### Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



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Subject: Bulletin No: 08-008/05

Last Issued: 10/21/2005

### APPLICABLE MODEL(S)/VINS

2004-2005 RX-8 built before April 15, 2005 with VINs of JM1FE\*\*\*\*\*154081 or lower

### DESCRIPTION

Some 2004-2005 RX-8 vehicles may experience an illuminated air bag warning light with one or both of the following DTCs stored in memory.

- B1994 Driver's-side side air bag module circuit resistance high
- · B1998 Passenger's-side side air bag module circuit resistance high

AIRBAG WARNING LIGHT ILLUMINATED - DTC B1994 AND / OR B1998 SET

This may indicate a poor contact between the terminals and the harness in the side air bag module connector. A revised overlay harness has been developed to repair this issue. This overlay harness will be installed over the existing main harness. Overlay harness installation requires cutting off existing air bag harness connectors and plugging in connectors from overlay harness and routing harness accordingly.

Customers having this concern should have their vehicle repaired using the following repair procedure.

### REPAIR PROCEDURE

#### **WARNING:**

- Consult Workshop Manual section 08-10 SERVICE WARNINGS and SERVICE CAUTIONS before servicing the air bag system. Failure to do so may result in injury.
- 1. Verify customer concern.
- 2. Prepare vehicle for installation of overlay harness.
  - a. Record customer radio station presets.
  - b. Turn ignition switch off and disconnect negative battery cable. Wait at least 1 minute for air bag system to power down before proceeding to step c.

#### **WARNING:**

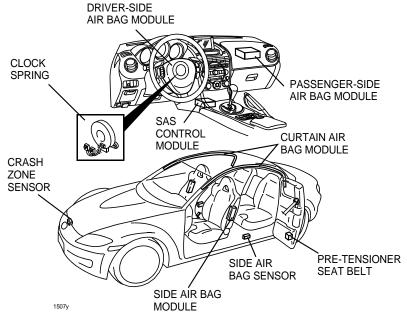
- Wait a minimum of 1 minute for air bag system to power down. Failure to do so may result in injury.
- c. Remove floor covering (carpet). See appropriate Workshop manual section 09-17 FLOOR COVERING REMOVAL / INSTALLATION.

### **WARNING:**

Use care when cutting off connectors. Be sure that only the wires for the air bag connector
are cut. If air bag harness and another vehicle harness is cut at the same time, the air bag
could deploy and cause serious injury. Double check where and what wires to cut.

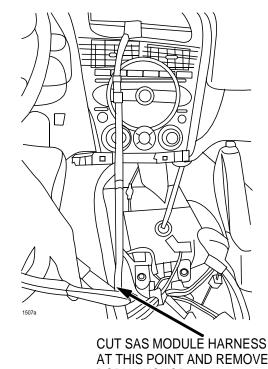
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- 3. Overlay harness installation preparation.
  - a. Disconnect SAS module connector. SAS module is located below center panel on transmission tunnel.



b. Pull out the SAS module harness. Cut SAS module harness after body anchor, but before the main harness branch.

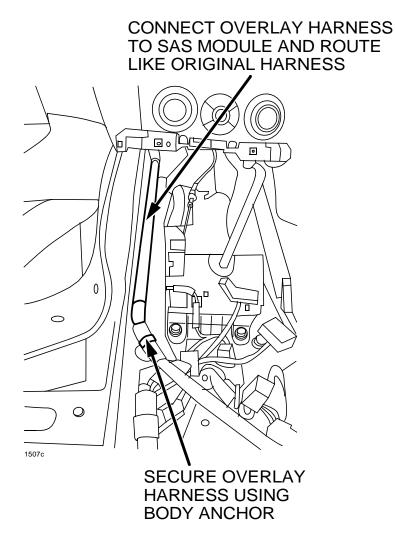
### DISCONNECT SAS MODULE CONNECTOR AND PULL OUT OF CONSOLE



AT THIS POINT AND REMOVE **BODY ANCHOR** 

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c. Route overlay harness exactly as original SAS module. Connect overlay harness connector to SAS module and secure overlay harness to body anchor.

