

Before beginning any service procedure, refer to section J1 of this manual for audio antitheft system alarm conditions.

AIR BAG SYSTEM

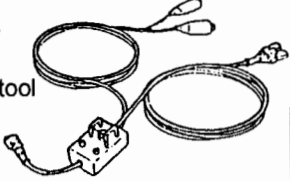
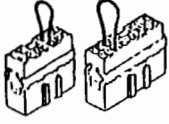
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AIR BAG SYSTEM

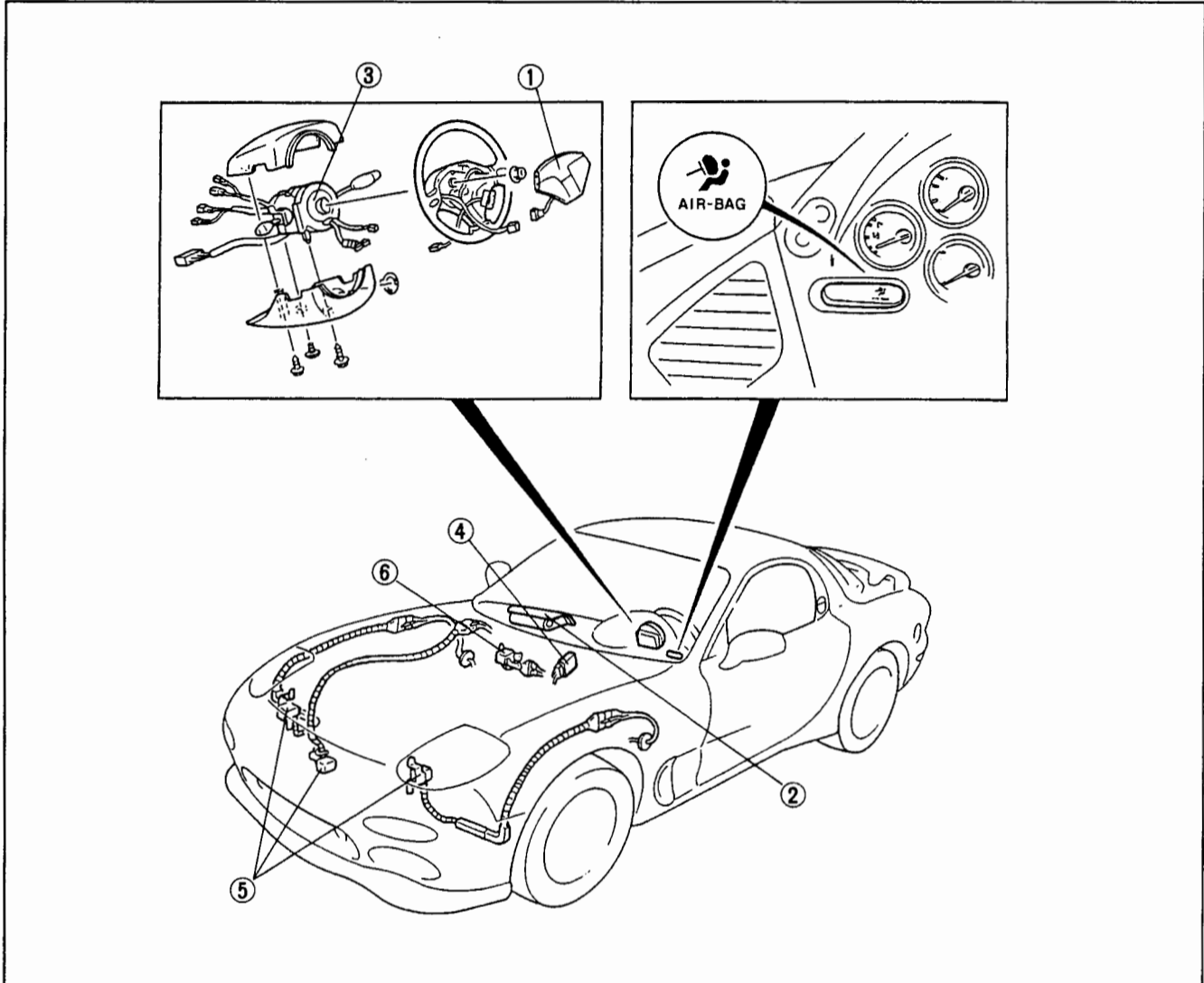
PREPARATION

SST

| | | | |
|--|---|---|--|
| <p>49 H066 002 Deployment tool</p>  | <p>For deployment of air bag module</p> | <p>49 H066 004 Short-circuit connector</p>  | <p>For deactivation of live air bag module</p> |
|--|---|---|--|

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STRUCTURAL VIEW



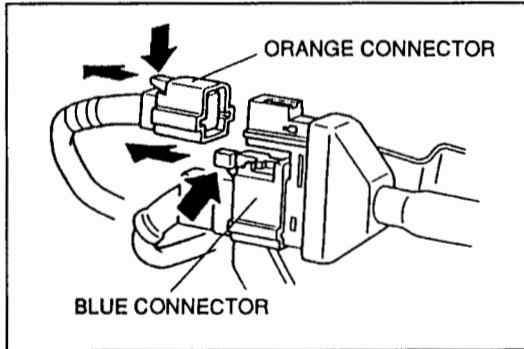
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- | | |
|---|--|
| <p>1. Driver-side air bag module Removal / Installation page S-20 Disposal procedure page S-30</p> <p>2. Passenger-side air bag module Removal / Installation page S-21 Disposal procedure page S-30</p> <p>3. Clock spring connector assembly Removal / Installation page S-23 Inspection page S-24 Adjustment page S-24</p> | <p>4. Diagnostic module Removal / Installation page S-22</p> <p>5. Crash sensor (D-sensor) Removal / Installation page S-25 Inspection page S-27</p> <p>6. Crash sensor (S-sensor) Removal / Installation page S-28 Inspection page S-29</p> |
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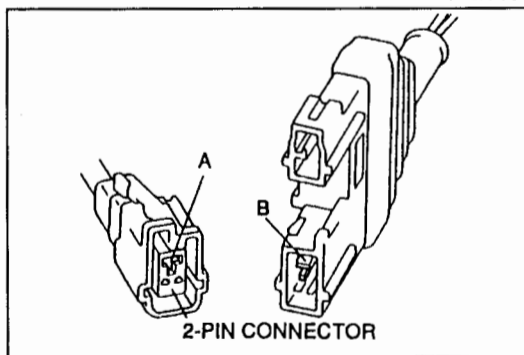
COMPONENT DESCRIPTION

| Component | | Function | Remarks |
|---------------------------------|----------|--|--|
| Air bag system warning light | | Light illuminates or flashes if malfunction occurs in air bag system | Located in instrument cluster |
| Air bag module | | Deploys air bag when current flows to integrated igniter | Location: Driver-side...In steering wheel hub Passenger-side...Above glove compartment |
| Clock spring connector assembly | | Ensures uninterrupted electrical connection to air bag module while allowing steering wheel to turn | Part of combination switch |
| Crash sensor | D-sensor | Activated (closed) when crash impact detected Acting with S-sensor, completes circuit to inflator | Located in front part of vehicle (center, RH, and LH) |
| | S-sensor | Activated (closed) when crash impact detected Acting with D-sensor, completes circuit to inflator | Located behind heater unit in passenger compartment |
| Diagnostic module | | Monitors components and harnesses in air bag system Indicates system malfunction by flashing or illuminating air bag system warning light If warning light is burnt, sounds warning buzzer Detects short circuit between air bag module and ground or crash sensor malfunction and melts system fuse to prevent unintended air bag deployment | Contains back-up battery |

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Double Lock Connectors

The connectors in the air bag system are double lock connectors. Disconnect them as follows:

1. Push the knob of the orange connector down and pull the connector out.
2. Push the knob of the blue connector in and pull the connector out.

Note

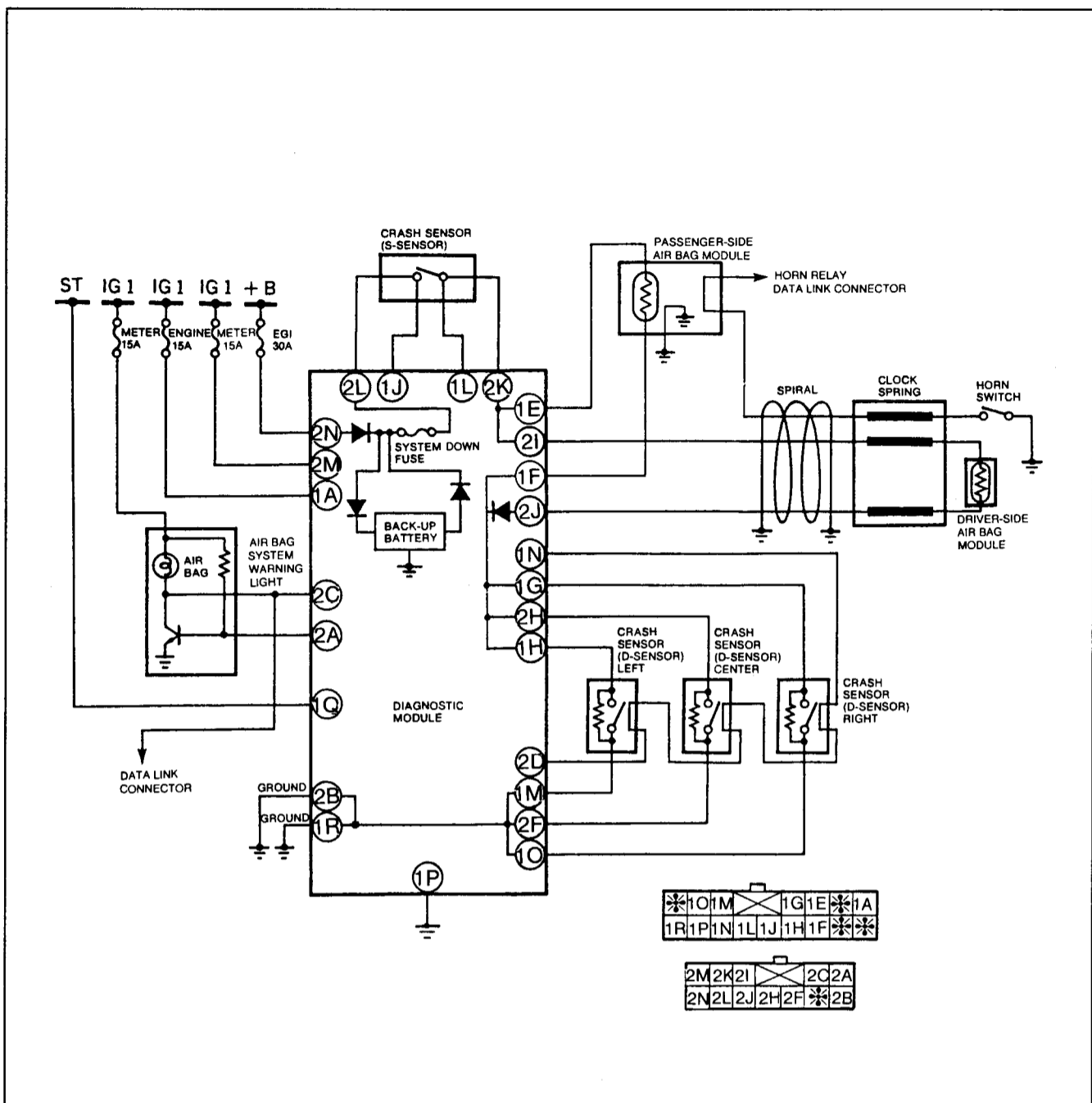
- When the 2-pin connector of the air bag module and clock spring is disconnected, a short occurs that will prevent the air bag from deploying during servicing.

Warning

- Reconnecting the 2-pin connector of the air bag module and clock spring with pin B broken can be dangerous. In an accident, the air bag will not deploy, causing serious injury or death. If pin B is broken, replace the combination switch or harness.

3. Connect the connectors in the reverse order of disconnection, make sure pin B is inserted properly into part A. This will fix the short caused by disconnection and allow current to flow to the air bag module again.

SYSTEM DIAGRAM



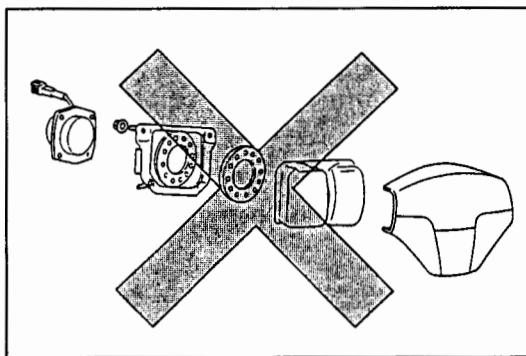
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System Operation**During collision**

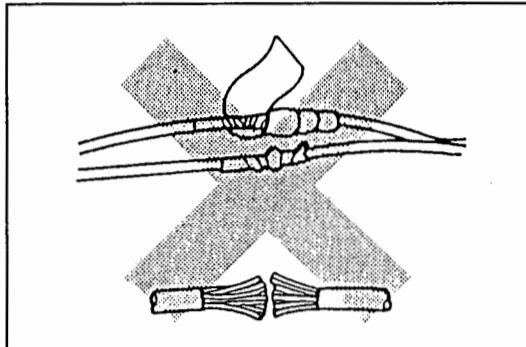
- When either of the D-sensors and the S-sensor are activated (closed) simultaneously by the shock of a collision, the circuit to the inflator is completed. The inflator creates nitrogen gas and the air bags are deployed.
- The air bags release the nitrogen gas from a vent hole in the back of the bag to reduce shock to the driver and passenger and to allow easier exit from the vehicle.

During normal condition and malfunction

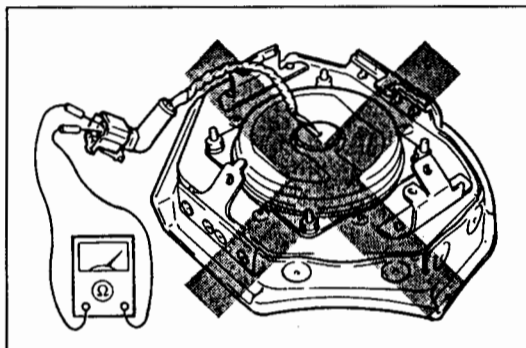
- The diagnostic module constantly monitors the components and wiring of the air bag system for malfunction, open circuits, and short circuits.
- If a malfunction is detected, the diagnostic module illuminates or flashes the warning light.
- If there is a short circuit in the sensors or sensor harnesses, the diagnostic module activates the warning light and shuts down the system to prevent accidental deployment of the air bags.



