DTC 46 Improper installation of SRS-ECU

TROUBLE JUDGMENT

This DTC is set when the SRS-ECU, which is designed only for the driver's airbag, is installed on vehicle, which have both driver's and passenger's sides.

Possible causes

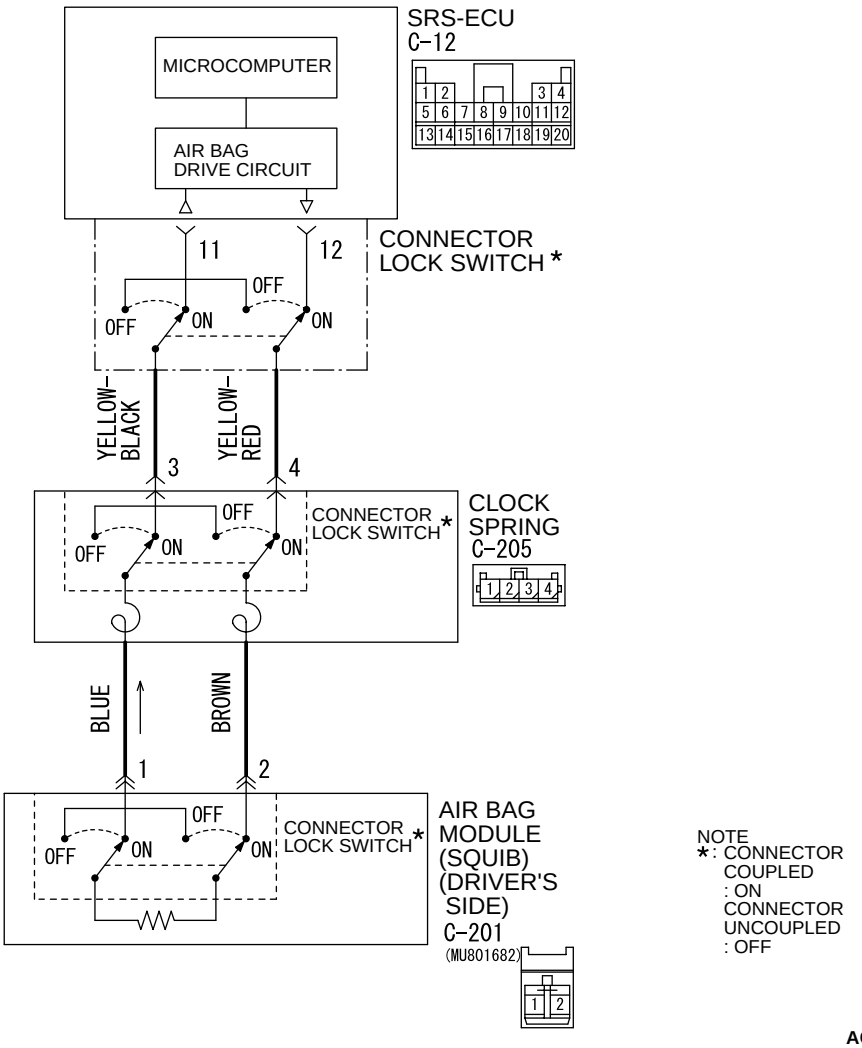
- Incorrectly installed SRS-ECU

DIAGNOSIS

Replace the SRS-ECU (Refer to P.52B-182).

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



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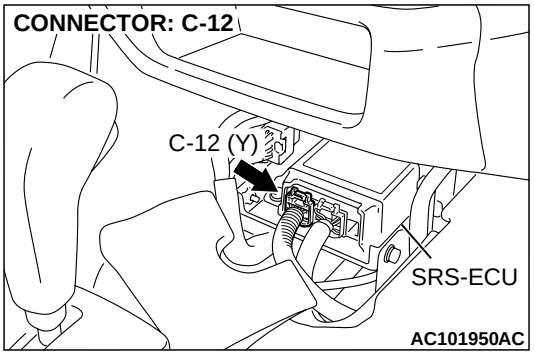
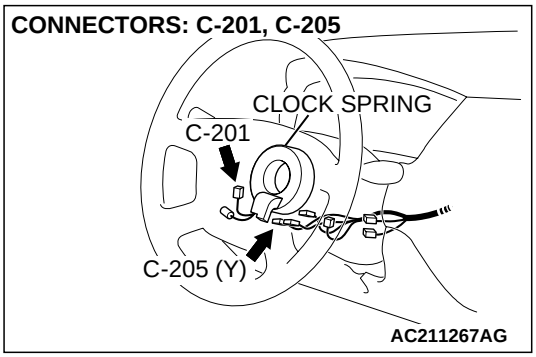
TSB Revision





CIRCUIT OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from 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 air bag module (squib). However, if no DTC reset, 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

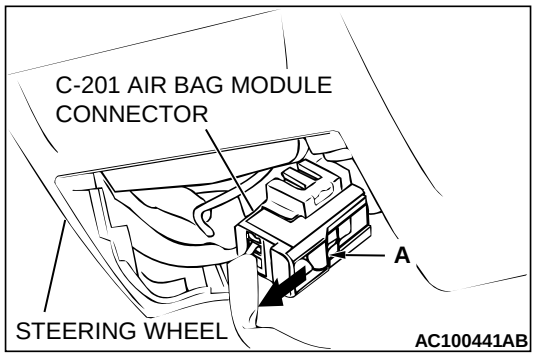
Required Special Tools:

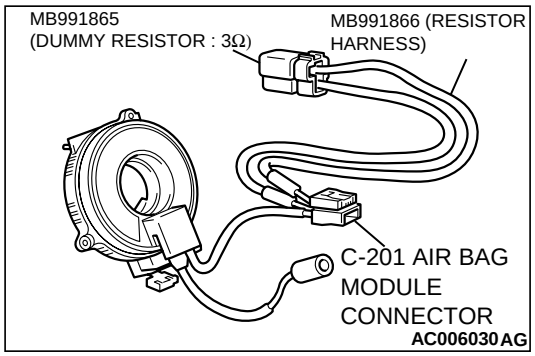
- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness

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 C-201 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 C-201 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.

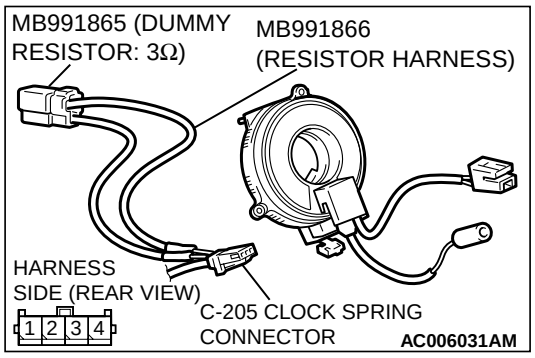
NO : Replace the driver's air bag module. (Refer to P.52B-184.) Then go to Step 6.

STEP 2. Check the clock spring.

(1) Disconnect the negative battery terminal.

(2) Disconnect the clock spring connector C-205.

(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 C-205 (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.

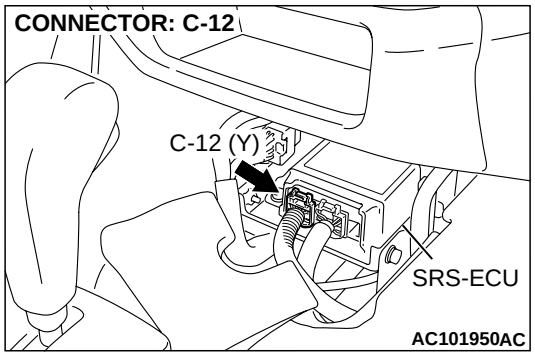
Q: Is DTC 61 set?

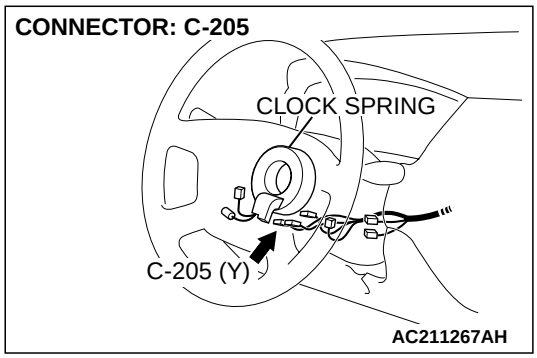
YES : Go to Step 3.

NO : Replace the clock spring. (Refer to P.52B-184.) Then go to Step 5.

STEP 3. Check the driver's air bag module circuit at the SRS-ECU connector C-12.

(1) Disconnect SRS-ECU connector C-12.



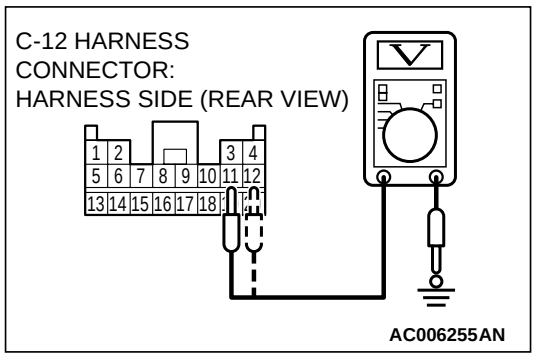


⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the clock spring connector C-205 to short the squib circuit.

(2) Disconnect the clock spring connector C-205.

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



⚠ CAUTION

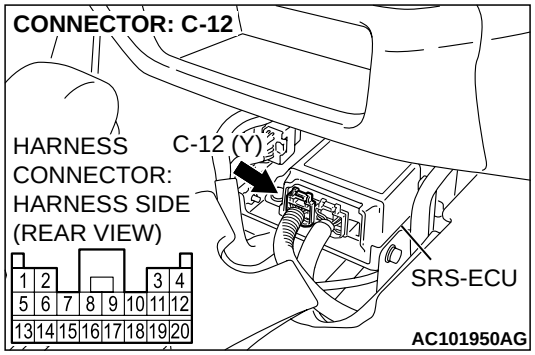
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

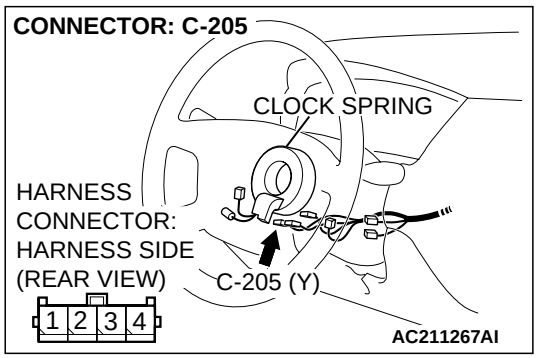
(4) Measure the voltage between C-12 harness connector terminals 11, 12 and body ground.
Voltage should measure 0 volt.

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.52B-182.) Then go to Step 5.

NO : Go to Step 4.



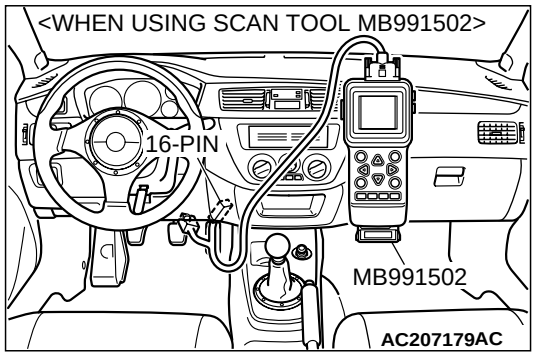


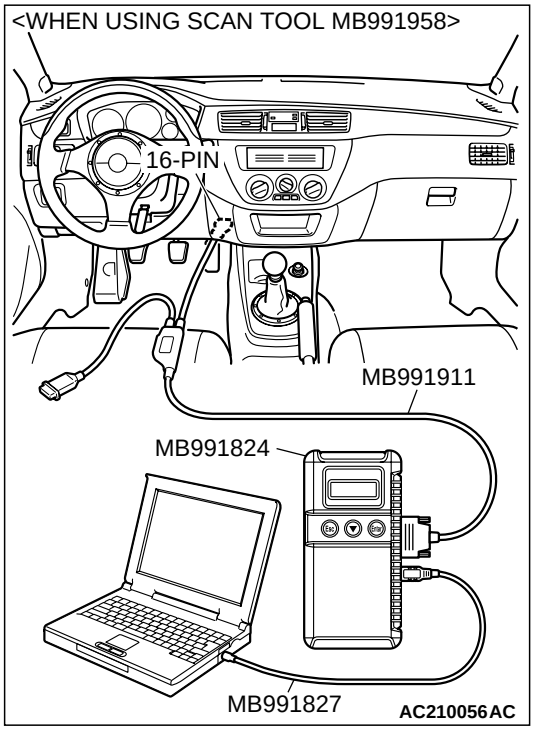
STEP 4. Check the harness for short circuit to power supply between SRS-ECU connector C-12 (terminal No.11 and 12) and clock spring connector C-205 (terminal No.3 and 4).

Q: Are harness wires between the SRS-ECU connector C-12 (terminal No.11 and 12) and clock spring connector C-205 (terminal No.3 and 4) in good condition?

YES : Go to Step 5.

NO : Repair the harness wires between SRS-ECU connector C-12 and clock spring connector C-205. Then go to Step 5.





STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

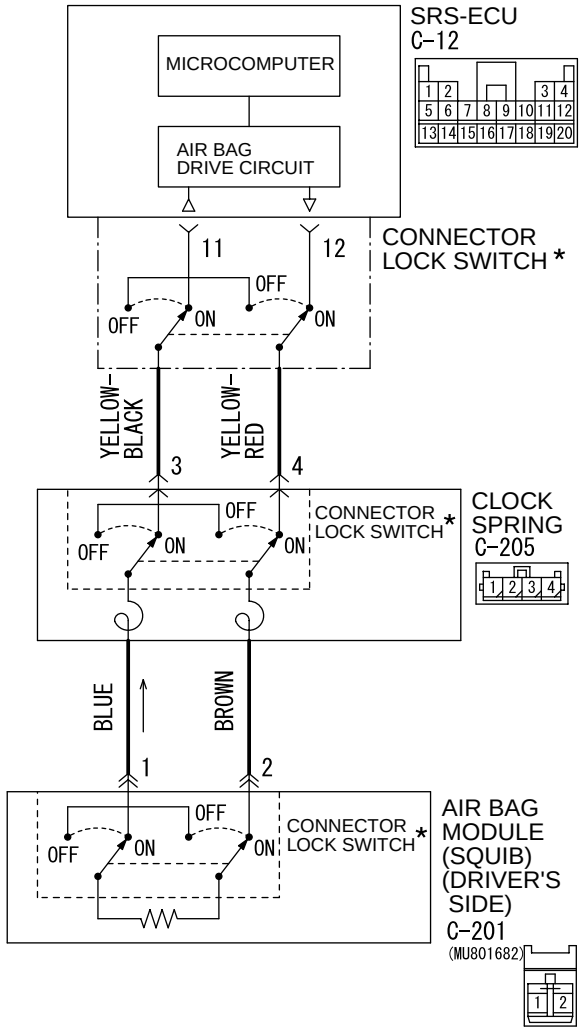
Q: Is DTC 61 set?

YES : Return to Step 1.

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



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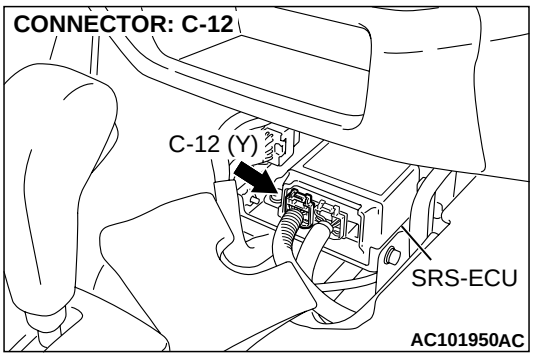
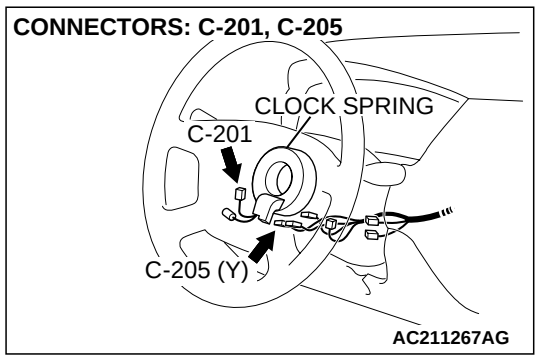




TSB Revision

CIRCUIT OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from 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 air bag module (squib). However, if no DTC reset, 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

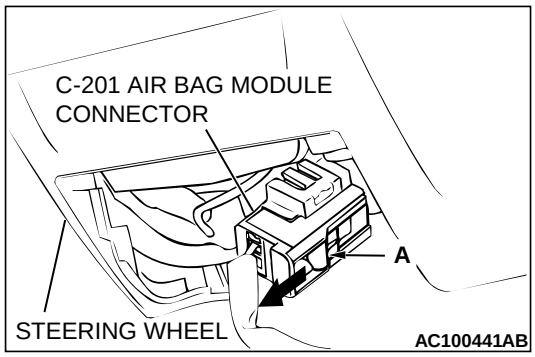
Required Special Tools:

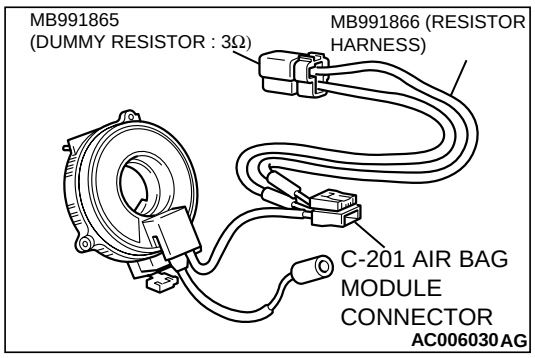
- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness

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 C-201 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 C-201 by backprobing.

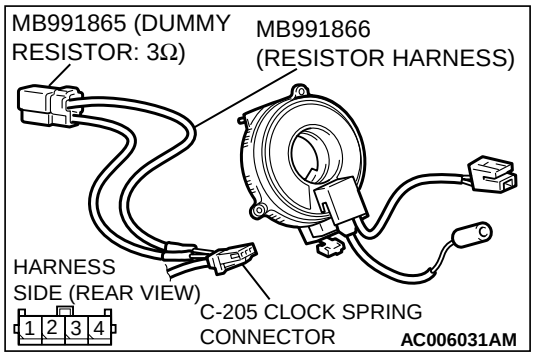
(5) Connect the negative battery terminal.

(6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 62 set?

YES : Go to Step 2.

NO : Replace the driver's air bag module. (Refer to P.52B-184.) Then go to Step 5.



STEP 2. Check the clock spring.

(1) Disconnect the clock spring connector C-205.
(2) 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.

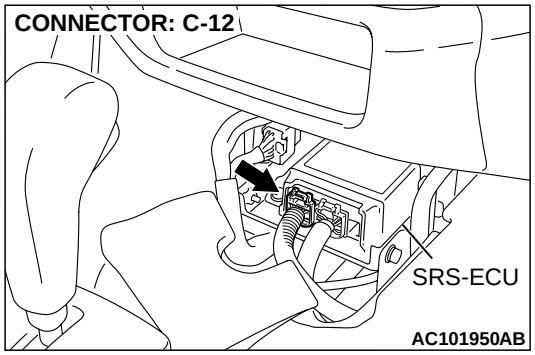
(3) Insert special tool MB991866 into clock spring harness side connector C-205 (terminal No.3 and 4) by backprobing.
(4) Connect the negative battery terminal.
(5) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 62 set?

YES : Go to Step 3.
NO : Replace the clock spring. (Refer to P.52B-184.) Then go to Step 5.

STEP 3. Check the driver's air bag module circuit at the SRS-ECU connector C-12.

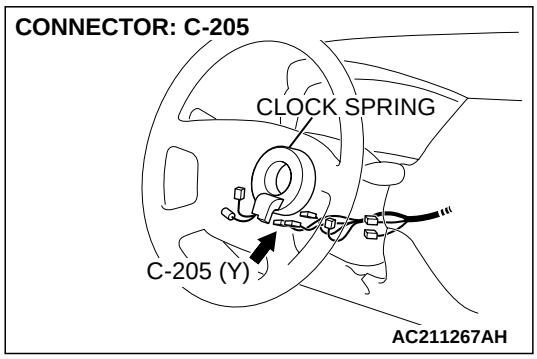
(1) Disconnect SRS-ECU connector C-12.



⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the clock spring connector C-205 to short the squib circuit.

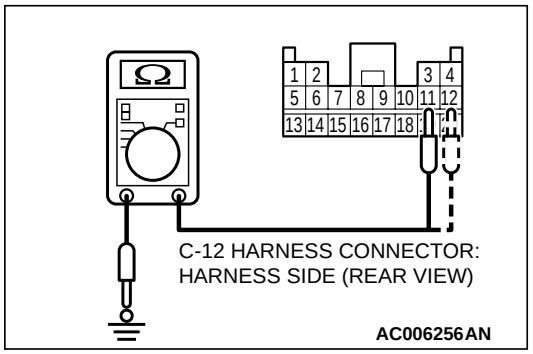
(2) Disconnect the clock spring connector C-205.



⚠ CAUTION

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

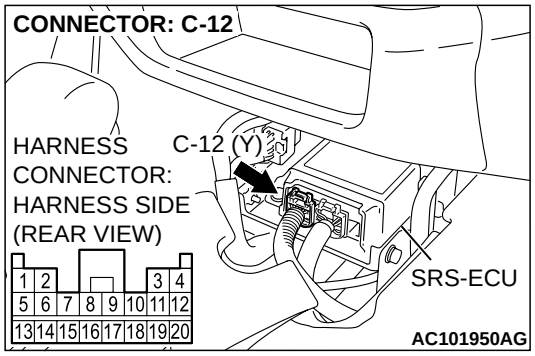
(3) Check for continuity between C-12 harness connector terminals 11, 12 and body ground.
It should be open circuit.

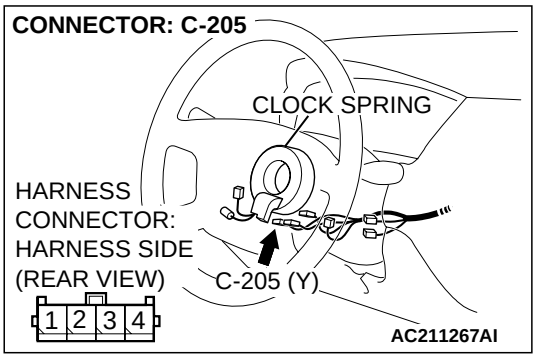


Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 62 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 5.
NO : Go to Step 5.

TSB Revision



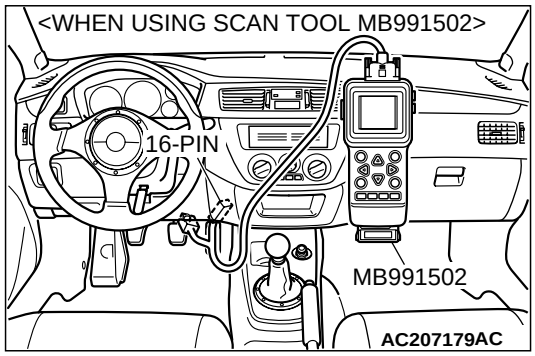


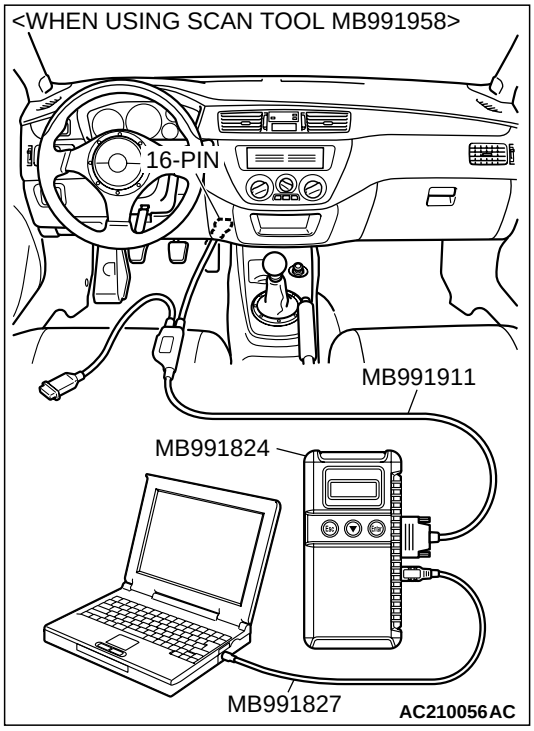
STEP 4. Check the harness for short circuit to ground between SRS-ECU connector C-12 (terminal No.11 and 12) and clock spring connector C-205 (terminal No.3 and 4).

Q: Are the harness wires between SRS-ECU connector C-12 (terminal No.11 and 12) and clock spring connector C-205 (terminal No.3 and 4) in good condition?

YES : Go to Step 5.

NO : Repair the harness wires between SRS-ECU connector C-12 and clock spring connector C-205. Then go to Step 5.





STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

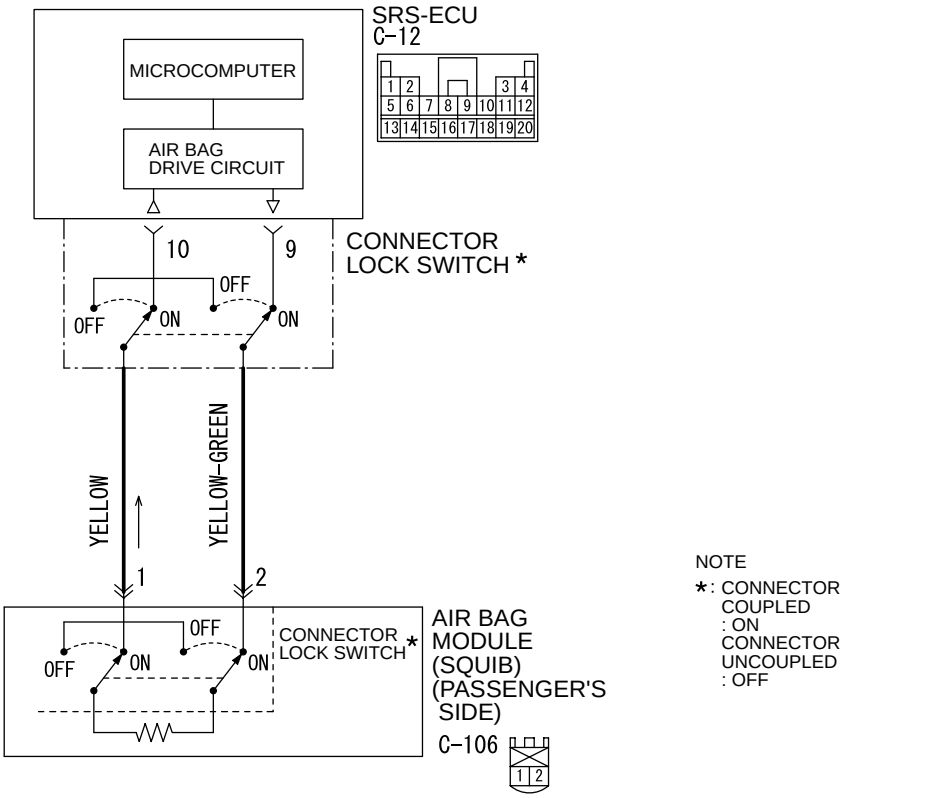
Q: Is DTC 62 set?

