GROUP 52Ba

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

CONTENTS

GENERAL INFORMATION 52Ba-2	
	CLOCK SPRING52Ba-27
SERVICE PRECAUTIONS 52Ba-16	REMOVAL AND INSTALLATION 52Ba-27
	INSPECTION52Ba-34
SPECIAL TOOLS	
	SIDE IMPACT SENSOR
TEST EQUIPMENT 52Ba-20	REMOVAL AND INSTALLATION 52Ba-37
	INSPECTION52Ba-39
SRS MAINTENANCE 52Ba-20	
	SEAT BELTS WITH
POST-COLLISION DIAGNOSIS 52Ba-20	PRE-TENSIONER52Ba-40
	REMOVAL AND INSTALLATION 52Ba-40
INDIVIDUAL COMPONENT	CHECK
SERVICE 52Ba-24	
	AIR BAG MODULE AND SEAT BELT PRE-
SRS CONTROL UNIT (SRS-ECU) 52Ba-25	TENSIONER DISPOSAL
REMOVAL AND INSTALLATION	PROCEDURES
INSPECTION 52Ba-26	
	SPECIFICATIONS52Ba-59
	FASTENER TIGHTENING
	SPECIFICATIONS 52Ba-59

MARNING

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

! WARNING

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

GENERAL DESCRIPTION

M1524000100279

⚠ WARNING

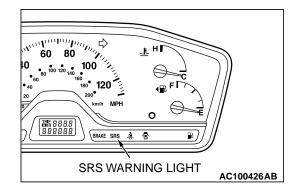
Extreme care must be used when servicing the SRS to avoid injury to the service personnel (by inadvertent deployment of the air bags) or the driver (by rendering the SRS inoperative).

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

The SRS consist of four air bag modules, SRS air bag control unit (SRS-ECU), two side impact sensors, SRS warning light, and clock spring. Air bags are located in the center of the steering wheel and above the glove box. Each air bag is made up of a

folded air bag and an inflator unit. Side-airbags located inside the front seatback assemblies. The SRS-ECU under the floor console monitors the system and has a safing G-sensor and an analog G-sensor. The warning light on the instrument panel indicates the operational status of the SRS. The clock spring is installed in the steering column. The seat belt pre-tensioner is built into the driver's and passenger's front seat belt retractor.

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

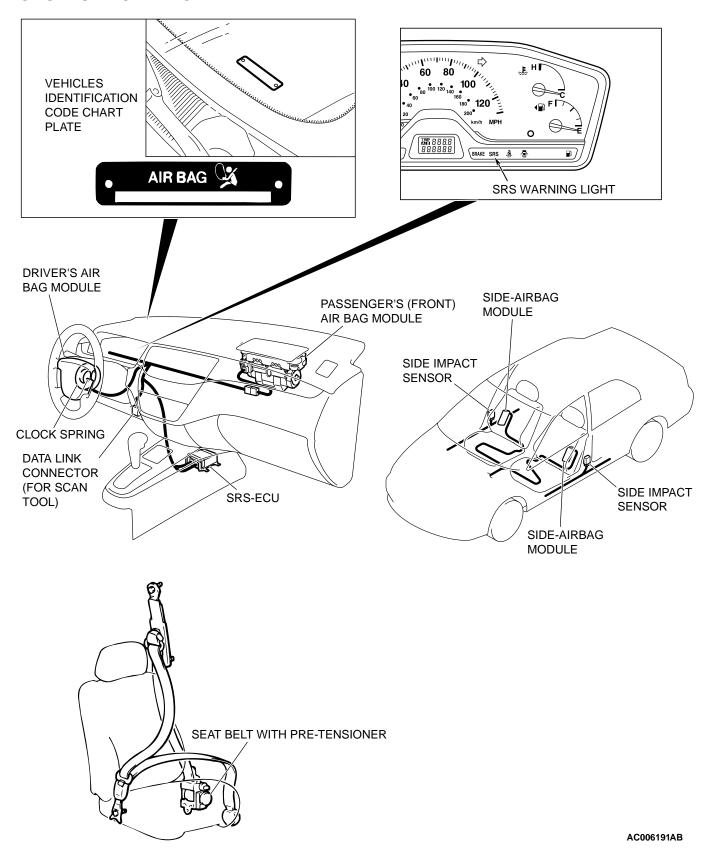


ON-BOARD DIAGNOSTIC/SRS WARNING LIGHT FUNCTION

The diagnosis unit monitors the SRS system and stores data concerning any detected faults in the system. When the ignition switch is in "ON" or "START" position, the SRS warning light should illuminate for about seven seconds and then turn "OFF". That indicates that the SRS system is in operational order. If the SRS warning light does any of the following, immediate inspection by an authorized dealer is needed.

- 1. The SRS warning light does not illuminate as described above
- The SRS warning light stays on for more than seven seconds.
- 3. The SRS warning light illuminates while driving. If a vehicle's SRS warning light is in any of these three conditions when brought in for inspection, the SRS system must be inspected, diagnosed and serviced in accordance with this manual.

CONSTRUCTION DIAGRAM



NOTE: This construction diagram shows the general view of the SRS components. For details, refer to "Schematic", (P.52Ba-7)"Configuration Diagrams" (P.52Ba-10) and "Circuit Diagram" (P.52Ba-11).

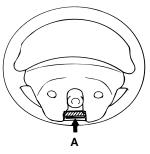
WARNING/CAUTION LABELS

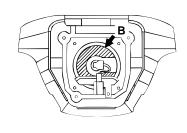
A number of caution labels related to the SRS are found in the vehicle, as shown in the following illustration. Follow label instructions when servicing SRS. The label H is not to be removed except by owner. If the other labels are dirty or damaged, replace them.

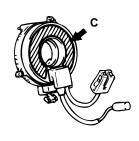
STEERING WHEEL



CLOCK SPRING



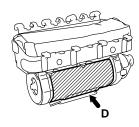


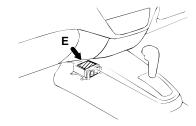


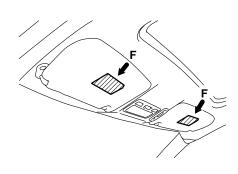
PASSENGER'S (FRONT) AIR BAG MODULE

SRS-ECU

SUN VISOR



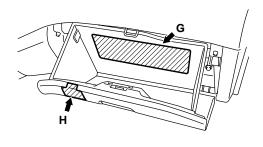


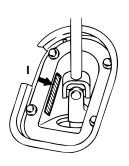


GLOVE BOX

STEERING JOINT COVER

SIDE-AIRBAG MODULE (DRIVER'S AND FRONT PASSENGER'S SEAT)

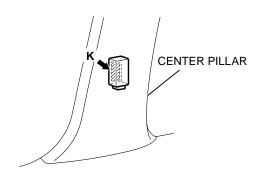


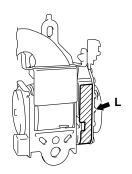




SIDE IMPACT SENSORS (RH AHD LH)