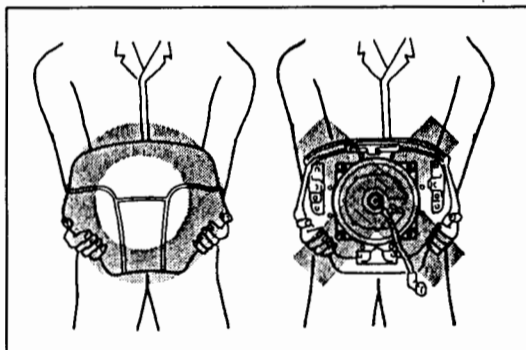
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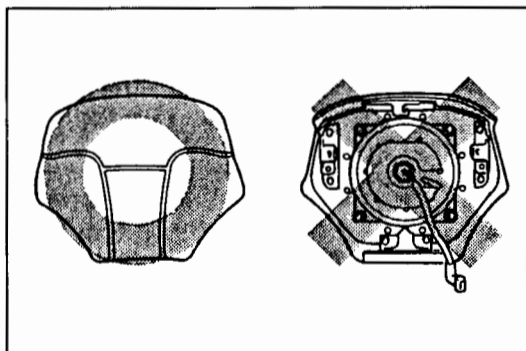
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SERVICE WARNINGS

Component Disassembly

- Disassembling and reassembling the components of the air bag system can render the system inoperative, which may result in serious injury or death in the event of an accident. Do not disassemble any air bag system components.

Wiring Harness Repair

- Incorrectly repairing an air bag system wiring harness can accidentally deploy the air bag, which can cause serious injury. If a problem is found in the system wiring, replace the wiring harness. Do not try to repair it.

Air Bag Module Inspection

- Inspecting the air bag module with an ohmmeter can deploy the air bag, which can cause serious injury. Do not use an ohmmeter to inspect the air bag module.

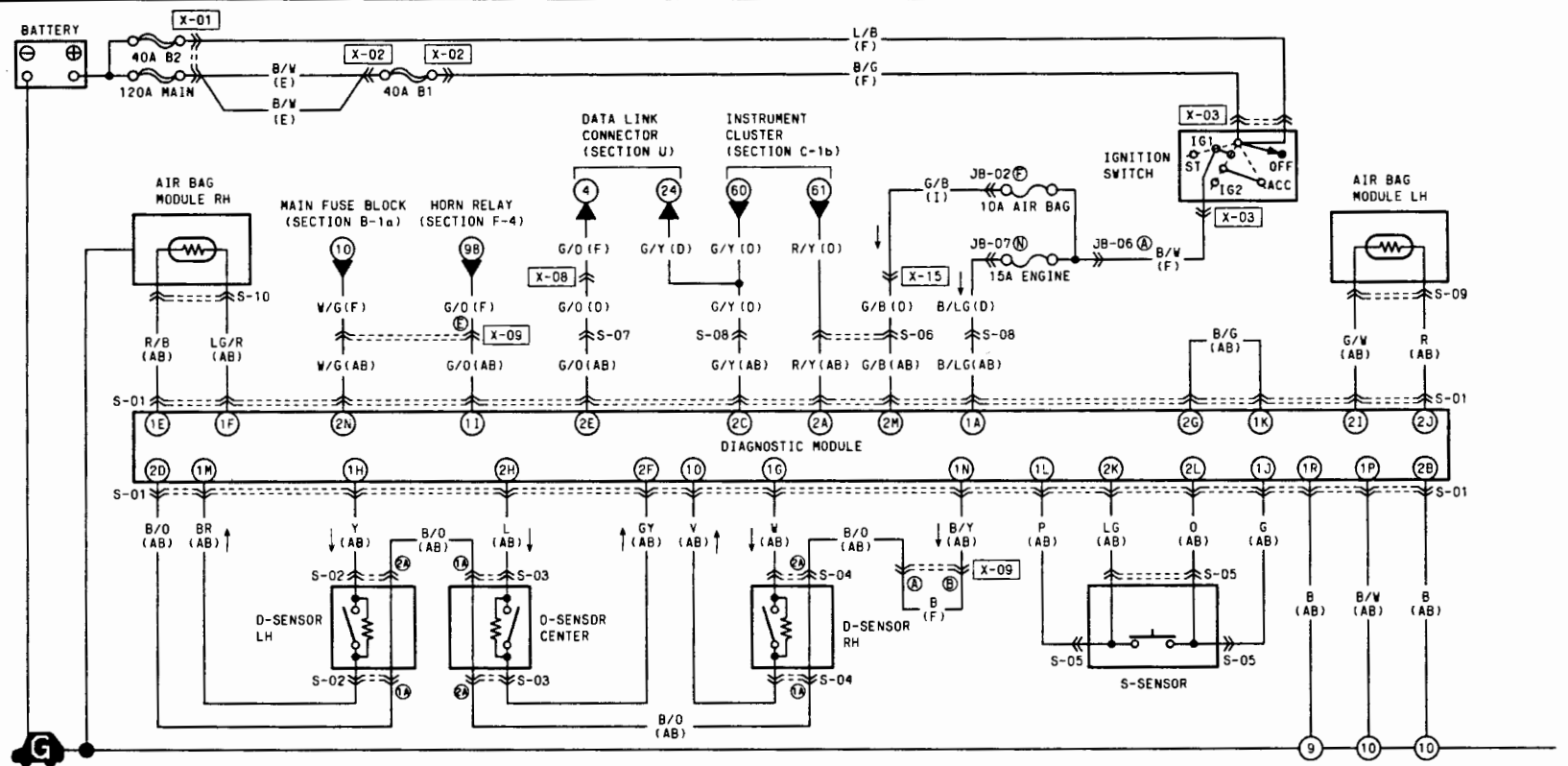
Air Bag Module Handling

- A live (undeployed) air bag may accidentally deploy when it is handled and cause serious injury. When carrying a live air bag module, point the trim cover away from your body to lessen the chance of injury in case it deploys.

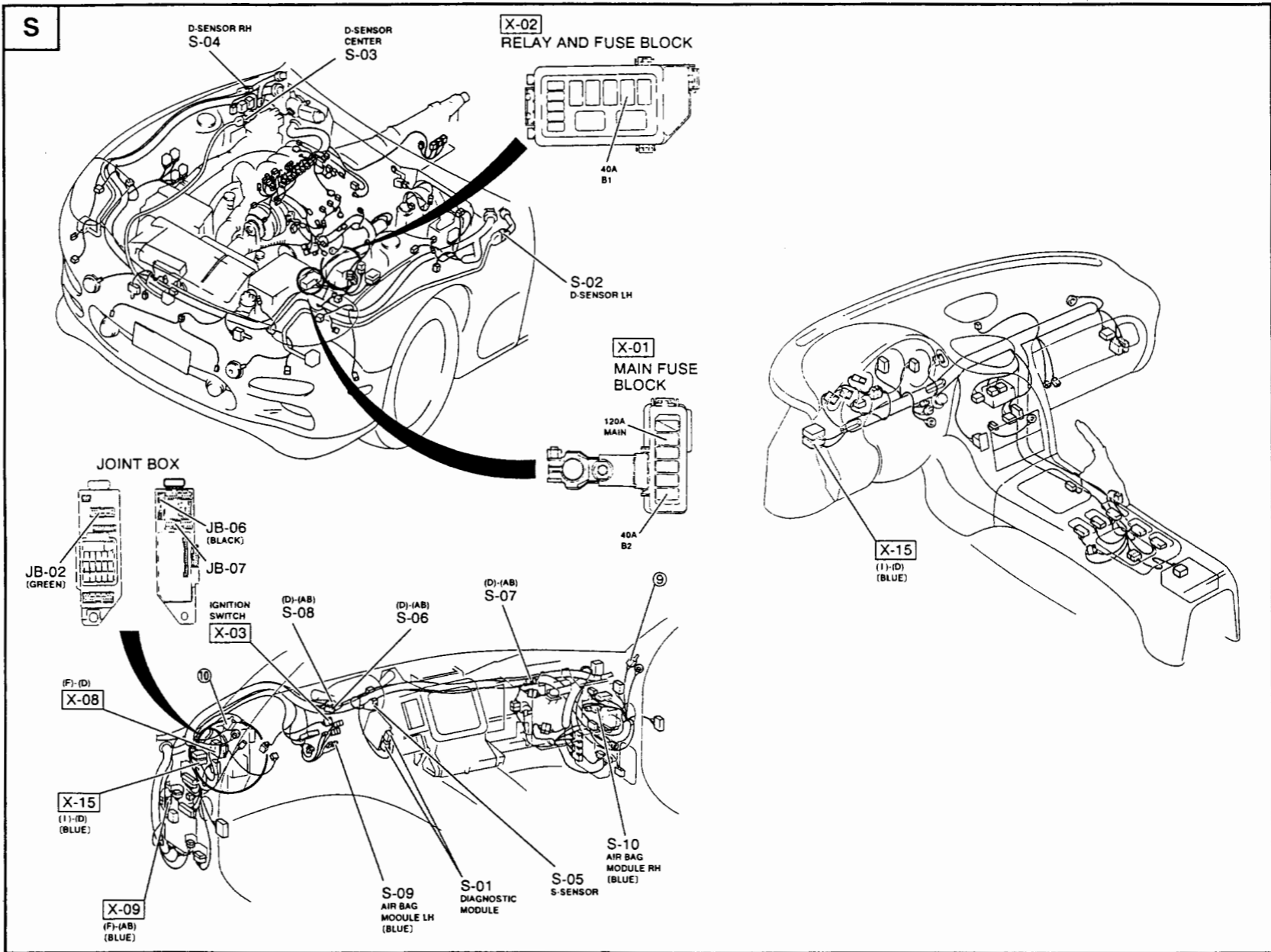
- A live air bag placed face down on a surface is dangerous. If the air bag deploys, the motion of the module can cause serious injury. Always face the trim cover up to reduce the motion of the module in case it accidentally deploys.

S

S ■ SRS AIR BAG SYSTEM

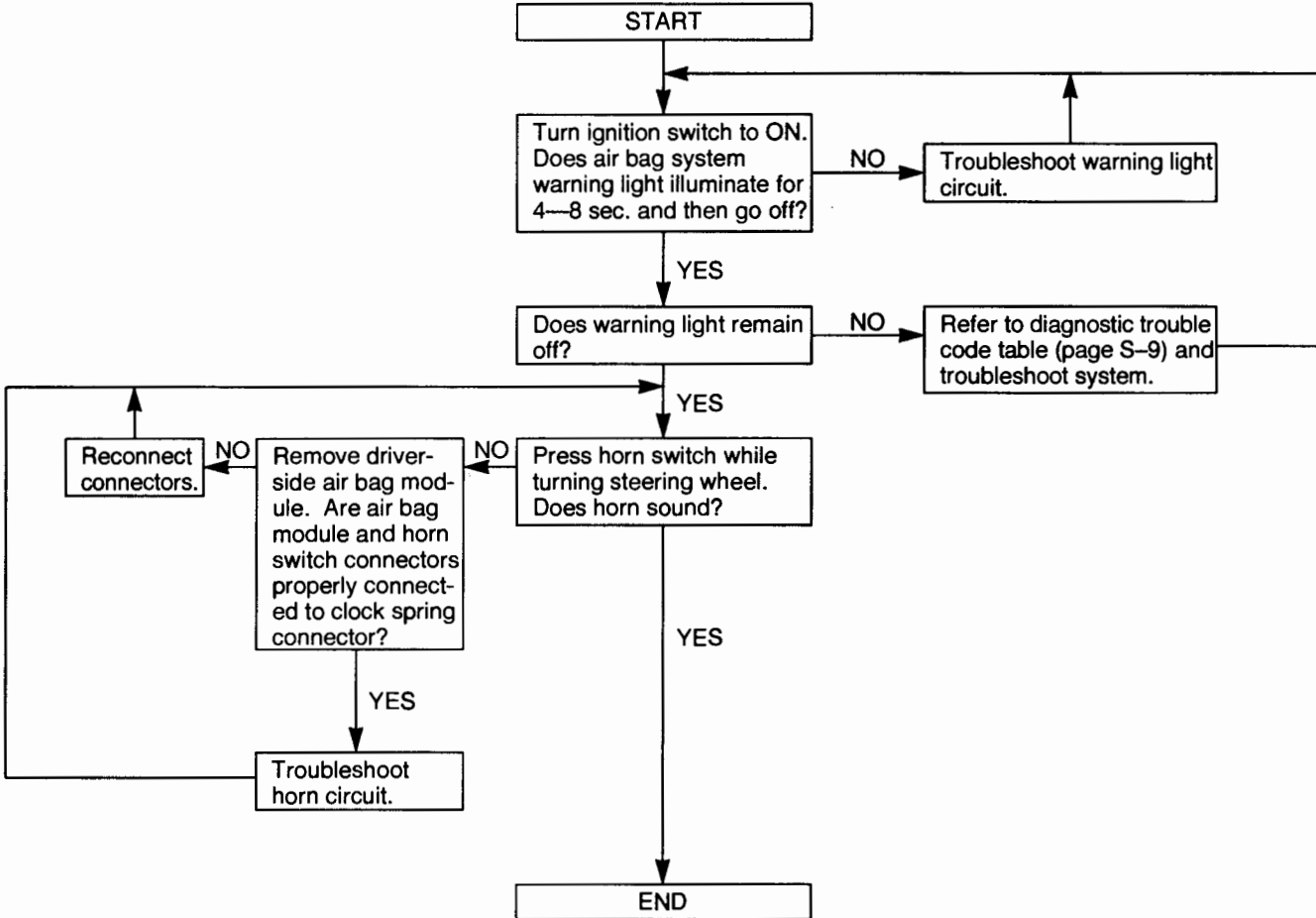


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|---|---|---|------------------------------------|------------------------------------|----|------|----|------|-----|----|-----|-----|-----|-----|-----|----|---|---|----|-----|-----|---|-----|---|------|-----|----|-----|-----|-----|-----|-----|---|-----|-----|---|---|---|------|---|---|-----|---|---|---|----|-----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------------------------------|----------------------------------|------------------------------|---------------------------|
| <p>S-01 DIAGNOSTIC MODULE (AB)</p> <table border="1"> <tr> <td>1Q</td><td>1Q</td><td>1M</td><td>1K</td><td>11</td><td>1G</td><td>1E</td><td>1C</td><td>1A</td> <td>2M</td><td>2K</td><td>21</td><td>2G</td><td>2E</td><td>2C</td><td>2A</td> </tr> <tr> <td>*</td><td>V</td><td>BR</td><td>B/G</td><td>G/O</td><td>W</td><td>R/B</td><td>*</td><td>B/LG</td> <td>G/B</td><td>LG</td><td>G/W</td><td>B/G</td><td>G/O</td><td>G/Y</td><td>R/Y</td> </tr> <tr> <td>B</td><td>B/W</td><td>B/Y</td><td>P</td><td>G</td><td>Y</td><td>LG/R</td><td>*</td><td>*</td> <td>W/G</td><td>O</td><td>R</td><td>L</td><td>GY</td><td>B/O</td><td>B</td> </tr> <tr> <td>1R</td><td>1P</td><td>1N</td><td>1L</td><td>1J</td><td>1H</td><td>1F</td><td>1D</td><td>1B</td> <td>2N</td><td>2L</td><td>2J</td><td>2H</td><td>2F</td><td>2D</td><td>2B</td> </tr> </table> | 1Q | 1Q | 1M | 1K | 11 | 1G | 1E | 1C | 1A | 2M | 2K | 21 | 2G | 2E | 2C | 2A | * | V | BR | B/G | G/O | W | R/B | * | B/LG | G/B | LG | G/W | B/G | G/O | G/Y | R/Y | B | B/W | B/Y | P | G | Y | LG/R | * | * | W/G | O | R | L | GY | B/O | B | 1R | 1P | 1N | 1L | 1J | 1H | 1F | 1D | 1B | 2N | 2L | 2J | 2H | 2F | 2D | 2B | <p>S-02 D-SENSOR LH (AB)</p> | <p>S-03 D-SENSOR CENTER (AB)</p> | <p>S-04 D-SENSOR RH (AB)</p> | <p>S-05 S-SENSOR (AB)</p> |
| 1Q | 1Q | 1M | 1K | 11 | 1G | 1E | 1C | 1A | 2M | 2K | 21 | 2G | 2E | 2C | 2A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * | V | BR | B/G | G/O | W | R/B | * | B/LG | G/B | LG | G/W | B/G | G/O | G/Y | R/Y | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | B/W | B/Y | P | G | Y | LG/R | * | * | W/G | O | R | L | GY | B/O | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1R | 1P | 1N | 1L | 1J | 1H | 1F | 1D | 1B | 2N | 2L | 2J | 2H | 2F | 2D | 2B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>S-06 CONNECTOR BETWEEN DASH (D) AND AIR BAG (AB)</p> | <p>S-07 CONNECTOR BETWEEN DASH (D) AND AIR BAG (AB)</p> | <p>S-08 CONNECTOR BETWEEN DASH (D) AND AIR BAG (AB)</p> | <p>S-09 AIR BAG MODULE LH (AB)</p> | <p>S-10 AIR BAG MODULE RH (AB)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Troubleshooting Procedure

The diagnostic module has a on-board diagnosis system function that flashes or illuminates the air bag system warning light to indicate trouble in the air bag system. The trouble can be determined by the warning light illumination or flashing pattern. If the light does not illuminate but the system still has trouble, a warning buzzer will sound 5 cycles of 5 times each.