YES : Return to Step 1.

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

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

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



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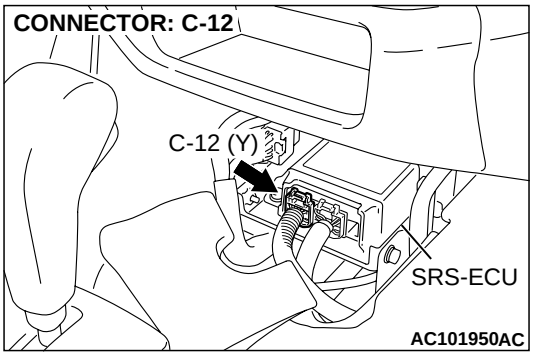
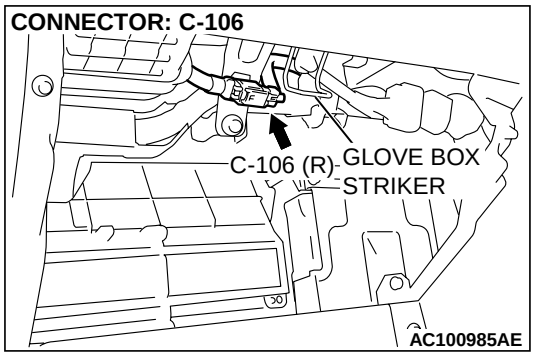




CIRCUIT OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from 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 reset, the SRS warning light will be switched off (DTC will be retained).

TSB Revision

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

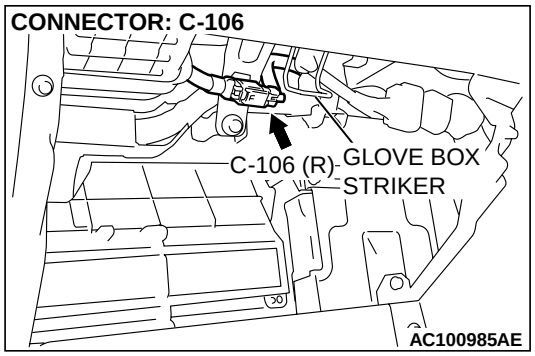
DIAGNOSIS

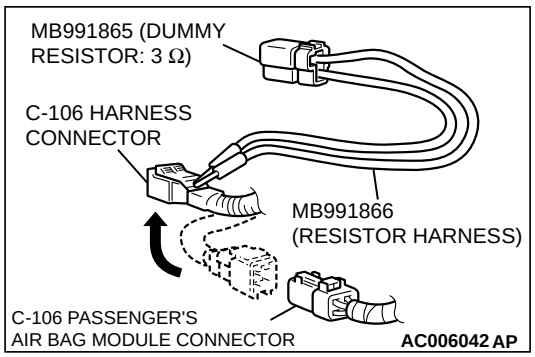
Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness

STEP1. Check the passenger's air bag module.

(1) Unclip passenger's air bag module connector C-106.





(2) 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.

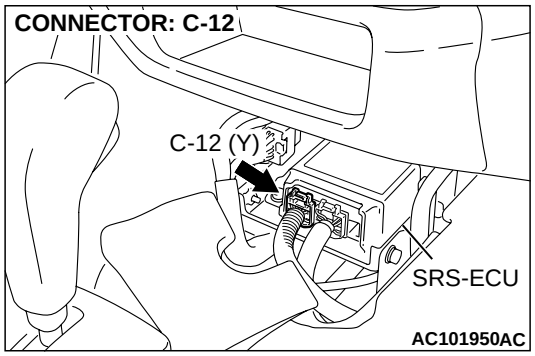
(3) Disconnect the passenger's air bag module connector C-106, and insert special tool MB991866 into the harness connector by backprobing.
(4) Connect the negative battery terminal.
(5) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

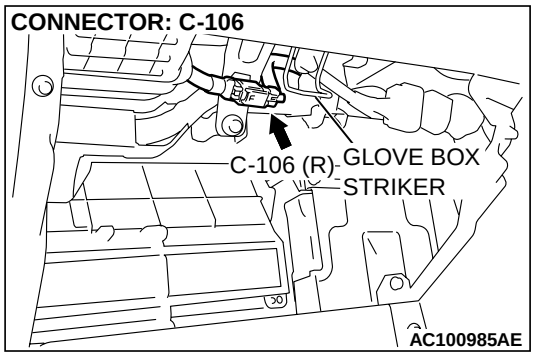
Q: Is DTC 64 set?

YES : Go to Step 2.
NO : Replace the passenger's air bag module. (Refer to P.52B-184.) Then go to Step 4.

STEP 2. Check the passenger's air bag module circuit at the SRS-ECU connector C-12.

(1) Disconnect SRS-ECU connector C-12.

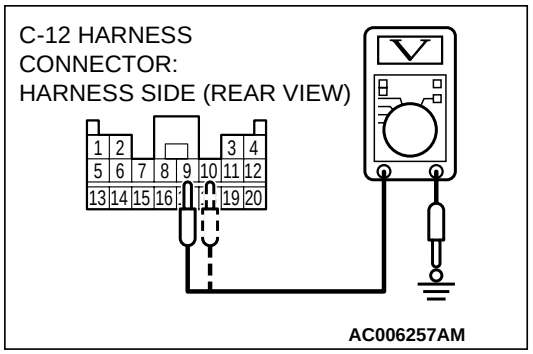




⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the passenger's air bag module connector C-106 to short the squib circuit.

(2) Unclip passenger's air bag module connector C-106.
(3) Disconnect the passenger's air bag module connector C-106.
(4) Turn the ignition switch to the "ON" position.



⚠ CAUTION

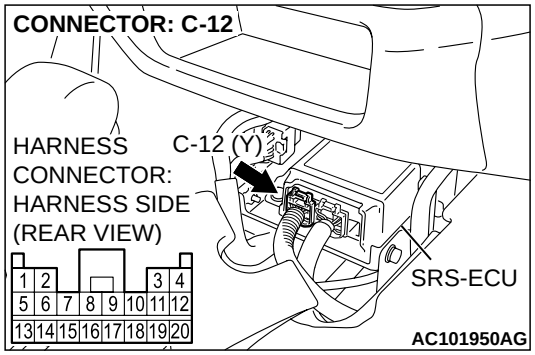
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

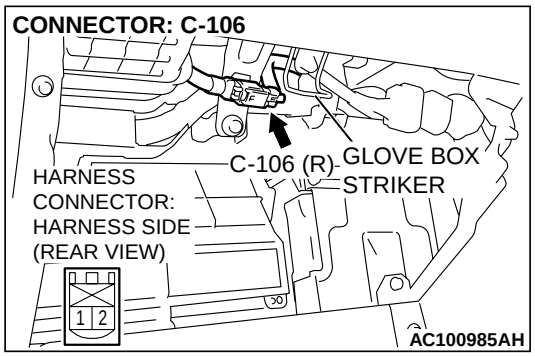
(5) Measure the voltage between C-12 harness connector terminals 9, 10 and body ground.
Voltage should measure 0 volt.

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 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.



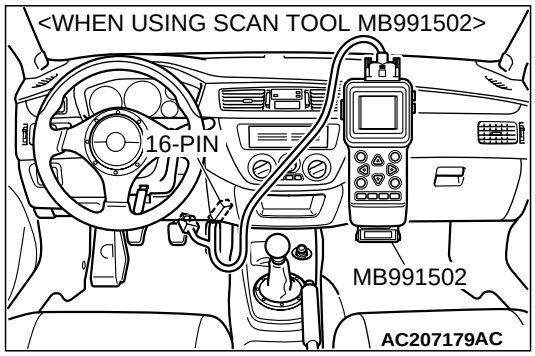


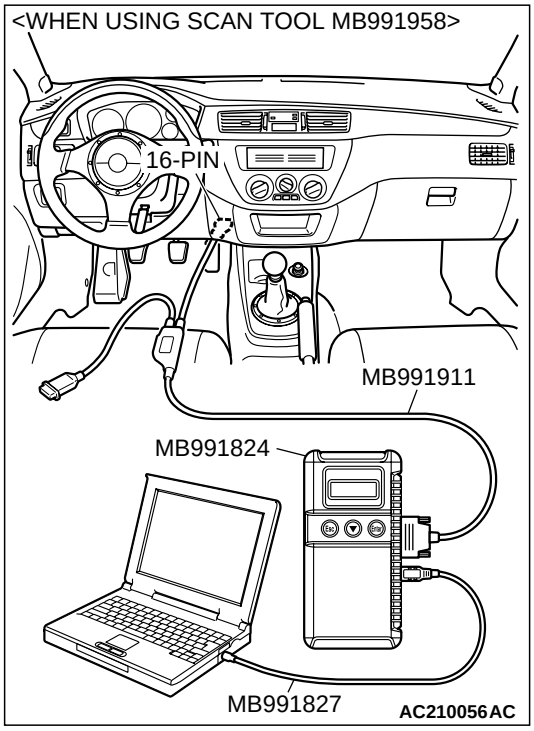
STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector C-12 (terminal No. 9 and 10) and passenger's air bag module connector C-106 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector C-12 (terminal No. 9 and 10) and passenger's air bag module connector C-106 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector C-12 and passenger's air bag module connector C-106. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

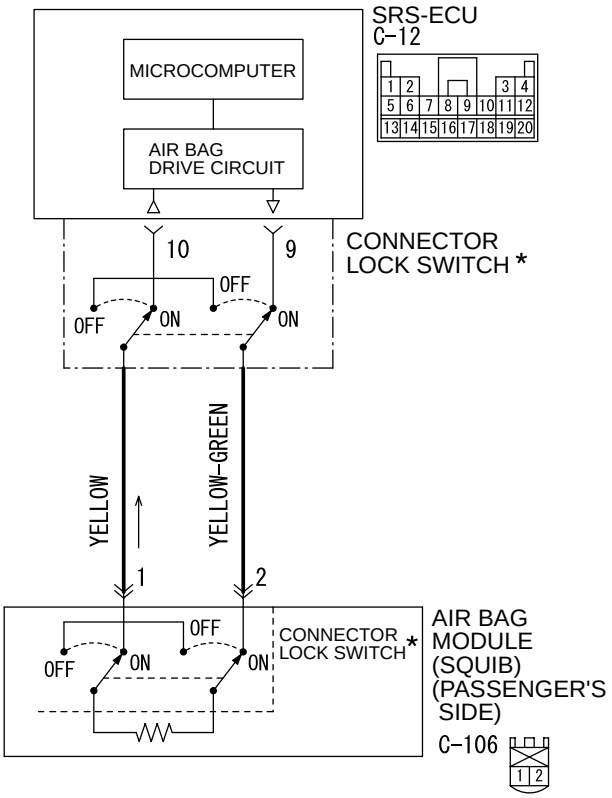
Q: Is DTC 64 set?

YES : Return to Step 1.

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



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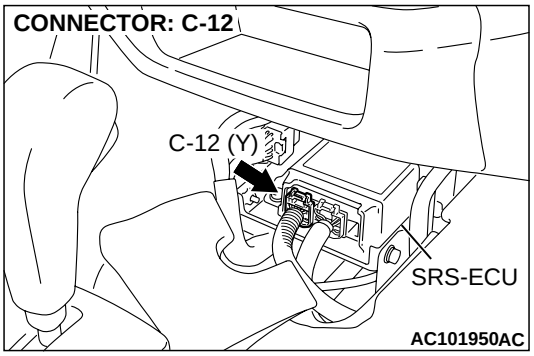
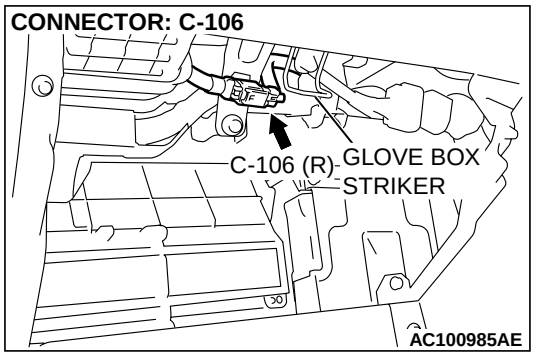




CIRCUIT OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from 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 reset, the SRS warning light will be switched off (DTC will be retained).

TSB Revision

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

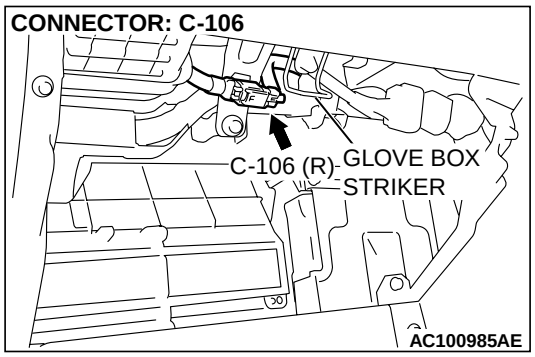
Required Special Tools:

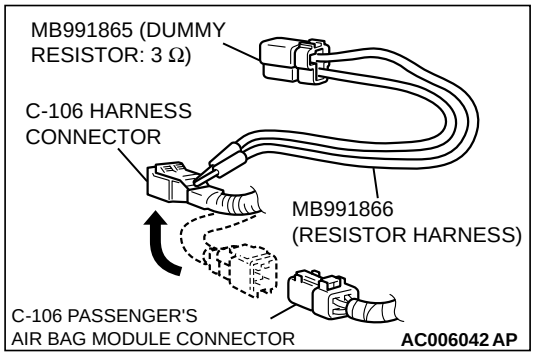
- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness

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

(1) Disconnect the negative battery terminal.

(2) Unclip passenger's air bag module connector C-106.





(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.

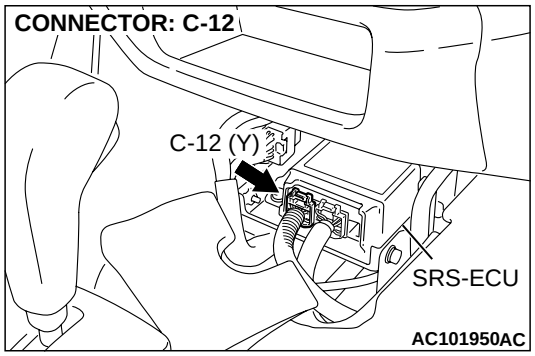
Q: Is DTC 65 set?

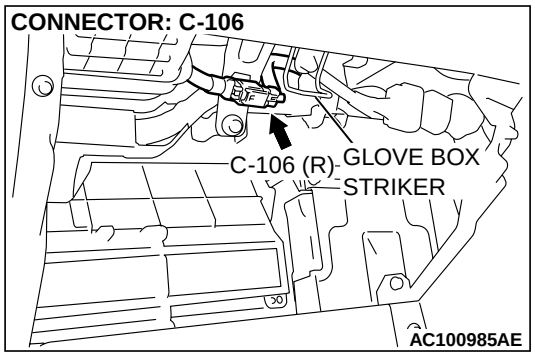
YES : Go to Step 2.

NO : Replace the passenger's air bag module. (Refer to P.52B-184.) Then go to Step 4.

STEP 2. Check the passenger's air bag module circuit at the SRS-ECU connector C-12.

(1) Disconnect SRS-ECU connector C-12.



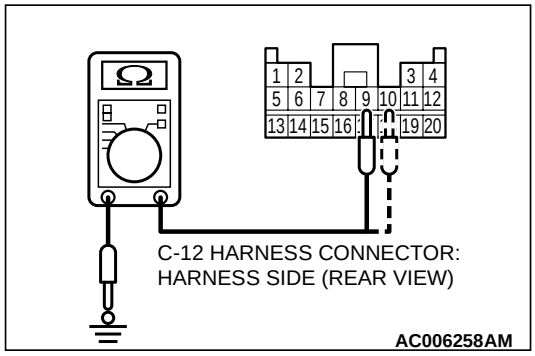


⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the passenger's air bag module connector C-106 to short the squib circuit.

(2) Unclip passenger's air bag module connector C-106.

(3) Disconnect the passenger's air bag module connector C-106.



⚠ CAUTION

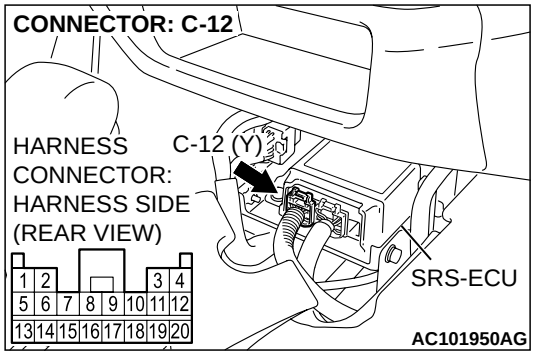
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

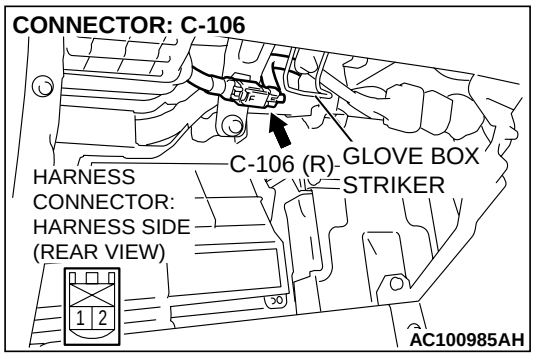
(4) Check for continuity between C-12 harness connector terminals 9, 10 and body ground.
It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 65 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.



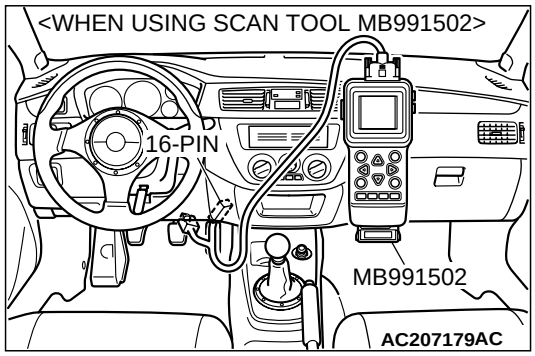


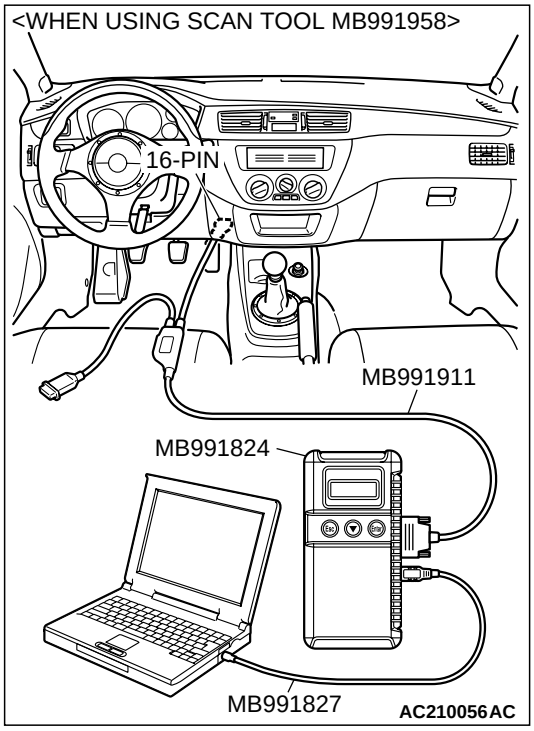
STEP 3. Check the harness wires for short circuit to ground between SRS-ECU connector C-12 (terminal No.9 and 10) and passenger's air bag module connector C-106 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector C-12 (terminal No.9 and 10) and passenger's air bag module connector C-106 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector C-12 and passenger's air bag module connector C-106. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

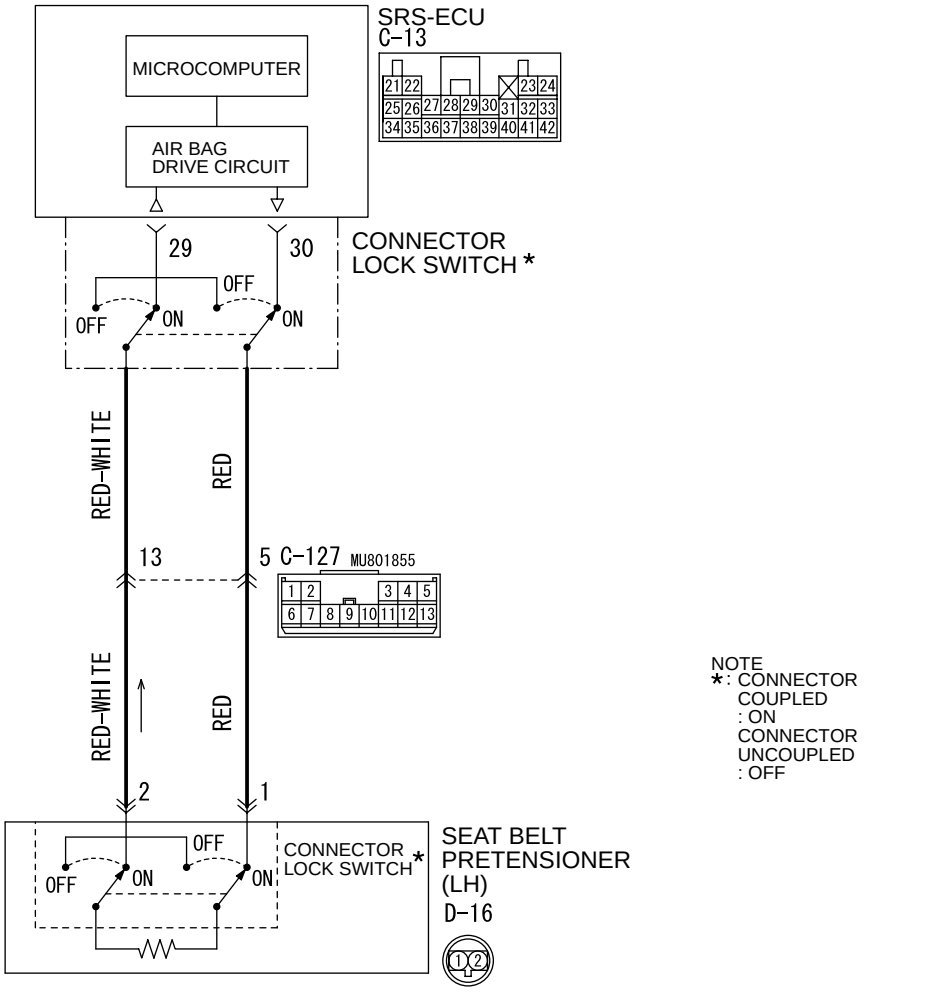
Q: Is DTC 65 set?

YES : Return to Step 1.

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



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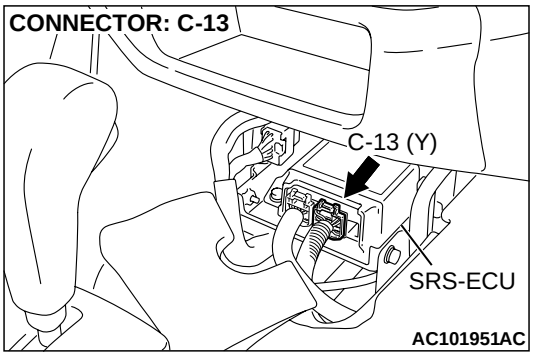
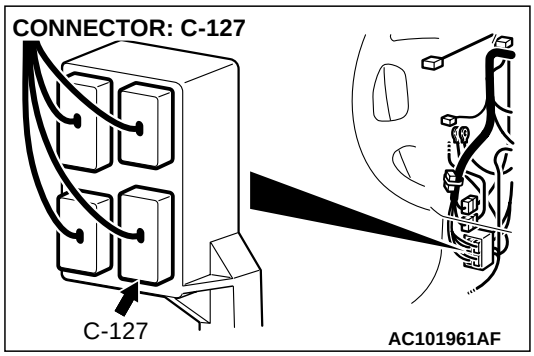
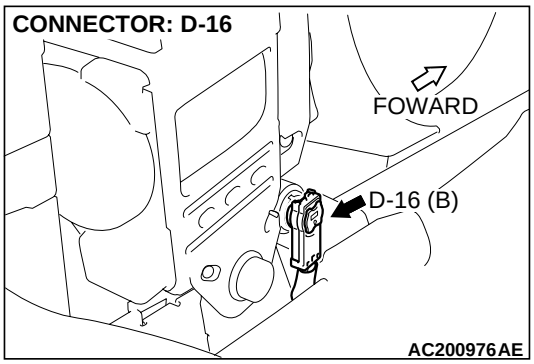




TSB Revision



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).

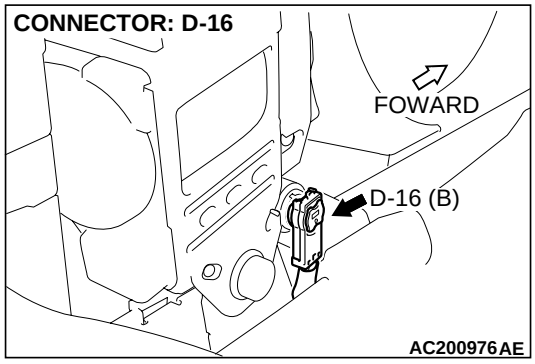
TROUBLESHOOTING HITS

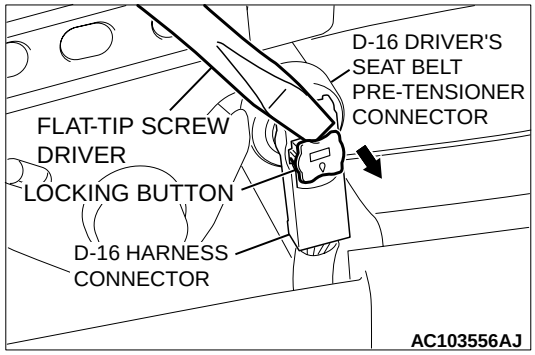
- Damaged wiring harnesses or connectors
- Short to the power supply in the driver's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tools:

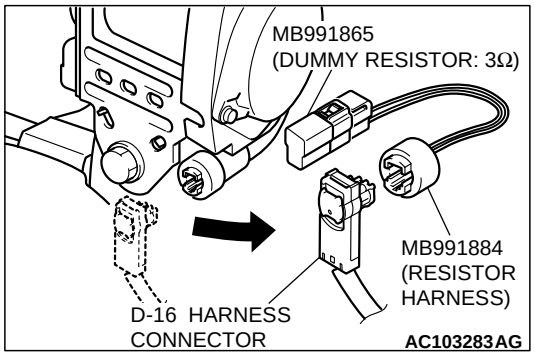
- MB991502: Scan Tool (MUT-ll)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991910: Main Harness A
- MB991865: Dummy resister
- MB991866: Resister harness (For Pre-tensioner)





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

(1) Disconnect the negative battery terminal.
(2) Disconnect driver's seat belt pre-tensioner connector D-16. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.