SEAT BELT WITH PRE-TENSIONER





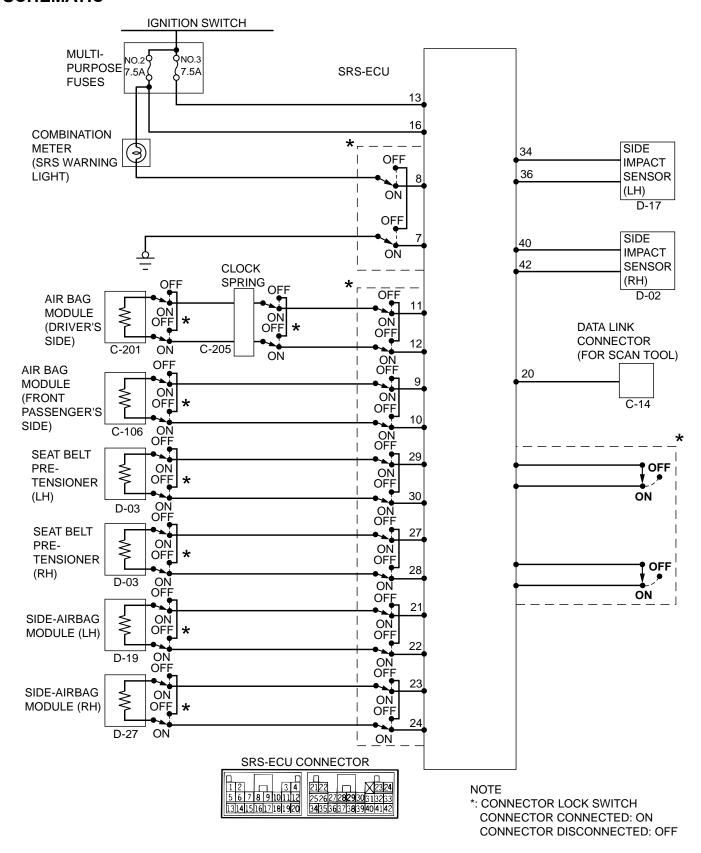
AC006193 AB

LABEL CONTEN	ITS
A.	WARNING: SRS BEFORE REPLACING WHEEL, READ SERVICE MANUAL. THIS AIR BAG MODULE CANNOT BE REPAIRED. DO NOT DISASSEMBLE OR TAMPER.
В.	DANGER FLAMMABLE MATERIAL TO PREVENT PERSONAL INJURY, DO NOT DISMANTLE, INCINERATE, OR BRING INTO CONTACT WITH ELECTRICITY STORE BELOW 200 °F (93 °C).
C.	CAUTION: SRS CLOCK SPRING THIS IS NOT A REPAIRABLE PART. IF DEFECTIVE, REPLACE ENTIRE UNIT ACCORDING TO THE SERVICE MANUAL INSTRUCTIONS. TO RE-CENTER: ROTATE CLOCKWISE UNTIL TIGHT. THEN ROTATE IN OPPOSITE DIRECTION ROUGHLY 3 3/ 4 TURNS AND ALIGN ARROWS >><<.
D, J.	WARNING FLAMMABLE/EXPLOSIVE SRS AIR BAG MODULE TO AVOID SERIOUS INJURY: • DO NOT REPAIR, DISASSEMBLE OR TAMPER. • AVOID CONTACT WITH FLAME OR ELECTRICITY. • DO NO DIAGNOSIS/USE NO TEST EQUIPMENT OR PROBES. • STORE BELOW 200°F (93°C). • BEFORE DOING ANY WORK INVOLVING MODULE, READ SERVICE MANUAL FOR IMPORTANT FURTHER DATA.
E, K.	CAUTION: DO NOT DISASSEMBLE OR DROP. IF DEFECT REFER TO SERVICE MANUAL.
F. V0037AA	WARNING DEATH or SERIOUS INJURY can occur Children 12 and under can be killed by the air bag. The BACK SEAT is the SAFEST place for children. NEVER put a rear-facing child seat in the front. Sit as far back as possible from the air bag. ALWAYS use SEAT BELTS and CHILD RESTRAINS.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) GENERAL DESCRIPTION

LABEL CONTE	NTS
G.	AIR BAG SYSTEM INFORMATION THIS VEHICLE HAS AN AIR BAG SYSTEM WHICH WILL SUPPLEMENT THE SEAT BELT IN CERTAIN FRONTAL COLLISIONS. THE AIR BAG IS NOT A SUBSTITUTE FOR THE SEAT BELT IN ANY TYPE OF COLLISION. THE DRIVER AND ALL OTHER OCCUPANTS SHOULD WEAR SEAT BELTS AT ALL TIME. WARNING!
	IF THE "SRS" WARNING LIGHT DOES NOT ILLUMINATE FOR SEVERAL SECONDS WHEN IGNITION KEY IS TURNED TO "ON" OR THE ENGINE IS STARTED, OR IF THE WARNING LIGHT STAYS ON WHILE DRIVING, TAKE THE VEHICLE TO YOUR NEAREST AUTHORIZED DEALER IMMEDIATELY. ALSO, IF VEHICLE'S FRONT END IS DAMAGED OR IF THE AIR BAG HAS DEPLOYED, TAKE THE VEHICLE FOR SERVICE IMMEDIATELY.
	THE AIR BAG SYSTEM MUST BE INSPECTED BY AN AUTHORIZED DEALER TEN YEARS AFTER THE VEHICLE MANUFACTURE DATE SHOWN ON THE CERTIFICATION LABEL LOCATED ON THE LEFT FRONT DOOR-LATCH POST OR DOOR FRAME. READ THE "SRS" SECTION OF YOUR OWNER'S MANUAL BEFORE DRIVING FOR
	IMPORTANT INFORMATION ABOUT OPERATION AND SERVICE OF THE AIR BAG SYSTEM. WHEN YOU ARE GOING TO DISCARD YOUR GAS GENERATOR OR VEHICLE, PLEASE SEE YOUR DEALER.
H.	WARNING CHILDREN CAN BE KILLED OR INJURED BY PASSENGER AIR BAG. THE BACK SEAT IS THE SAFEST PLACE FOR CHILDREN 12 AND UNDER. MAKE SURE ALL CHILDREN USE SEAT BELTS OR CHILD SEAT. NOT TO BE REMOVED EXCEPT BY OWNER.
I.	CAUTION: SRS FIX STRG. WHEEL AT TIRES STRAIGHT AHEAD BEFORE GEAR BOX REMOVAL. OTHERWISE, MAY DAMAGE SRS CLOCK SPRING MARKING SRS SYSTEM IN OPERATIVE. RISKING SERIOUS DRIVER INJURY.
L	DANGER: BELT PRETENSIONER • DO NOT DISASSEMBLE OR IMPACT. • REFER TO SERVICE MANUAL FOR INSTRUCTIONS, HANDLING, STORAGE AND DISPOSAL PROCEDURES.

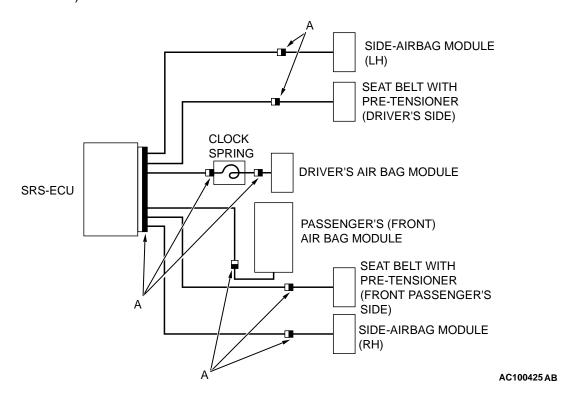
SCHEMATIC



AC100412AC

SRS air bag special connector

To enhance the system reliability, a connector lock switch is integrated in the SRS-ECU connector, the air bag module connectors, the clock spring connector, the seat belt pretensioner connectors (black connector "A" shown in the illustration below).

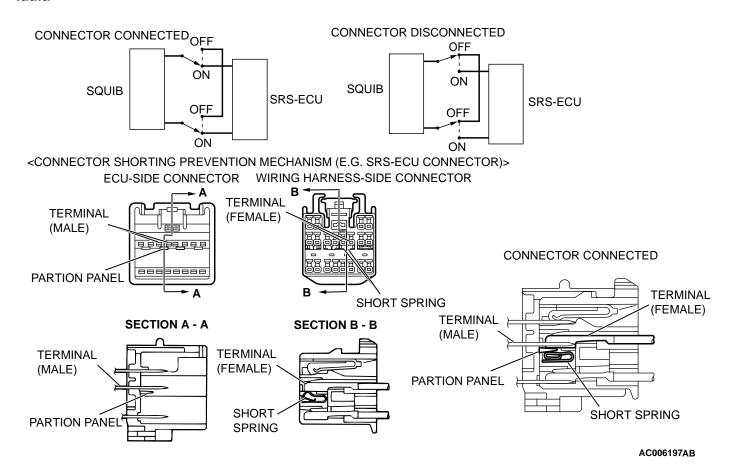


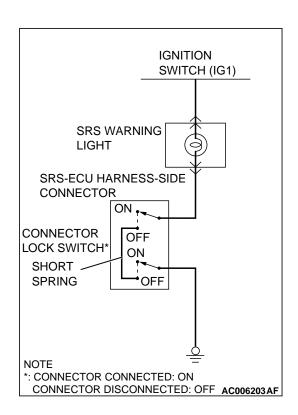
SQUIB CIRCUIT CONNECTOR LOCK SWITCH

The switch is a mechanism that shorts the power supply terminal to the ground terminal automatically in the air bag squib circuit when the connector is disconnected. A "short" spring is integrated inside the connector. This spring prevents static electricity from flowing to the squib by shorting the power supply terminal to the ground terminal (i.e. there is no potential difference between the two terminals).

⚠ CAUTION

When the connector is disconnected, there will be short circuit between the terminals. This is not a fault.