Flowchart

47U0SX-512

Diagnostic trouble code table

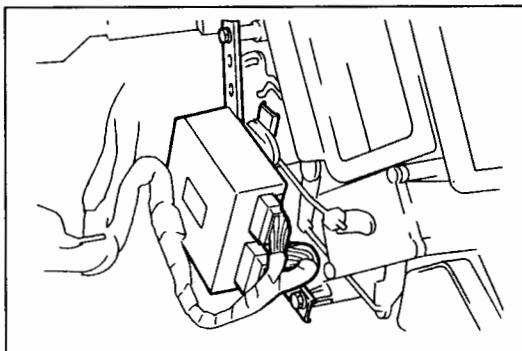
If there are two or more problems in the air bag system, the warning light indicates the problem with the highest priority.

| Priority | Warning light | Possible cause | Flowchart No. | Refer to page |
|----------|---------------------|---|---------------|---------------|
| 1 | Remains on | Damaged diagnostic module Poor connection of diagnostic module connector | 1 | S-9 |
| 2 | Flashes three times | Burnt ENGINE 15A and EGI 30A fuse Open or short in power supply circuit | 2 | S-10 |
| 3 | Flashes five times | Damaged D-sensor Open or short circuit in wiring harness | 3 | S-12 |
| 4 | Flashes four times | Damaged S-sensor Damaged diagnostic module Open or short circuit in S-sensor system wiring harness Poor connection of S-sensor connector | 4 | S-13 |
| 5 | Flashes six times | Damaged driver-side air bag module Damaged combination switch Damaged diagnostic module Damaged wiring harness | 5 | S-14 |
| 6 | Flashes seven times | Damaged passenger-side air bag module Damaged wiring harness | 6 | S-16 |
| 7 | Flashes ten times | Burnt system-down fuse in diagnostic module Damaged D-sensor(s) (center, RH, and LH) | 7 | S-17 |
| 8 | Flashes nine times | Open or short circuit in wiring harness Poor connection of D-sensor connector | 3 | S-12 |
| | Remains off | Burnt warning light bulb Damaged diagnostic module | 8 | S-18 |

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| Flowchart No. | • Fault indication | Warning light remains on |
|---------------|--------------------------|--|
| 1 | • Damaged system | Diagnostic module internal circuit |
| | • Possible cause | Damaged diagnostic module |
| | | Poor connection of diagnostic module connector |

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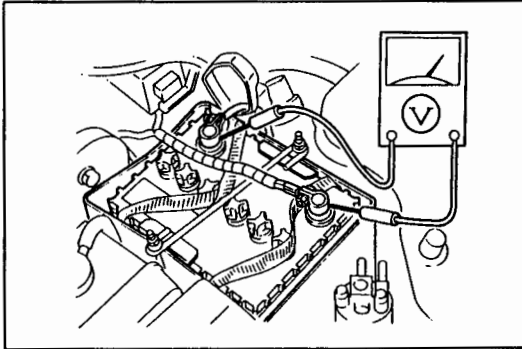
Remedy

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Make sure the diagnostic module connectors are properly connected.

| Connection | Action |
|------------|---|
| OK | Replace diagnostic module |
| Loose | Reconnect connector and check warning light operation |

| | | |
|----------------------|--------------------------|---|
| Flowchart No. | • Fault indication | Warning light flashes three times |
| | • Damaged system | Diagnostic module power supply system |
| 2 | • Possible cause | Burnt fuse Open or short in power supply circuit |

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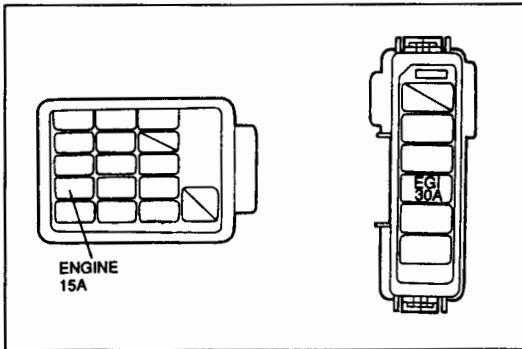


47U0SX-517

Step 1

Measure the battery positive voltage.

| Battery | Action |
|--------------|---|
| More than 9V | Go to Step 2 |
| Less than 9V | Check charging system (Refer to 1994 RX-7 Workshop Manual, section G) |

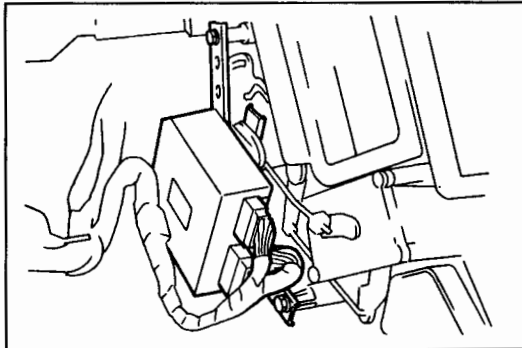


47U0SX-518

Step 2

Check ENGINE 15A fuse in the fuse block and the EGI 30A fuse in the main fuse block No.1.

| Fuse | Action |
|-------|--|
| OK | Go to Step 3 |
| Burnt | Replace fuse after checking and repairing wiring harness |

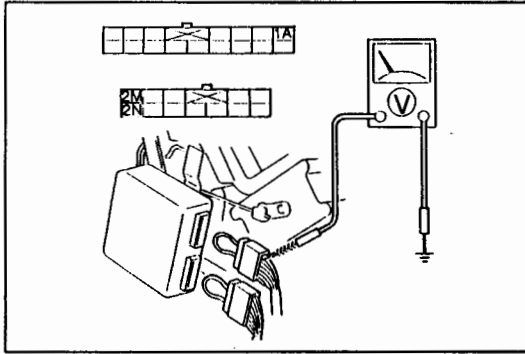


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Step 3

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Make sure the diagnostic module connectors are properly connected.

| Connector | Action |
|-----------|---|
| OK | Go to Step 4 |
| Loose | Reconnect connector and check warning light operation |



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Step 4

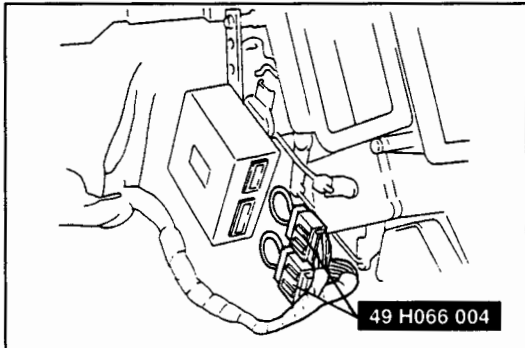
1. Disconnect the diagnostic module connector.
2. Connect the negative battery cable.
3. Turn the ignition switch to ON.
4. Measure the voltage at terminals 1A (B/LG), 2M (G/B) and 2N (W/G) of the diagnostic module connector.

B+: Battery positive voltage

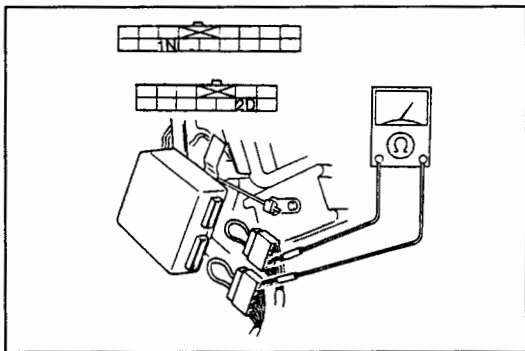
| Terminal | Voltage | Action |
|-----------|---------|--|
| 1A (B/LG) | B+ | Check terminal 2M (G/B) |
| | Other | Replace wiring harness (ENGINE 15A fuse—Diagnostic module) |
| 2M (G/B) | B+ | Check terminal 2N (W/G) |
| | Other | Replace wiring harness (METER 15A fuse—Diagnostic module) |
| 2N (W/G) | B+ | Replace diagnostic module |
| | Other | Replace wiring harness (EGI 30A fuse—Diagnostic module) |

| | | |
|----------------------|--------------------------|--|
| Flowchart No. | • Fault indication | Warning light flashes five times or nine times |
| | • Damaged system | D-sensor system |
| 3 | • Possible cause | Flashes five times— Damaged D-sensor Open or short circuit in wiring harness |
| | | Flashes nine times— Open or short circuit in wiring harness Poor connection of D-sensor connector |

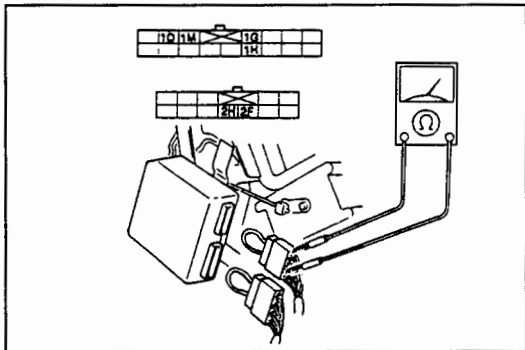
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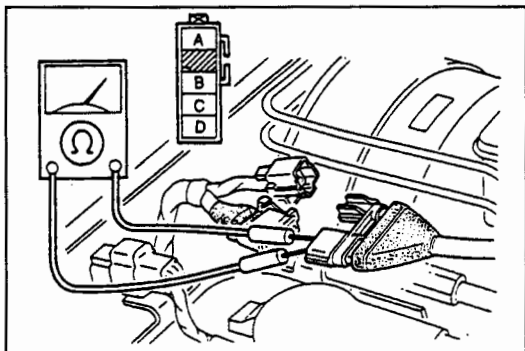
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47U0SX-523



47U0SX-524



47U0SX-525

Step 1

1. Deactivate the audio antitheft system, if installed.
(Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connectors and connect the **SST** to it as shown in the figure.

Step 2

Check for continuity between terminals 1N (B/Y) and 2D (B/O) of the diagnostic module connector.

| Continuity | Action |
|------------|--------------|
| Yes | Go to Step 3 |
| No | Go to Step 5 |

Step 3

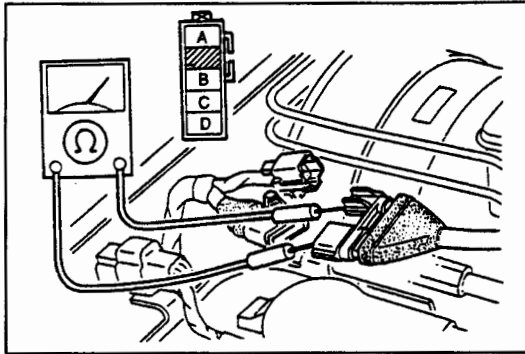
Measure the resistance between the terminals of the diagnostic module connector.

| Terminal | Resistance | Action |
|----------|------------|---|
| 1H (Y) | 1M (BR) | Approx. 1.2 kΩ Measure resistance between 1G and 1O |
| | | Other Go to Step 4 |
| 1G (W) | 1O (V) | Approx. 1.2 kΩ Measure resistance between 2H and 2F |
| | | Other Go to Step 4 |
| 2H (L) | 2F (GY) | Approx. 1.2 kΩ Replace diagnostic module |
| | | Other Go to Step 4 |

Step 4

1. Disconnect the D-sensor connectors (center, RH and LH).
2. Measure the resistance between terminals C and D of the D-sensor.

| Resistance | Action |
|----------------|------------------|
| Approx. 1.2 kΩ | Go to Step 5 |
| Other | Replace D-sensor |



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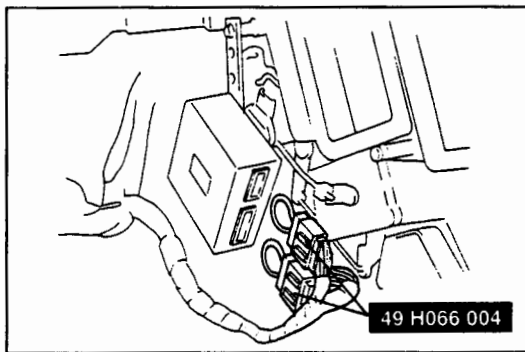
Step 5

Check for continuity between terminals A and B of the D-sensor.

| Continuity | Action |
|------------|------------------------|
| Yes | Replace wiring harness |
| No | Replace D-sensor |

| Flowchart No. | • Fault indication | Warning light illuminates four times |
|---------------|--------------------------|---|
| 4 | • Damaged system | S-sensor system |
| | • Possible cause | Damaged S-sensor |
| | | Damaged diagnostic module Open or short circuit in S-sensor system wiring harness Poor connection of S-sensor connector |

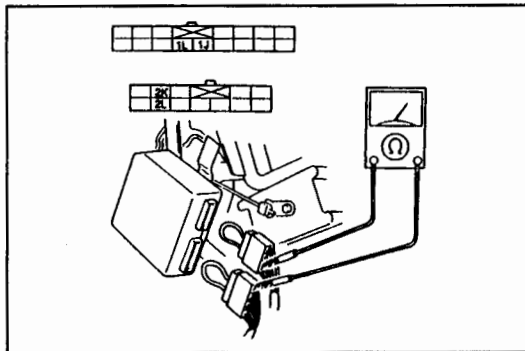
47U0SX-527



47U0SX-528

Step 1

1. Deactivate the audio antitheft system, if installed.
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connectors and connect the **SST** to it as shown in the figure.