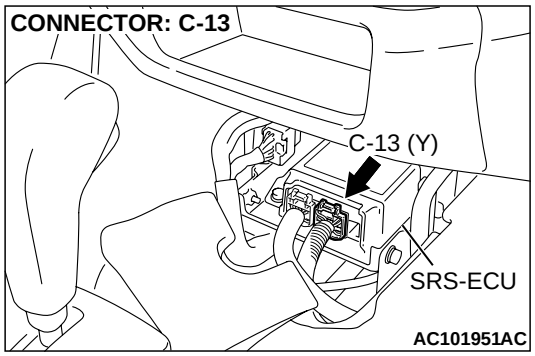
(3) Connect special tool MB991865 to special tool MB991884.
(4) Connect special tool MB991884 to the D-16 harness connector.
(5) Connect the negative battery terminal.
(6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

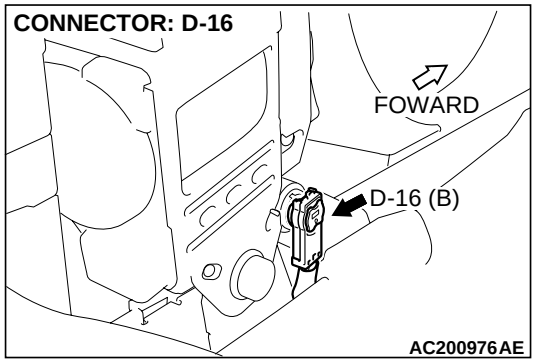
Q: Is DTC 66 set?

YES : Go to Step 2.
NO : Replace the driver's seat belt pre-tensioner. (Refer to P.52B-192.) Then go to Step 4.

STEP 2. Check the driver's seat belt pre-tensioner circuit at the SRS-ECU connector C-13.

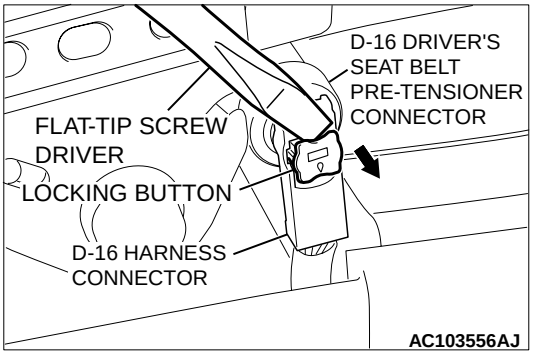
(1) Disconnect SRS-ECU connector C-13.





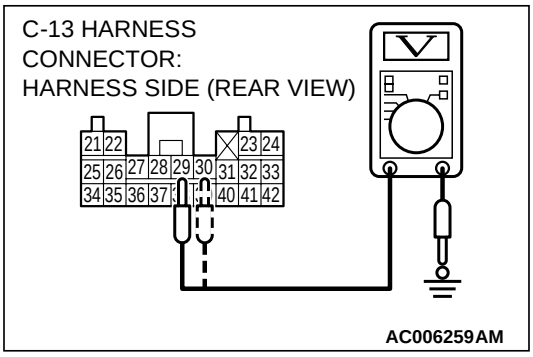
(2) Disconnect driver's seat belt pre-tensioner connector D-16. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.

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



⚠ CAUTION

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

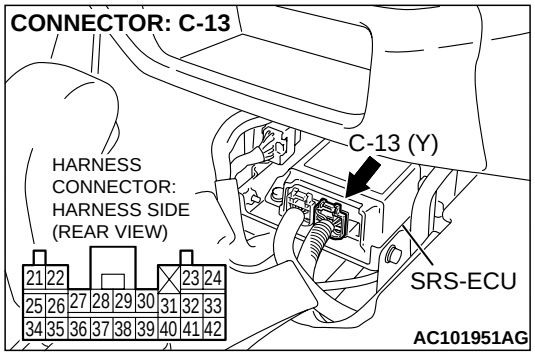


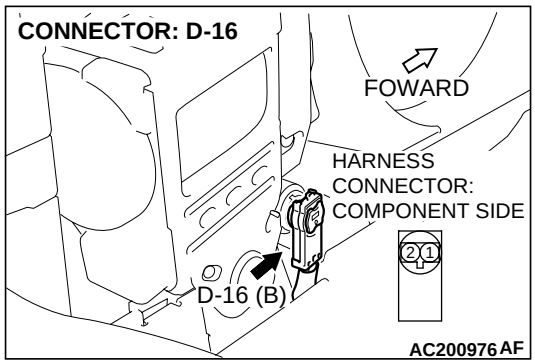
(4) Measure the voltage between C-13 harness connector terminals 29, 30 and body ground.
Voltage should measure 0 volt.

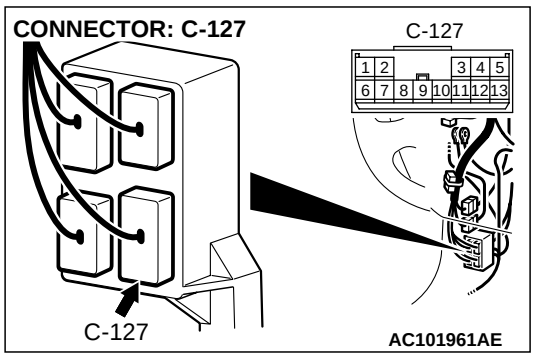
Q: Is the measured voltage within the specified range?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 65 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.





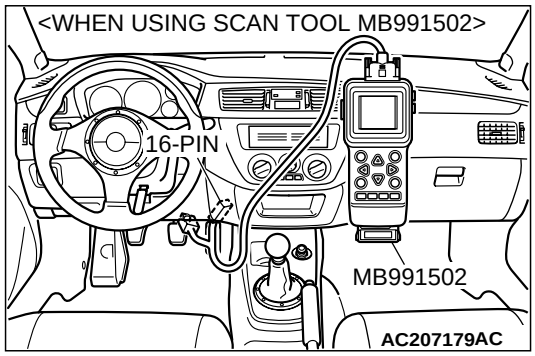


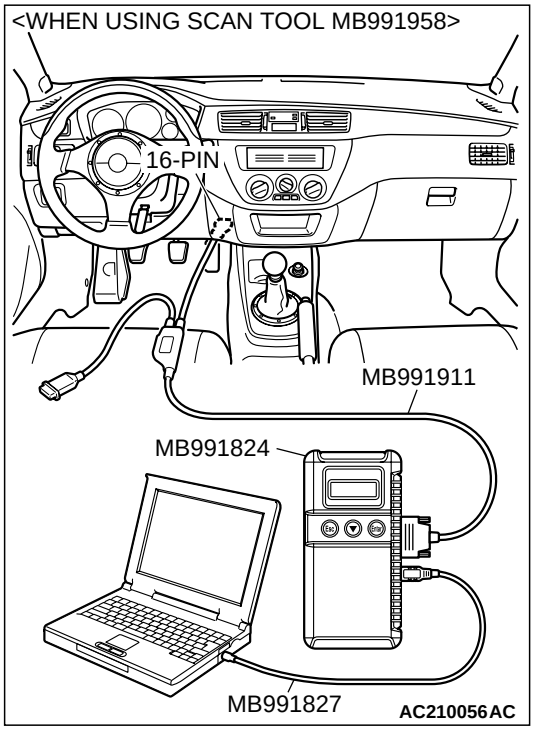
STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector C-13 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-16 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector C-127 inspect the wiring harness.
If the intermediate connector C-127 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 4.

Q: Are the harness wires between SRS-ECU connector C-13 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-16 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.
NO : Repair the harness wires between SRS-ECU connector C-13 and driver's seat belt pre-tensioner connector D-16. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

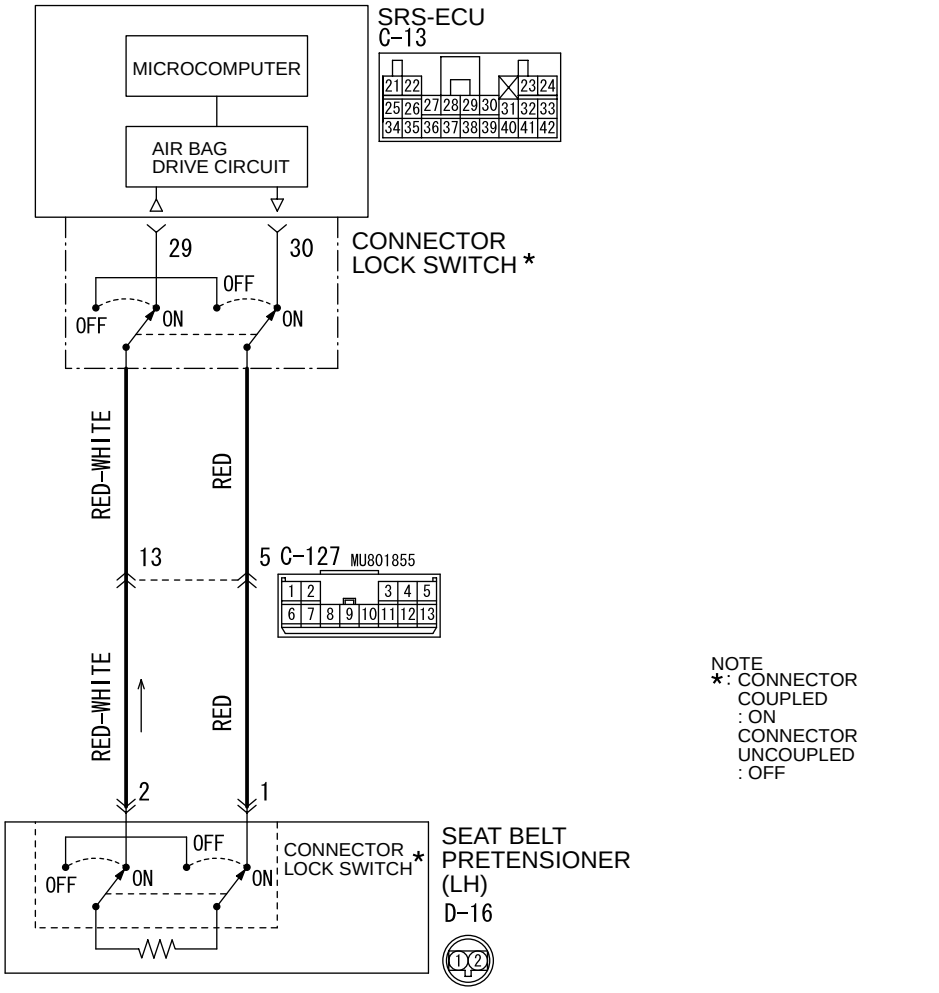
Q: Is DTC 66 set?

YES : Return to Step 1.

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

Driver's Seat Belt Pre-tensioner (Squib)



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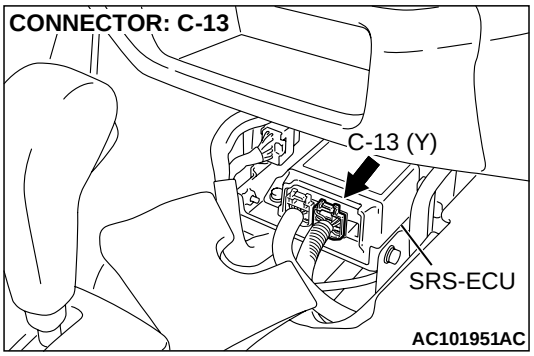
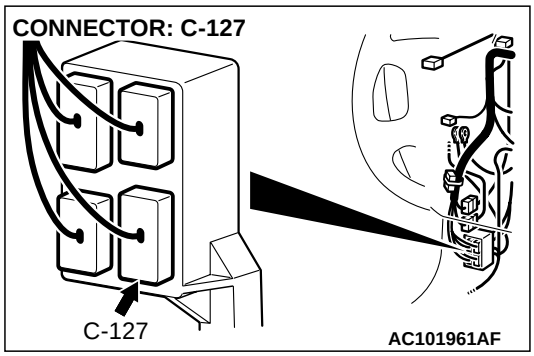
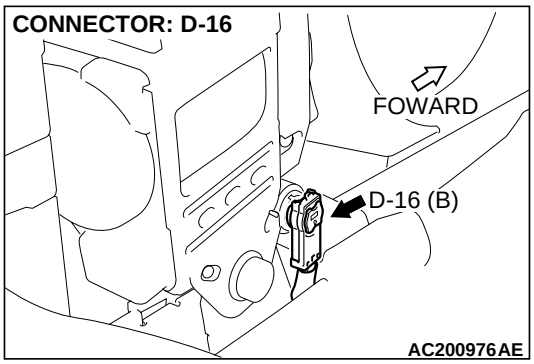




TSB Revision



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).

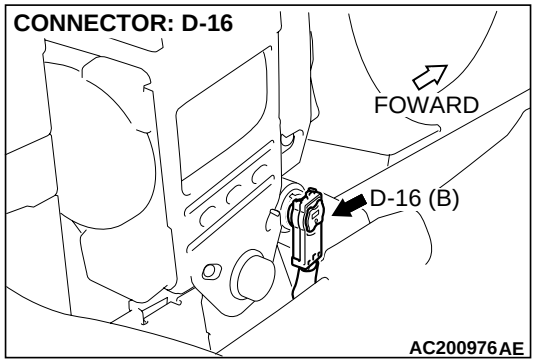
TROUBLESHOOTING HITS

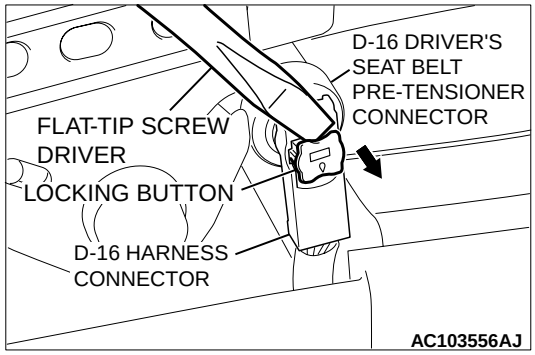
- Damaged wiring harnesses or connectors
- Short to the ground in the driver's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tools:

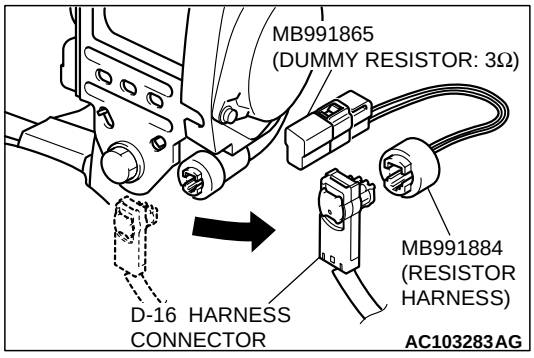
- MB991502: Scan Tool (MUT-ll)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness (For Pre-tensioner)





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

(1) Disconnect the negative battery terminal.
(2) Disconnect driver's seat belt pre-tensioner connector D-16. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.



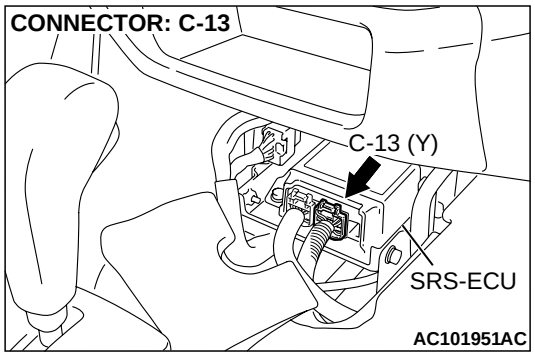
(3) Connect special tool MB991865 to special tool MB991884.
(4) Connect special tool MB991884 to the D-16 harness connector.
(5) Connect the negative battery terminal.
(6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 67 set?

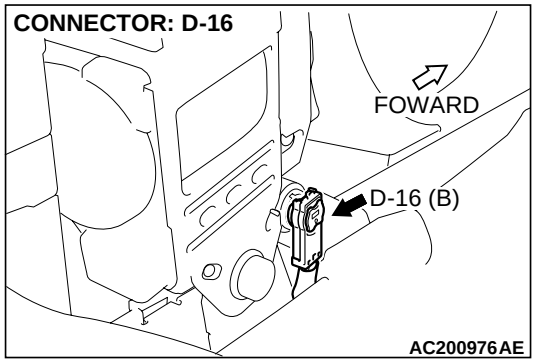
YES : Go to Step 2.
NO : Replace the driver's seat belt pre-tensioner. (Refer to P.52B-192.) Then go to Step 4.

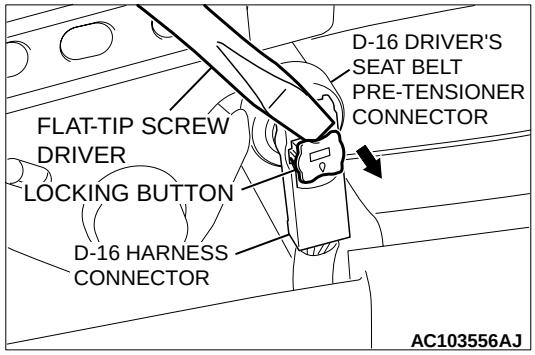
STEP 2. Check the driver's seat belt pre-tensioner circuit at the SRS-ECU connector C-13.

(1) Disconnect SRS-ECU connector C-13.

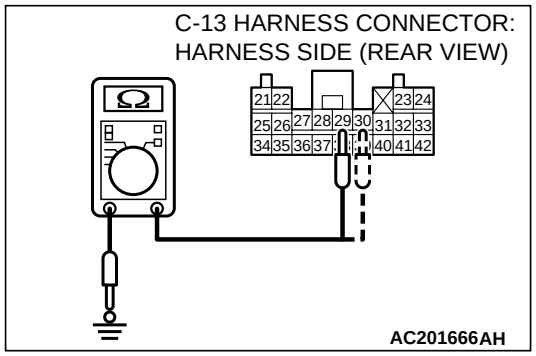


(2) Disconnect driver's seat belt pre-tensioner connector D-16. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.





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

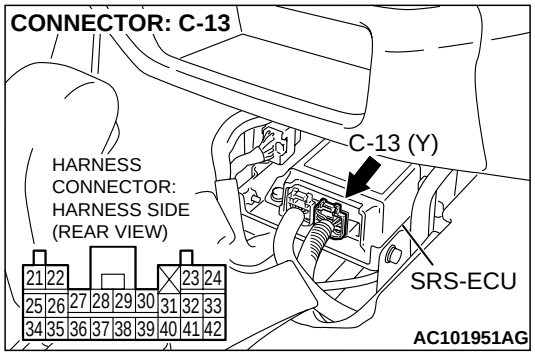


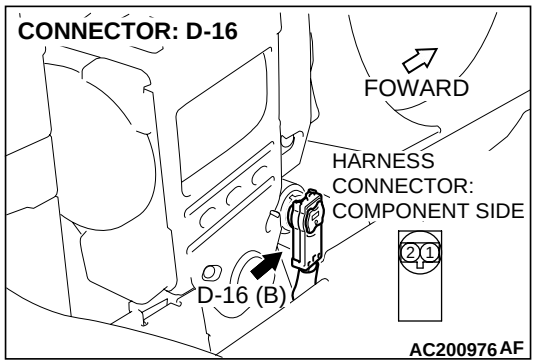
(3) Check for continuity between C-13 harness connector terminals 29, 30 and body ground.
It should be open circuit.

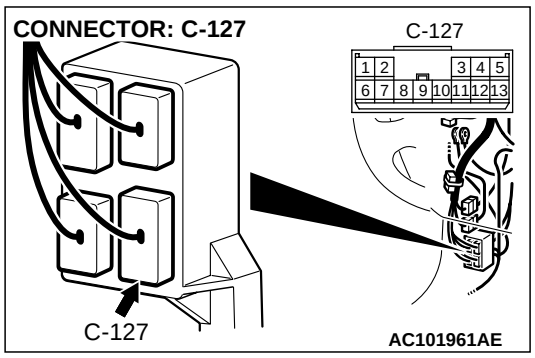
Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 67 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.





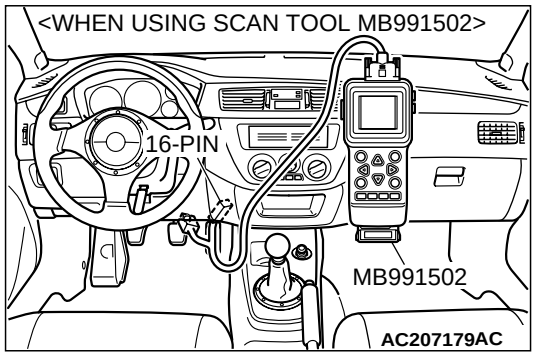


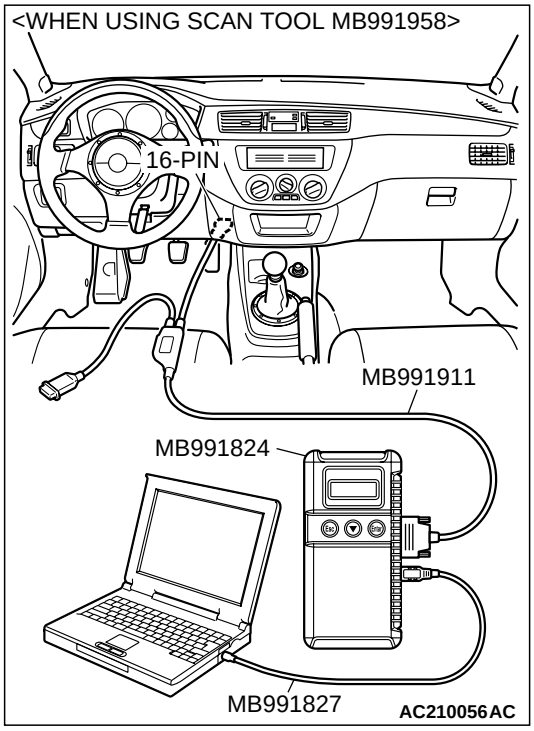
STEP 3. Check harness wires for short circuit to ground between SRS-ECU connector C-13 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-16 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector C-127, inspect the wiring harness.
If the intermediate connector C-127 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 4.

Q: Are the harness wires between SRS-ECU connector C-13 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-16 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.
NO : Repair the harness wires between SRS-ECU connector C-13 and driver's seat belt pre-tensioner connector D-16. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

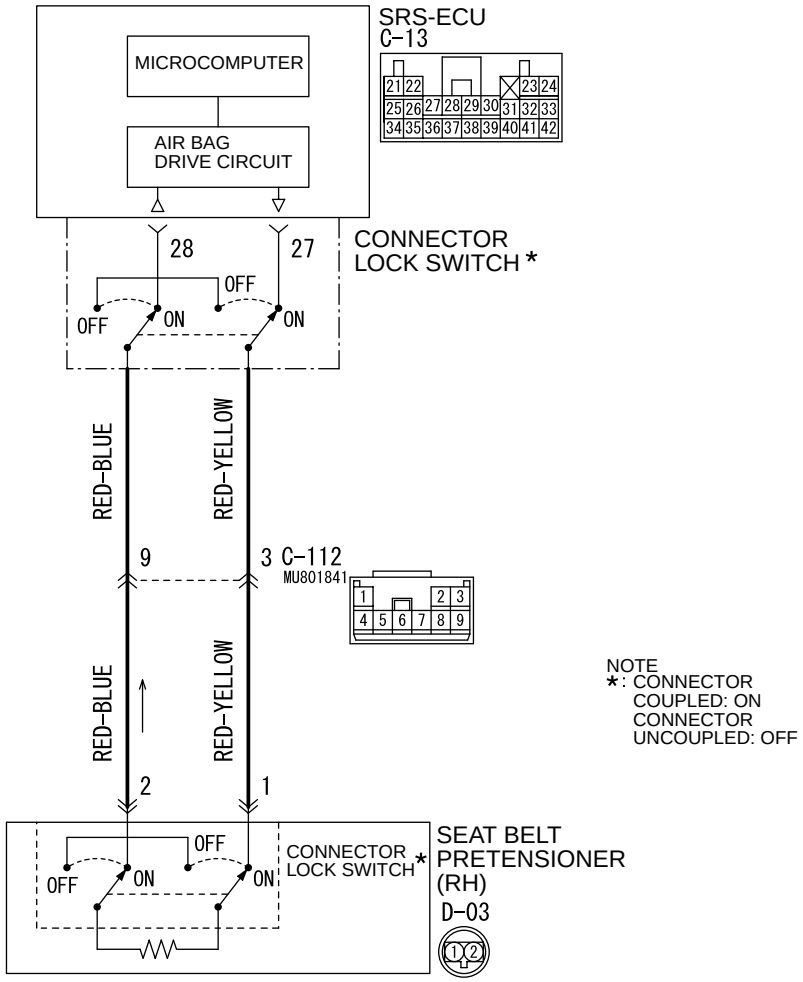
Q: Is DTC 67 set?

YES : Return to Step 1.

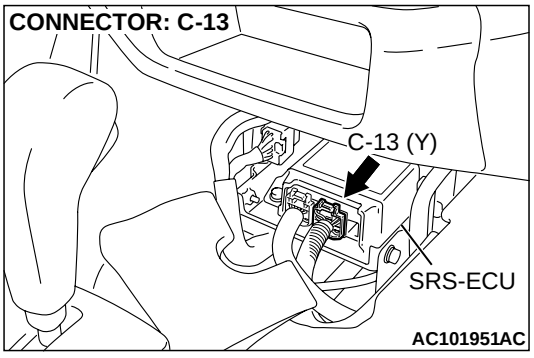
NO : The procedure is complete. (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

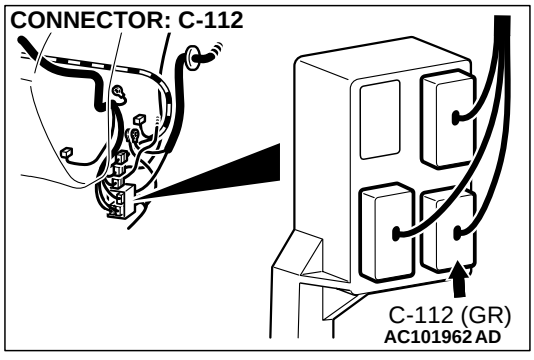
DTC 68: Passenger's (Front) Seat Belt Pre-Tensioner (Squib) System Fault for Power Supply Circuit (Short-Circuited to Power Supply)

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

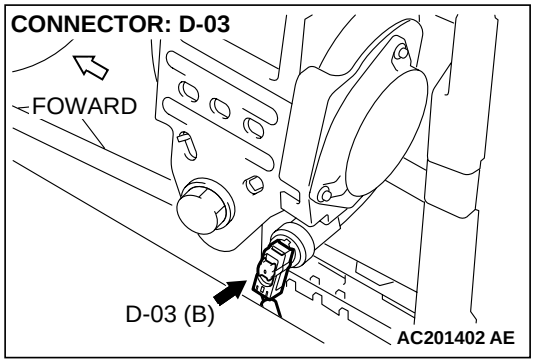


AC212023AB
W3J19M05AA





TSB Revision



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 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 pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS

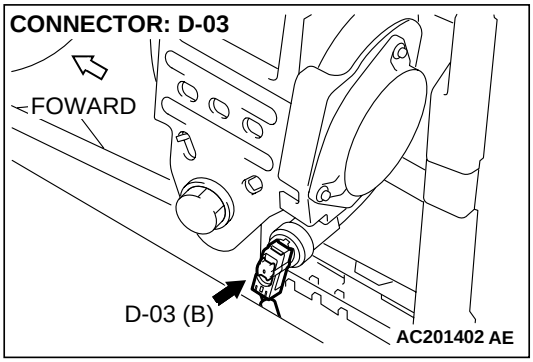
Required Special Tools:

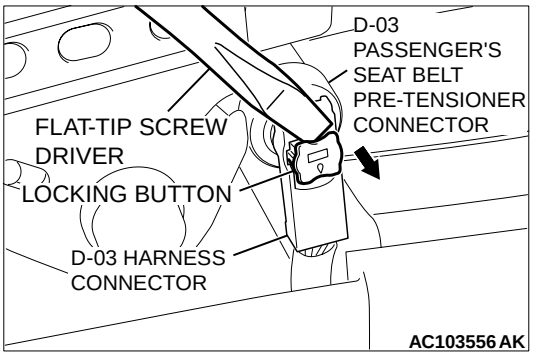
- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness (For Pre-tensioner)

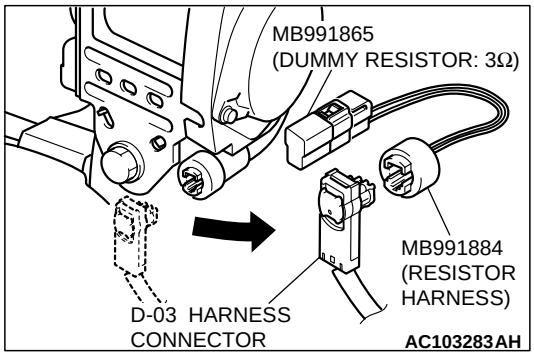
STEP 1. Check the passenger's seat belt pre-tensioner.