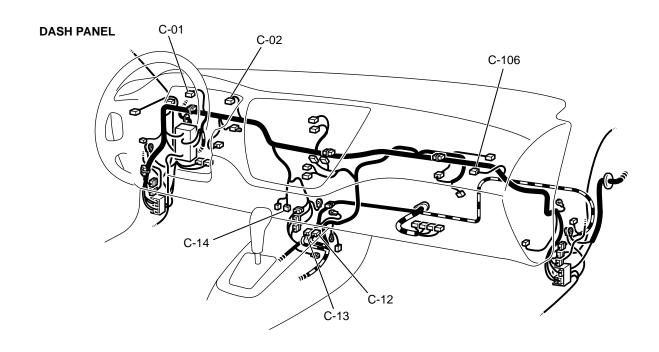


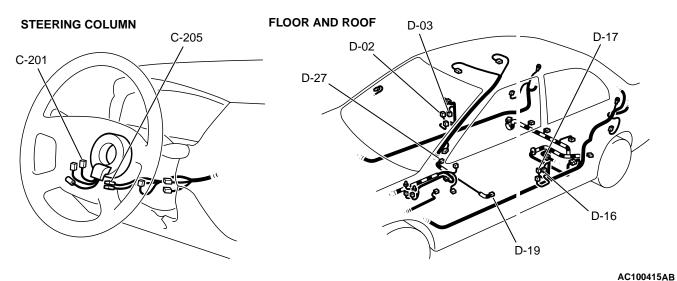


WARNING LIGHT CIRCUIT CONNECTOR LOCK SWITCH

The switch is a mechanism that shorts the power supply terminal to the ground terminal automatically in the warning light circuit when the connector is disconnected. Its structure is similar to the squib circuit connector shorting mechanism.

CONFIGURATION DIAGRAMS





			AOTOTIOAD
C-01	COMBINATION METER (FOR SRS WARNING LIGHT)	D-03	SEAT BELT PRE-TENSIONER (RH)
C-02	COMBINATION METER (FOR SRS WARNING LIGHT)	D-16	SEAT BELT PRE-TENSIONER (LH)
C-12	SRS-ECU	D-17	SIDE IMPACT SENSOR (LH)
C-13	SRS-ECU		<vehicles p="" side-<="" srs="" with=""></vehicles>
C-14	DATA LINK CONNECTOR (FOR		AIRBAG>
	SCAN TOOL)	D-19	SIDE-AIRBAG MODULE (LH)
C-106	AIR BAG MODULE (FRONT		<vehicles p="" side-<="" srs="" with=""></vehicles>
	PASSENGER'S SIDE)		AIRBAG>
C-205	CLOCK SPRING	D-27	SIDE-AIRBAG MODULE (RH)
C-201	AIR BAG MODULE (DRIVER'S		<vehicles side-<="" srs="" th="" with=""></vehicles>
	SIDE)		AIRBAG>
D-02	SIDE IMPACT SENSOR (RH)		

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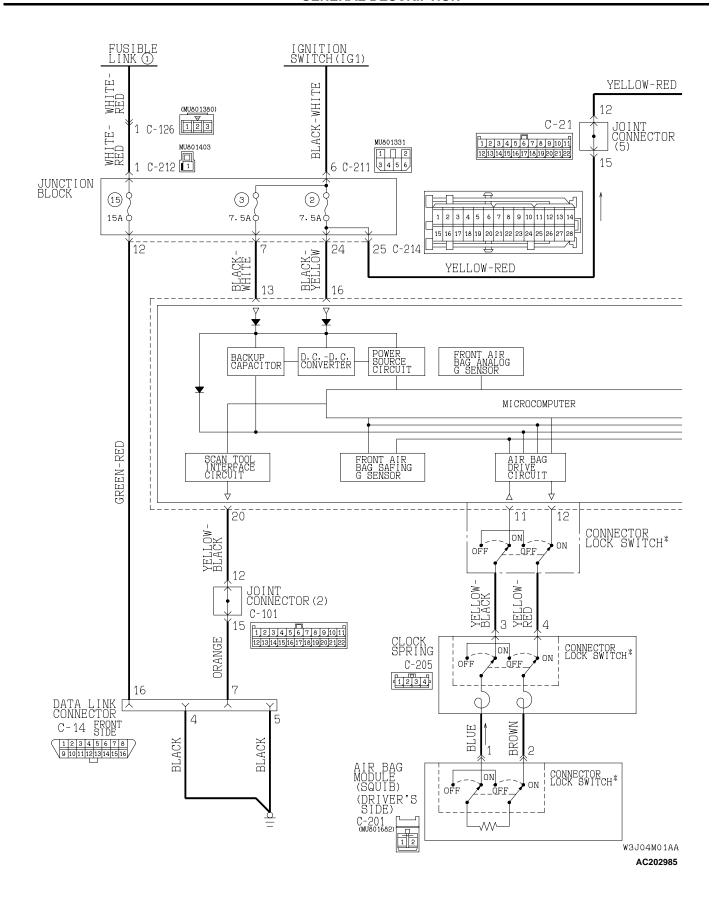
<VEHICLES WITH SRS SIDÉ-

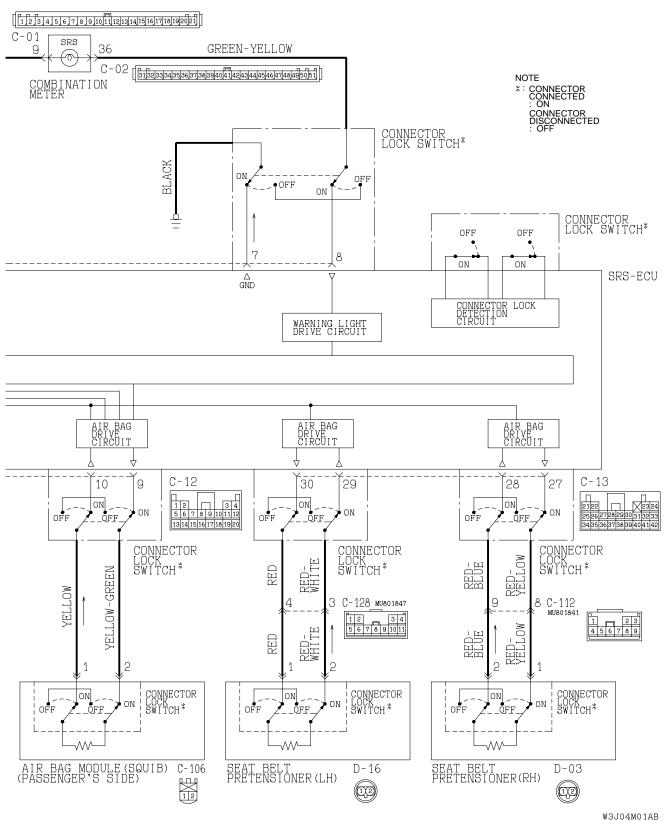
AIRBAG>

CIRCUIT DIAGRAM

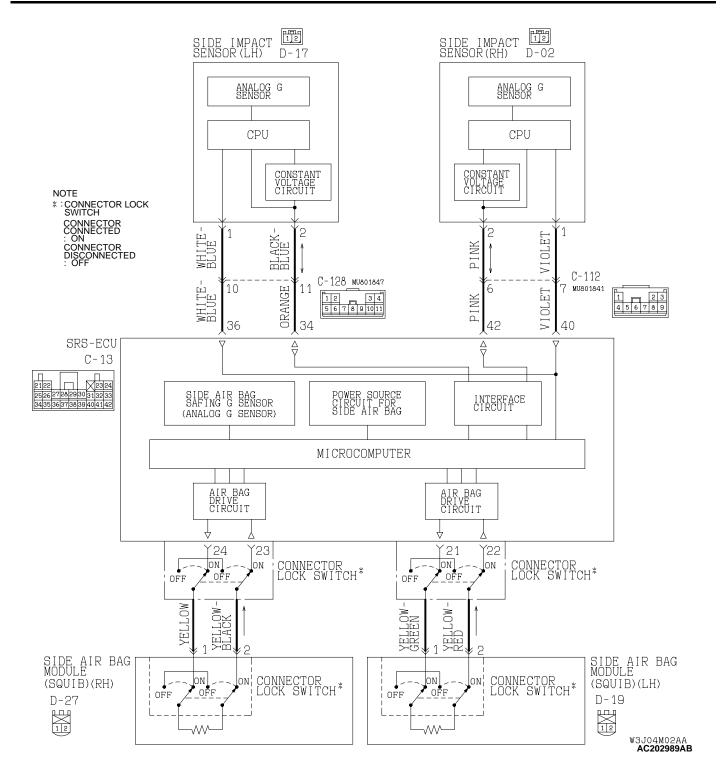
MARNING

- Do not repair, splice, or modify the SRS wiring (except for specific repairs to the instrument panel wiring harness and the floor wiring harness shown on P.52Ba-16): replace the wiring if necessary, after reading and following all precautions and procedures in this manual.
- Do not use an analog ohmmeter to check the SRS wiring or components; use only the special tools (refer to P.52Ba-19) and a digital multi-meter (refer to P.52Ba-20).