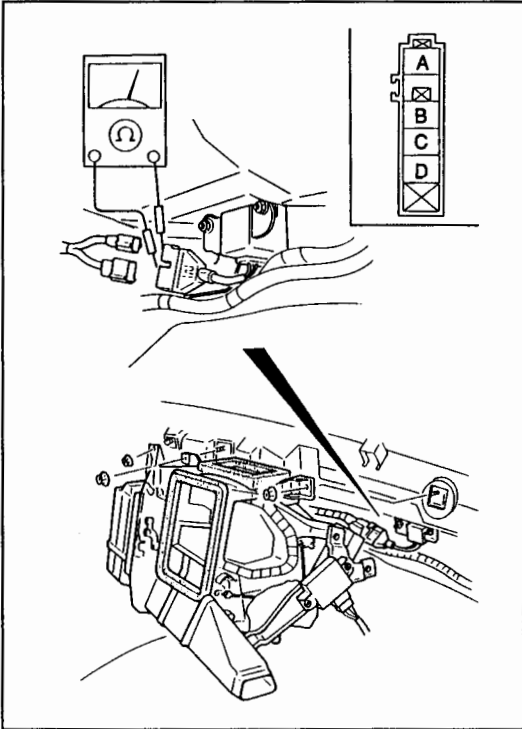


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Step 2

Check for continuity between the terminals of the diagnostic module connector.

| Terminal | Continuity | Action |
|-------------------|------------|---|
| 1J (G) | 2L (O) | Yes: Check for continuity between 1L and 2K |
| | | No: Go to Step 3 |
| 1L (P) | 2K (LG) | Yes: Replace diagnostic module |
| | | No: Go to Step 3 |
| 2L (O) | 2K (LG) | Yes: Check for continuity between 2L or 2K and ground |
| | | No: Go to Step 3 |
| 2L (O) or 2K (LG) | GND | Yes: Replace diagnostic module |
| | | No: Go to Step 3 |



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Step 3

1. Disconnect the S-sensor connector.
2. Check for continuity between the terminals of the S-sensor.

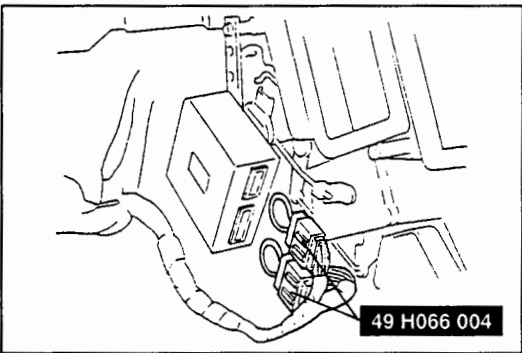
| Terminal | Continuity | Action | |
|----------|------------|--------|---|
| A | B | Yes | Check for continuity between C and D |
| | | No | |
| C | D | Yes | Check for continuity between A and C |
| | | No | |
| A | C | Yes | Replace S-sensor |
| | | No | Replace wiring harness (Diagnostic module—S-sensor) |

| | | |
|----------------------|--------------------------|--|
| Flowchart No. | • Fault indication | Warning light flashes six times |
| | • Damaged system..... | Driver-side air bag module (inflator system) |
| 5 | • Possible cause | Damaged driver-side air bag module |
| | | Damaged combination switch |
| | | Damaged diagnostic module |
| | | Damaged wiring harness |

Warning

- Handling the air bag module improperly can accidentally deploy the air bag, which may seriously injure you. Read SERVICE WARNINGS, page S-5, before handling the air bag module.

47U0SX-531



47U0SX-532

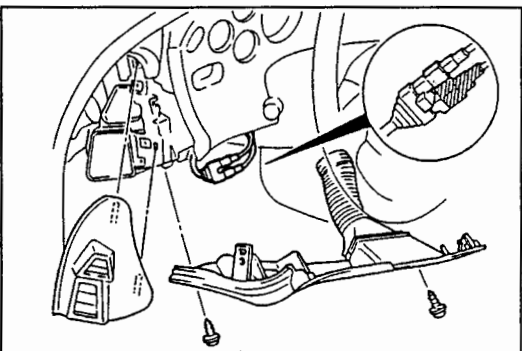
Step 1

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the SST to it as shown in the figure.

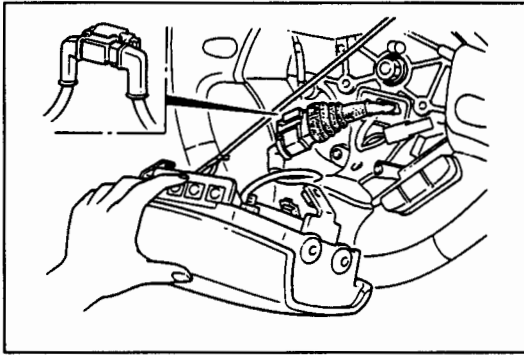
Step 2

Check the connection of the clock spring connector.

| Connection | Action |
|------------|---------------------|
| OK | Go to Step 3 |
| Loose | Reconnect connector |



47U0SX-533

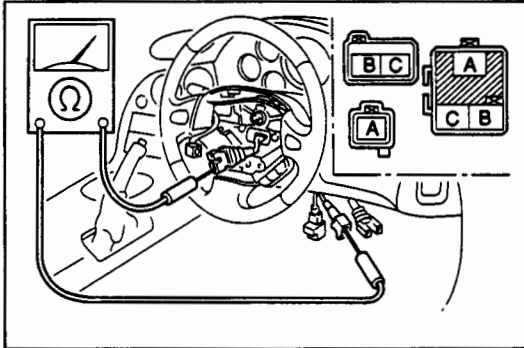


47U0SX-534

Step 3

1. Remove the driver-side air bag module.
2. Check the connection of the driver-side air bag module connector.

| Connection | Action |
|------------|---------------------|
| OK | Go to Step 4 |
| Loose | Reconnect connector |

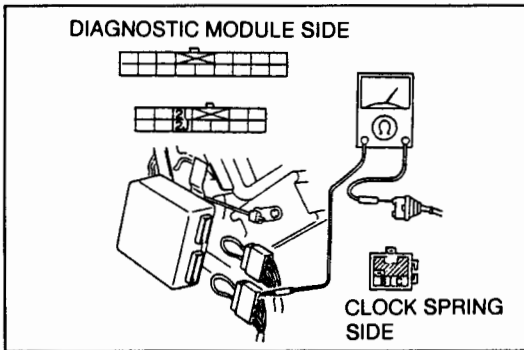


47U0SX-535

Step 4

Check for continuity between the terminals of the clock spring connector.

| Terminal | Continuity | Action | |
|----------|------------|--------|---------------------------------------|
| A | 3A | Yes | Check for continuity between B and 2A |
| | | No | Replace combination switch |
| B | 2A | Yes | Check for continuity between C and 2B |
| | | No | Replace combination switch |
| C | 2B | Yes | Go to Step 5 |
| | | No | Replace combination switch |



47U0SX-536

Step 5

Check for continuity between the terminal diagnostic module connector and clock spring connector.

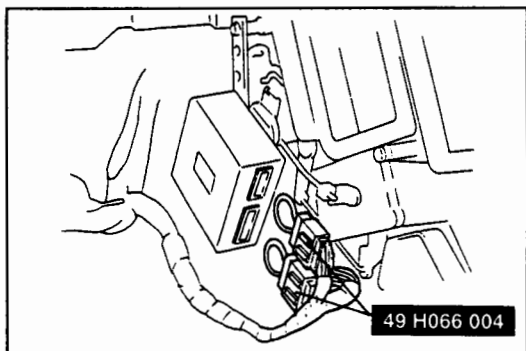
| Terminal | | Continuity | Action |
|------------------------|-------------------|------------|---|
| Diagnostic module side | Clock spring side | | |
| 2I (G/W) | B (G/W) | Yes | Check for continuity between 2J and C |
| | | No | Replace wiring harness |
| 2J (R) | C (R) | Yes | Replace driver-side air bag module and check warning light operation If warning light flashes six times, replace diagnostic module |
| | | No | Replace wiring harness |

| | | |
|--------------------------------------|--------------------------|---|
| Flowchart No. 6 | • Fault indication | Warning light flashes seven times |
| | • Damaged system..... | Passenger-side air bag module (inflator system) |
| | • Possible cause | Damaged passenger-side air bag module Damaged wiring harness |

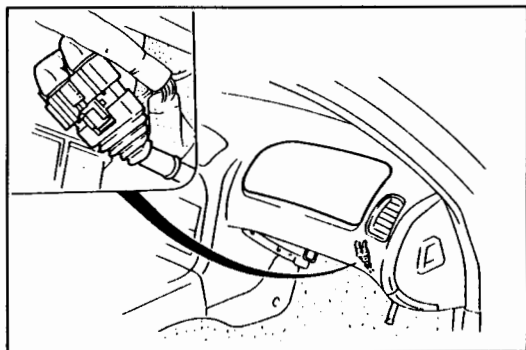
Warning

- Handling the air bag module improperly can accidentally deploy the air bag, which may seriously injure you. Read **SERVICE WARNINGS**, page S-5, before handling the air bag module.

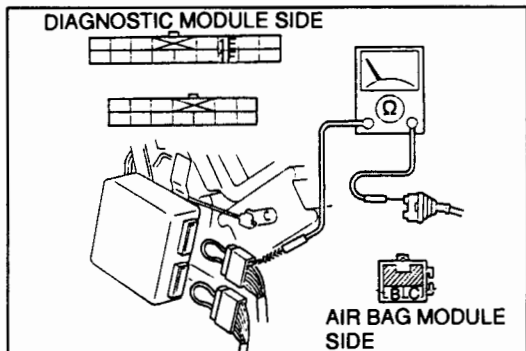
47U0SX-537



47U0SX-538



47U0SX-539



47U0SX-540

Step 1

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.

Step 2

1. Remove the glove compartment. (Refer to the 1994 RX-7 Workshop Manual, section S.)
2. Check the connection of the passenger-side air bag module connectors.

| Connection | Action |
|------------|---------------------|
| OK | Go to Step 3 |
| Loose | Reconnect connector |

Step 3

1. Disconnect the passenger-side air bag module connectors.
2. Check for continuity between the terminals of the diagnostic module connector and passenger-side air bag module connector.

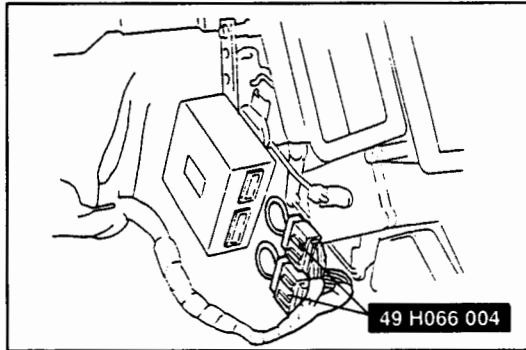
| Terminal | | Continuity | Action |
|------------------------|---------------------|------------|---|
| Diagnostic module side | Air bag module side | | |
| 1E (R/B) | B (R/B) | Yes | Check for continuity between 1F and C |
| | | No | Replace wiring harness |
| 1F (LG/R) | C (LG/R) | Yes | Replace air bag module and check warning light operation If warning light flashes seven times, replace diagnostic module |
| | | No | Replace wiring harness |

| | | |
|----------------------|---|--|
| Flowchart No. | <ul style="list-style-type: none"> • Fault indication Warning light flashes ten times • Damaged system Diagnostic module system | |
| 7 | <ul style="list-style-type: none"> • Possible cause Burnt system-down fuse (burnt system-down fuse) Burnt system-down fuse in diagnostic module Damaged D-sensor(s) (center, RH, and LH) | |

Note

- To prevent the fail-safe system from unintentionally operating, the system-down fuse in the diagnostic module will burn if the module detects one of the following:
 1. Damaged D-sensors (center, RH and LH).
 2. Open or short circuit in air bag system

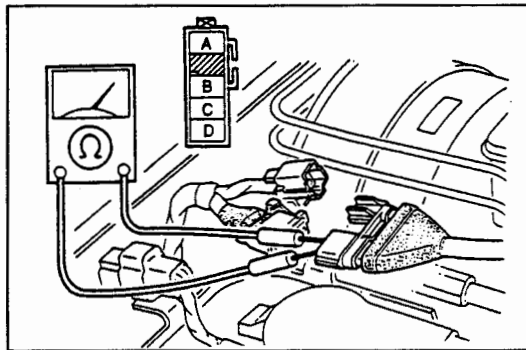
47U0SX-541



47U0SX-542

Step 1

1. Deactivate the audio antitheft system, if installed.
(Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.

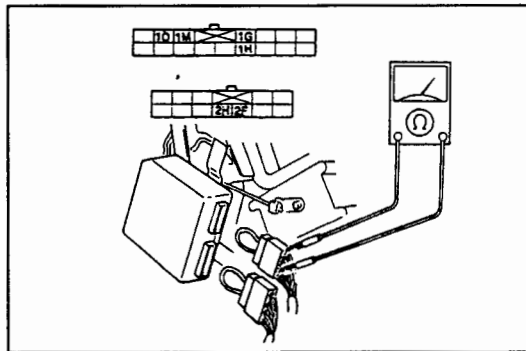


47U0SX-543

Step 2

1. Disconnect the D-sensor connectors (center, RH and LH).
2. Measure the resistance between terminals C and D of each sensor connector.

| Resistance | Action |
|----------------|------------------|
| Approx. 1.2 kΩ | Go to Step 3 |
| Other | Replace D-sensor |



47U0SX-544

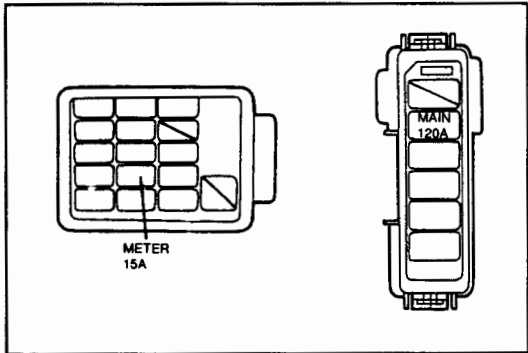
Step 3

1. Connect the D-sensor connectors (center, RH and LH).
2. Measure the resistance between the diagnostic module connector terminals.

| Terminal | Resistance | Resistance | Action |
|-----------|------------|----------------|--------------------------------------|
| 1H (Y) | 1M (BR) | Approx. 1.2 kΩ | Measure resistance between 1G and 1O |
| | | Other | Replace wiring harness |
| 1G (W) | 1O (V) | Approx. 1.2 kΩ | Measure resistance between 2H and 2F |
| | | Other | Replace wiring harness |
| 2H (L) | 2F (GY) | Approx. 1.2 kΩ | Replace diagnostic module |
| | | Other | Replace wiring harness |

| | | |
|----------------------|--------------------------|---|
| Flowchart No. | • Fault indication | Warning light does not illuminate |
| | • Damaged system..... | Warning light illumination circuit system |
| 8 | • Possible cause | Burnt warning light bulb Damaged diagnostic module |