(1) Disconnect the negative battery terminal.

(2) Disconnect passenger's seat belt pre-tensioner connector D-03. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.







(3) Connect special tool MB991865 to special tool MB991884.

(4) Connect special tool MB991884 to the D-03 harness connector.

(5) Connect the negative battery terminal.

(6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

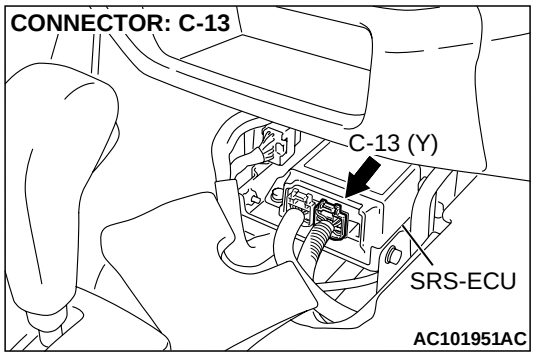
Q: Is DTC 68 set?

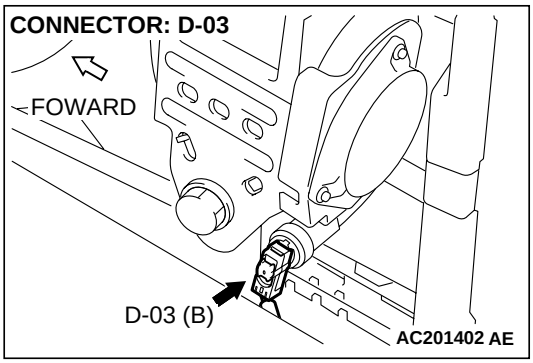
YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52B-192.) Then go to Step 4.

STEP 2. Check the passenger's seat belt pre-tensioner circuit at the SRS-ECU connector C-13.

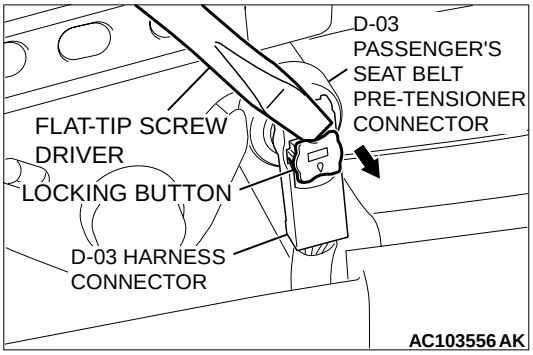
(1) Disconnect SRS-ECU connector C-13.





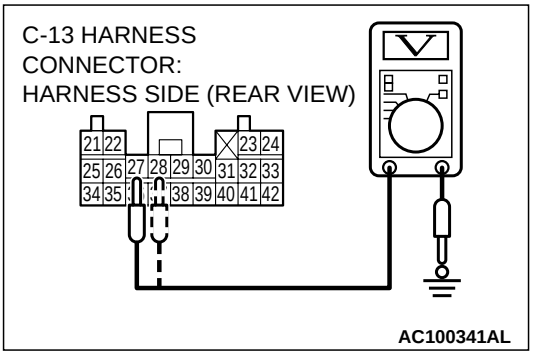
(2) Disconnect passenger's seat belt pre-tensioner connector D-03. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.

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



⚠ CAUTION

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

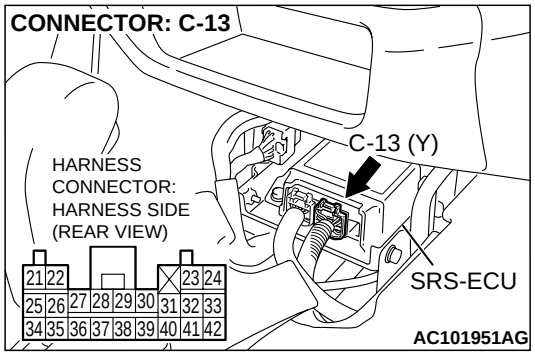


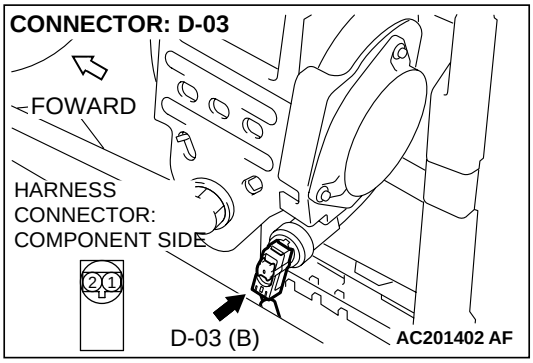
(4) Measure the voltage between C-13 harness connector terminals 27, 28 and body ground.
Voltage should measure 0 volt.

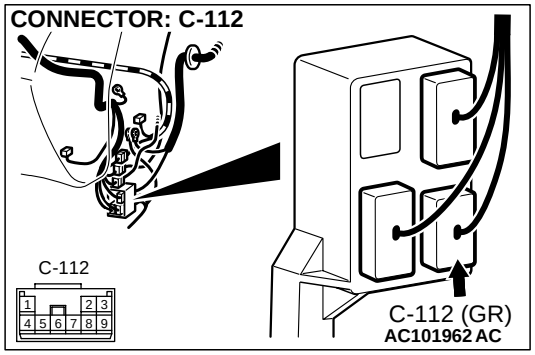
Q: Is the circuit normal?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 68 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.





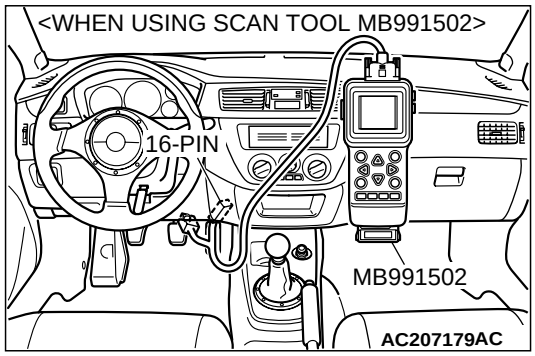


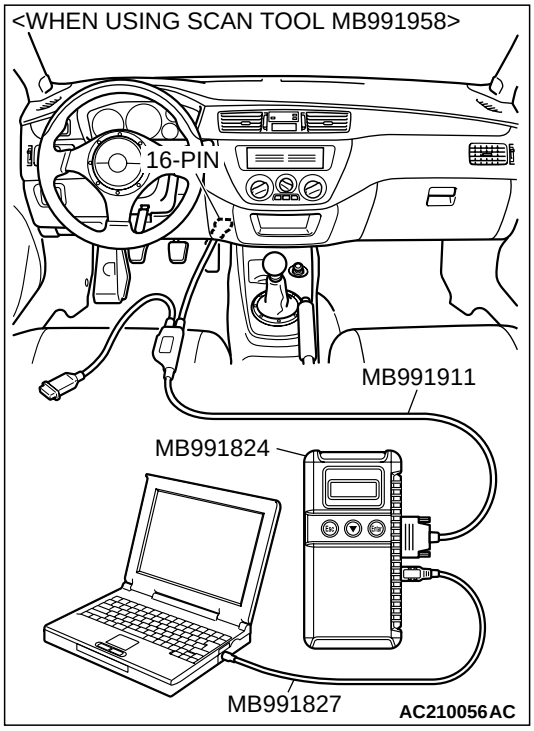
STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector C-13 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-03 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector C-112 inspect the wiring harness.
If the intermediate connector C-112 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 4.

Q: Are the harness wires between SRS-ECU connector C-13 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-03 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.
NO : Repair the harness wires between SRS-ECU connector C-13 and passenger's seat belt pre-tensioner connector D-03. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

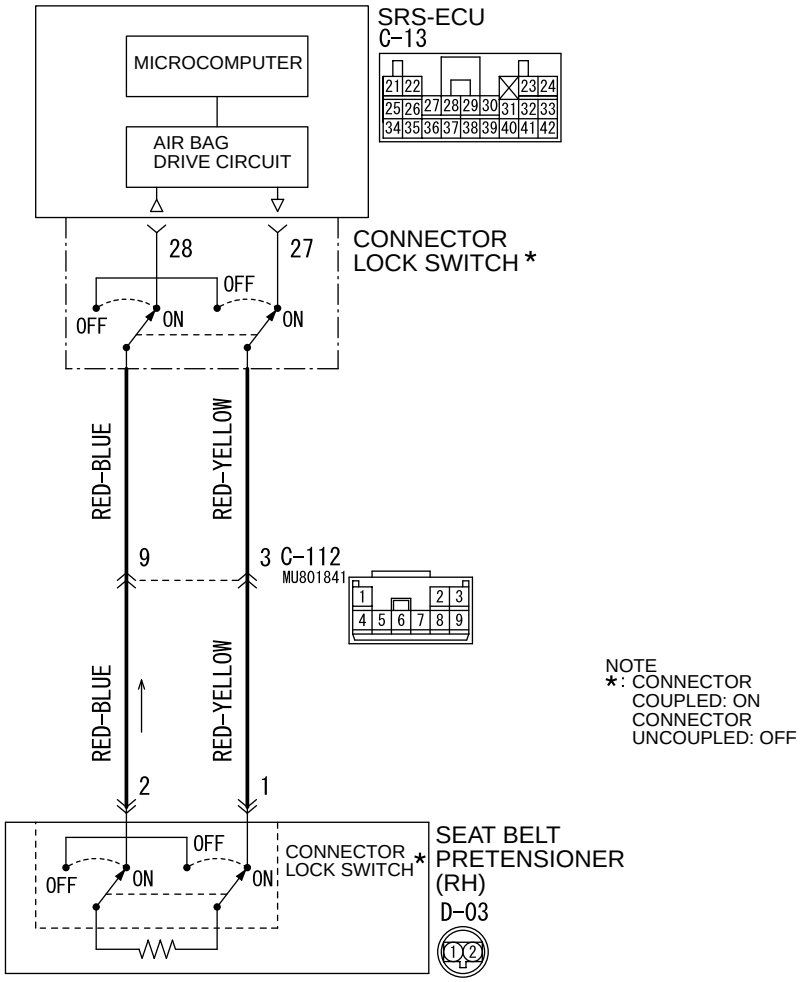
Q: Is DTC 68 set?

YES : Return to Step 1.

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

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

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



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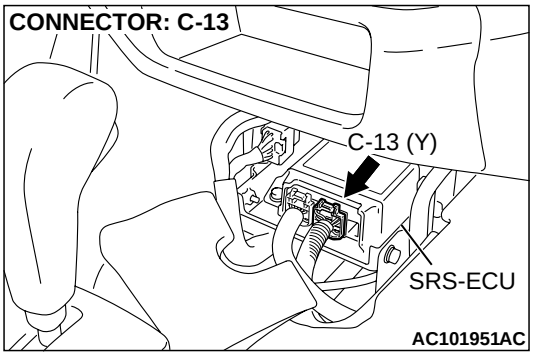
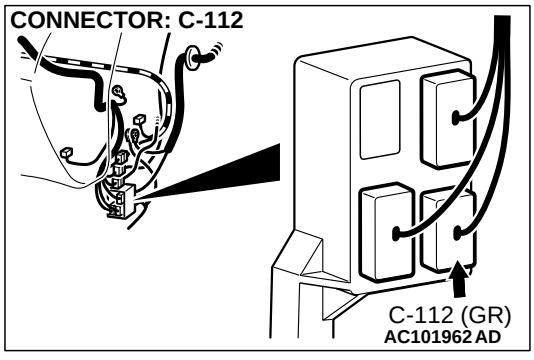
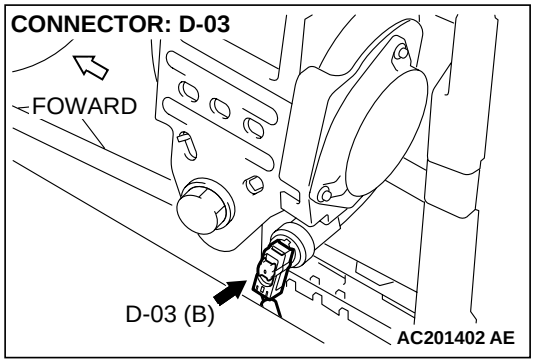
W3J19M05AA





TSB Revision



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 passenger's seat belt pre-tensioner (squib).

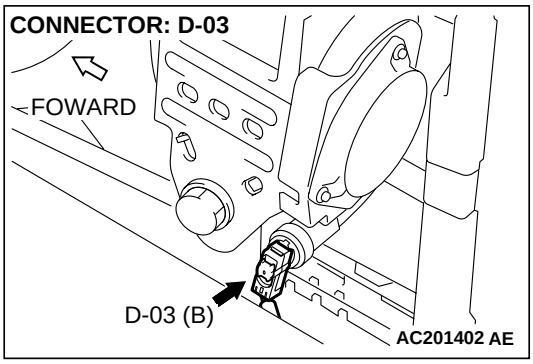
TROUBLESHOOTING HITS

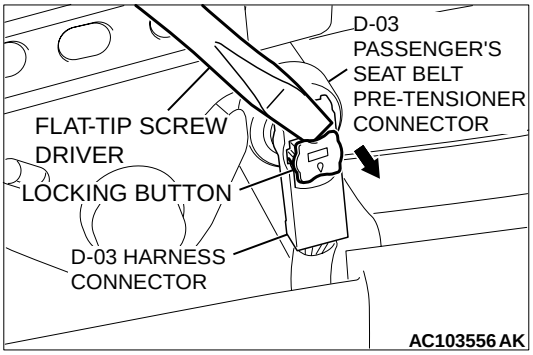
- Damaged wiring harnesses or connectors
- Short to the ground in the passenger's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

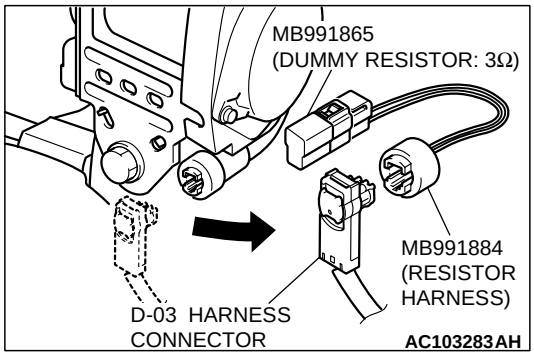
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-ll)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991865: Dummy resister
- MB991866: Resister harness (For Pre-tensioner)







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

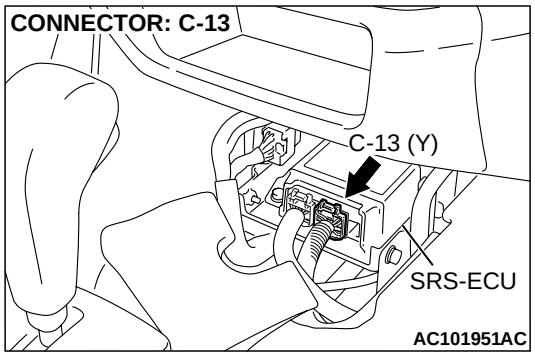
(1) Disconnect the negative battery terminal.
(2) Disconnect driver's seat belt pre-tensioner connector D-03. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.
(3) Connect special tool MB991865 to special tool MB991884.
(4) Connect special tool MB991884 to the D-03 harness connector.
(5) Connect the negative battery terminal.
(6) Erase the diagnostic trouble code memory, and then check the diagnostic trouble code.

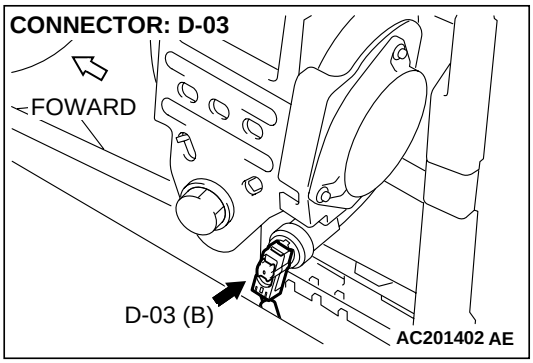
Q: Is DTC 69 set?

YES : Go to Step 2.
NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52B-192.) Then go to Step 3.

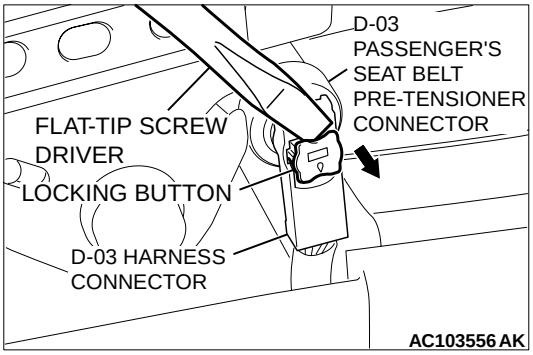
STEP 2. Check the passenger's seat belt pre-tensioner circuit at the SRS-ECU connector C-13.

(1) Disconnect SRS-ECU connector C-13.



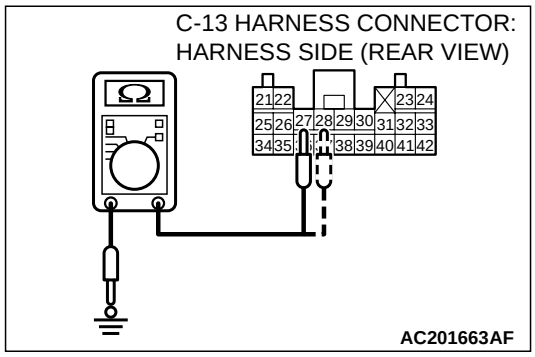


(2) Disconnect driver's seat belt pre-tensioner connector D-03. Use a flat-tipped screwdriver to unlock the locking button at the harness side connector by withdrawing it toward you in two stages, and then disconnect the connector.



⚠ CAUTION

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

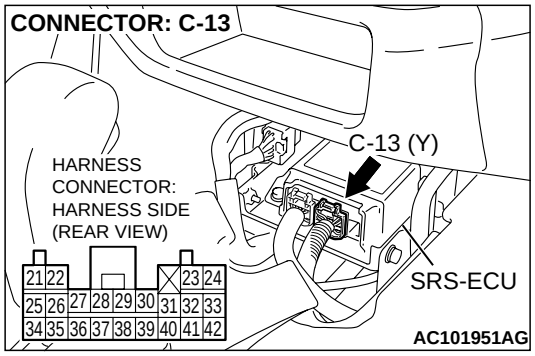


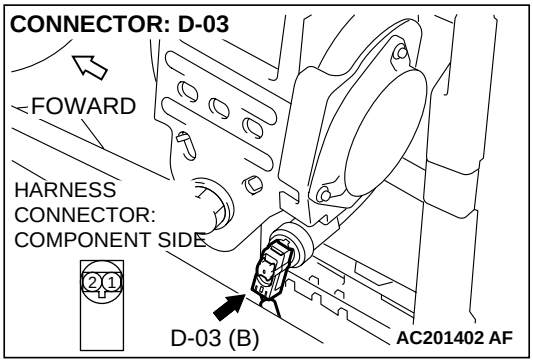
(3) Check for continuity between C-13 harness connector terminals 27, 28 and body ground.
It should be open circuit.

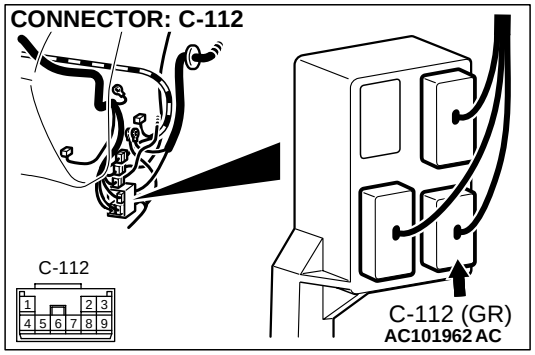
Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 69 set, replace the SRS-ECU. (Refer to P.52B-182.) Then go to Step 4.

NO : Go to Step 3.







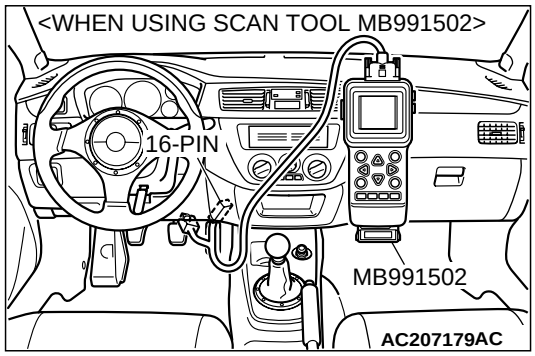
STEP 3. Check harness wires for short circuit to ground between SRS-ECU connector C-13 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-03 (terminal No.1 and 2).

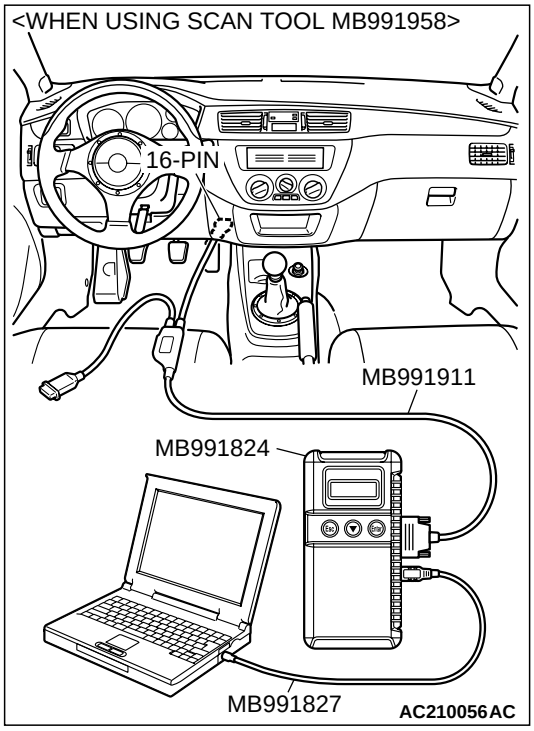
NOTE: After inspecting intermediate connector C-112 inspect the wiring harness.
If the intermediate connector C-112 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 4.

Q: Are the harness wires between SRS-ECU connector C-13 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-03 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector C-13 and passenger's seat belt pre-tensioner connector D-03. Then go to Step 4.





STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

(1) Erase the DTC.
(2) Turn the ignition switch to the "ON" position.
(3) Check if the DTC is set.
(4) Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is DTC 69 set?

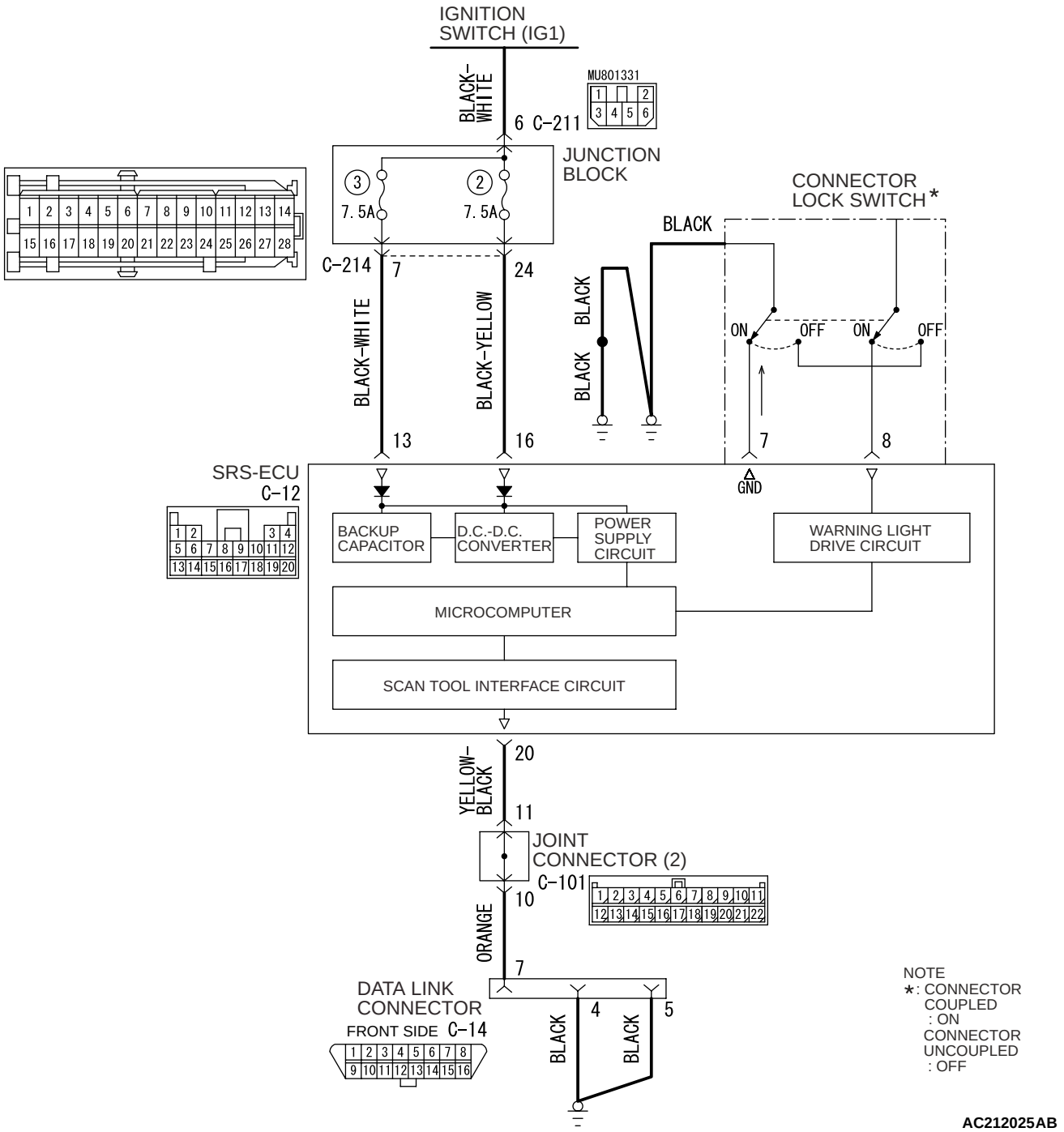
YES : Return to Step 1.