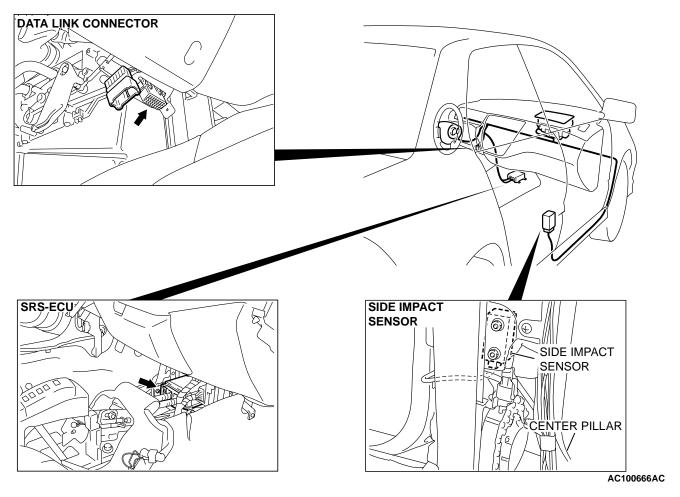




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COMPONENT LOCATION



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

SERVICE PRECAUTIONS

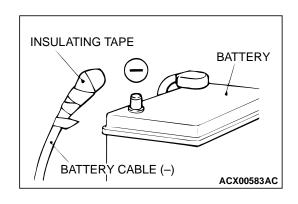
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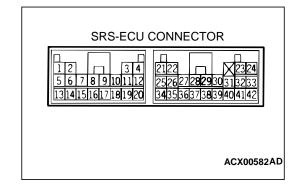


- In order to avoid injury to yourself or others from accidental deployment of the air bag during servicing, read and carefully follow all the precautions and procedures described in this manual.
- After disconnecting the battery cable, wait 60 seconds or more before proceeding with the following work. The SRS system is designed to retain enough voltage to deploy the air bag for a short time even after the battery has been disconnected, so serious injury may result from unintended air bag deployment if work is done on the SRS system immediately after the battery cables are disconnected.



- Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.
- Do not use any electrical test equipment on or near the SRS components, except those specified on P.52Ba-20.
- Never Attempt to Repair the Following Components: SRS-ECU, Clock Spring, Air Bag Module, Side Impact Sensor, Seat Belt with Pre-tensioner. If any of these components are diagnosed as faulty, they should only be replaced, in accordance with the INDIVIDUAL COMPONENT SERVICE procedures in this manual, starting on P.52Ba-24.
- Do not attempt to repair the wiring harness connectors of the SRS. If any of the connectors are diagnosed as faulty, replace the wiring harness. If the wires are diagnosed as faulty, replace or repair the wiring harness according to the following table.





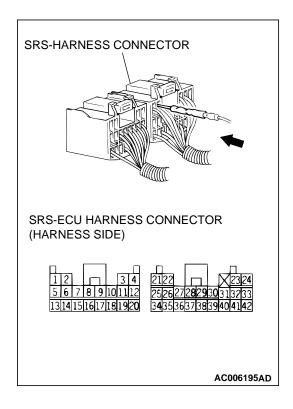
SRS-ECU TERMINAL NO.	DESTINATION OF HARNESS	CORRECTIVE ACTION
7	Instrument panel wiring harness→ Ground	Correct or replace the body wiring harness.
8	Instrument panel wiring harness → SRS warning light	Correct or replace each wiring harness.
9, 10	Instrument panel wiring harness → Air bag module (Front passenger's side)	Correct or replace the body wiring harness.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS) SERVICE PRECAUTIONS

SRS-ECU TERMINAL NO.	DESTINATION OF HARNESS	CORRECTIVE ACTION
11, 12	Instrument panel wiring harness → Clock spring → Air bag module (Driver's side)	Correct or replace each wiring harness. Replace the clock spring.
13	Instrument panel wiring harness → Junction block (fuse No.3)	Correct or replace the body wiring harness.
16	Instrument panel wiring harness → Junction block (fuse No.2)	Correct or replace the body wiring harness.
20	Instrument panel wiring harness → Data link connector	Correct or replace the body wiring harness.
21*, 22*	Floor wiring harness (LH) \rightarrow Sideairbag module (LH)	Correct or replace the body wiring harness.
23*, 24*	Floor wiring harness (RH) \rightarrow Sideairbag module (RH)	Correct or replace the body wiring harness.
27, 28	Floor wiring harness (RH) \rightarrow Seat belt pre-tensioner (RH)	Connector or replace each wiring harness.
29, 30	Floor wiring harness (LH) \rightarrow Seat belt pre-tensioner (LH)	Connector or replace each wiring harness.
34*, 36*	Floor wiring harness (LH) → Side impact sensor (LH)	Correct or replace each wiring harness.
40*, 42*	Floor wiring harness (RH) → Side impact sensor (RH)	Correct or replace each wiring harness.

NOTE: *Vehicles with side-airbags



⚠ WARNING

- Inspection of the SRS-ECU connector harness should be carried out by the following procedure. Insert the backprobing tool into connector from harness side (rear side), and connect the tester to backprobing tool. If any tool other than backprobing tool is used, it may cause damage to the harness and other components. Furthermore, measurement should not be carried out by touching the backprobing tool directly against the terminals from the front of the connector. The terminals are plated to increase their conductivity, so if they are touched directly by the backprobing tool, the plating may break, which will decrease reliability.
- The SRS components and seat belt with pre-tensioner should not be subjected to heat, so removed the SRS-ECU, driver's and front passenger's air bag modules, clock spring, side-airbag module, and seat belt pre-tensioner before drying or baking the vehicle after painting.
 - SRS-ECU, air bag module, clock spring: 93 °C (200 °F) or more
 - Seat belt with pre-tensioner 90 °C (194 °F) or more
- After servicing the SRS system, check the warning light operation to make sure that the system functions properly. (Refer to P.52Ba-2.)
- Make certain that the ignition switch is "LOCK"(OFF) position when the scan tool is connected or disconnected.
- If you have any questions about the SRS system, please contact the MMSA Tech Line.

SPECIAL TOOLS

M1524000700293

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)
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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) TEST EQUIPMENT

TOOL	TOOL NUMBER AND NAME	SUPERSESSION	APPLICATION
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), seat belt with pre-tensioner outside the vehicle

TEST EQUIPMENT

M1524000800096

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

SRS MAINTENANCE

M1524003900092

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

M1524001100261

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

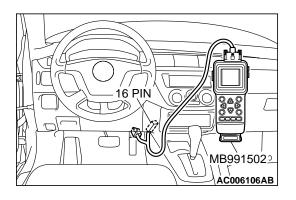
Required Special Tool:

• MB991502: Scan tool (MUT-II)

⚠ 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.

- Connect scan tool MB991502 to the data link connector (16-pin).
- 2. Read (and write down) all displayed diagnostic trouble codes. (Refer to P.52Bb-2.)
 - NOTE: If the battery power supply has been disconnected or disrupted by the collision, scan tool MB991502 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.



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.)	

 Erase the diagnostic trouble codes and, after waiting five seconds or more, read (and write down) all displayed diagnostic trouble codes. (Refer to P.52Bb-2.)

REPAIR PROCEDURE

WHEN FRONT AIR BAGS DEPLOY IN A COLLISION.

- 1. Replace the following parts with new ones.
- SRS-ECU (Refer to P.52Ba-25.)
- Air bag module (Refer to P.52Ba-27.)
- Seat belt with pre-tensioner (Refer to P.52Ba-40.)
- 2. Check the following parts and replace if there are any malfunctions.
 - Clock spring (Refer to P.52Ba-27.)
 - 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.
- 3. Check the wiring harnesses for binding, the connectors for damage, poor connections, and the terminals for deformation. (Refer to P.52Ba-16.)

WHEN SIDE-AIRBAGS DEPLOY IN A COLLISION

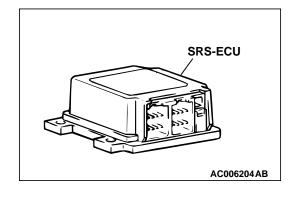
- 1. Replace the following parts with new ones.
- SRS-ECU (Refer to P.52Ba-25.)
- Side impact sensors (Refer to P.52Ba-37.)
- Front seatback assembly (Refer to GROUP 52A, Front Seat P.52A-17.)
- Check the wiring harnesses for binding, the connectors for damage, poor connections, and the terminals for deformation. (Refer to P.52Ba-16.)

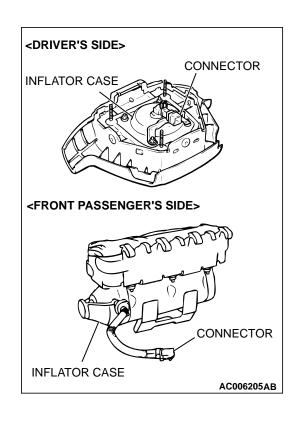
WHEN AIR BAGS DO NOT DEPLOY IN LOW-SPEED COLLISION.