47U0SX-545

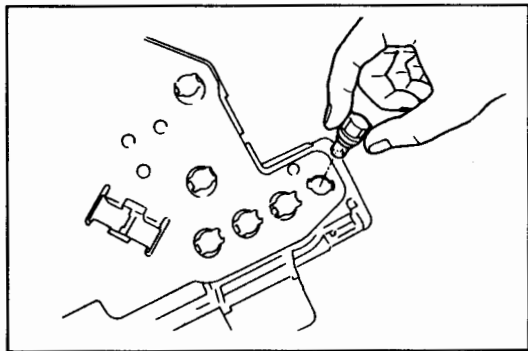


47U0SX-546

Step 1

Check the MAIN 120A fuse in the main fuse block and the METER 15A fuse in the fuse block.

| Fuse | Action |
|-------|--|
| OK | Go to Step 2 |
| Burnt | Replace fuse after checking and repairing wiring harness |

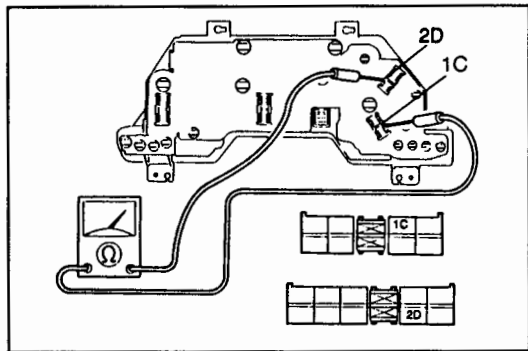


47U0SX-547

Step 2

1. Remove the instrument cluster.
2. Check the air bag system warning light bulb.

| Warning light | Action |
|---------------|----------------------------|
| OK | Go to Step 3 |
| Burnt | Replace warning light bulb |

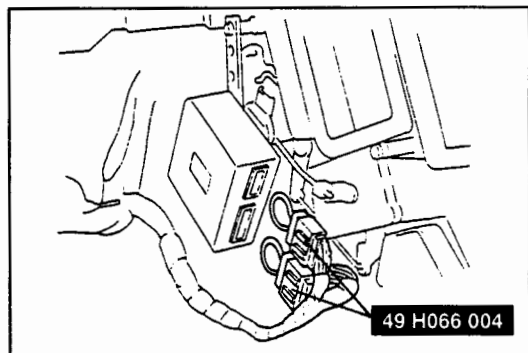


47U0SX-548

Step 3

Check for continuity between terminals 2D and 1C of the instrument cluster connectors.

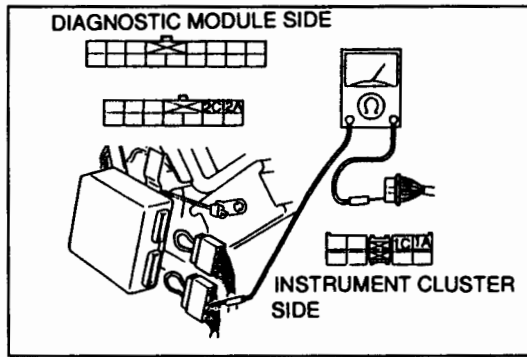
| Continuity | Action |
|------------|-----------------------|
| Yes | Go to Step 4 |
| No | Replace print circuit |



47U0SX-549

Step 4

1. Deactivate the audio antitheft system if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.



47U0SX-550

Step 5

Check for continuity between the terminals of the diagnostic module connector and instrument cluster connector.

| Terminal | | Continuity | Action |
|-----------------------------|------------------------------|------------|--|
| Diagnostic module connector | Instrument cluster connector | | |
| 2A (R/Y) | 1A (R/Y) | Yes | Check for continuity between 2C and 1C |
| | | No | Replace wiring harness between 2A and 1A (R/Y) |
| 2C (G/Y) | 1C (G/Y) | Yes | Replace diagnostic module |
| | | No | Replace wiring harness between 2C and 1C (G/Y) |

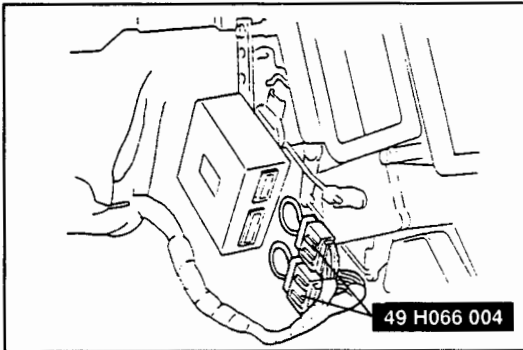
DRIVER-SIDE AIR BAG MODULE

Removal / Installation

Warning

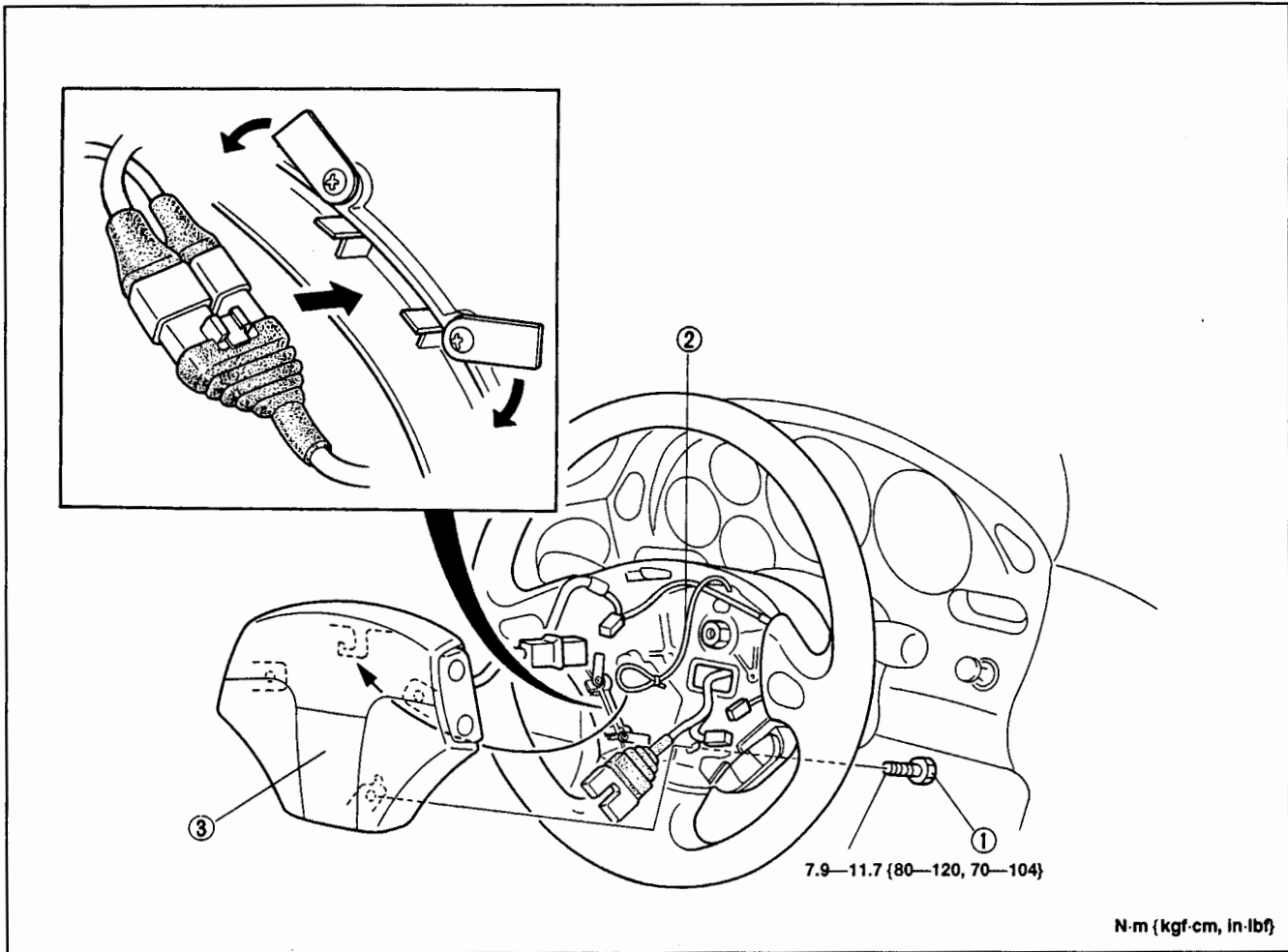
- Handling the air bag module improperly can accidentally deploy the air bag, which may seriously injure you. Read **SERVICE WARNINGS**, page S-5, before handling the air bag module.

47U0SX-551



47U0SX-552

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove in the order shown in the figure.
5. Install in the reverse order of removal.
6. Follow the troubleshooting flowchart (page S-8) to verify that the air bag system is operating normally.



N·m {kgf·cm, in·lbf}

47U0SX-553

1. Bolt
2. Support rope

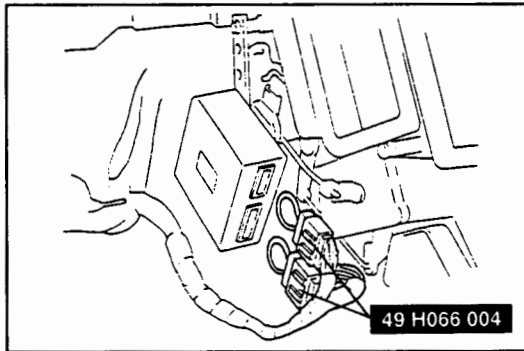
3. Driver-side air bag module
Disposal procedure page S-30

PASSENGER-SIDE AIR BAG MODULE Removal / Installation

Warning

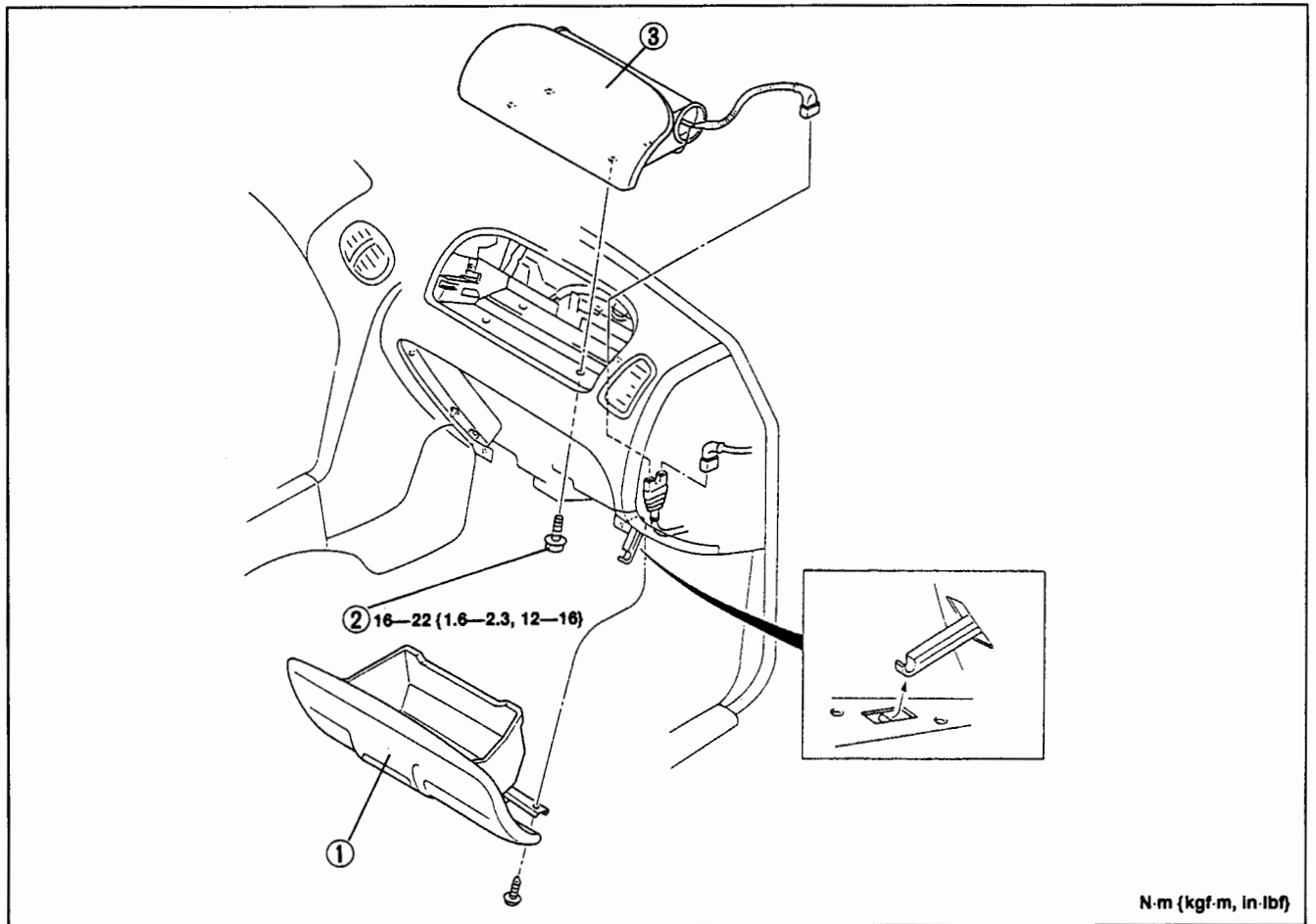
- Handling the air bag module improperly can accidentally deploy the air bag, which may seriously injure you. Read **SERVICE WARNINGS**, page S-5, before handling the air bag module.

47U0SX-554



47U0SX-555

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove in the order shown in the figure.
5. Install in the reverse order of removal.
6. Follow the troubleshooting flowchart (page S-8) to verify that the air bag system is operating normally.