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

SYMPTOM PROCEDURES

INSPECTION PROCEDURE 1: Communication with scan tool MB991502 or MB991958 is not possible (Communication is not possible with SRS).

SRS-ECU Power Supply Circuit



AC212025AB
W3J19M07AA

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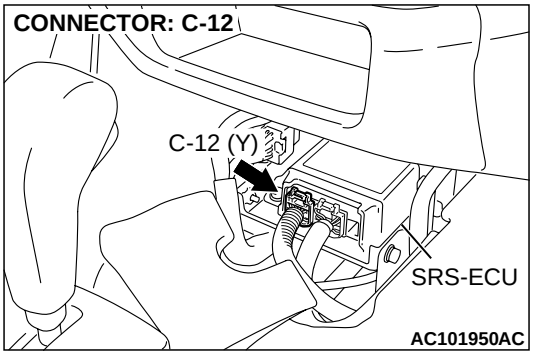
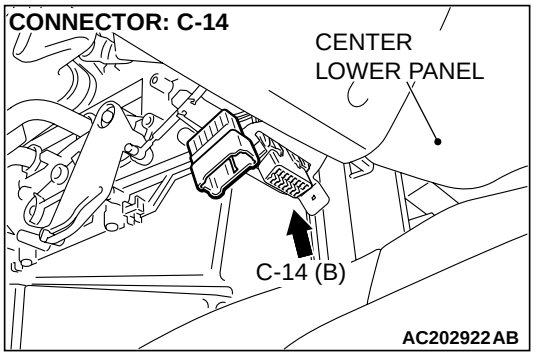
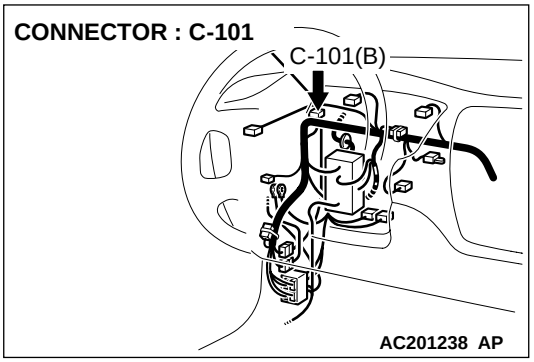
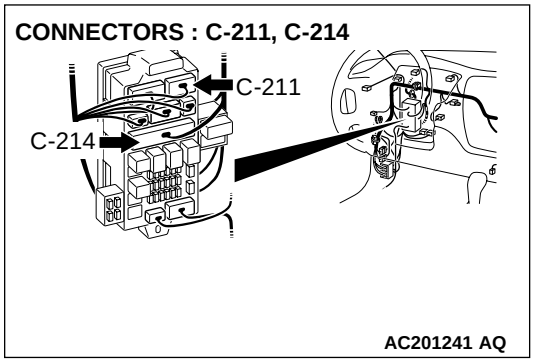








CIRCUIT OPERATION

- 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 or MB991958 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

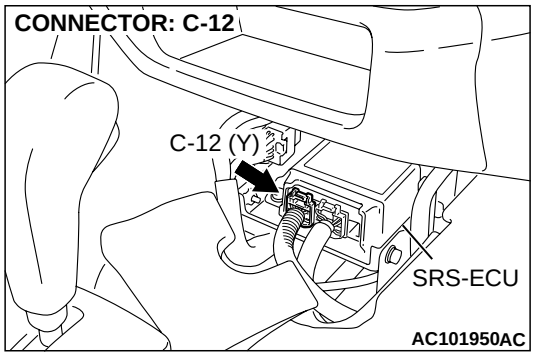
- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU
- Incorrect scan tool (MUT-II) ROM pack

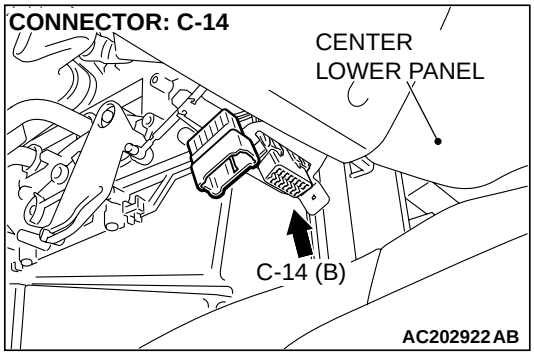
DIAGNOSIS

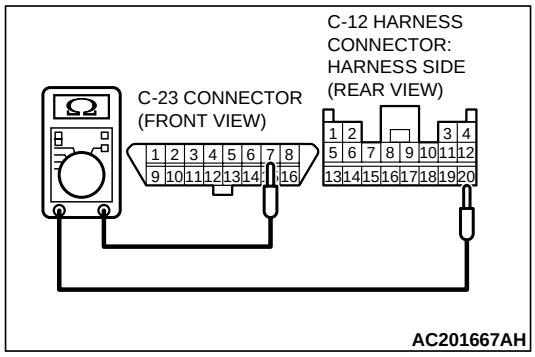
STEP 1. Check that the scan tool can communicate with the other systems.

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

YES : Go to Step 2.
NO : Refer to GROUP 13A, Diagnosis P.13A-551.







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

(1) Disconnect SRS-ECU connector C-12 and data link connector C-14 and measure at the wiring harness side.

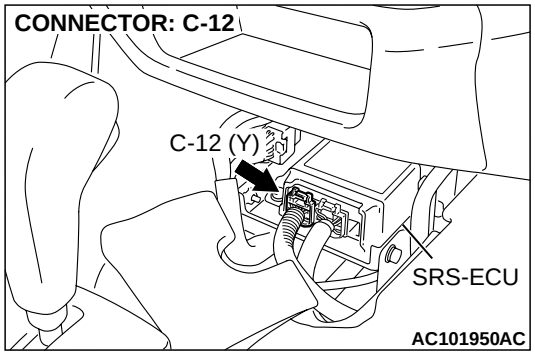
⚠ CAUTION

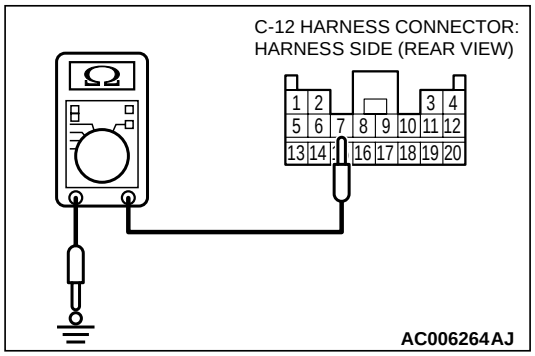
Do not insert a test probe into the terminal of the SRS-ECU connector C-12 from its front side directly as the connector contact pressure may be weakened.

(2) Check for continuity between the following terminals. SRS-ECU connector C-12 (terminal No.20) and date ling connector C-14 (terminal No.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 C-12, and measure at the wiring harness side.

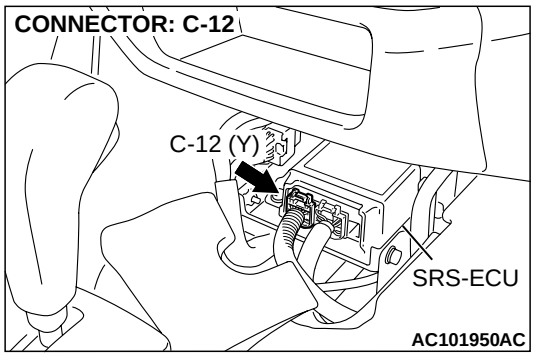
⚠ CAUTION

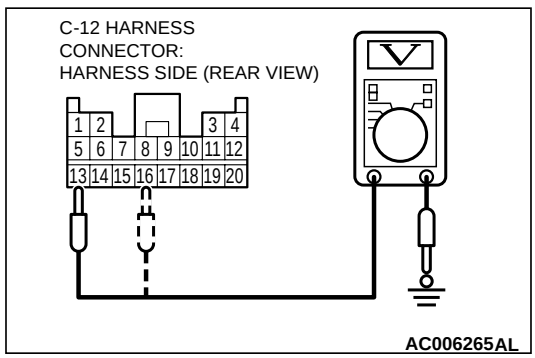
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Check for continuity between terminal 7 and body 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 the negative battery terminal.
(2) Disconnect SRS-ECU connector C-12, and measure at the wiring harness side.
(3) Connect the negative battery terminal.
(4) Turn the ignition switch to the "ON" position.

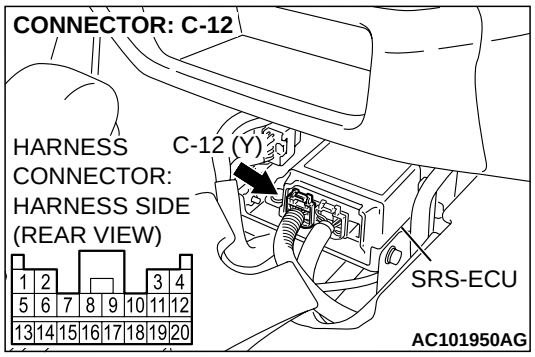
⚠ CAUTION

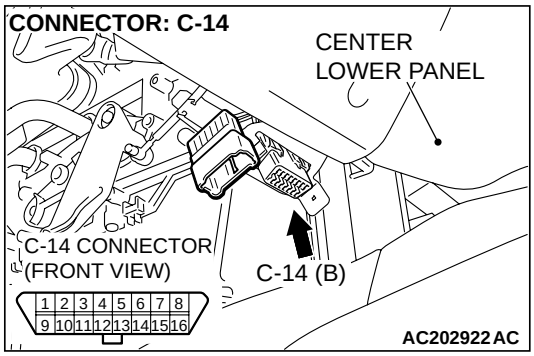
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

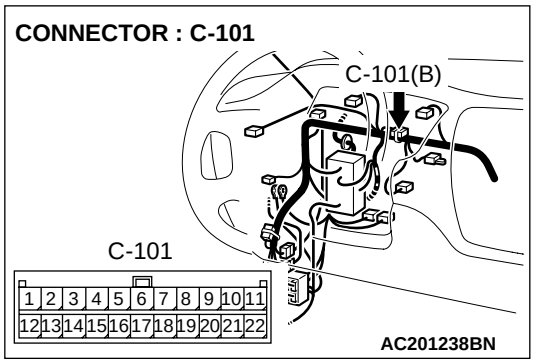
(5) Measure the voltage between terminals 13, 16 and body ground.
Voltage should measure 9 volts or more.

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.52B-182.) Then go to Step 8.
NO : Go to Step 7.





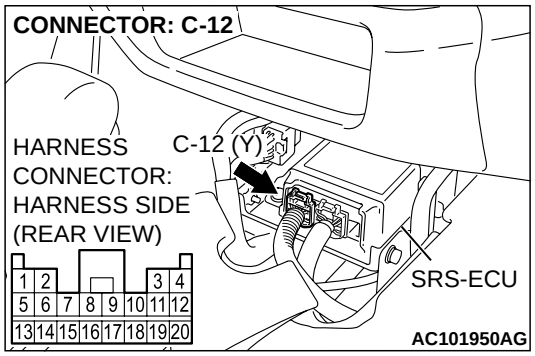


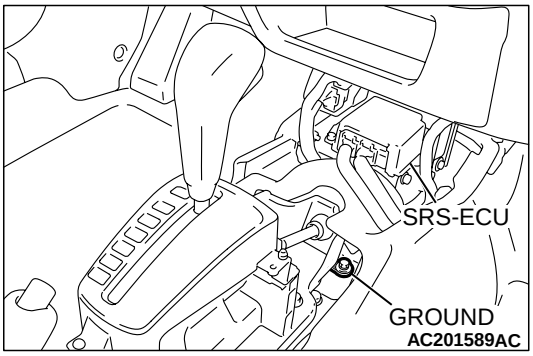
STEP 5. Check the harness wires between SRS-ECU connector C-12 (terminal No.20) and data link connector C-14 (terminal No.7).

NOTE: After inspecting intermediate connector C-101, inspect the wiring harness.
If the intermediate connector C-101, is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 8.

Q: Are the harness wires between SRS-ECU connector C-12 (terminal No.20) and data link connector C-14 (terminal No.7) in good condition?

YES : Go to step 8.
NO : Repair the harness wires between SRS-ECU connector C-12 and data link connector C-14. Then go to Step 8.



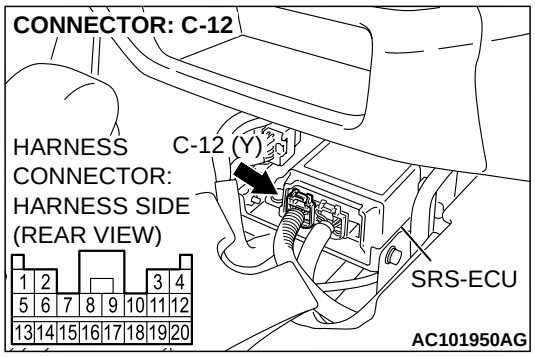


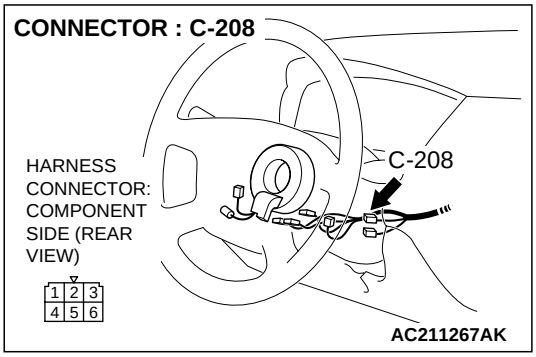
STEP 6. Check the harness wire between SRS-ECU connector C-12 (terminal No.7) and ground.

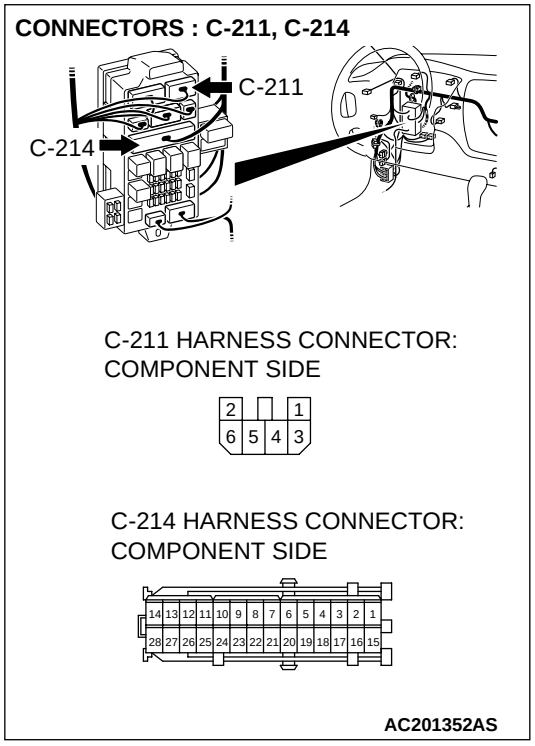
Q: Are the harness wire between SRS-ECU connector C-12 (terminal No.7) and ground in good condition?

YES : Go to Step 8.

NO : Repair the harness wire between SRS-ECU connector C-12 and ground. Then go to Step 8.







STEP 7. Check the harness wires between SRS-ECU connector C-12 (terminal No.13 and 16) and ignition switch connector C-208 (terminal No.2).

NOTE: After inspecting intermediate connector C-214 and C-211, inspect the wiring harness.
If the intermediate connector C-214 or C-211 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2.
Go to Step 8.

Q: Are the harness wires between SRS-ECU connector C-12 (terminal No.13 and 16) and ignition switch connector C-208 (terminal No.2) in good condition?

YES : Go to Step 8.

NO : Repair the harness wires between SRS-ECU connector C-12 and ignition switch connector C-208. Then go to Step 8.

STEP 8. Retest the system.

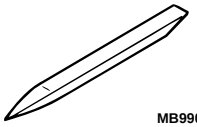
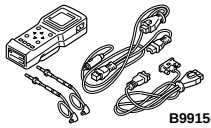
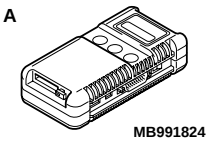
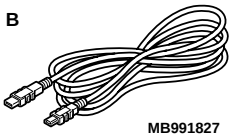
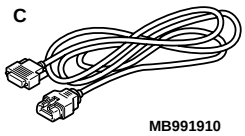
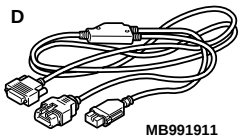
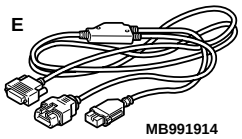
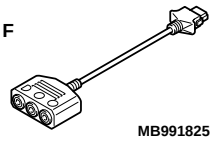
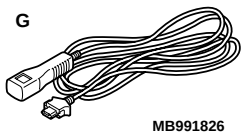
Q: Does the scan tool communicate normally with the SRS system?

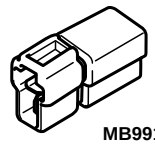
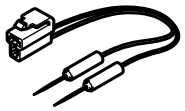
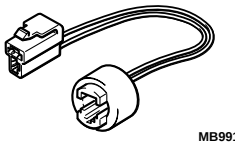
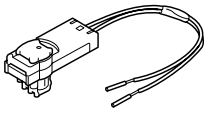
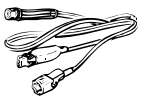
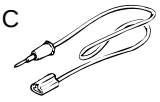
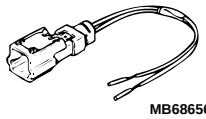
YES : The procedure is complete. (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

NO : There is no action to be taken.

SPECIAL TOOLS

M1524000700345

TOOL	TOOL NUMBER AND NAME	SUPERSESSION	APPLICATION
 MB990784	MB990784 Ornament remover	General service tool	Removal of cover.
 B991502	MB991502 Scan tool (MUT-II)	MB991496-OD	• Reading diagnostic trouble codes • Erasing diagnostic trouble codes • Reading vehicle data for a specific period • Reading erase times (Refer to MUT-II operating instructions)
A  MB991824 B  MB991827 C  MB991910 D  MB991911 E  MB991914 F  MB991825 G  MB991826 MB991958	MB991958 A: MB991824 B: MB991827 C: MB991910 D: MB991911 E: MB991914 F: MB991825 G: MB991826 Scan tool (MUT-III sub assembly) A: Vehicle communication interface (U. C. I.) B: MUT-III USB cable C: MUT-III main harness A (Vehicles with CAN communication system) D: MUT-III main harness B (Vehicles without CAN communication system) E: MUT-III main harness C (For Chrysler models only) F: MUT-III adapter harness G: MUT-III trigger harness		Checking diagnostic trouble code

TOOL	TOOL NUMBER AND NAME	SUPERSESSION	APPLICATION
 MB991865	MB991865	Dummy resistor	SRS air bag circuit check
 MB991866	MB991866	Resistor harness	
 MB991884	MB991884	Resistor harness (For Pre-tensioner)	Seat belt with pre-tensioner circuit check
 MB991885	MB991885	Pretensioner adapter harness	• Deployment of seat belt with pre-tensioner inside the vehicle • Deployment of seat belt with pre-tensioner outside the vehicle
A  B  C  D  MB991223AG	MB991223 A: MB991219 B: MB991220 C: MB991221 D: MB991222 Harness set A: Test harness B: LED harness C: LED harness adapter D: Probe	General service tools	Checking the continuity and measuring the voltage at the SRS-ECU harness connector
 MB686560	MB686560 SRS air bag adapter harness	General service tool	• Deployment of air bag module (Front passenger's side) inside the vehicle • Deployment of air bag module (Front passenger's side)

TEST EQUIPMENT

M1524000800267

TOOL	NAME	USE
 AC000019AB	Digital multi-meter Use a multi-meter for which the maximum test current is 2 mA or less at the minimum range of resistance measurement	Checking the SRS electrical circuitry with SRS check harness

TSB Revision

SRS MAINTENANCE

M1524003900241

The SRS must be inspected by an authorized dealer up to 10 years after the date of vehicle registration. (Refer to GROUP 00, Maintenance Service – SRS Maintenance P.00-48.)

POST-COLLISION DIAGNOSIS

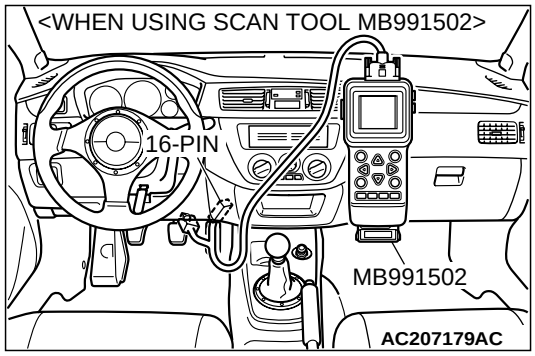
M1524001100379

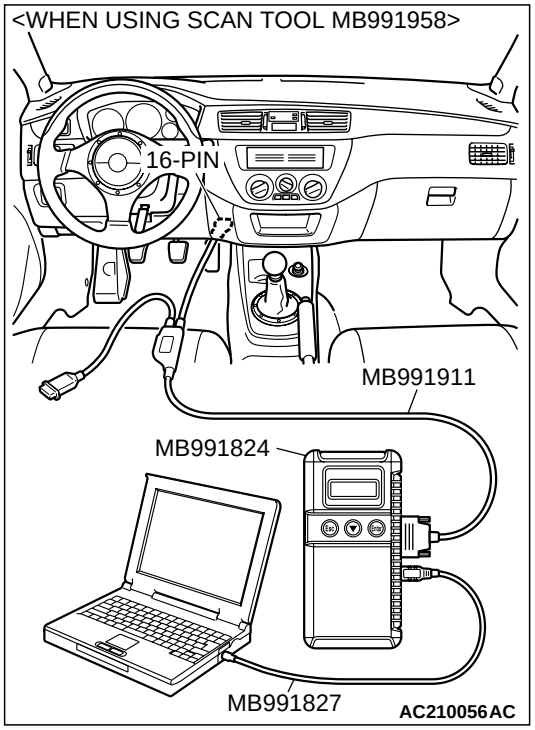
To inspect and service the SRS after a collision (whether or not the air bags have deployed), perform the following steps.

SRS-ECU MEMORY CHECK

Required Special Tool:

- MB991502: Scan tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B





⚠ 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 or MB991958.

1. Connect scan tool MB991502 or MB991958 to the data link connector (16-pin).
2. Read (and write down) all displayed diagnostic trouble codes. (Refer toP.52B-23.)

   NOTE: If the battery power supply has been disconnected or disrupted by the collision, scan tool MB991502 or MB991958 cannot communicate with the SRS-ECU. Check the battery then check and, if necessary, repair the front wiring harness and the body wiring harness before proceeding.
3. Read the data list (fault duration and how many times memories are erased) using scan tool MB991502 or MB991958.

Data list

NO.	SERVICE DATA ITEM	APPLICABILITY
92	Number indicating how often the memory is cleared	Maximum time to be stored: 250
93	How long a problem has lasted (How long it takes from the occurrence of the problem till the first air bag squib igniting signal)	Maximum time to be stored: 9,999 minutes (approximately seven days)
94	How long a problem has lasted (How long it takes from the first air bag squib igniting signal till now.)	

4. Erase the diagnostic trouble codes and, after waiting five seconds or more, read (and write down) all displayed diagnostic trouble codes. (Refer to P.52B-23.)

TSB Revision

REPAIR PROCEDURE

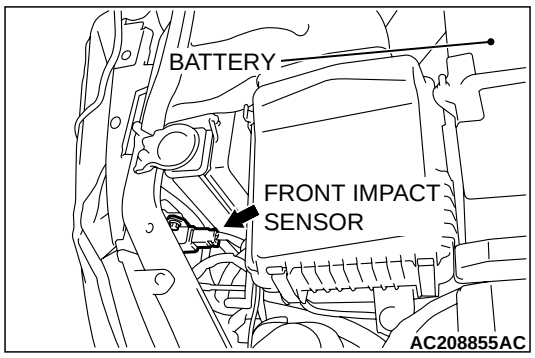
WHEN FRONT AIR BAGS DEPLOY IN A COLLISION.

1. Replace the following parts with new ones.
   - Front impact sensor (Refer toP.52B-179.)
   - SRS-ECU (Refer to P.52B-182.)
   - Air bag module (Refer to P.52B-184.)
   - Seat belt with pre-tensioner (Refer to P.52B-192.)
   - Instrument panel (Refer toP.52A-3.)
2. Check the following parts and replace if there are any malfunctions.
   - Clock spring (Refer to P.52B-184.)
   - Steering wheel, steering column and shaft assembly
     (1) Check the wiring harness (built into the steering wheel) and connectors for damage, and terminals for deformation.
     (2) Install the air bag module to check fit or alignment with the steering wheel.
     (3) Check the steering wheel for noise, binds or difficult operation and excessive free play.
     (4) Check the steering column shaft shock absorbing mechanism (Refer to GROUP 37A, On-Vehicle Service – Steering Column Shaft Assembly Shock Absorbing Mechanism Check P.37-21).
3. Check the wiring harnesses for binding, the connectors for damage, poor connections, and the terminals for deformation. (Refer to P.52B-18.)

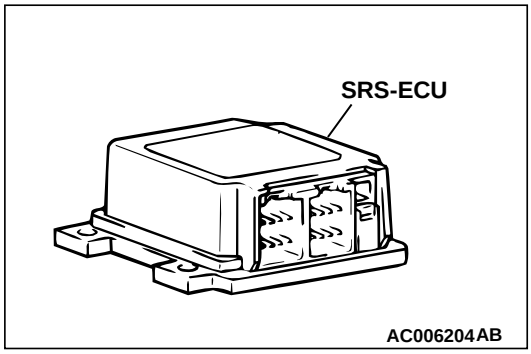
WHEN AIR BAGS DO NOT DEPLOY IN LOW-SPEED COLLISION.

Check the SRS components. If the SRS components are showing any visible damage such as dents, cracks, or deformation, replace them with new ones. Concerning parts removed for inspection, replacement with new parts and cautionary points for working, refer to appropriate INDIVIDUAL COMPONENT SERVICE, P.52B-178.

Front impact sensor

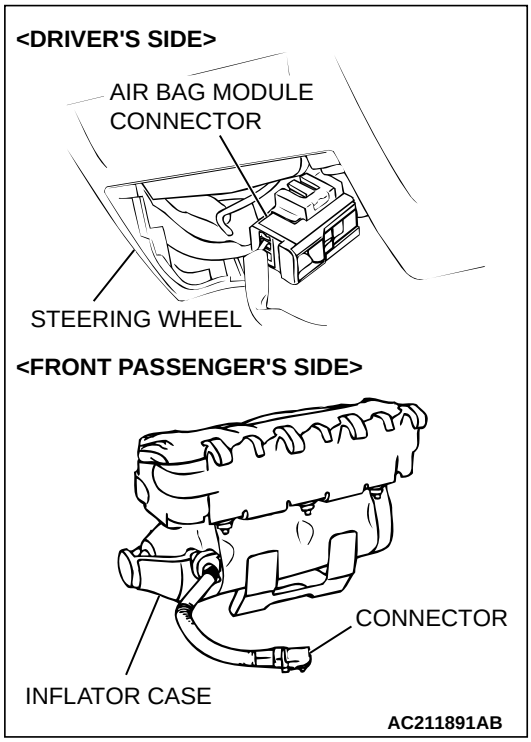


1. Check the radiator support panel for distortion and rust.
2. Check the front impact sensor for dents, cracks, deformation or rust.
3. Check the front impact sensor wiring harness for binding, check the connector for damage, and check the terminals for deformation.