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.52Ba-24.

SRS-ECU

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





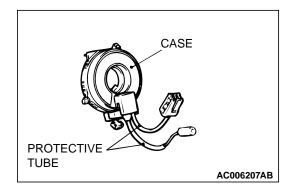
Air bag modules

- 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.



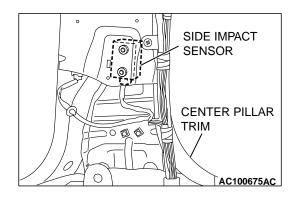
Front seatback assembly (Side-airbag module)

- 1. Check that there is no abnormality in the seat air bag module deployment section.
- 2. Check that there is no connector damage, bent terminals or clamping of the harness.



Clock spring

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



Side impact sensor

- 1. Check that there is no bending or corrosion in the center pillar.
- 2. Check that there is no denting, breakage or bending of the side impact sensor.
- 3. Check that there is no clamping of the harness, connector damage or bent terminals.

NOTE: The illustration at left shows the side impact sensor (LH). The position of the side impact sensor (RH) is symmetrical to this.

Steering wheel, steering column and shaft assembly

- 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.

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.52Ba-16.)

INDIVIDUAL COMPONENT SERVICE

M1524002900259

⚠ WARNING

- If heat damage may occur during paint work, remove 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. (SRS-ECU: refer to P.52Ba-25, Air Bag Modules and Clock Spring: refer to P.52Ba-27, Side impact sensor: refer to P.52Ba-37, Seat Belt with Pre-tensioner: refer to P.52Ba-40.)

SRS CONTROL UNIT (SRS-ECU)

M1524002100253

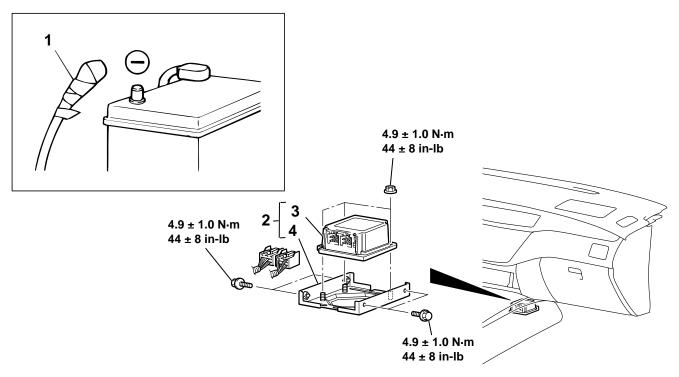
REMOVAL AND INSTALLATION

MARNING

- 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.52Ba-20.

Pre-removal Operation

• Turn the ignition switch to the "LOCK" (OFF) position.



AC100671AB

<<A>>>

REMOVAL STEPS

- 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
 - NEGATIVE (–) BATTERY CABLE CONNECTION
- >>B<< POST-INSTALLATION INSPECTION

REMOVAL SERVICE POINT

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

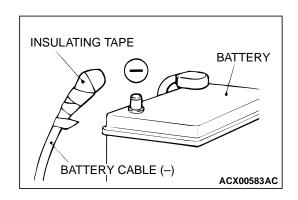


Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52Ba-16.)



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

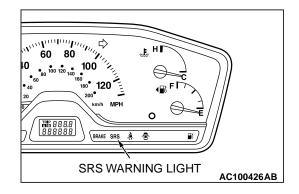
>>A<< SRS-ECU INSTALLATION

MARNING

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.52Bb-3.



INSPECTION

M1524002200227

⚠ 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.52Bb-6 for inspection of SRS-ECU for other than physical damage.

AIR BAG MODULES AND CLOCK SPRING

M1524002400298

REMOVAL AND INSTALLATION

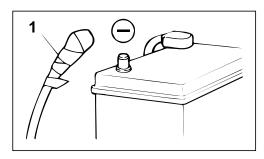
↑ WARNING

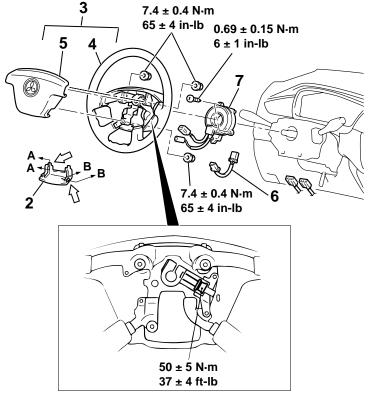
- Never attempt to disassemble or repair the air bag modules or clock spring. If faulty, replace it.
- Do not drop the air bag modules or clock spring or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.
- The air bag modules should be stored on a 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.52Ba-43.)

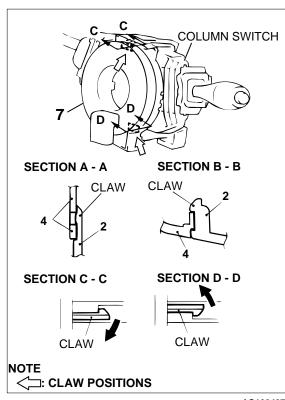
<Side-airbag module>

For removal and installation of the front seatback assembly with side-airbag module, refer to GROUP52A, Front Seat P.52A-17.

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







AC100437AD

AIR BAG MODULE REMOVAL STEPS

- <<A>>> 1. NEGATIVE (-) BATTERY CABLE CONNECTION
- <> 2. COVER
- <C>> 3. STEERING WHEEL AND AIR BAG MODULE ASSEMBLY
 - 4. STEERING WHEEL
- <<D>> 5. AIR BAG MODULE

 CLOCK SPRING REMOVAL STEPS
 - 1. NEGATIVE (-) BATTERY CABLE
- CONNECTION
- <> 2. COVER

<<A>>>

- <C>> 3. STEERING WHEEL AND AIR BAG MODULE ASSEMBLY
 - COLUMN COVER LOWER (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-2.)

CLOCK SPRING REMOVAL STEPS

- 6. CLOCK SPRING SUB HARNESS <VEHICLES WITH AUTO-CRUSE CONTROL>
- 7. CLOCK SPRING
 AIR BAG MODULE INSTALLATION
 STEPS
- >>A<< PRE-INSTALLATION INSPECTION
 - 5. AIR BAG MODULE
 - 4. STEERING WHEEL
- >>C<< 3. STEERING WHEEL AND AIR BAG MODULE ASSEMBLY
 - 2. COVER

<<E>>>

- NEGATIVE (-) BATTERY CABLE CONNECTION
- >>D<< POST-INSTALLATION INSPECTION CLOCK SPRING INSTALLATION STEPS
- >>A<< PRE-INSTALLATION INSPECTION
- >>B<< 7. CLOCK SPRING

CLOCK SPRING INSTALLATION STEPS (Continued)

- 6. CLOCK SPRING SUB HARNESS <VEHICLES WITH AUTO-CRUSE CONTROL>
- COLUMN COVER LOWER (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-2.)
- >>C<< 3. STEERING WHEEL AND AIR BAG MODULE ASSEMBLY
 - 2. COVER

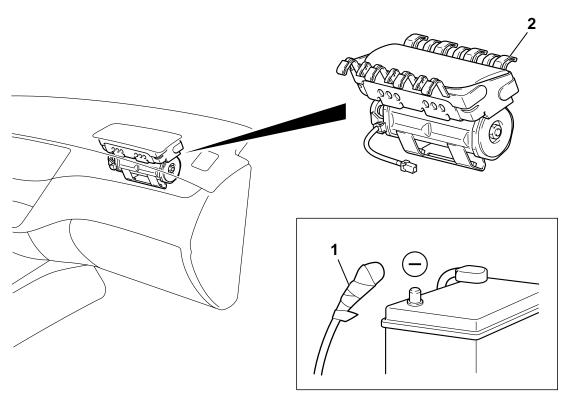
CLOCK SPRING INSTALLATION STEPS (Continued)

- 1. NEGATIVE (-) BATTERY CABLE CONNECTION
- >>D<< POST-INSTALLATION INSPECTION

Required Special Tools:

• MB991502: Scan Tool (MUT-II)

<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-2.)

2. AIR BAG MODULE

AIR BAG MODULE INSTALLATION STEPS

>>A<< • PRE-INSTALLATION INSPECTION

- 2. AIR BAG MODULE
- INSTRUMENT PANEL (REFER TO GROUP 52A, INSTRUMENT PANEL P.52A-2.)

AIR BAG MODULE INSTALLATION STEPS (Continued)

- NEGATIVE (-) BATTERY CABLE CONNECTION
- >>D<< . POST-INSTALLATION INSPECTION

Required Special Tool:

- MB991502: Scan Tool (MUT-II)
- MB990784: Ornament remover
- MB991222: Probe

<<F>>

REMOVAL SERVICE POINT

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

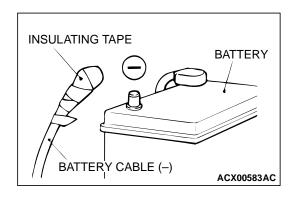
↑ DANGER

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52Ba-16.)