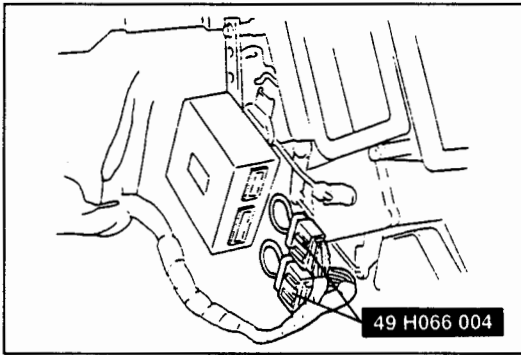


N·m (kgf·m, in·lbf)

47U0SX-556

1. Glove compartment
2. Bolt

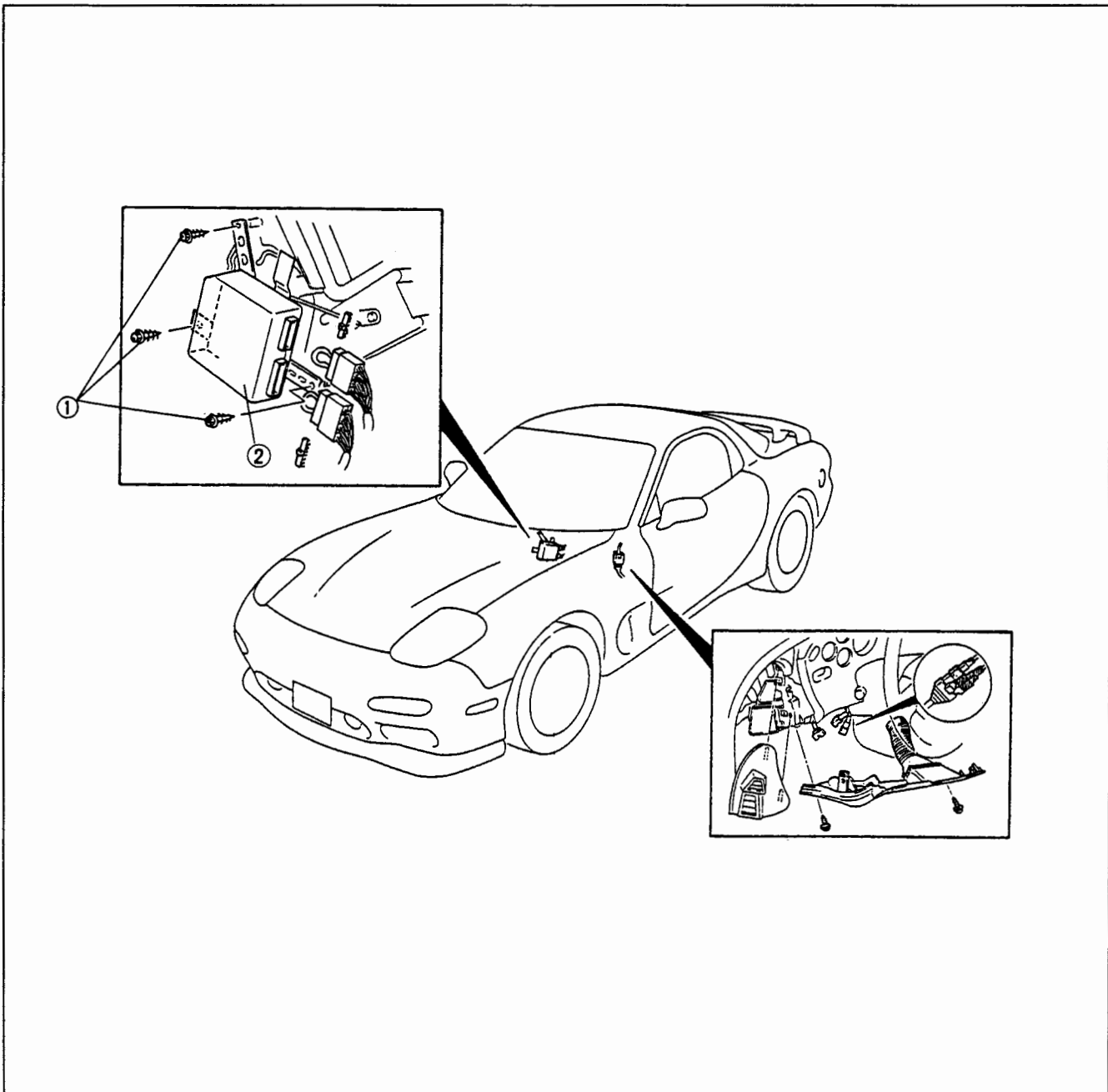
3. Passenger-side air bag module.
Disposal procedure page S-30



47U0SX-557

DIAGNOSTIC MODULE**Removal / Installation**

1. Deactivate the audio antitheft system, if installed.
(Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove in the order shown in the figure.
5. Install in the reverse order of removal.
6. Follow the troubleshooting flowchart (page S-8) to verify that the air bag system is operating normally.



47U0SX-558

1. Screw
2. Diagnostic module

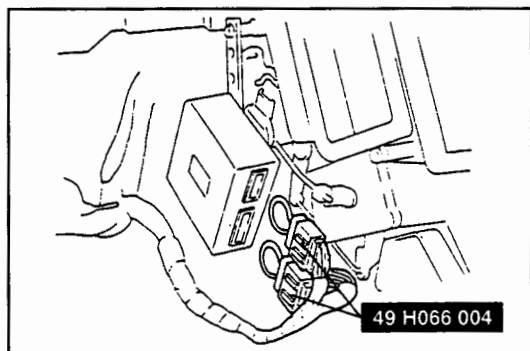
CLOCK SPRING CONNECTOR ASSEMBLY

Removal / Installation

Warning

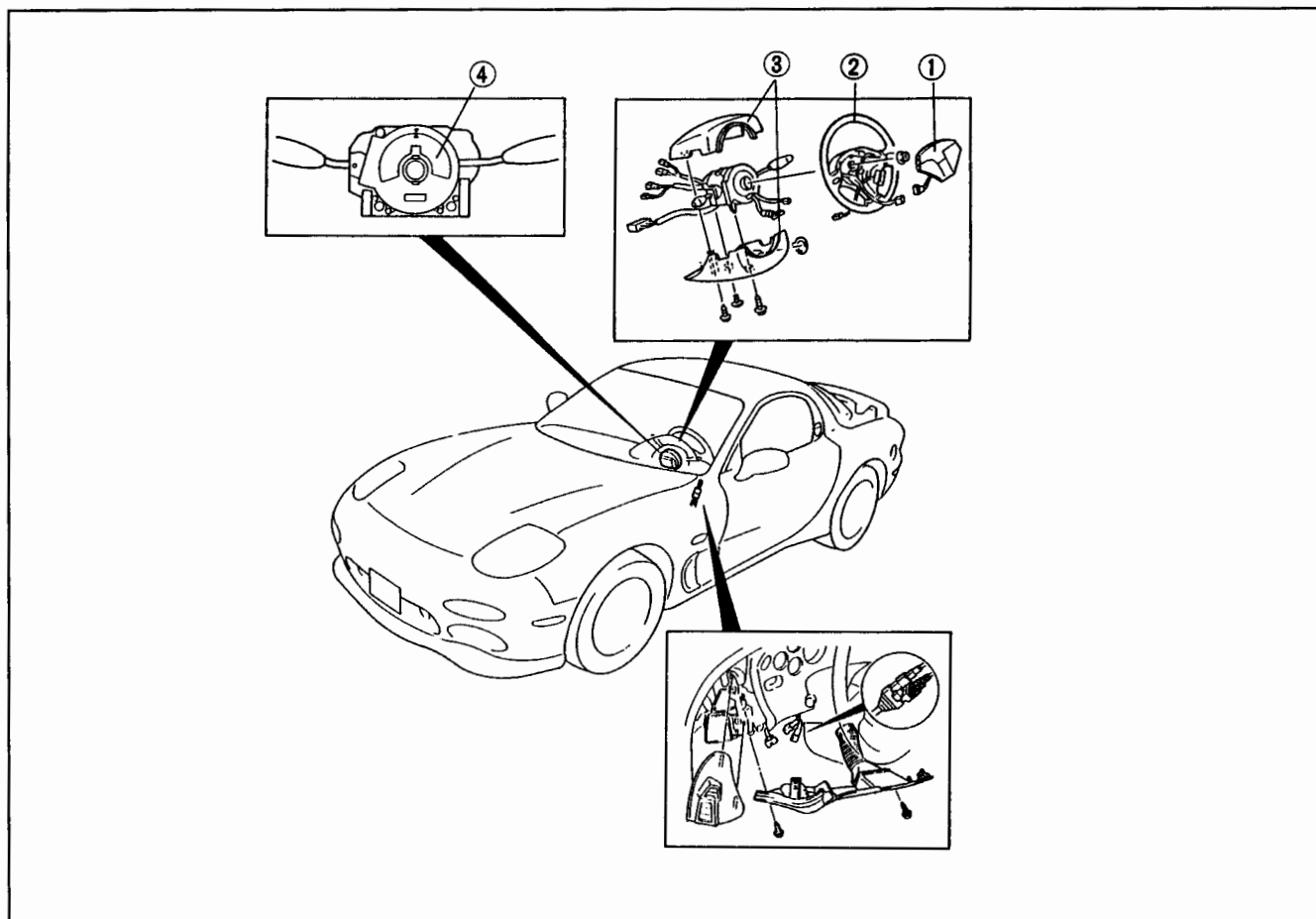
- Handling the air bag module improperly can accidentally deploy the air bag, which may seriously injure you. Read **SERVICE WARNINGS**, page S-5, before handling the air bag module.

47U0SX-559



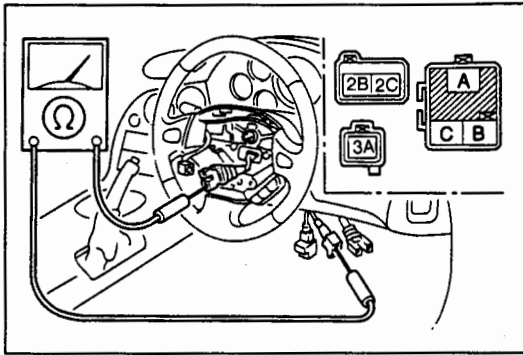
47U0SX-560

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove in the order shown in the figure.
5. Install in the reverse order of removal.
6. Follow the troubleshooting flowchart (page S-8) to verify that the air bag system is operating normally.



47U0SX-561

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Driver-side air bag module <ul style="list-style-type: none"> Removal / Installation page S-20 Disposal procedure page S-30 2. Steering wheel | <ol style="list-style-type: none"> 3. Column cover 4. Clock spring connector assembly <ul style="list-style-type: none"> Inspection page S-24 Adjustment page S-24 |
|--|---|



47U0SX-562

Inspection

1. Check for continuity between the terminals of the clock spring connector.

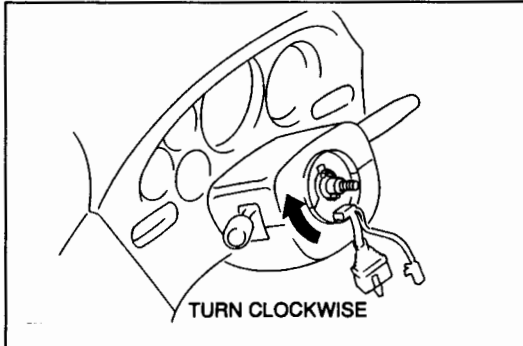
| Terminal | Continuity |
|----------|------------|
| A—3A | Yes |
| B—2B | Yes |
| C—2C | Yes |

2. If not as specified, replace the clock spring connector assembly.

Adjustment

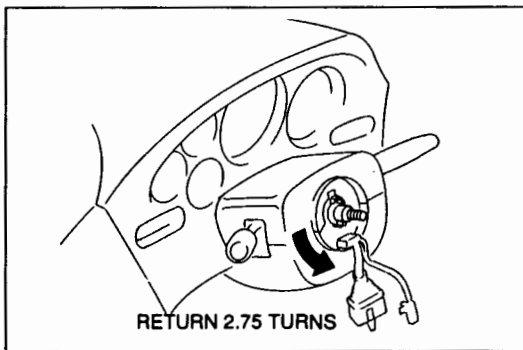
Before installing the steering wheel, adjust the clock spring.

1. Set the front wheels straight ahead.
2. Turn the clock spring clockwise until it stops.
Do not force it.



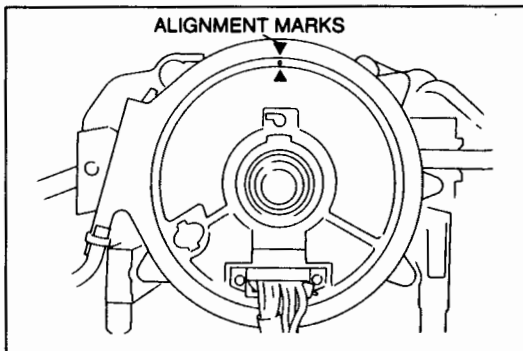
47U0SX-563

3. Turn the clock spring counterclockwise 2.75 turns.

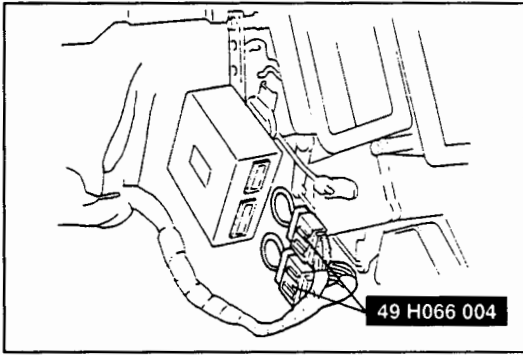


47U0SX-564

4. Align the mark on the clock spring connector with that on the outer housing.



47U0SX-565

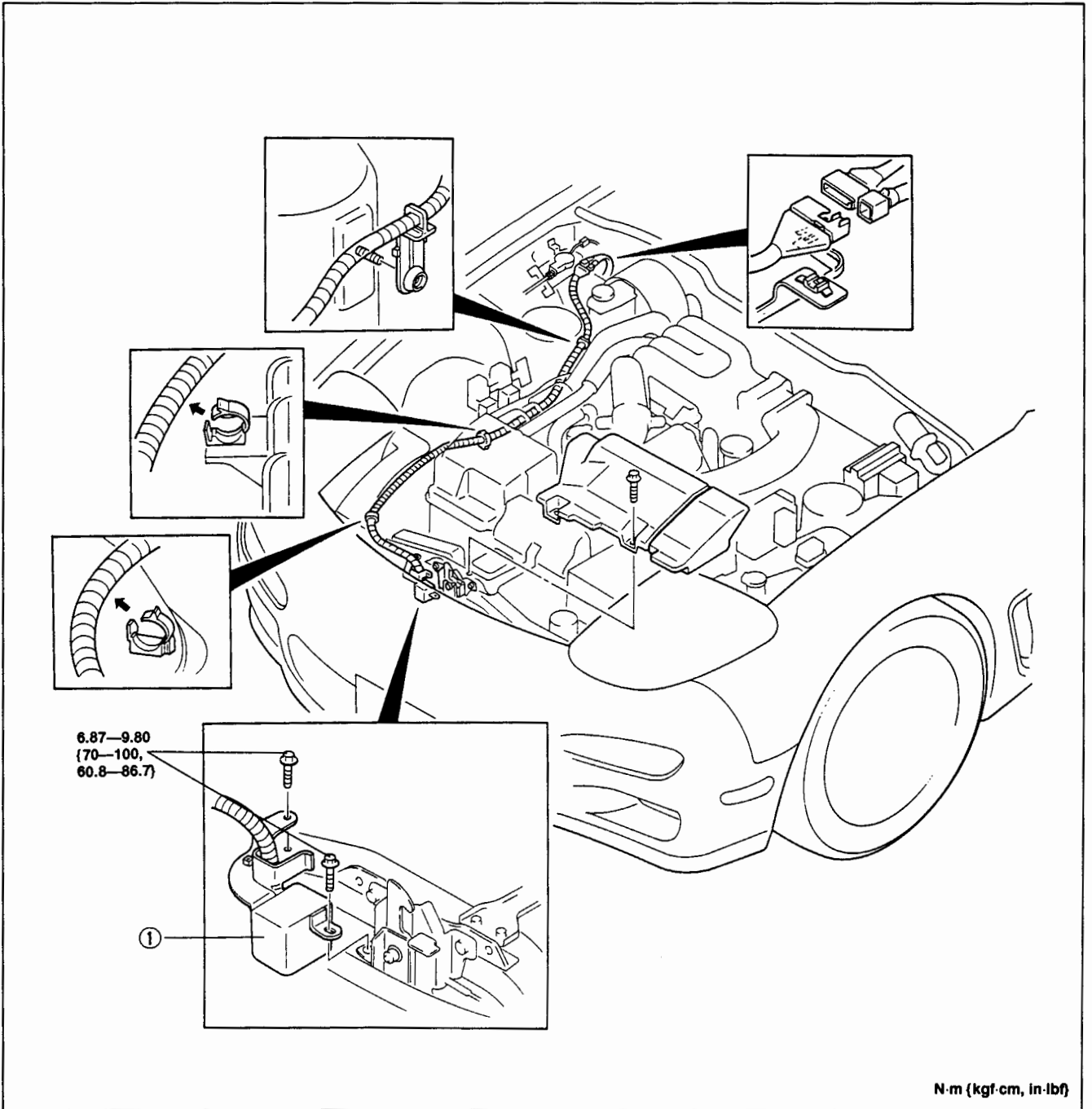


47UOSX-566

CRASH SENSOR (D-SENSOR)

Removal / Installation

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove in the order shown in the figure.
5. Install in the reverse order of removal, referring to **Installation note**.