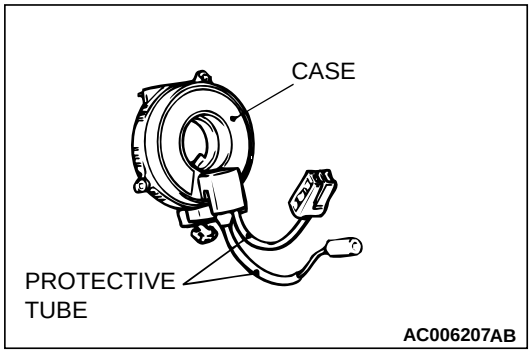
SRS-ECU

1. Check the SRS-ECU case and brackets for dents, cracks or deformation.
2. Check the connector for damage, and the terminals for deformation.
3. Check the fit of the SRS-ECU and its bracket.



Air bag modules

1. Check the pad cover for dents, cracks or deformation.
2. Check the connector for damage, terminals deformities, and the harness for binding.
3. Check the air bag inflator case for dents, cracks or deformities.
4. Install the air bag module (driver's side) to the steering wheel to check fit or alignment with the steering wheel.
5. Install the air bag module (front passenger's side) to the instrument panel and front deck crossmember to check fit or alignment.



Clock spring

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

Steering wheel, steering column and shaft assembly

1. Check the wiring harness (built into the steering wheel) and the connectors for damage, and the terminals for deformation.
2. Install the air bag module to check fit or alignment with the steering wheel.
3. Check the steering wheel for noise, binding or difficult operation and excessive free play.
4. Check the steering column shaft shock absorbing mechanism (Refer to GROUP 37A, On-Vehicle Service – Steering Column Shaft Assembly Shock Absorbing Mechanism CheckP.37-21).

Seat belt with pre-tensioner

1. Check the seat belt for damage or deformation.
2. Check the seat belt with pre-tensioner for cracks or deformation.
3. Check that the unit is installed correctly to the vehicle body.

Harness connector (floor wiring harness)

Check the harnesses for binding, the connectors for damage, poor connection, and the terminals for deformation. (Refer to P.52B-18.)

INDIVIDUAL COMPONENT SERVICE

M1524002900301

⚠ ***WARNING***

- ***If heat damage may occur during paint work, remove Front impact sensor, the SRS-ECU, the air bag module, the clock sprint, the seat belt with pre-tensioner. Recheck the SRS system operability after reinstalling them. (Refer to GROUP 00, Maintenance Service-SRS Maintenance P.00-48.)***
  - ***SRS-ECU, air bag module, clock spring: 93°C (200°F) or more***
  - ***Seat belt with pre-tensioner: 90°C (194°F) or more***
- ***If the SRS components are removed for the purpose of check, sheet metal repair, painting, etc., they should be stored in a clean, dry place until they are reinstalled.***

If the SRS components are to be removed or replaced as a result of maintenance, diagnosis, etc., follow the appropriate procedure in this section. (Front impact sensor: refer to P.52B-179, SRS-ECU: refer to P.52B-182, Air Bag Modules and Clock Spring: refer to P.52B-184, Seat Belt with Pre-tensioner: refer to P.52B-192.)

FRONT IMPACT SENSORS

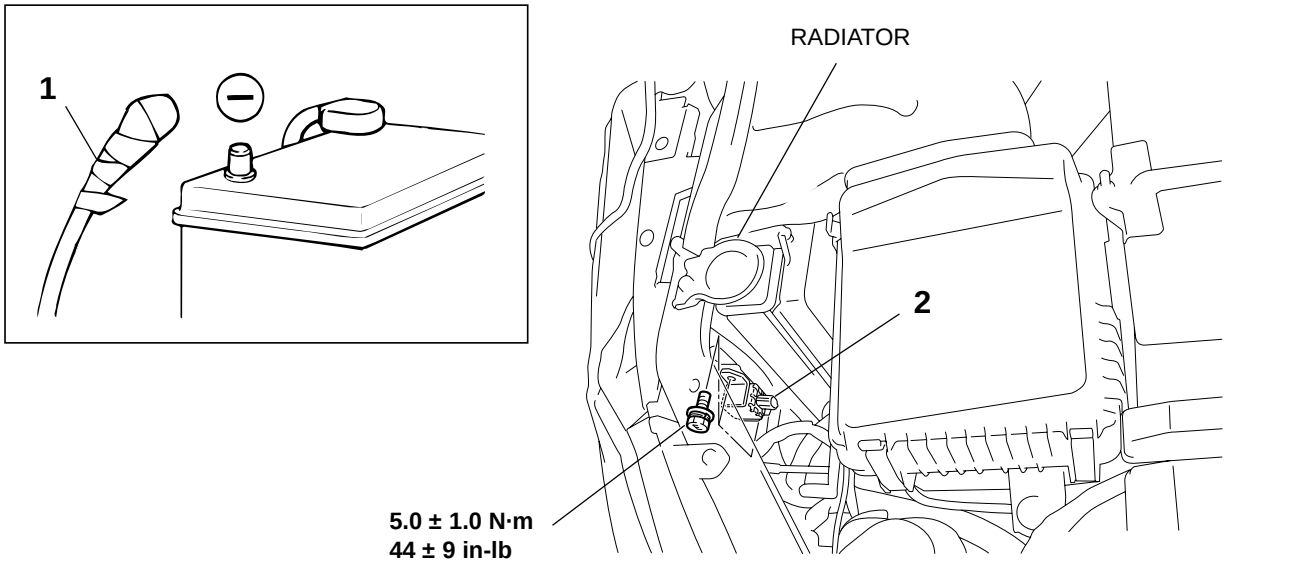
REMOVAL AND INSTALLATION

M1524001500203

⚠ ***WARNING***

- ***Never repair or disassemble the front impact sensor. If faulty, replace it.***
- ***Handle the front impact sensors very carefully, taking care not to drop them or otherwise a new one is required.***
- ***Replace the sensors with new ones after the air bag has deployed.***

Pre-removal Operation
- Turn the ignition key to the "LOCK" (OFF) position.



REMOVAL STEPS

<<A>> 1. NEGATIVE (–) BATTERY CABLE CONNECTION
2. FRONT IMPACT SENSOR

INSTALLATION STEPS

>>A<< • PRE-INSTALLATION INSPECTION
>>B<< 2. FRONT IMPACT SENSOR
1. NEGATIVE (–) BATTERY CABLE CONNECTION
>>C<< • POST-INSTALLATION INSPECTION

NOTE: The illustration above shows the front impact sensor (LH). The position of the front impact sensor (RH) is symmetrical to this.

TSB Revision

REMOVAL SERVICE POINT

<<A>> NEGATIVE (-) BATTERY CABLE DISCONNECTION

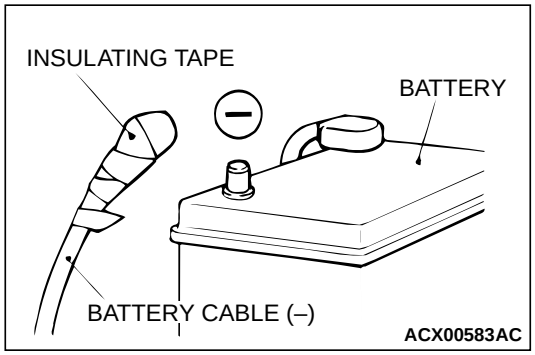
⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cable before doing any further work (Refer to P.52B-18).

⚠ ***WARNING***

Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

Disconnect the negative (-) battery cable from the battery and tape the terminal to prevent accidental connection and air bag(s) deployment.



INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

when the new front impact sensor refer to the previous item "INSPECTION."

>>B<< FRONT IMPACT SENSOR INSTALLATION

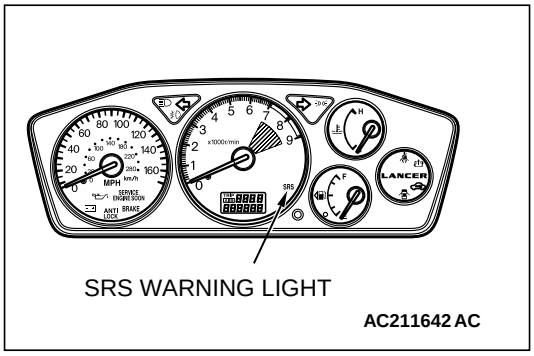
⚠ ***WARNING***

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

1. Securely connect the connector.
2. Position the front impact sensor facing toward the front of the vehicle as shown by the arrow on the label, and install it securely.

>>C<< POST-INSTALLATION INSPECTION

1. Reconnect the negative (-) battery cable.
2. Turn the ignition key to "ON" position.



3. Does the "SRS" warning light illuminate for approximately seven seconds, and then remain off for at least five seconds after turning "OFF"?
4. If yes, the SRS system is functioning properly.
   If no, consult page P.52B-23.

INSPECTION

M1524001600170

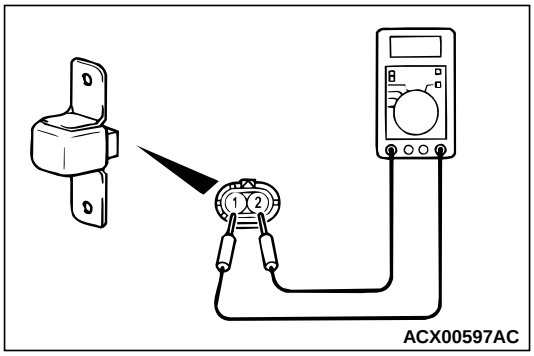
⚠ WARNING

If a dent, crack, deformation or rust is detected, replace with a new sensor.

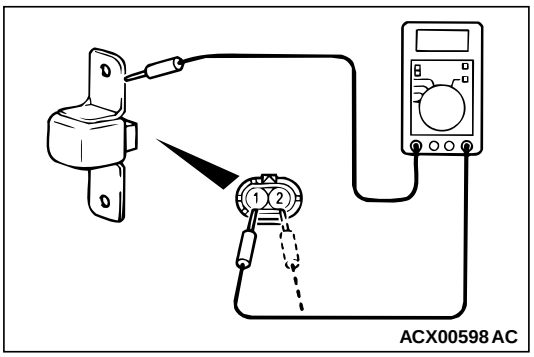
1. Check the front impact sensor for dents, cracks, deformation or rust.

⚠ WARNING

If the resistance value shows the short-circuit or the open-circuit, be sure to replace the front impact sensor with a new one.



2. Check the short-circuit or the open-circuit between the front impact sensor terminals.
   When short-circuit: 1 ohm and less
   When open-circuit: 1 mega ohm and over



3. Check for continuity between the terminal and the bracket.
   When there is continuity, it shows insufficient insulation of the sensor. Replace the sensor with a new one.
4. Deformation and rust on the radiator support panel.

SRS CONTROL UNIT (SRS-ECU)

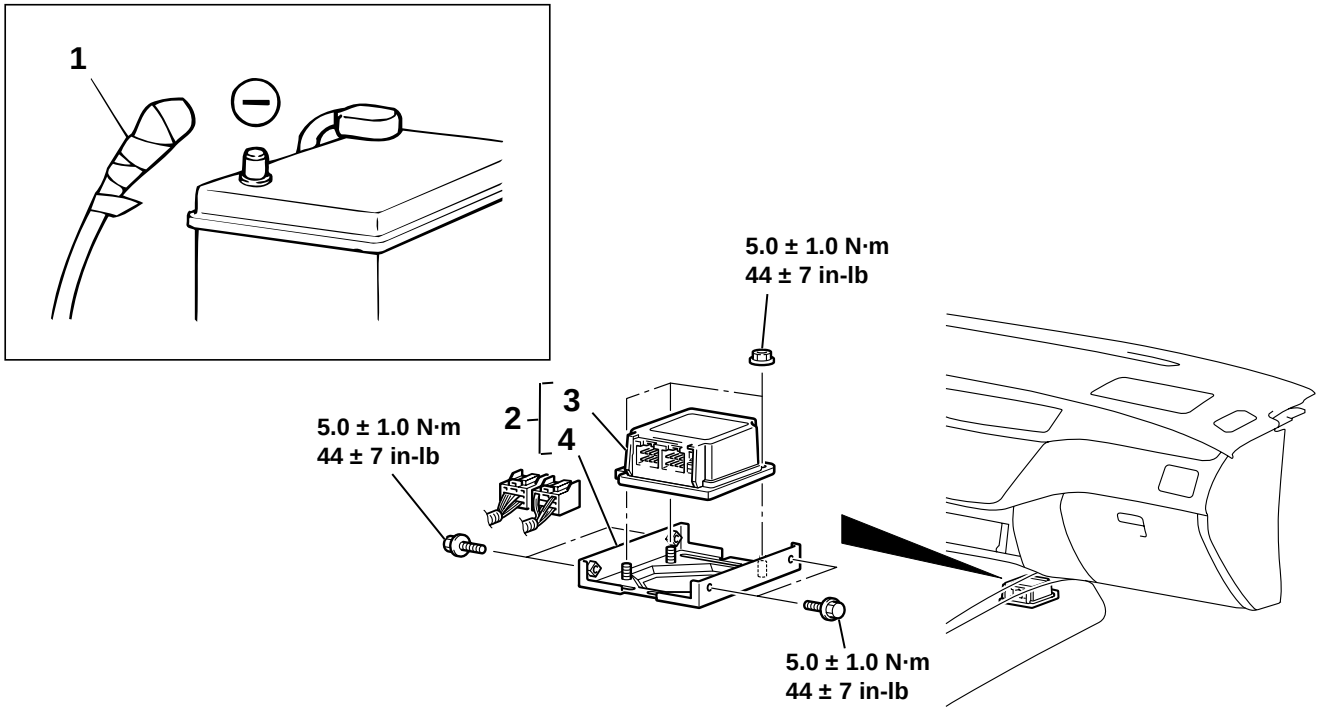
M1524002100316

REMOVAL AND INSTALLATION

⚠ ***WARNING***

- ***Never attempt to disassemble or repair the SRS-ECU. If faulty, replace it.***
- ***Do not drop or subject the SRS-ECU to impact or vibration. If denting, cracking, deformation, or rust are discovered in the SRS-ECU, replace it with a new SRS-ECU. Discard the old one.***
- ***After deployment of an air bag, replace the SRS-ECU with a new one.***
- ***Never use an ohmmeter on or near the SRS-ECU, and use only the special test equipment described on P.52B-173.***

Pre-removal Operation
- Turn the ignition switch to the "LOCK" (OFF) position.



AC100671AC

REMOVAL STEPS

<<A>>
1. NEGATIVE (–) BATTERY CABLE CONNECTION
2. SRS-ECU BRACKET ASSEMBLY
3. SRS-ECU
4. SRS-ECU BRACKET

INSTALLATION STEPS

4. SRS-ECU BRACKET
>>A<< 3. SRS-ECU
2. SRS-ECU BRACKET ASSEMBLY
1. NEGATIVE (–) BATTERY CABLE CONNECTION
>>B<< • POST-INSTALLATION INSPECTION

TSB Revision

REMOVAL SERVICE POINT

<<A>> NEGATIVE (–) BATTERY CABLE DISCONNECTION

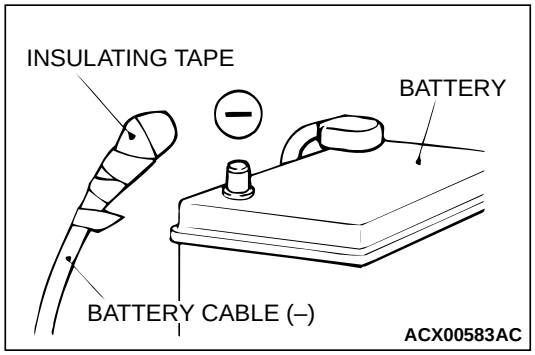
⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

Disconnect the negative battery cable from the battery and tape the terminal to prevent accidental connection and deployment.



INSTALLATION SERVICE POINTS

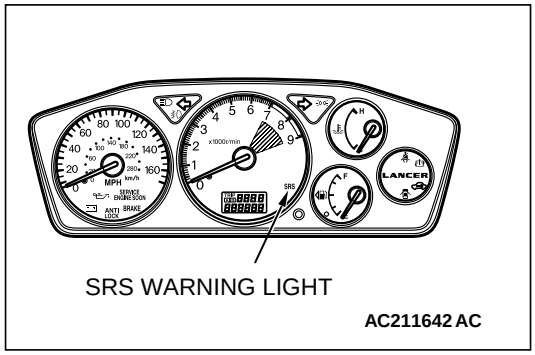
>>A<< SRS-ECU INSTALLATION

⚠ ***WARNING***

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

>>B<< POST-INSTALLATION INSPECTION

1. Reconnect the negative (–) battery cable.
2. Turn the ignition switch to the "ON" position.
3. Does the "SRS" warning light illuminate for approximately seven seconds, and then go out?
4. If yes, the SRS system is functioning properly. If no, refer to P.52B-23.



INSPECTION

M1524002200261

⚠ ***WARNING***

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

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

NOTE: Refer to P.52B-26 for inspection of SRS-ECU for other than physical damage.

AIR BAG MODULE(S) AND CLOCK SPRING

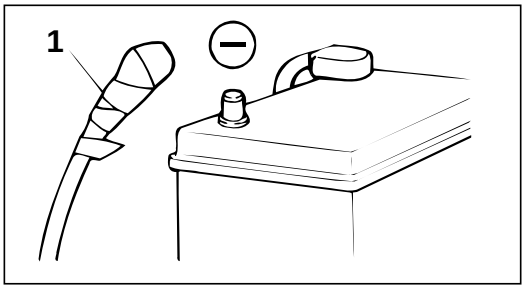
M1524002400362

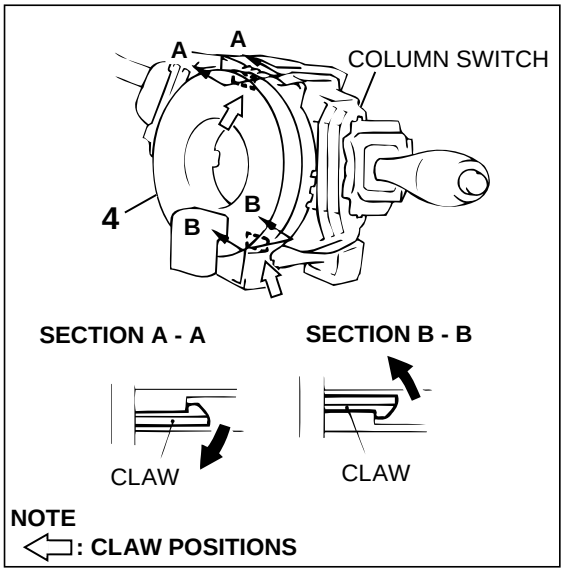
REMOVAL AND INSTALLATION

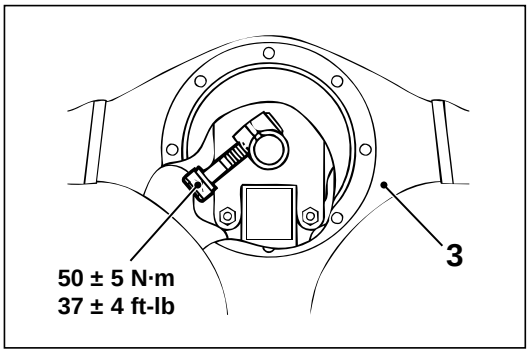
⚠ ***WARNING***

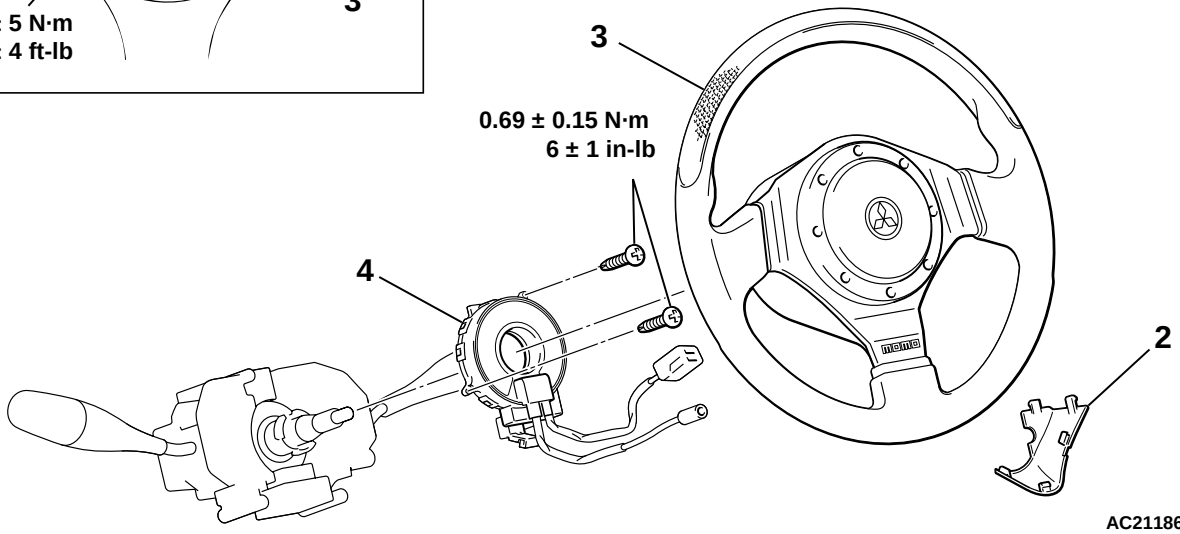
- ***Never attempt to disassemble or repair the air bag modules or clock spring. If faulty, replace it.***
- ***Do not drop the air bag modules or clock spring or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.***
- ***The air bag modules should be stored on a flat surface is facing upward. Do not place anything on top of it.***
- ***Do not expose the air bag modules to temperatures over 93°C (200°F).***
- ***After deployment of an air bag, replace the clock spring with a new one.***
- ***Wear gloves and safety glasses when handling air bags that have already deployed.***
- ***An undeployed air bag module should only be disposed of in accordance with the procedures. (Refer to P.52B-197.)***

<Air bag module (driver's side) and clock spring>









AC211864AB

AIR BAG MODULE REMOVAL STEPS

<<A>> 1. NEGATIVE (–) BATTERY CABLE CONNECTION
<<B>> 2. COVER
<<C>> 3. STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY

CLOCK SPRING REMOVAL STEPS

<<A>> 1. NEGATIVE (–) BATTERY CABLE CONNECTION
<<B>> 2. COVER
<<C>> 3. STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY
- COLUMN COVER LOWER (REFER TO GROUP 37A, STEERING SHAFTP.37-25.)

<<D>> 4. CLOCK SPRING

AIR BAG MODULE INSTALLATION STEPS

>>A<< • PRE-INSTALLATION INSPECTION
>>C<< 3. STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY
2. COVER
1. NEGATIVE (–) BATTERY CABLE CONNECTION
>>D<< • POST-INSTALLATION INSPECTION

CLOCK SPRING INSTALLATION STEPS

>>A<< • PRE-INSTALLATION INSPECTION
>>B<< 4. CLOCK SPRING
- COLUMN COVER LOWER (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-3.)

>>C<< 3. STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY
2. COVER

CLOCK SPRING INSTALLATION STEPS (Continued)

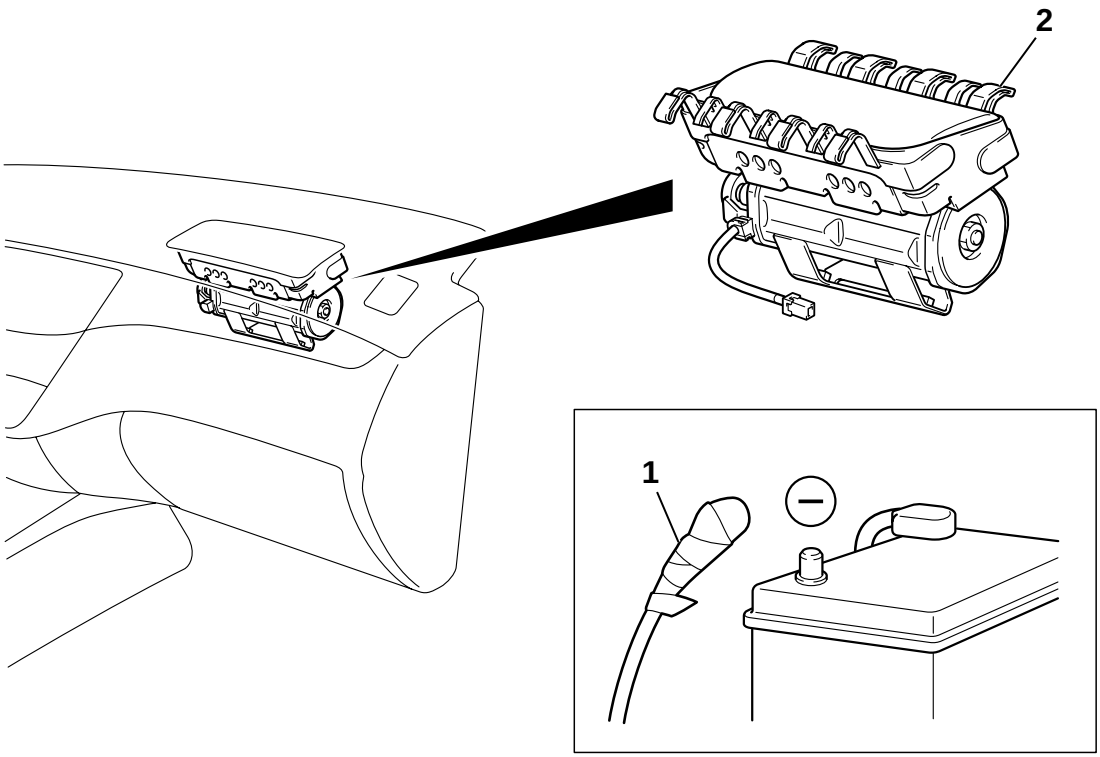
1. NEGATIVE (–) BATTERY CABLE CONNECTION

>>D<< • POST-INSTALLATION INSPECTION

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991222: Probe
- MB990803: Steering Wheel Puller
- MB990784: Ornament remover

<Air bag module (front passenger's side)>



AC100438AB

AIR BAG MODULE REMOVAL STEPS

<<A>> 1. NEGATIVE (–) BATTERY CABLE CONNECTION

• INSTRUMENT PANEL (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-3.)

<<E>> 2. AIR BAG MODULE (FRONT PASSENGER'S SIDE)

AIR BAG MODULE INSTALLATION STEPS

>>A<< • PRE-INSTALLATION INSPECTION

2. AIR BAG MODULE

• INSTRUMENT PANEL (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-3.)