⚠ WARNING

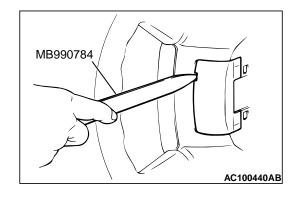
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

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



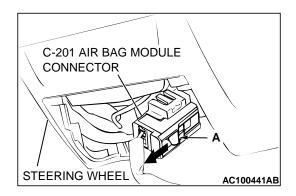
<>COVER REMOVAL

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

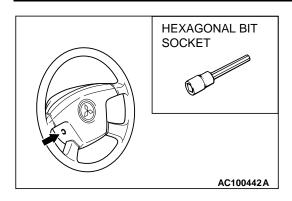


<<C>> STEERING WHEEL AND AIR BAG MODULE ASSEMBLY REMOVAL

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



SUPPLEMENTAL RESTRAINT SYSTEM (SRS) AIR BAG MODULES AND CLOCK SPRING



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>> DRIVER'S AIR BAG MODULE 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.

<<E>> CLOCK SPRING REMOVAL

MARNING

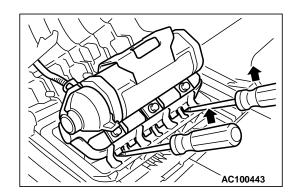
The removed clock spring should be stored in a clean, dry place.

<<F>> 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 a flat-tipped 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.



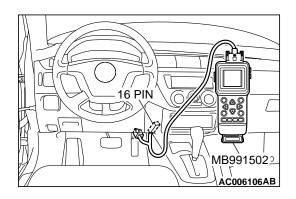
INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

MARNING

Dispose of air bag modules only according to the specified procedure. (Refer to P.52Ba-43.)

- 1. When installing the new air bag modules and clock spring, refer to "INSPECTION" (P.52Ba-34).
- 2. Connect the negative (-) battery cable.





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

- 3. Connect scan tool MB991502 to the data link connector.
- 4. Turn the ignition switch to the "ON" position.
- 5. Check DTCs using scan tool MB991502 to ensure entire SRS operates properly.

Confirm that the DTCs other than 24 and 21 are not set.

⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52Ba-16.)

MARNING

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

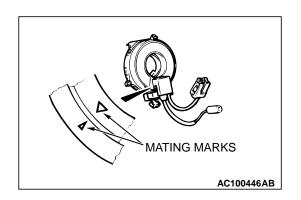
Turn the ignition switch to the "LOCK" (OFF) position.
 Disconnect the negative (–) battery cable and tape the terminal to prevent accidental connection and air bags deployment.

>>B<< CLOCK SPRING INSTALLATION

MARNING

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.

- 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 AND AIR BAG MODULE ASSEMBLY INSTALLATION

⚠ CAUTION

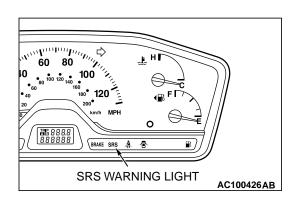
When installing the steering wheel, and air bag module ensure that the harness of the clock spring does not become caught or tangled.

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.52Bb-3.



INSPECTION

M1524002500295

AIR BAG MODULE CHECK

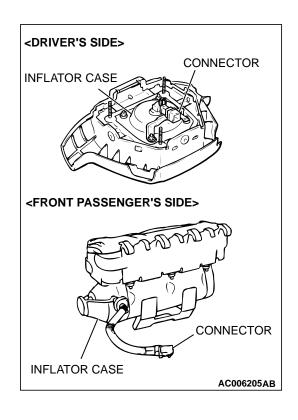
⚠ DANGER

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.

MARNING

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.52Ba-43.)

- 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.



FRONT SEATBACK ASSEMBLY WITH SIDE-AIRBAG MODULE CHECK

↑ DANGER

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

⚠ WARNING

If any improper part is found during the following inspection, replace the front seatback assembly with a new one. Dispose of the old one according to the specified procedure. (Refer to P.52Ba-43.)

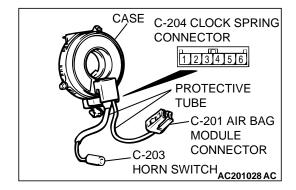
- 1. Check the air bag module deployment section for dents or deformation.
- 2. Check the connector for damage, the terminals for deformation, and the harness for binds.

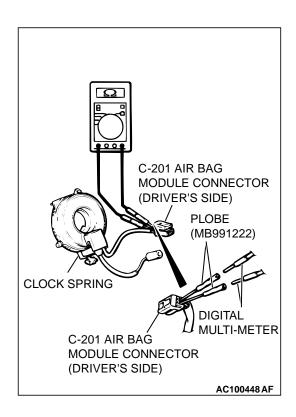


CLOCK SPRING CHECK

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

- 1. Check the connectors and protective tube for damage, and the terminals for deformation.
- 2. Visually check the case for damage.
- 3. Check to see that there is a charge (continuity) between the C-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.

SIDE IMPACT SENSOR

M1524004600168

REMOVAL AND INSTALLATION

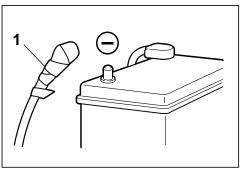
A side impact sensor is installed behind the center pillar trim on both driver and passenger sides of the vehicle.

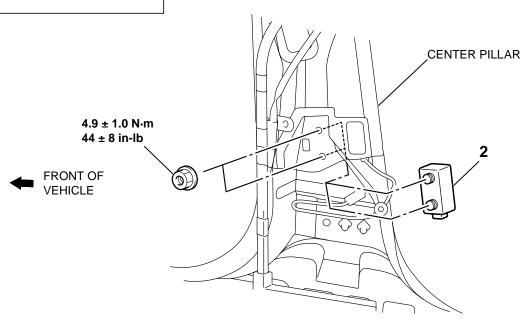
MARNING

- Never attempt to disassemble or repair the side impact sensor. If faulty, replace it.
- Do not drop or subject the side impact sensor to impact or vibration. Replace the side impact sensor, if dents, cracking, deformation, or rust are present.
- Replace the side impact sensor after the air bag has deployed.

Pre-removal Operation

• Turn the ignition key to the "LOCK" (OFF) position.





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REMOVAL STEPS

- CENTER PILLAR LOWER TRIM (REFER TO GROUP 52A, TRIMS P.52A-11.)
- SEAT BELT (REFER TO GROUP 52A, FRONT SEAT BELT P.52A-22)

<<A>>>

- REMOVAL STEPS (Continued)
- NEGATIVE (-) BATTERY CABLE CONNECTION
- 2. SIDE IMPACT SENSOR INSTALLATION STEPS
- >>A<< PRE-INSTALLATION INSPECTION

>>B<< 2. SIDE IMPACT SENSOR

TSB Revision

INSTALLATION STEPS

- NEGATIVE (–) BATTERY CABLE CONNECTOR
- SEAT BELT (REFER TO GROUP 52A, FRONT SEAT BELT P.52A-22)
- CENTER PILLAR LOWER TRIM (REFER TO GROUP 52A, TRIMS P.52A-11.)

>>C<<

POST-INSTALLATION INSPECTION

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

REMOVAL SERVICE POINT

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

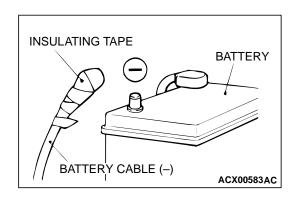
⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52Ba-16.)



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 deployment.

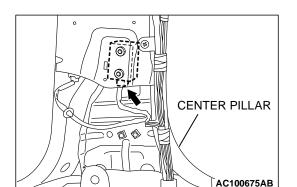


INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

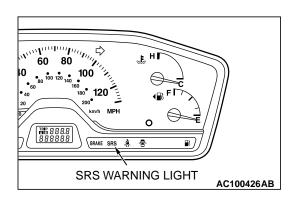
Check the side impact sensor for dents, breakage and bending and measure the resistance between the terminals, even when installing a new side impact sensor.

>>B<< SIDE IMPACT SENSOR INSTALLATION



↑ WARNING

If the side impact sensor is not installed securely and correctly, the side-airbag may not operate normally. Securely connect the 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, go out?
- 4. If yes, the SRS system is functioning properly. If no, refer to P.52Bb-3.

INSPECTION

M1524004700079

MARNING

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

NOTE: For checking of the side impact sensor other than described above, refer to the section concerning SRS diagnosis (Refer to P.52Bb-2.)