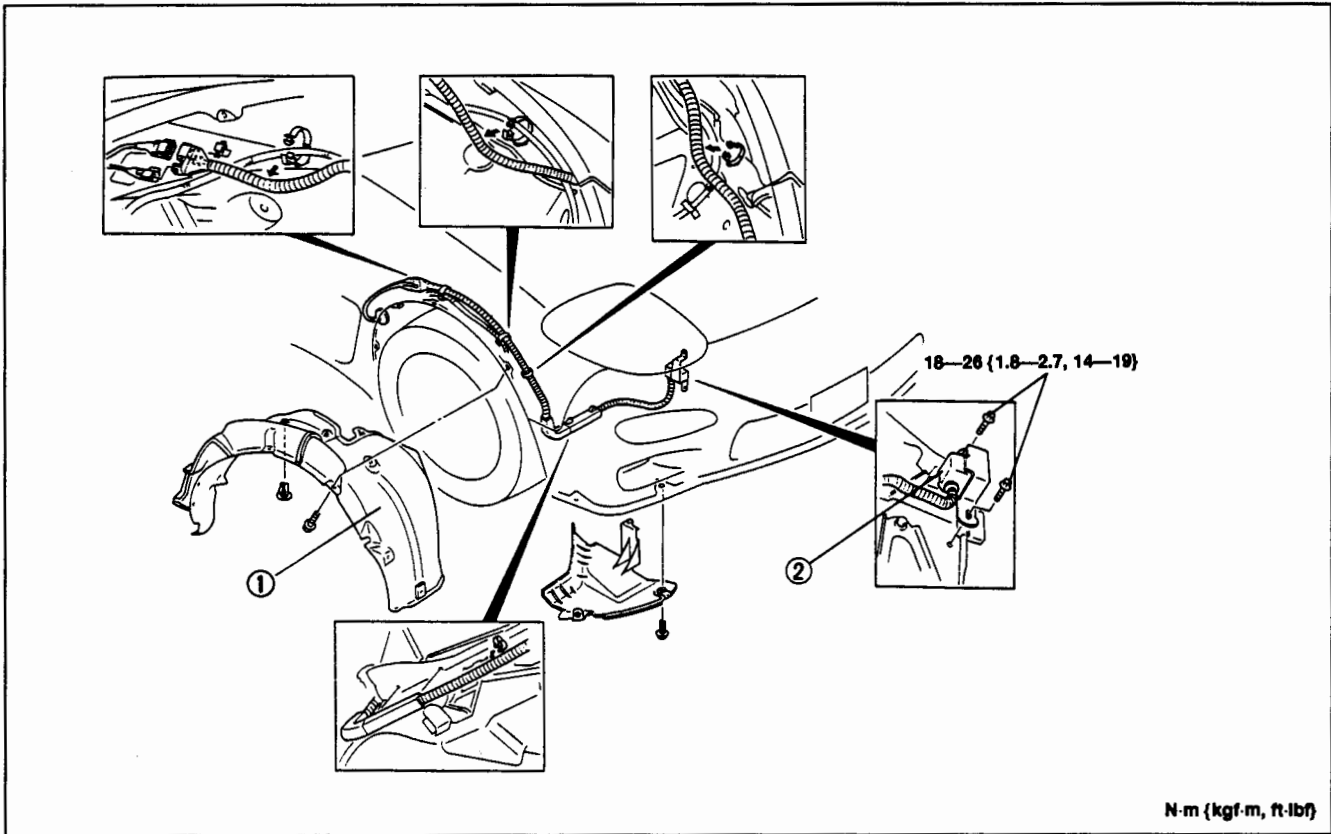


6.87–9.80
(70–100,
60.8–86.7)

N·m (kgf·cm, in·lbf)

47UOSX-567

1. Crash sensor (D-sensor, center)
Inspection page S-27



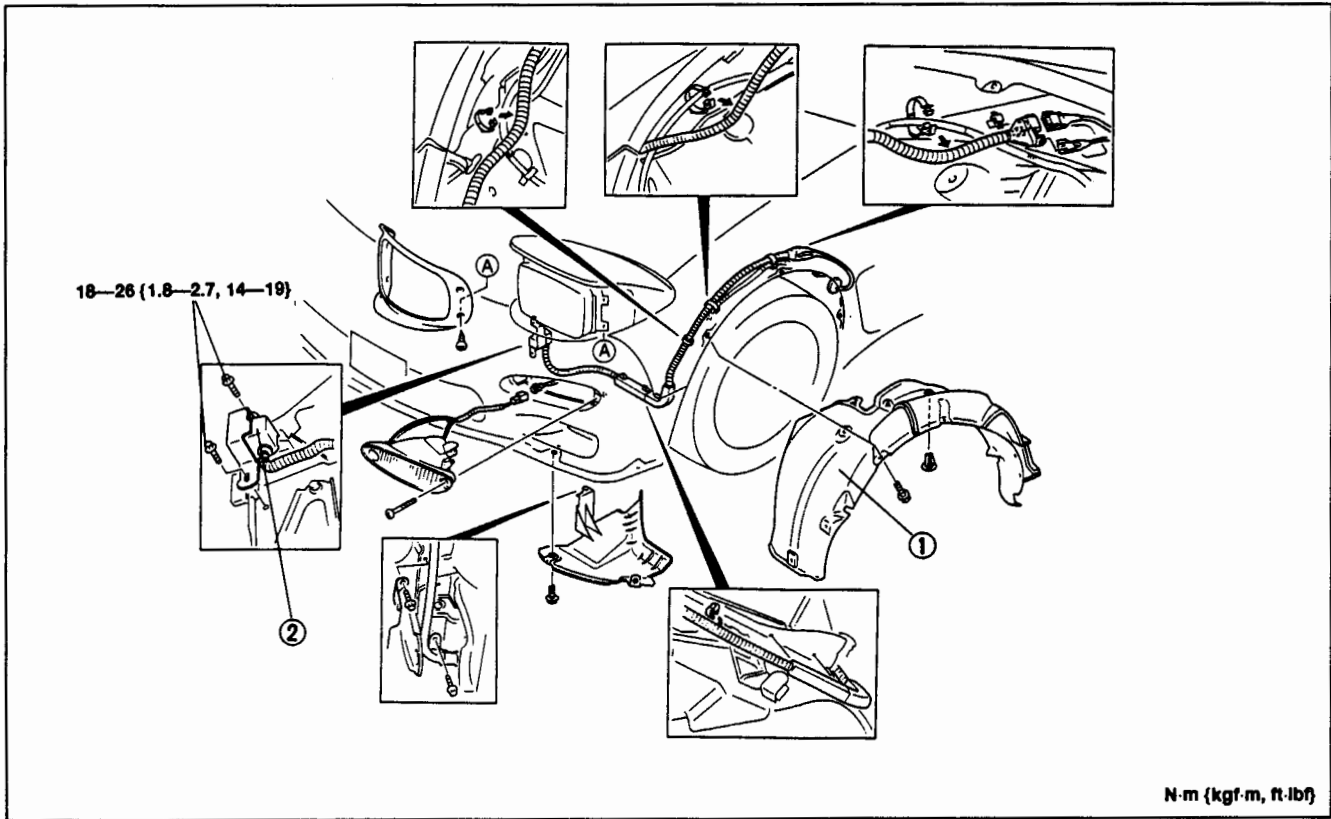
N·m {kgf·m, ft·lbf}

47U0SX-568

1. Mud guard

2. Crash sensor (D-sensor, right)

Inspection page S-27



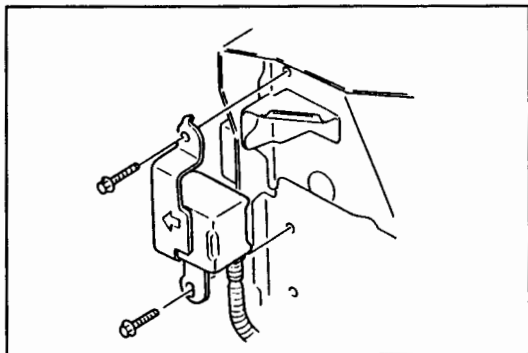
N·m {kgf·m, ft·lbf}

47U0SX-569

1. Mud guard

2. Crash sensor (D-sensor, left)

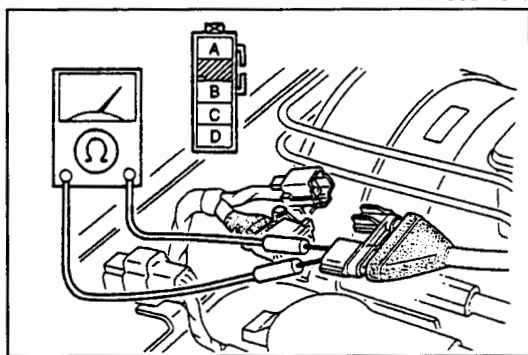
Inspection page S-27



47U0SX-570

Installation note

1. If the crash sensor mounting area is damaged, repair the area to its original shape before reinstalling the sensor.
2. Point the arrow on the crash sensor toward the front of the vehicle.



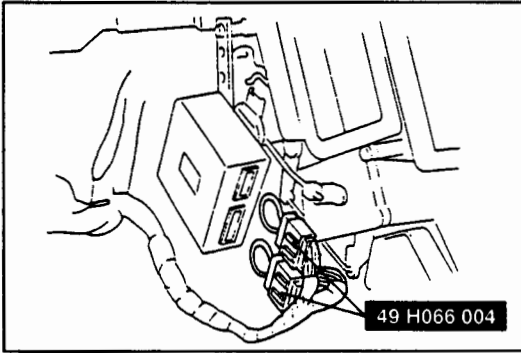
47U0SX-571

Inspection

1. Disconnect the D-sensor connectors (center, RH and LH).
2. Measure the resistance between terminals C and D of each sensor connector.

Resistance: Approx. 1.2k Ω

3. Check for continuity between terminals A and B of each sensor connector.
4. If not as specified, replace the crash sensor.

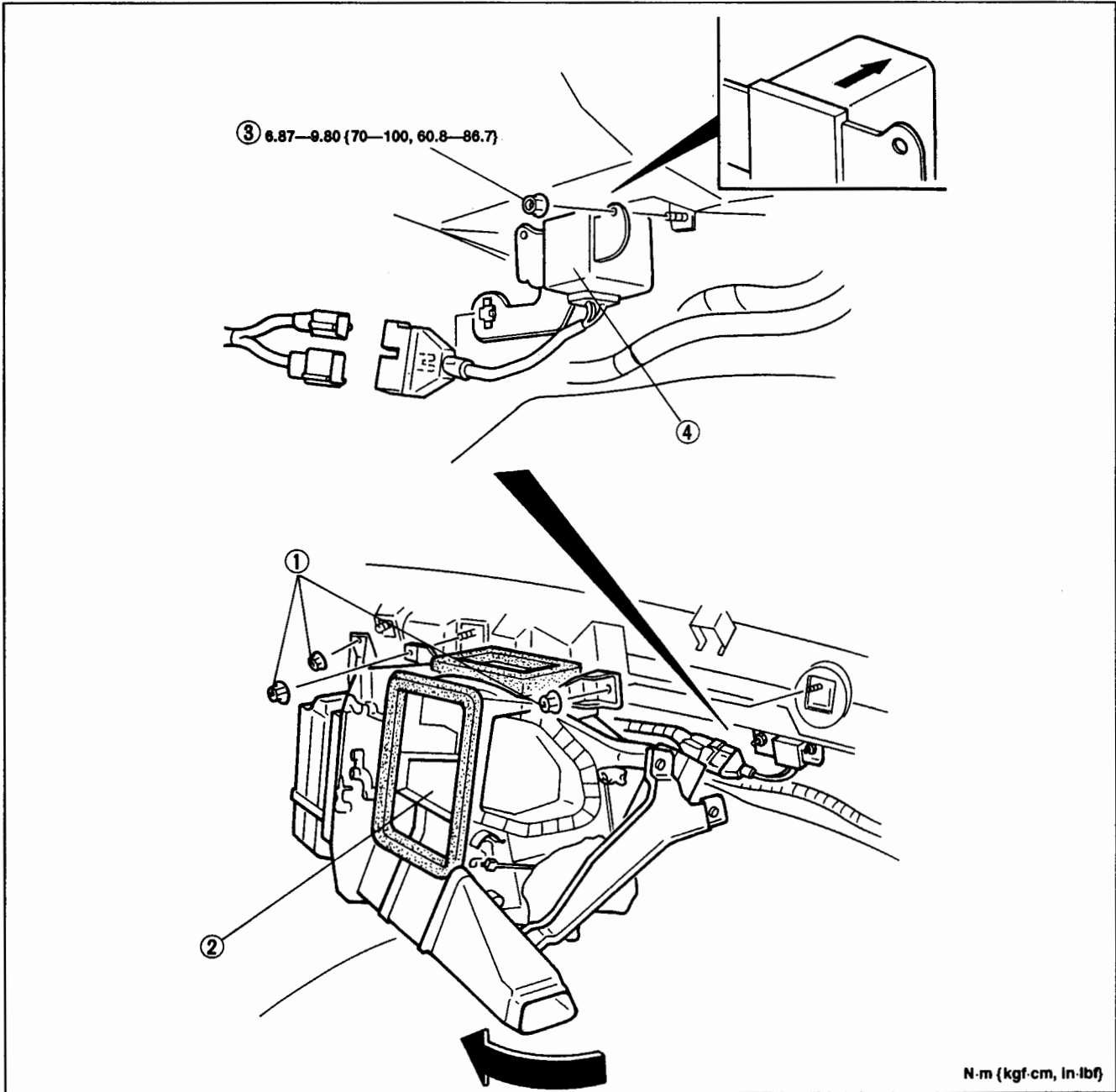


47U0SX-572

CRASH SENSOR (S-SENSOR)

Removal / Installation

1. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
2. Disconnect the negative battery cable.
3. Disconnect the diagnostic module connector and connect the **SST** to it as shown in the figure.
4. Remove the cooling unit. (Refer to section G.)
5. Remove in the order shown in the figure.
6. Install in the reverse order of removal, referring to **Installation note**.