AIR BAG MODULE INSTALLATION STEPS (Continued)

1. NEGATIVE (–) BATTERY CABLE CONNECTION

>>D<< • POST-INSTALLATION INSPECTION

Required Special Tool:

- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B
- MB991222: Probe
- MB990803: Steering Wheel Puller
- MB990784: Ornament remover

REMOVAL SERVICE POINT

<<A>> NEGATIVE (–) BATTERY CABLE DISCONNECTION

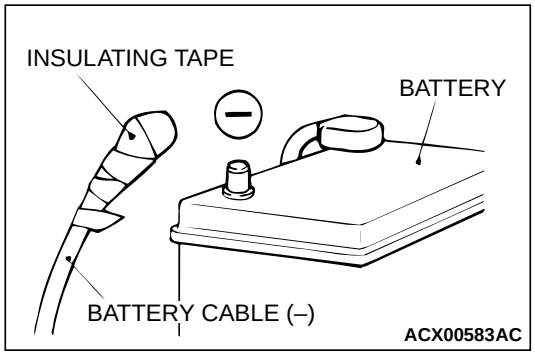
⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

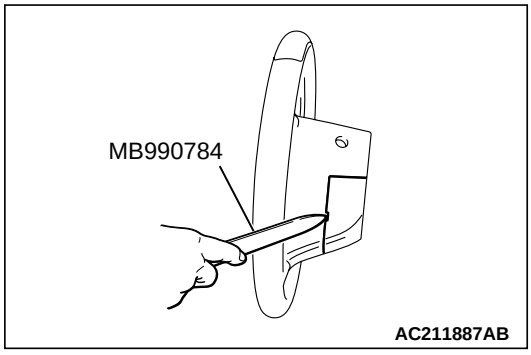
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

Disconnect the negative (–) battery cable from the battery and tape the terminal to prevent accidental connection and air bag(s) deployment.



<<B>> COVER REMOVAL

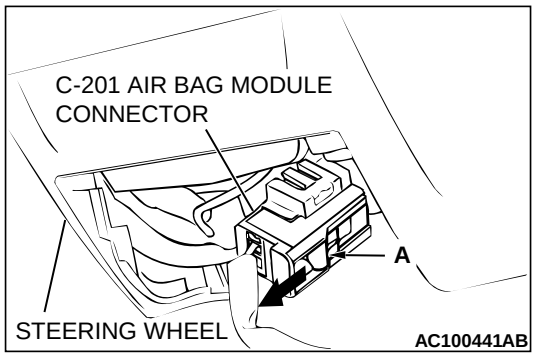
Insert the special tool MB990784 as shown in the illustration to remove the cover.



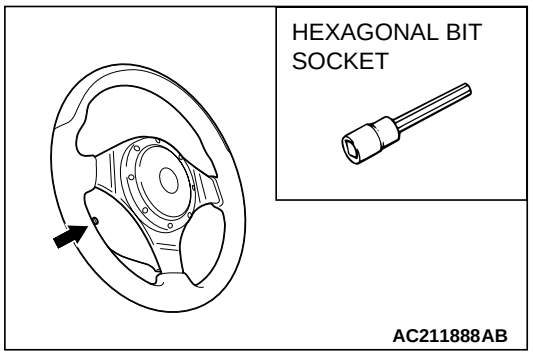
<<C>> STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY REMOVAL

⚠ WARNING

- ***The air bag module must not be measured with such equipment as an ohmmeter, nor disassembled.***
- ***The removed air bag module should be stored in a clean, dry place with the deployment surface facing up.***



1. By sliding the A section (in the figure) of the air bag module connector in the arrow direction, disconnect the connector.



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

   NOTE: Use a hexagonal bit socket or a hexagonal wrench having an effective length of 75 mm (0.2 inches) or more in the hexagonal section and the diameter of 8 mm or more.

<<D>> CLOCK SPRING REMOVAL

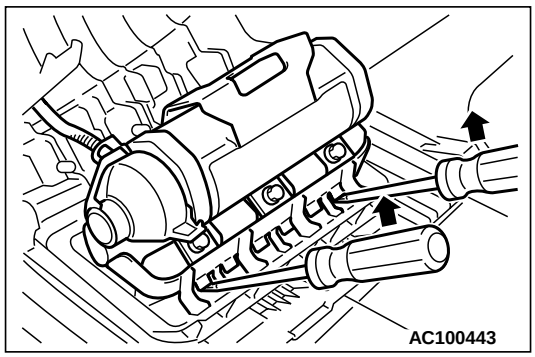
⚠ WARNING

The removed clock spring should be stored in a clean, dry place.

<<E>> AIR BAG MODULE REMOVAL (FRONT PASSENGER'S SIDE)

⚠ WARNING

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



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

INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

⚠ WARNING

Dispose of air bag modules only according to the specified procedure. (Refer to P.52B-197.)

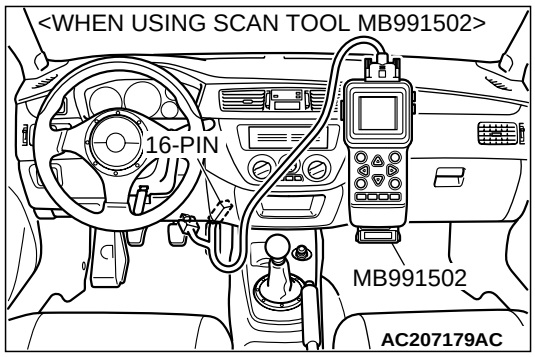
1. When installing the new air bag modules and clock spring, refer to “INSPECTION” (P.52B-191).
2. Connect the negative (–) battery cable.

⚠ CAUTION

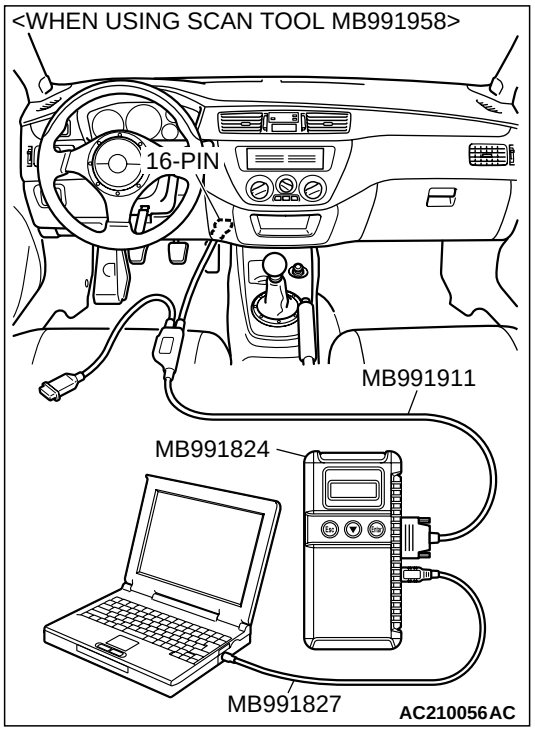
To prevent damage to scan tool MB991502 or MB991958, always turn the ignition, switch to the “LOCK” (OFF) position before connecting or disconnecting scan tool MB991502or MB991958.

3. Connect scan tool MB991502 or MB991958 to the data link connector.
4. Turn the ignition switch to the “ON” position.
5. Check DTCs using scan tool MB991502 or MB991958 to ensure entire SRS operates properly.
   Confirm that the DTCs other than 24 and 21 are not set.

<WHEN USING SCAN TOOL MB991502>



<WHEN USING SCAN TOOL MB991958>



⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-18.)

⚠ WARNING

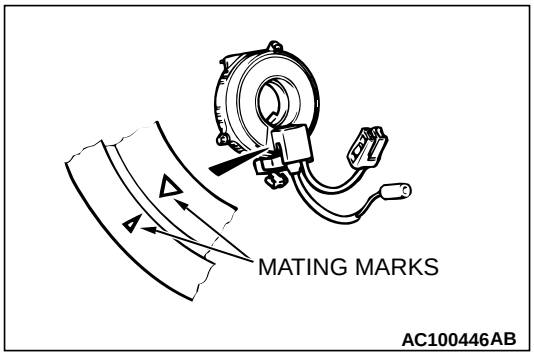
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

6. Turn the ignition switch to the "LOCK" (OFF) position. Disconnect the negative (–) battery cable and tape the terminal to prevent accidental connection and air bags deployment.

>>B<< CLOCK SPRING INSTALLATION

⚠ WARNING

Ensure that the clock spring's mating marks are properly aligned. If not, the steering wheel may not rotate completely during a turn, or the flat cable in the clock spring could be damaged, This would prevent normal SRS operation and possibly cause serious injury to the driver.



1. Align the mating marks of the clock spring.
   <Mating Mark Alignment>
   Turn the clock spring clockwise fully. Then turn it back approximately 3 3/4 turns counterclockwise to align the mating marks.
2. Turn the front wheels to the straight-ahead position. Then install the clock spring to the column switch.

>>C<< STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY INSTALLATION

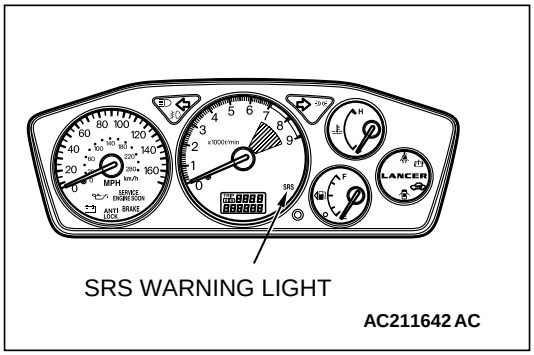
⚠ CAUTION

When installing the steering wheel, and air bag module ensure that the harness of the clock spring does not become caught or tangled.

1. Before installing the steering wheel, and air bag module turn the vehicle's front wheels to the straight-ahead position and align the mating marks of the clock spring.
2. After securing the steering wheel, turn the steering wheel all the way in both directions to confirm that the steering wheel rotation is normal.

>>D<< POST-INSTALLATION INSPECTION

1. Reconnect the negative (–) battery cable.
2. Turn the ignition switch to "ON" position.
3. Does the "SRS" warning light illuminate for approximately seven seconds, and go out?
4. If yes, the SRS system is functioning properly. If no, refer to P.52B-23.



INSPECTION

M1524002500347

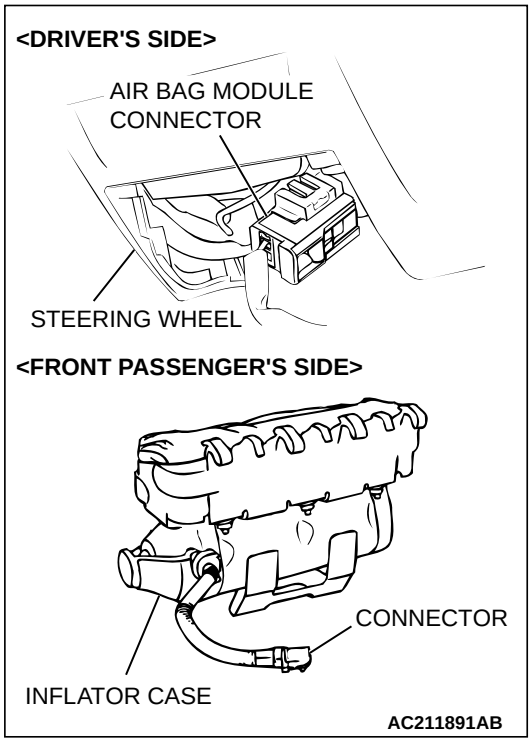
AIR BAG MODULE CHECK

⚠ ***DANGER***

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

⚠ ***WARNING***

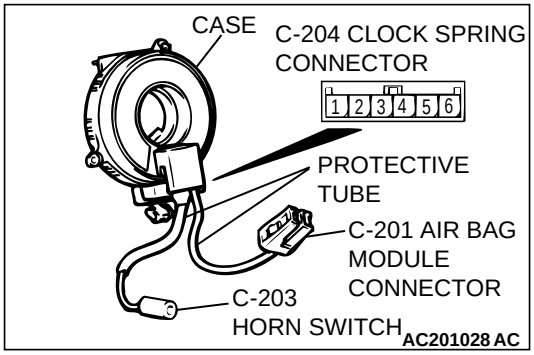
If any component damage is found during the following inspection, replace the air bag module with a new one. Dispose of the old one according to the specified procedure. (Refer to P.52B-197.)



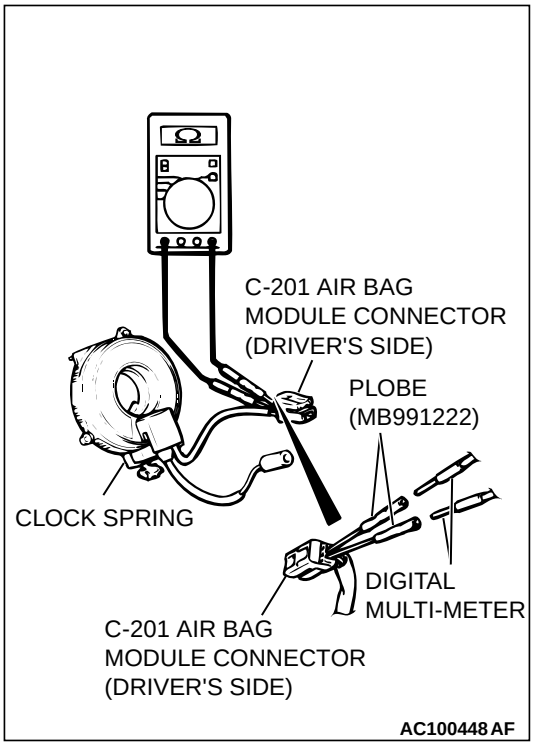
1. Check the pad cover for dents, cracks or deformation.
2. Check the connectors for damage, the terminals for deformation, and the harness for binds.
3. Check the air bag inflator case for dents, cracks or deformation.
4. Install the air bag module (driver's side) to the steering wheel and check fit and alignment with the wheel.
5. Install the air bag module (front passenger's side) to the instrument panel and front deck crossmember and check fit and alignment.

CLOCK SPRING CHECK

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



1. Check the connectors and protective tube for damage, and the terminals for deformation.
2. Visually check the case for damage.
3. Check to see that there is a charge (continuity) between the C-204 clock spring connector terminal and C-203 horn switch.



⚠ CAUTION
Do not directly insert a probe, etc. into the terminal from the front of the connector.

4. Insert the special tool (MB991222) from behind the airbag module connector of the C-201 driver's seat.
5. As shown in the Figure, connect the circuit tester to the special tool (MB991222) and check to see that there is a charge between the terminals.

SEAT BELTS WITH PRE-TENSIONER

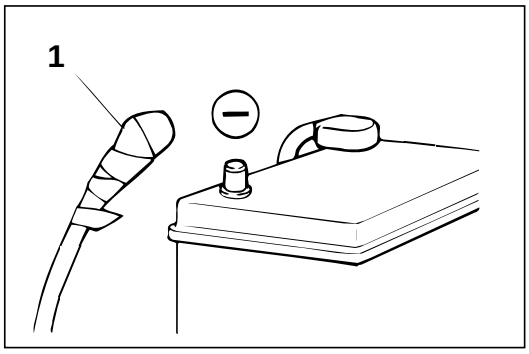
M1524004100196

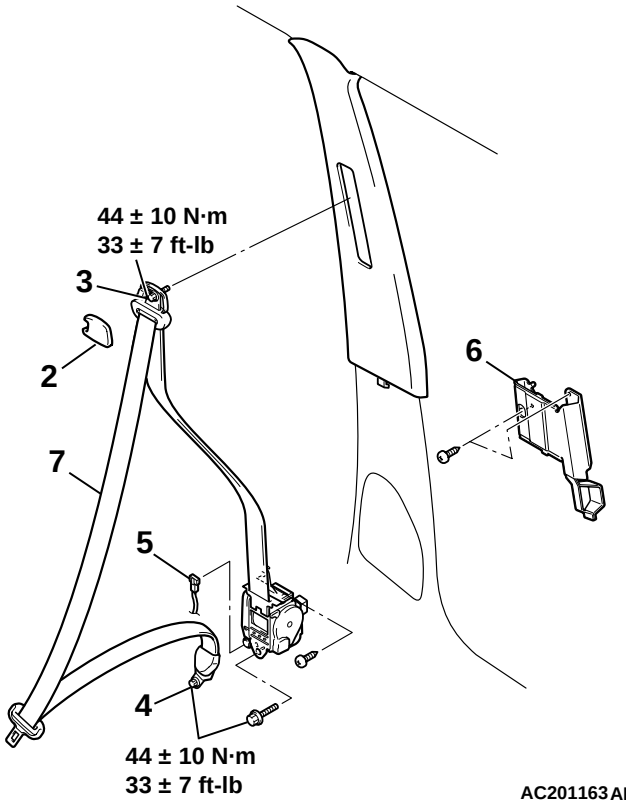
REMOVAL AND INSTALLATION

⚠ WARNING

- ***Never attempt to disassemble or repair the seat belt pre-tensioner. If faulty, replace it.***
- ***Be extremely careful when handling the seat with pre-tensioner. Do not subject it to shocks, drop it, bring it close to strong magnets or allow contact with water, grease or oil. Always replace it with a new part if any dents, cracks or deformation is found.***
- ***Do not place anything on top of the seat belt pre-tensioner.***
- ***Do not expose the seat belt pre-tensioner to temperatures over 90°C (194°F).***
- ***After operating the seat belt pre-tensioner, replace the seat belt pre-tensioner with a new part.***
- ***Gloves and protective goggles should be worn when handling a seat belt pre-tensioner once it has been used.***
- ***If disposing of a seat belt with pre-tensioner which has not yet been used, its seat belt pre-tensioner should be operated first before disposal. (Refer to P.52B-197.)***

Pre-removal Operation
- Turn the ignition key to the "LOCK" (OFF) position.





REMOVAL STEPS

<<A>>
1. NEGATIVE (–) BATTERY CABLE CONNECTION
2. SASH GUIDE COVER
3. SEAT BELT SHOULDER ANCHOR BOLT
4. SEAT BELT LOWER ANCHOR BOLT
- CENTER PILLAR TRIM, LOWER (REFER TO GROUP 52A, TRIMS P.52A-11.)

<<B>>
5. PRE-TENSIONER CONNECTOR CONNECTION
6. BRACKET
7. SEAT BELT WITH PRE-TENSIONER

INSTALLATION STEPS

>>A<<
- PRE-INSTALLATION INSPECTION

7. SEAT BELT WITH PRE-TENSIONER
6. BRACKET

>>B<<
5. PRE-TENSIONER CONNECTOR CONNECTION

INSTALLATION STEPS (Continued)
- CENTER PILLAR TRIM, LOWER (REFER TO GROUP 52A, TRIMS P.52A-11.)

4. SEAT BELT LOWER ANCHOR BOLT
3. SEAT BELT SHOULDER ANCHOR BOLT
2. SASH GUIDE COVER
1. NEGATIVE (–) BATTERY CABLE CONNECTION

>>C<<
- POST-INSTALLATION INSPECTION

Required Special Tools:
- MB991502: Scan Tool (MUT-II)
- MB991958: Scan Tool (MUT-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: USB Cable
  - MB991911: Main Harness B

TSB Revision

REMOVAL SERVICE POINTS

<<A>> NEGATIVE (–) BATTERY CABLE DISCONNECTION

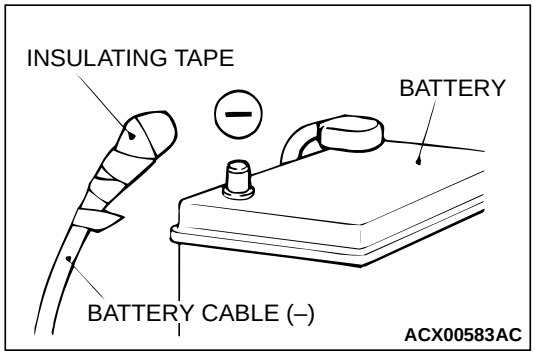
⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

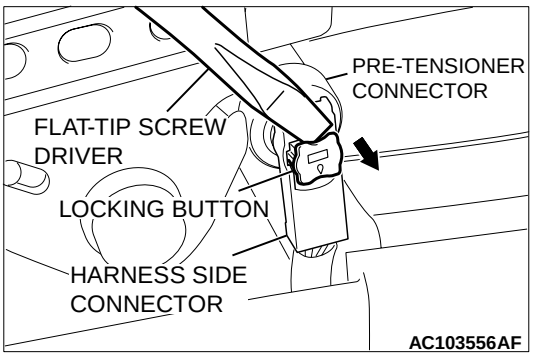
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

Disconnect the negative (–) battery cable from the battery and tape the terminal to prevent accidental connection and seat belt pre-tensioner operation.



<<B>> PRE-TENSIONER CONNECTOR DISCONNECTION

1. Use a flat-tipped screwdriver to unlock the locking button of the harness-side connector by with drawing it toward you in two stages.
2. Disconnect the pretensioner connector.



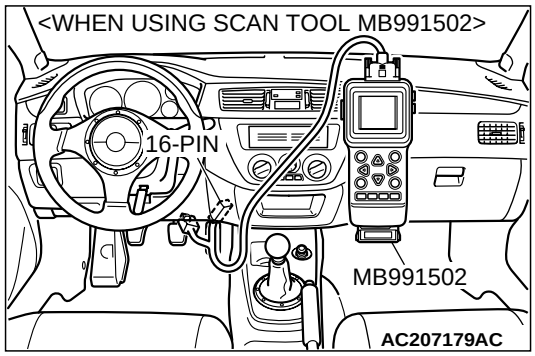
INSTALLATION SERVICE POINTS

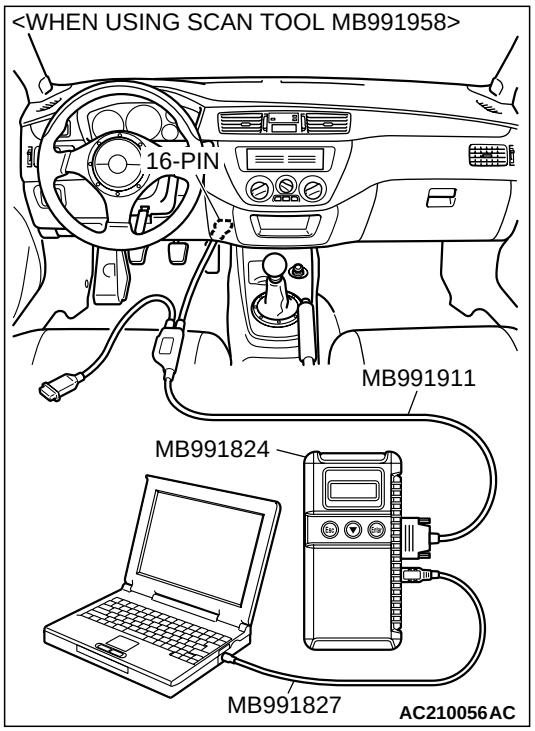
>>A<< PRE-INSTALLATION INSPECTION

⚠ ***WARNING***

Dispose of seat belt pre-tensioner only according to the specified procedure. (Refer to P.52B-197.)

1. When installing the new seat belt pre-tensioner, refer to “INSPECTION” (P.52B-196).
2. Connect the negative (–) battery cable.





⚠ CAUTION

To prevent damage to scan tool MB991502 or MB991958, always turn the ignition, switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991502or MB991958.

3. Connect scan tool MB991502 or MB991958 to the data link connector.
4. Turn the ignition switch to the "ON" position.
5. Check DTCs using scan tool MB991502 or MB991958 to ensure entire SRS operates properly.
   Confirm that the DTCs other than 26 and 28 are not set.

⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-18.)

⚠ WARNING

Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

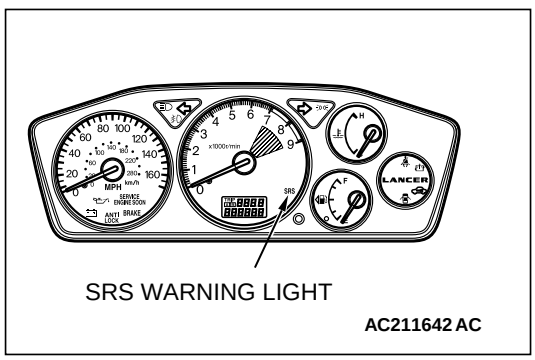
6. Turn the ignition switch to the "LOCK" (OFF) position. Disconnect the negative (–) battery cable and tape the terminal to prevent accidental connection and seat belt pretensioner operation.

>>B<< PRE-TENSIONER CONNECTOR CONNECTION

Connect the pretensioner connector then securely lock the locking button of the harness-side connector.

>>C<< POST-INSTALLATION INSPECTION

1. Reconnect the negative (–) battery cable.
2. Turn the ignition switch to the "ON" position.
3. Does the "SRS" warning light illuminate for approximately seven seconds, and go out?
4. If yes, the SRS system is functioning properly. If no, refer to P.52B-23.



INSPECTION

M1524004200182

SEAT BELT WITH PRE-TENSIONER CHECK

⚠ WARNING

- ***If any component damage is found during the following inspection, replace the seat belt with pre-tensioner with a new one. Dispose of the old one according to the specified procedure. (Refer to P.52B-197.)***
- ***Never attempt to measure the circuit resistance of the seat belt pre-tensioner even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental seat belt pre-tensioner operation will result in serious personal injury.***

1. Check seat belt pre-tensioner for dents, cracks or deformation.
2. Check the connectors for damage, the terminals for deformation, and the harness for binds.

AIR BAG MODULE AND SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES

M1524001200310

Before disposing of an air bag or a vehicle equipped with an air bag, follow the procedures below to deploy the air bag.

UNDEPLOYED AIR BAG MODULE DISPOSAL

Required Special Tools:

- MB686560: SRS Air Bag Adapter Harness
- MB991885: Pre-tensioner Adapter Harness (For pre-tensioner)

⚠ ***WARNING***

- ***If the vehicle is to be scrapped or otherwise disposed of, deploy the air bags and operate the seat belt pre-tensioner inside the vehicle. If the vehicle will continue to be used and only the air bag modules and seat belt pre-tensioner are to be disposed of, deploy the air bags and operate the seat belt pre-tensioner outside the vehicle.***
- ***Since a large amount of smoke is produced when the air bag is deployed and the seat belt pre-tensioner is operated, avoid residential areas whenever possible.***
- ***Since there is loud noise when the air bags are deployed and when the seat belt pre-tensioner are operated, avoid residential areas whenever possible. If anyone is nearby, give warning of the impending noise.***
- ***Suitable ear protection should be worn by personnel performing these procedures or by people in the immediate area.***

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Air bag module (driver's side)>

1. Move the vehicle to an isolated spot.

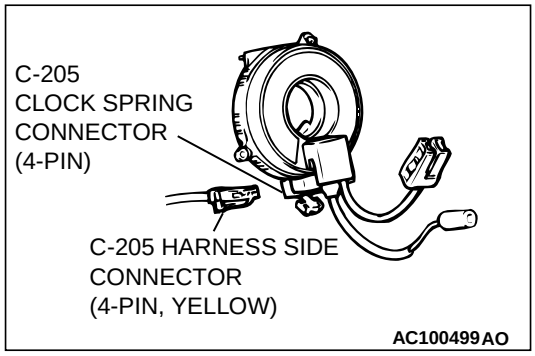
⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

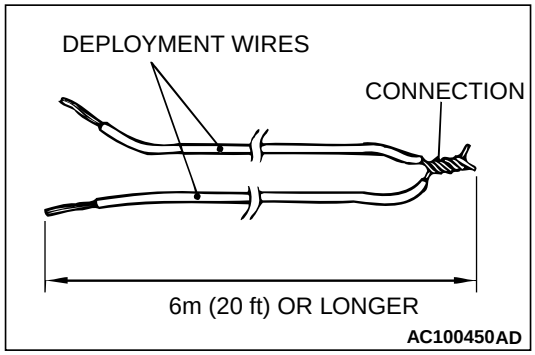
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

2. Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.
3. Remove the steering column cover lower. (Refer to GROUP 52A, Instrument PanelP.52A-3.)