- Check the side impact sensor and bracket for dents, cracks or deformation.
- Check the connector for damage, and terminal for deformation.
- Check that there is no bending or corrosion in the center pillar.

SEAT BELTS WITH PRE-TENSIONER

M1524004100141

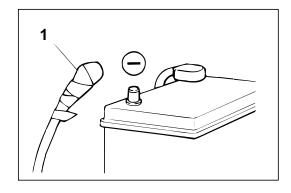
REMOVAL AND INSTALLATION

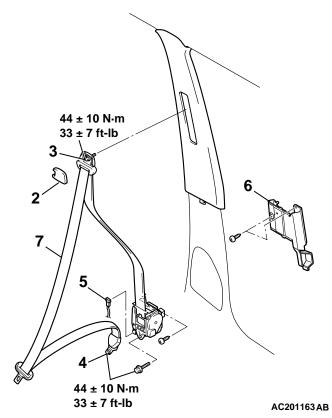
MARNING

- 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.52Ba-43.)

Pre-removal Operation

• Turn the ignition key to the "LOCK" (OFF) position.





REMOVAL STEPS

- NEGATIVE (-) BATTERY CABLE CONNECTION
- 2. SASH GUIDE COVER

REMOVAL STEPS (Continued)

- 3. SEAT BELT SHOULDER ANCHOR BOLT
- 4. SEAT BELT LOWER ANCHOR BOLT

<<A>>>

TSB Revision

REMOVAL STEPS (Continued)

- CENTER PILLAR TRIM, LOWER (REFER TO GROUP 52A, TRIMS P.52A-11.)
- <>
- 5. PRE-TENSHONER CONNECTOR CONNECTION
- 6. BRACKET
- SEAT BELT WITH PRE-TENSHONER

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
- NEGATIVE (-) BATTERY CABLE CONNECTION
- >>C<< . POST-INSTALLATION INSPECTION

Required Special Tools:

MB991502: Scan Tool (MUT-II)

REMOVAL SERVICE POINTS

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

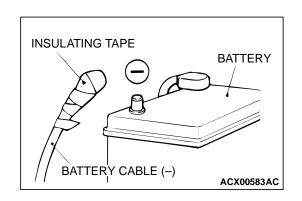
⚠ DANGER

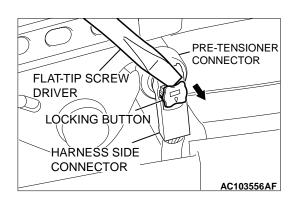
Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52Ba-16.)

MARNING

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.





<>PRE-TENSIONER CONNECTOR DISCONNECTION

- 1. Use a flat-tipped screwdriver to pull out forward and unlock the locking button of the harness-side connector.
- 2. Disconnect the pretensioner connector.

INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

↑ WARNING

Dispose of seat belt pre-tensioner only according to the specified procedure. (Refer to P.52Ba-43.)

- 1. When installing the new seat belt pre-tensioner, refer to "INSPECTION" (P.52Ba-43).
- 2. Connect the negative (–) battery cable.

⚠ 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.

- 3. Connect scan tool MB991502 to the data link connector.
- 4. Turn the ignition switch to the "ON" position.
- 5. Check DTCs using scan tool MB991502 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.52Ba-16.)

MARNING

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

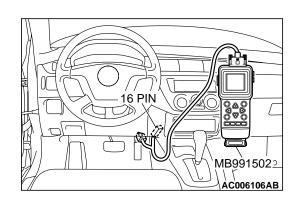
Turn the ignition switch to the "LOCK" (OFF) position.
 Disconnect the negative (–) battery cable and tape the terminal to prevent accidental connection and seat belt pretensioner operation.

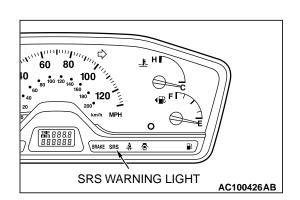
>>B<< PRE-TENSIONER CONNECTOR CONNECTION

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.52Bb-3.





INSPECTION

M1524004200030

SEAT BELT WITH PRE-TENSIONER CHECK

MARNING

- If any component damage is found during the following inspection, replace the seat belt with pretensioner with a new one. Dispose of the old one according to the specified procedure. (Refer to P.52Ba-43.)
- 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.
- Check seat belt pre-tensioner for dents, cracks or deformation.
- Check the connectors for damage, the terminals for deformation, and the harness for binds.

AIR BAG MODULE AND SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES

M1524001200268

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

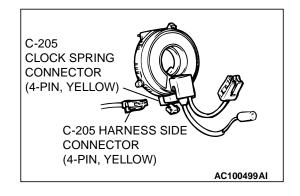
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

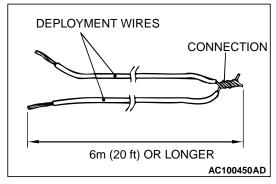
⚠ WARNING

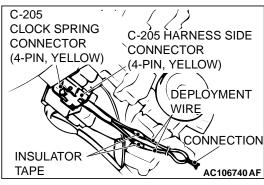
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

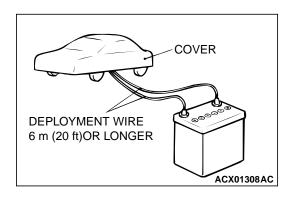
- 2. Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle
- 3. Remove the steering column cover lower. (Refer to GROUP 52A, Instrument PanelP.52A-2.)
- 4. Remove the connection between the C-205 clock spring connector (four-pin, yellow) 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.

- 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.
- 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.

MARNING

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.

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.52Ba-58.) for post-deployment handling instructions.
- If the air bag module fails to deploy, do not go near the module. Contact the MMSA 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.52Ba-58.)

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

1. Move the vehicle to an isolated spot.

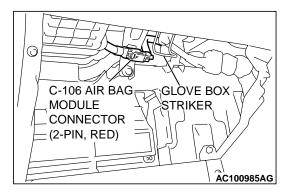
↑ DANGER

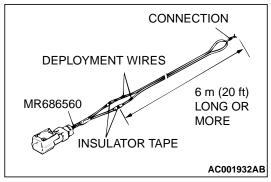
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

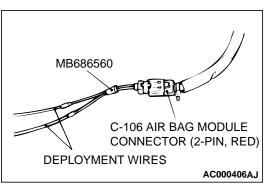
MARNING

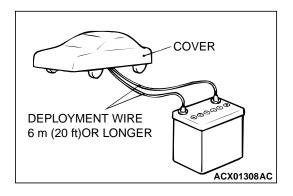
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

- 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-2.)
- 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 (shortcircuited), 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.









MARNING

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.

MARNING

- 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.52Ba-58.) for postdeployment handling instructions.
- If the air bag module fails to deploy, do not go near the module. Contact the MMSA 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.
- 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.52Ba-58.)

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Side-airbag module>

1. Move the vehicle to an isolated spot.

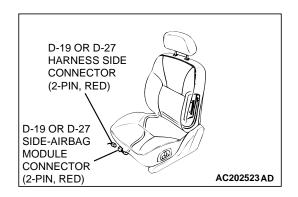
⚠ DANGER

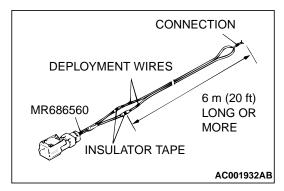
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

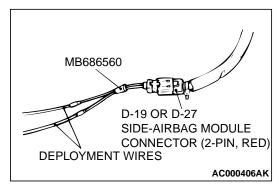
↑ WARNING

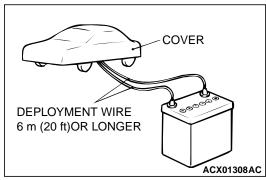
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

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









⚠ WARNING

The side-airbag modules for both the driver's side and passenger's side should be deployed.

3. Remove the connection between the D-19 or D-27 sideairbag module connector (two-pin, red) and the harness side connector (two-pin, red).

NOTE: If the air bag module connector is disconnected from the floor 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.

4. 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 (shortcircuited), to prevent sudden unexpected deployment of the air bag module.

5. Connect the D-19 or D-27 side-airbag module two-pin connector (two-pin, red) to special tool MB686560 and move the deployment wires out of the vehicle.

MARNING

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

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

⚠ WARNING

- Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.
- The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module Disposal (Refer to P.52Ba-58.) for postdeployment handling instructions.
- If the air bag module fails to deploy, do not go near the module. Contact the MMSA Tech Line.
- 7. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
- 8. After deployment, dispose of the front seatback assembly (air bag module) according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal. (Refer to P.52Ba-58.)