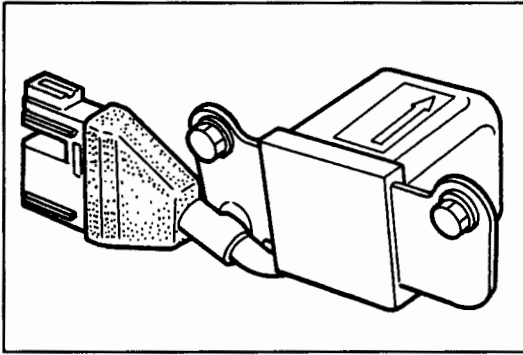


N·m (kgf·cm, in·lbf)

47U0SX-573

1. Nut
2. Heater unit
3. Nut

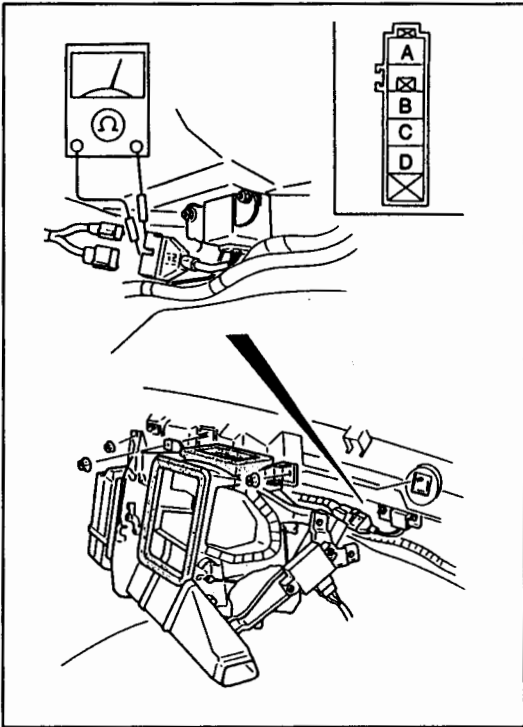
4. Crash sensor (S-sensor)
Inspection page S-29



47U0SX-574

Installation note

1. If the crash sensor mounting area is damaged, repair the area to its original shape before reinstalling the sensor.
2. Point the arrow on the crash sensor toward the front of the vehicle.



47U0SX-575

Inspection

1. Disconnect the S-sensor connector.
2. Check for continuity between the terminals of the S-sensor connector.

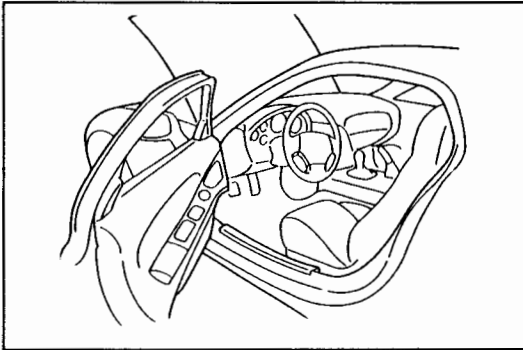
| Terminal | | Continuity |
|----------|---|------------|
| A | B | Yes |
| C | D | Yes |

3. If not as specified, replace the S-sensor.

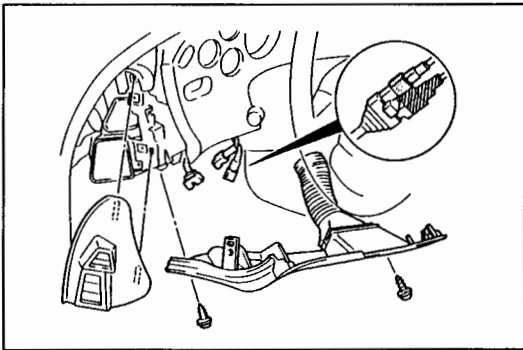
AIR BAG MODULE DISPOSAL PROCEDURE

Before scrapping a vehicle with an undeployed air bag module, deploy the air bag. Never dispose of a live air bag module. If the deployment tool **SST** is not available, consult the nearest Mazda representative for assistance.

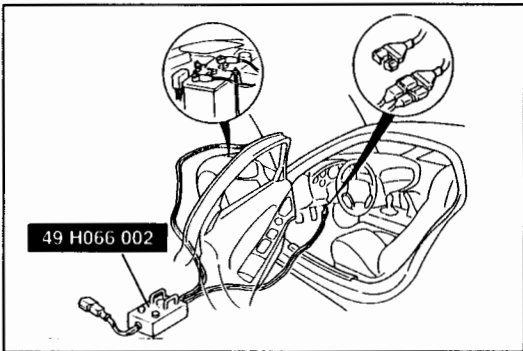
49U0TX-922



47U0SX-576



47U0SX-577



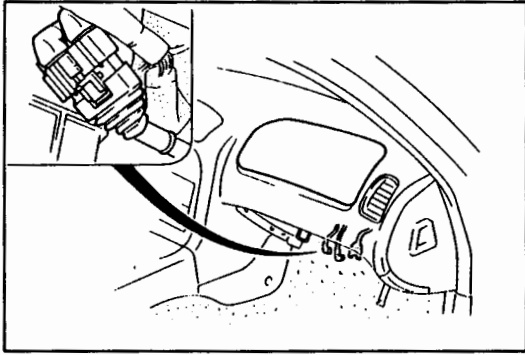
47U0SX-578

Air Bag Deployment

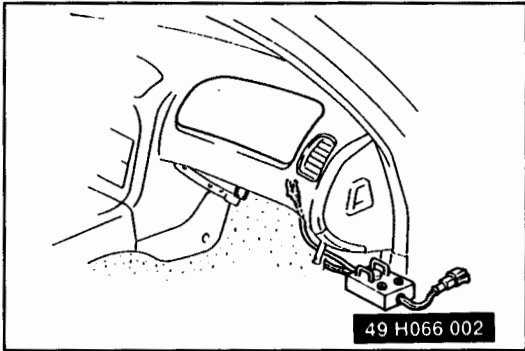
1. Move the vehicle to an open space, away from strong winds, and open all of the vehicle's doors.
2. Deactivate the audio antitheft system, if installed. (Refer to section J1.)
3. Disconnect the negative battery cable.

(Driver-side)

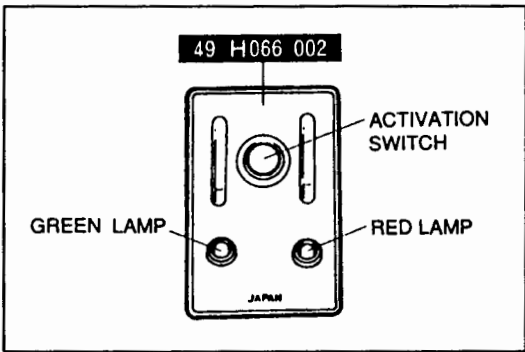
4. Make sure the air bag module is firmly mounted to the steering wheel.
5. Remove the driver-side undercover and lower panel.
6. Disconnect the orange and blue clock spring connectors.
7. Inspect the **SST**. (Refer to page S-33.)
8. Connect the **SST** to the clock spring connector as shown in the figure.



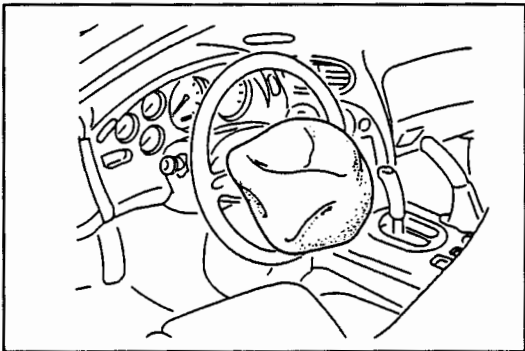
47U0SX-579



47U0SX-580



47U0SX-581



47U0SX-582

(Passenger-side)

4. Make sure the air bag module is firmly mounted to the dashboard.
5. Remove the glove compartment.
(Refer to the 1994 RX-7 Workshop Manual, section S.)
6. Disconnect the orange and blue air bag module connectors.

7. Inspect the **SST**. (Refer to gage S-33.)
8. Connect the **SST** to the air bag module as shown in the figure.

9. Connect the red clip of the **SST** to the positive battery terminal and the black clip to the negative terminal.
10. Verify that the red light on the **SST** is illuminated.

11. Make sure all persons are standing at least 6 m {20 ft} from the vehicle.
12. Press the activation switch on the **SST** to deploy the air bag.

Air Bag Disposal**Warning**

- The air bag is very hot immediately after it deploys. You can be burned. Do not touch the air bag module for at least 15 minutes after deployment.

Warning

- Pouring water on a deployed air bag is dangerous. The water will mix with the residual gases to form a gas that can make breathing difficult if inhaled. Do not pour water on the deployed air bag module.

Warning

- A deployed air bag module may contain deposits of sodium hydroxide, a caustic by-product of the gas-generated combustion. If this substance gets in your eyes or on your hands, it can cause irritation and itching. When handling a deployed air bag module, wear gloves and safety glasses.

47U0SX-583

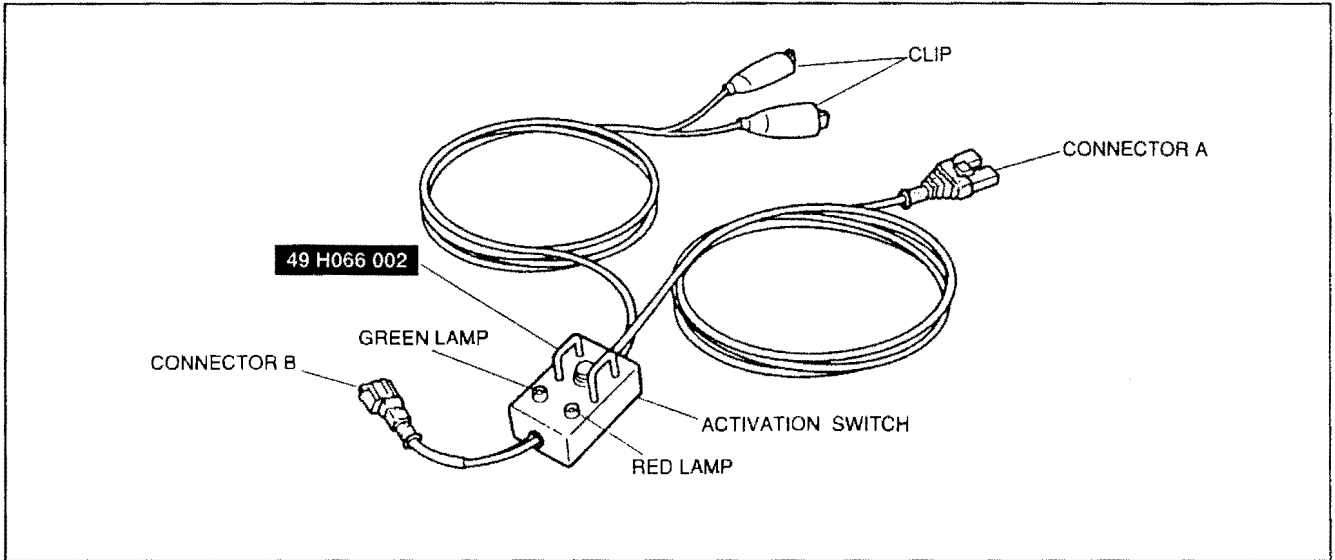


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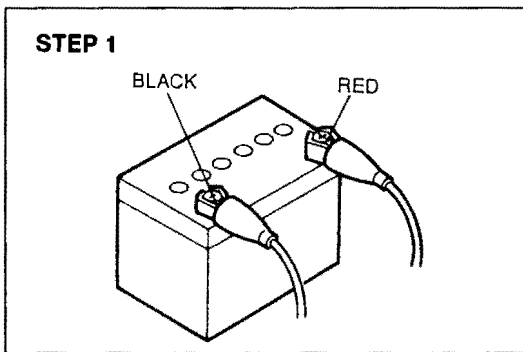
1. Put on gloves and safety glasses.
2. Place the deployed air bag module in a plastic bag, seal it, and then dispose of it.
3. Wash your hands after removing your gloves.

INSPECTION OF SST (DEPLOYMENT TOOL)

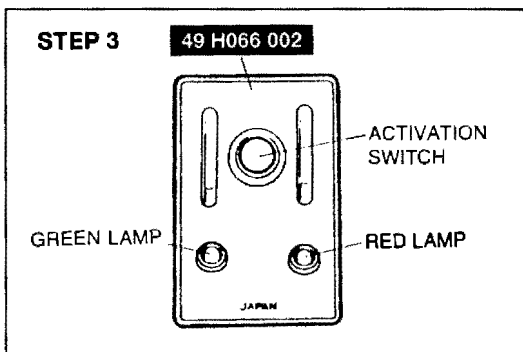
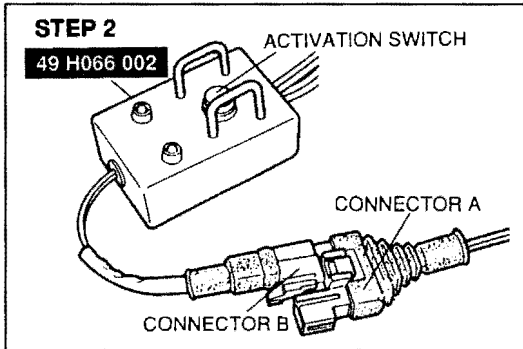
- Use the **SST** (deployment tool) to deploy a live air bag module before disposing of it.
- Before connecting the **SST** to the clock spring connector or air bag module connector, inspect operation of the **SST**.



29U0TX-357



29U0TX-358



Inspection Procedure

1. Inspect operation of the **SST** by following the steps below.

| Step | Inspection procedure | Light condition | |
|------|---|-----------------|-----|
| | | Green | Red |
| 1 | Connect red clip to positive battery terminal and black clip to negative battery terminal | ON | OFF |
| 2 | Connect connectors A and B of SST | OFF | ON |
| 3 | Press activation switch | ON | OFF |

2. If not as specified, do not use the **SST** because it may cause the air bag to unexpectedly deploy upon connection to the module.