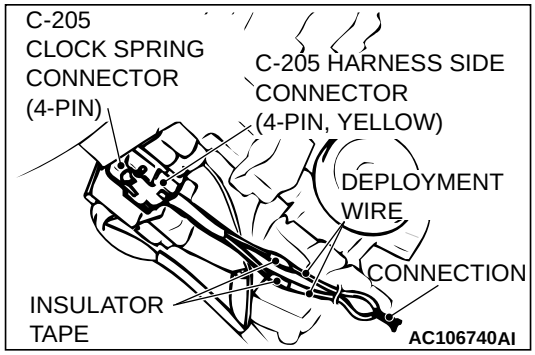
4. Remove the connection between the C-205 clock spring connector (four-pin) and the harness side connector (four-pin, yellow).

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



5. Obtain two suitable wires, which are 6 meters (20 feet) or longer, as deployment wires. Then connect the wires at one end to short.

   NOTE: This prevents the air bag from unintentional deployment caused by static electricity, etc.



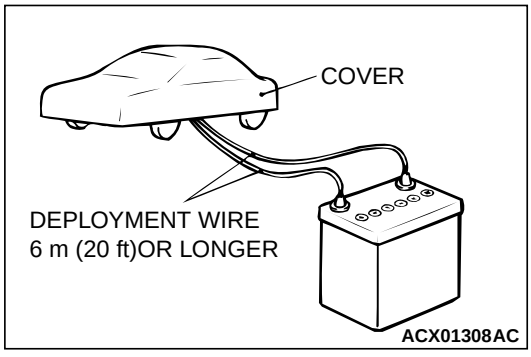
6. Cut with a nipper, etc. the instrument panel wiring harness shown in the Figure of the instructions, while the C-205 clock spring connector is disconnected.

   NOTE: The disconnection location should be sufficiently away from the C-205 harness side connector with consideration to the expansion harness connection location upon disconnections.

7. Individually connect a harness on the two harnesses disconnected, cover the connection areas with insulation tape and then pull out the expansion harness outside the vehicle.
8. Connect the C-205 harness side connector connected with an expansion harness to the C-205 clock spring connector.

⚠ ***WARNING***

If the glass is scratched, air bag deployment could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.



9. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

⚠ WARNING

- ***Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.***
- ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module Disposal (Refer to P.52B-208.) for post-deployment handling instructions.***
- ***If the air bag module fails to deploy, do not go near the module. Contact the MMNA Tech Line.***

10. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
11. After deployment, dispose of the air bag module according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-208).

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Air bag module (front passenger's side)>

1. Move the vehicle to an isolated spot.

⚠ DANGER

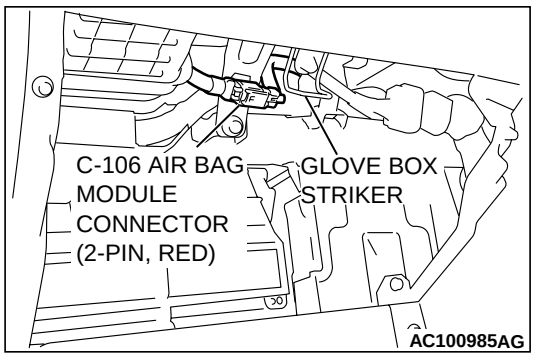
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

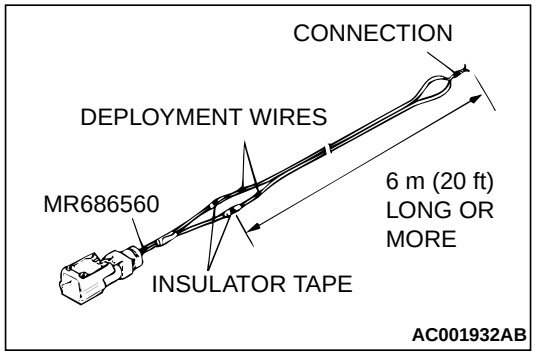
⚠ WARNING

Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

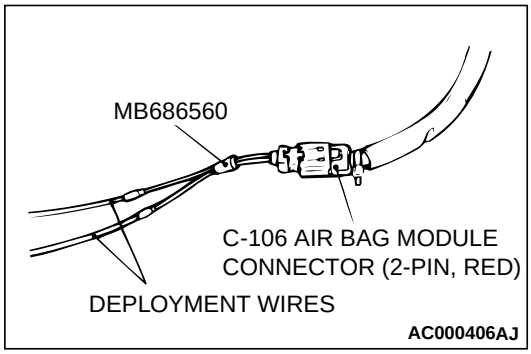
2. Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.
3. Remove the glove box. (Refer to GROUP 52A, Instrument Panel P.52A-3.)
4. Remove the connection between the C-106 air bag module (front passenger's side) connector (two-pin, red) and the instrument panel wiring harness connector (two-pin, red).

   NOTE: If the air bag module connector is disconnected from the instrument panel wiring harness, both electrodes of the air bag module connector will be automatically shorted to prevent unintended deployment of the air bag due to static electricity, etc.

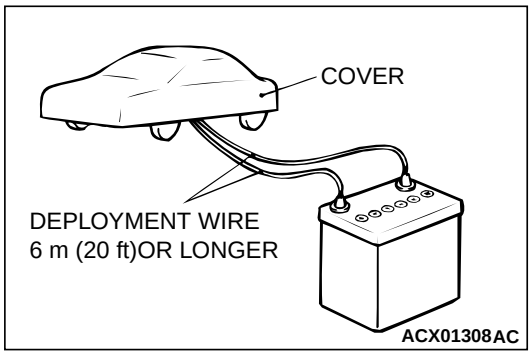




5. Connect deployment wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB686560, and cover the connections with insulation tape. The other ends of the deployment wires should be connected to each other (short-circuited), to prevent sudden unexpected deployment of the air bag module.



6. Connect the C-106 air bag module (front passenger's side) connector (two-pin, red) to special tool MB686560 and move the deployment wires out of the vehicle.



⚠ ***WARNING***

If the glass is scratched, air bag deployment could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

7. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

⚠ ***WARNING***

- ***Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.***
- ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module Disposal (Refer to P.52B-208.) for post-deployment handling instructions.***
- ***If the air bag module fails to deploy, do not go near the module. Contact the MMNA Tech Line.***

8. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
9. After deployment, dispose of the air bag module according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-208).

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Seat belt pre-tensioner>

1. Move the vehicle to an isolated spot.

⚠ ***DANGER***

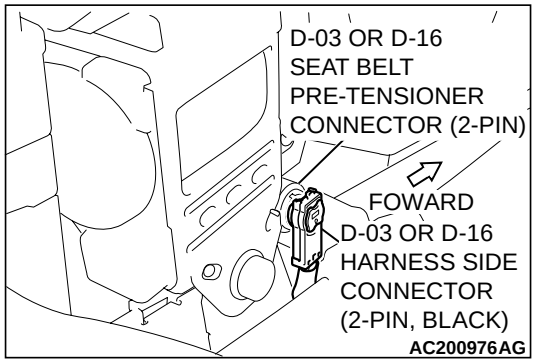
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

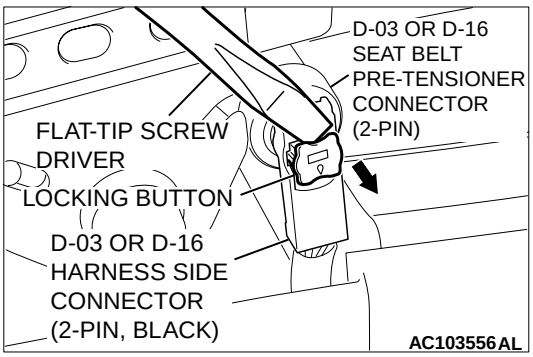
⚠ ***WARNING***

Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

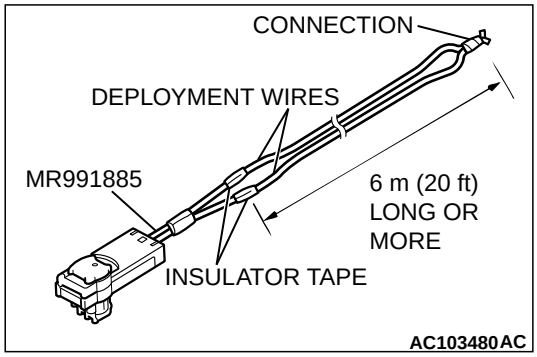
2. Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.
3. Remove the center pillar lower trim. (Refer to GROUP 52A, TRIMS P.52A-11.)
4. Execute the following steps to disconnect the connection between D-03 or D-16 seat belt pre-tensioner connector (two-pin) and harness side connector (two-pin, black).

   NOTE: If the seat belt pre-tensioner connector is disconnected from the floor wiring harness, both electrodes of the seat belt pre-tensioner connector will be automatically shorted to prevent unintended operation of the seat belt pre-tensioner due to static electricity, etc.

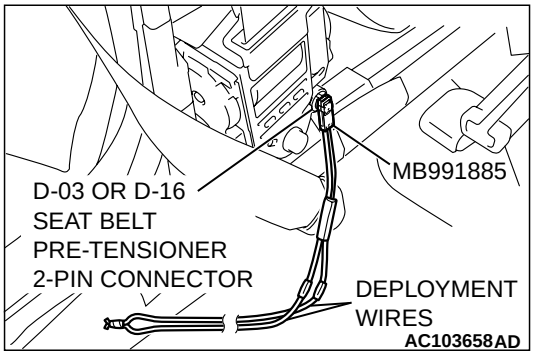


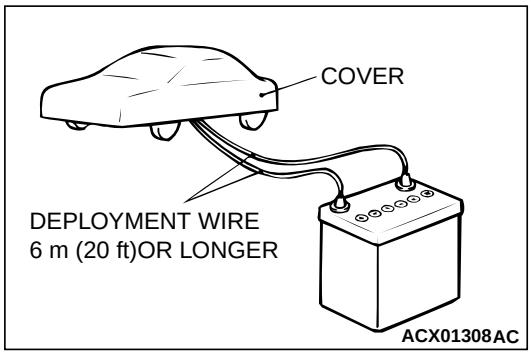


   (1) Use a flat-tip screwdriver to unlock the harness side connector (two-pin, black) locking button by with drawing it toward you in two stages.
   (2) Disconnect the D-03 or D-16 harness side connector.



5. Connect deployment wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB991885, and cover the connections with insulation tape. The other ends of the deployment wires should be connected to each other (short-circuited), to prevent sudden unexpected operate of the seat belt pre-tensioner.





6. Connect the D-03 or D-16 seat belt pre-tensioner two-pin connector to special tool MB686560 and move the deployment wires out of the vehicle.

⚠ ***WARNING***

If the glass is scratched, seat belt pre-tensioner operation could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

7. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

⚠ ***WARNING***

- ***Before operating the seat belt pre-tensioner in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.***
- ***The inflator will be quite hot immediately following the operation, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although no poisonous, do not inhale gas from the seat belt pre-tensioner operation. See Deployed Air Bag and Operated Seat Belt pre-tensioner Disposal (Refer to P.52B-208) for post-operation handling instructions.***
- ***If the seat belt pre-tensioner fails to operate, do not go near the seat belt pre-tensioner. Contact the MMNA Tech Line.***

8. At a location as far away from the vehicle as possible, disconnect the two connected wires from each the, and connect them to the two terminals of the battery (which has been removed from the vehicle) to operating the seat belt pre-tensioner.
9. After operation, dispose of the seat belt pre-tensioner according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-208).

DEPLOYMENT OUTSIDE THE VEHICLE <Air bag module (driver's side)>

⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

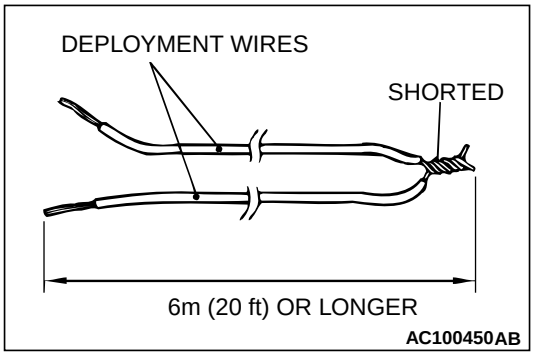
- ***Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.***
- ***Deploy the air bag in a wide, flat area at least 6 meters (20 feet) away from obstacles and other people.***
- ***Do not perform deployment outside if a strong wind is blowing. If there is a slight breeze, place the air bag module downwind from the battery.***

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

⚠ **CAUTION**

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

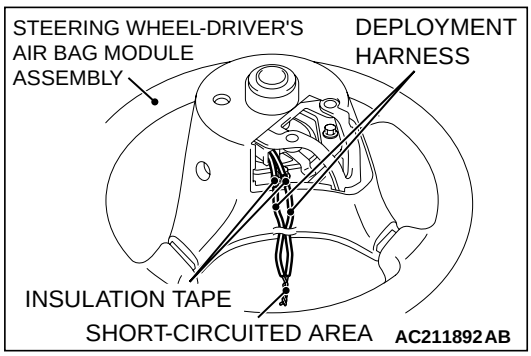
2. Remove the steering wheel-driver's air bag module assembly from the vehicle. (Refer to P.52B-184.)
3. Prepare two wires longer than 6 meters (20 feet) for deployment and connect the terminals in one end to short-circuit. This is to prevent accidental deployment caused by static etc.



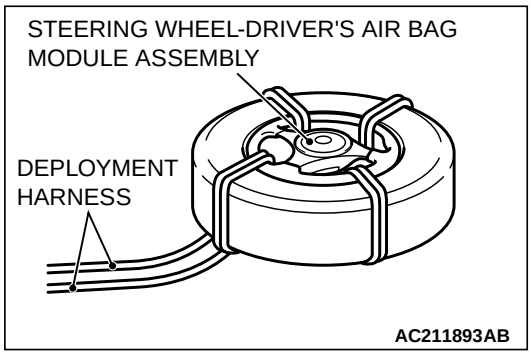
⚠ **CAUTION**

Never fail to do Step 4 in order to prevent accidental deployment caused by static.

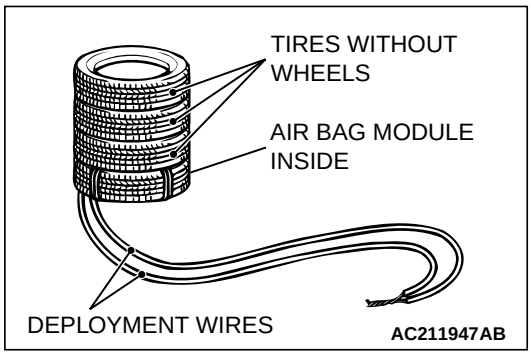
4. Touch the vehicle's body with bare hands to discharge static in you.



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



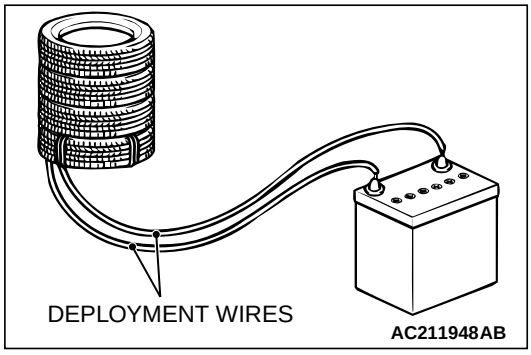
6. Use a rope to tie the steering wheel-driver's air bag module assembly to secure old tires with wheels.
7. Route the deployment harness connected to driver's air bag module beneath old tires with wheels. Then, secure the steering wheel-driver's air bag module assembly with the deployment surface facing up.



8. Place three old tires without wheels on the tire secured with the driver’s air bag module.

⚠ WARNING

- ***Before deployment, check carefully to be sure that no one is nearby.***
- ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module Disposal and Operated Seat Belt Pre-tensioner (Refer to .) for post-deployment handling instructions.***
- ***If the air bag fails to deploy, do not go near the module. Contact the MMNA Teach Line.***



9. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them, to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
10. Discard the deployed air bag module as specified in Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-208).

DEPLOYMENT OUTSIDE THE VEHICLE <Air bag module (front passenger's side)>

⚠ ***DANGER***

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

⚠ ***WARNING***

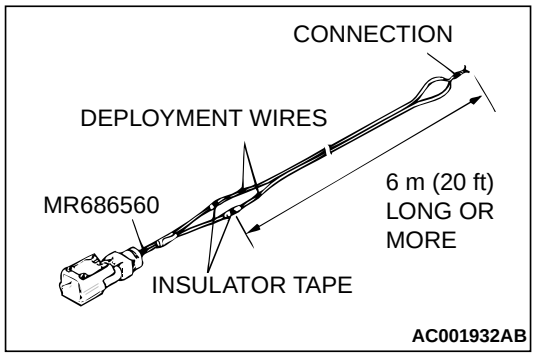
- ***Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.***
- ***Deploy the air bag in a wide, flat area at least 6 meters (20 feet) away from obstacles and other people.***
- ***Do not perform deployment outside if a strong wind is blowing. If there is a slight breeze, place the air bag module downwind from the battery.***

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

⚠ **CAUTION**

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

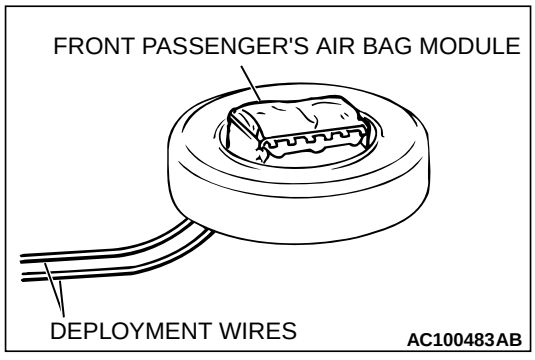
2. Remove the air bag module from the vehicle. (Refer to P.52B-184.)
3. Connect two wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB686560, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected deployment of the air bag module.
4. Connect the deployment wires to special tool MB686560, pass it beneath the tire and wheel assembly, and connect it to the air bag module.

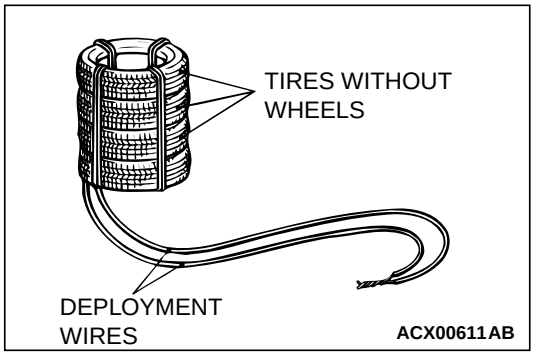


⚠ **CAUTION**

- **The adapter harness below the wheel should be loose. If it is too tight, the reaction when the air bag deploys could damage the adapter harness.**
- **During deployment, the connector of special tool MB686560 must not be between the tires.**

5. Pass the thick wire through the air bag module mounting hole, and then secure the air bag module to an old tire with a wheel in it so that the pad on the module is facing upwards.

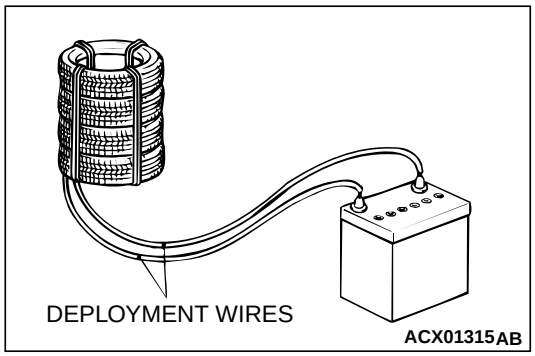




6. Place three old tires without wheels on top of the tire secured to the air bag module, and secure all tires together with ropes (four locations).

⚠ WARNING

- ***Before deployment, check carefully to be sure that no one is nearby.***
- ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module Disposal and Operated Seat Belt Pre-tensioner (Refer to .) for post-deployment handling instructions.***
- ***If the air bag fails to deploy, do not go near the module. Contact the MMNA Tech Line.***



7. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
8. Discard the deployed air bag module as specified in Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-208.)

DEPLOYMENT OUTSIDE THE VEHICLE <Seat belt pre-tensioner>

⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-18.)

⚠ WARNING

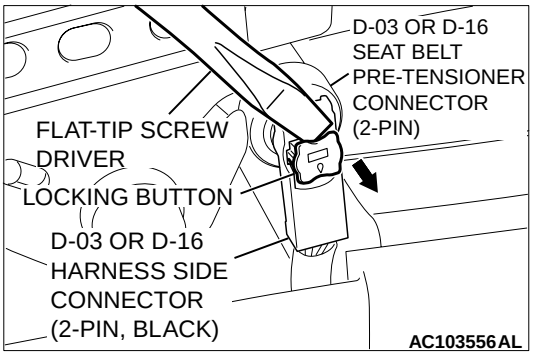
- ***Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.***
- ***Operate the seat belt pre-tensioner in a wide, flat area at least 6 meters (20 feet) away from obstacles and other people.***
- ***Do not perform operation outside if a strong wind is blowing. If there is a slight breeze, place the seat belt pre-tensioner downwind from the battery.***

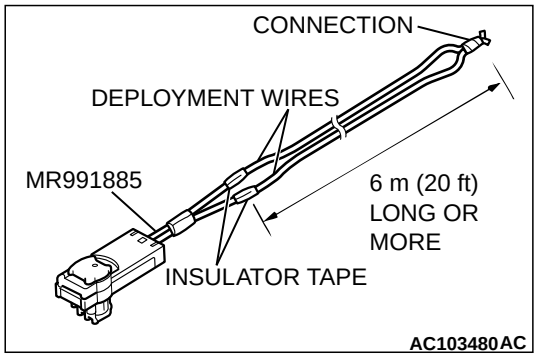
1. Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.

⚠ *WARNING*

Store the operated seat belt pre-tensioner the correct way up with its operation surface upper most on a flat surface. Do not place anything on top of them.

2. Remove the seat belt pre-tensioner from the vehicle. (Refer to P.52B-192.)
3. Use a flat-tip screwdriver to unlock the harness side connector (two-pin, black) locking button by with drawing it toward you in two stages.
4. Disconnect the D-03 or D-16 harness side connector.



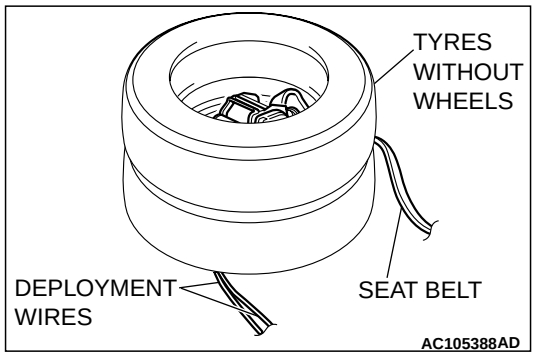


5. Connect two wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB991885, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected operation of the seat belt pre-tensioner.
6. Connect the special tool MB991885, which the deployment wires is attached to, to the seat belt pre-tensioner connector.

⚠ **CAUTION**

The adapter harness below the wheel should be loose. If it is too tight, the reaction when the seat belt pre-tensioner operates could damage the adapter harness.

7. Pass the thick wires through the hole on the seat belt pre-tensioner bracket and secure them to the front (raised part) of the wheel on two place.
8. Pull the seat belt out the outside of the tire, and then place one tire without a wheel inside on top of the existing tire.

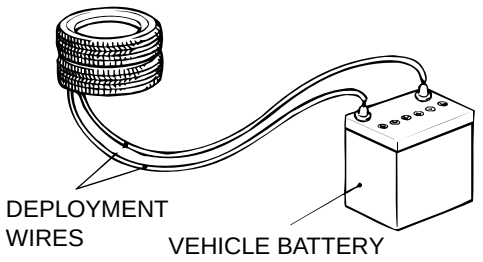


⚠ WARNING

- ***Before operation, check carefully to be sure that no one is nearby.***
- ***The inflator will be quite hot immediately following the operation, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from seat belt pre-tensioner operation. See Deployed Air Bag Module and Operated Seat Belt pre-tensioner Disposal (Refer to P.52B-208) for post-operation handling instructions.***
- ***If the seat belt pre-tensioner fails to operate, do not go near the seat belt pre-tensioner. Contact the MMNA Tech Line.***

9. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to operated seat belt pre-tensioner.
10. Discard the operated seat belt pre-tensioner as specified in Deployed Air Bag Module and Operated Seat Belt pre-tensioner Disposal (Refer to P.52B-208).

<SEAT BELT PRE-TENSIONER>



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DEPLOYED AIR BAG MODULE AND OPERATED SEAT BELT PRE-TENSIONER DISPOSAL

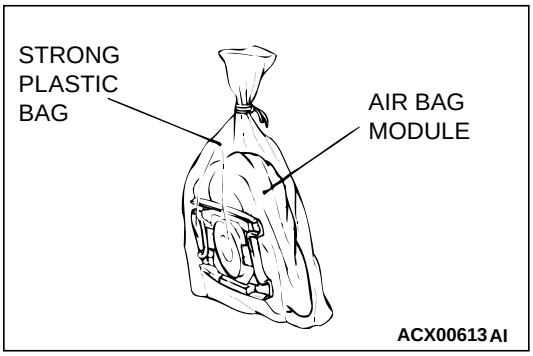
After deployment and operation, the air bag module and seat belt pre-tensioner should be disposed of in the same manner as any other scrap parts, adhering to local laws and/or legislation. Observe the following precautions during air bag or seat belt pre-tensioner disposal:

1. The inflator will be quite hot immediately following deployment, so wait at least 30 minutes to allow it cool before attempting to handle it.
2. Do not put water or oil on the air bag after deployment or on the seat belt pre-tensioner after operation.

⚠ WARNING

If after following these precautions, any material does get into the eyes or on the skin, immediately rinse the affected area with a large amount of clean water. If any irritation develops, seek medical attention.

3. There may be material on the deployed air bag module or the operated seat belt pre-tensioner, that could irritate the eye and/or skin. Wear gloves and safety glasses when handling a deployed air bag module or the operated seat belt pre-tensioner.



4. Tightly seal the air bag module and seat belt pre-tensioner in a strong plastic bag for disposal.
5. Be sure to always wash your hands after completing this operation.

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

M1524004900255

ITEM	SPECIFICATION
Air bag module(s) and clock spring	
Clock spring screw	0.69 ± 0.15 N·m (6 ± 1 in-lb)
Hexagon socket head bolt	50 ± 5 N·m (37 ± 4 ft-lb)
Front impact sensor	5.0 ± 1.0 N·m (44 ± 9 in-lb)
Seat belts with pre-tensioner	
Seat belt lower anchor bolt	44 ± 10 N·m (33 ± 7 ft-lb)
Seat belt shoulder anchor bolt	44 ± 10 N·m (33 ± 7 ft-lb)
Seat belt with pre-tensioner mounting bolt	44 ± 10 N·m (33 ± 7 ft-lb)
SRS control unit (SRS-ECU)	
SRS-ECU bracket bolt	5.0 ± 1.0 N·m (43 ± 7 in-lb)
SRS-ECU mounting nut	5.0 ± 1.0 N·m (44 ± 7 in-lb)

NOTES