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

1. Move the vehicle to an isolated spot.

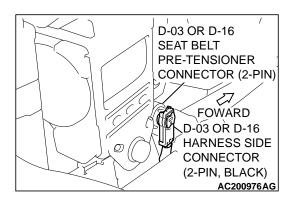
⚠ DANGER

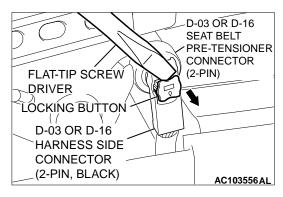
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

MARNING

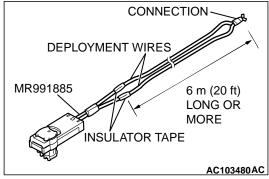
Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.

- 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 pretensioner due to static electricity, etc.

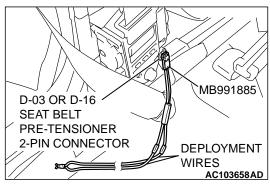




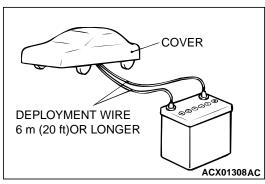
- (1) Use a flat-tip screwdriver to pull out forward and unlock the harness side connector (two-pin, black) locking button.
- (2) Disconnect the D-26 or D-39 harness side connector.



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 (shortcircuited), 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.



MARNING

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.52Ba-58.) 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 MMSA 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.52Ba-58.)

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.52Ba-16.)

MARNING

- 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.

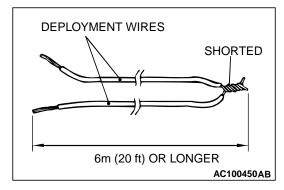
Once disconnected, both electrodes of the driver's air bag module connector short automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything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

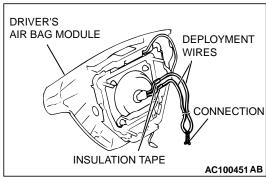
- 2. Remove the air bag module from the vehicle. (Refer to P.52Ba-27.)
- Prepare two wires longer than 6 meters (20 feet) for deployment and connect the terminals in one end to shortcircuit. This is to prevent accidental deployment caused by static etc.

⚠ 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. Using pliers, cut the driver's air bag module connector from the harnesses. Connect the deployment wires to each harness that has been cut and insulate the connections with plastic tape.





DRIVER'S AIR BAG MODULE

AC100482AB

TIRES WITHOUT
WHEELS

AIR BAG MODULE
INSIDE

DEPLOYMENT WIRES

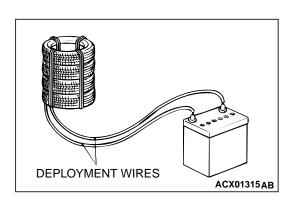
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DEPLOYMENT WIRES

- 6. Install a nut to the bolt behind the driver's air bag module and tie thick wire there for securing.
- 7. Route the deployment wires connected to the driver's air bag module beneath an old tire and wheel assembly. Then, using the wire tied to the bolt, secure the driver's air bag module to the tire and wheel 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 P.52Ba-58.) for post-deployment handling instructions.
- If the air bag fails to deploy, do not go near the module. Contact the MMSA 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 Pretensioner Disposal. (Refer to P.52Ba-58.)



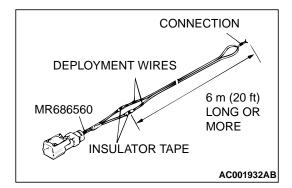
DEPLOYMENT OUTSIDE THE VEHICLE <Air bag module (front passenger's side)>

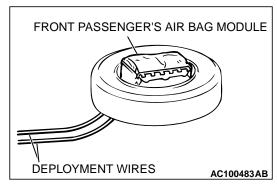
↑ DANGER

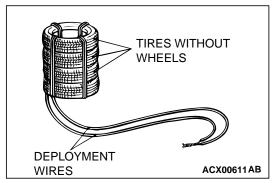
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

MARNING

- 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.

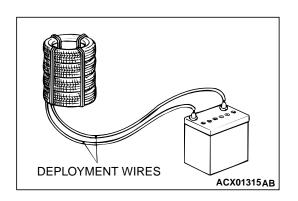
- 2. Remove the air bag module from the vehicle. (Refer to P.52Ba-27.)
- Connect two wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB686560, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), 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 P.52Ba-58.) for post-deployment handling instructions.
- If the air bag fails to deploy, do not go near the module. Contact the MMSA 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 Pretensioner Disposal. (Refer to P.52Ba-58.)



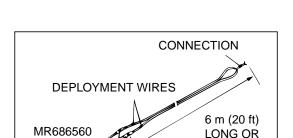
DEPLOYMENT OUTSIDE VEHICLE <Side-airbag module>

↑ DANGER

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

⚠ WARNING

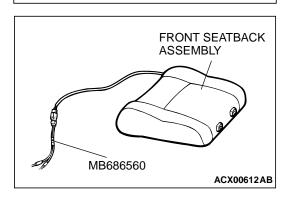
- Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.
- Deploy the air bag in a wide, flat area at least 6 meters (20 feet) away from obstacles and other people.
- Do not perform deployment outside if a strong wind is blowing. If there is a slight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

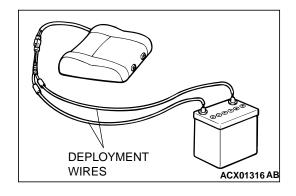


INSULATOR TAPE

MORE

AC001932AB





⚠ CAUTION

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

- 2. Remove the front seatback assembly with side-airbag module from the vehicle. (Refer to P.52Ba-27.)
- 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. Place the front seatback assembly with its back contact with the ground.
- 5. Connect the SRS air bag adapter harness with the deployment wires to the side-airbag module connector.

⚠ WARNING

- Before deployment, check carefully to be sure that no one is nearby.
- The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52Ba-58.) for post-deployment handling instructions.
- If the air bag fails to deploy, do not go near the module. Contact the MMSA Teach Line.
- 6. Disconnect the deployment wires as far from the front seatback assembly possible and connect the harnesses to the battery removed from the vehicle. Then, deploy.
- Remove the deployed air bag module from the seatback assembly and discard as specified in Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal. (Refer to P.52Ba-58.)

DEPLOYMENT OUTSIDE THE VEHICLE <Seat belt pretensioner>

⚠ DANGER

Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52Ba-16.)

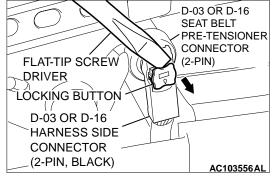
MARNING

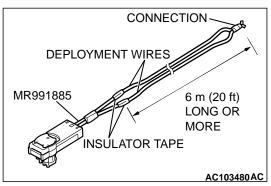
- Battery posts, terminals and related accessories contain lead and lead compounds. WASH HANDS AFTER HANDLING.
- Operate the seat belt pre-tensioner in a wide, flat area at least 6 meters (20 feet) away from obstacles and other people.
- Do not perform operation outside if a strong wind is blowing. If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

MARNING

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.52Ba-40.)
- 3. Use a flat-tip screwdriver to pull out forward and unlock the harness side connector (two-pin, black) locking button.
- 4. Disconnect the D-03 or D-16 harness side connector.



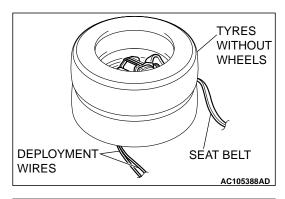


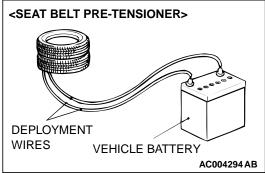
- 5. Connect two wires, each 6 meters (20 feet) or longer, to the two leads of special tool MB991885, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected operation of the seat belt pretensioner.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

MARNING

- 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.52Ba-58.) 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 MMSA 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 pretensioner Disposal. (Refer to P.52Ba-58.)

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

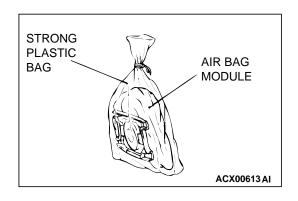
After deployment and operation, the air bag module and seat belt pre-tensioner should be disposed of in the same manner as any other scrap parts, adhering to local laws and/or legislation. Observe the following precautions during air bag or seat belt pre-tensioner disposal:

- 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

M1524004900222

SPECIFICATION
7.4 ± 0.4 N·m (65 ± 4 in-lb)
0.69 ± 0.15 N·m (6 ± 1 in-lb)
50 ± 5 N·m (37 ± 4 ft-lb)
44 ± 10 N·m (33 ± 7 ft-lb)
44 ± 10 N·m (33 ± 7 ft-lb)
44 ± 10 N·m (33 ± 7 ft-lb)
4.9 ± 1.0 N·m (43 ± 8 in-lb)
4.9 ± 1.0 N·m (43 ± 8 in-lb)
4.9 ± 1.0 N·m (44 ± 8 in-lb)

NOTES