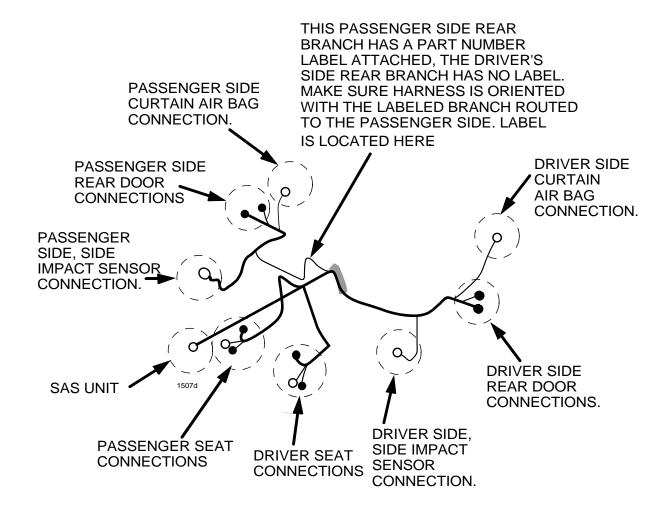


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d. Place overlay harness onto floor of vehicle and route connectors to the proper location.

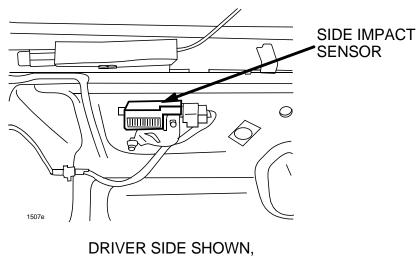
### NOTE:

• Follow original vehicle harness routing as close as possible. Use component location image at beginning of bulletin to aid in overlay.



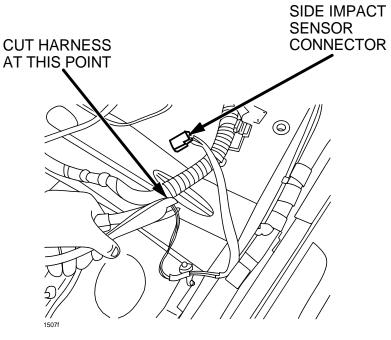
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- 4. Route and connect overlay harness to side impact sensors.
  - a. Starting at driver's side, remove metal protector from side impact sensor to gain access to connector and harness anchor. For additional information, refer to appropriate Workshop manual section 08-10 SIDE AIR BAG SENSOR REMOVAL / INSTALLATION.



PASSENGER SIDE SIMILAR

- b. Disconnect sensor and remove harness anchors from body up to branch point.
- c. Cut side impact sensor harness at branch point.



DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

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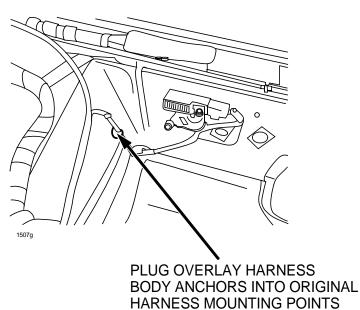
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d. Connect overlay harness connector to side impact sensor.

### NOTE:

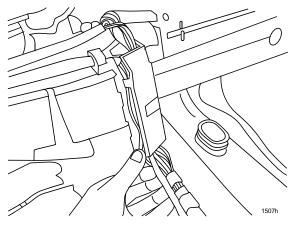
- Driver's side overlay harness side impact sensor connector wire colors: Y/B and W/R.
- Passenger's side overlay harness side impact sensor connector wire colors: G and G/R.
- e. Fasten overlay harness body anchors to body.

### DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR



- f. Install metal protector to impact sensor. Torque bolts to 7.9-11.7 N.m (70-103 in. lb).
- g. Open original body harness protector and place overlay harness rear branch inside.

## DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

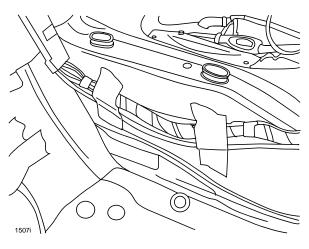


INSERT OVERLAY HARNESS INTO HARNESS PROTECTOR AND CLOSE PROTECTOR

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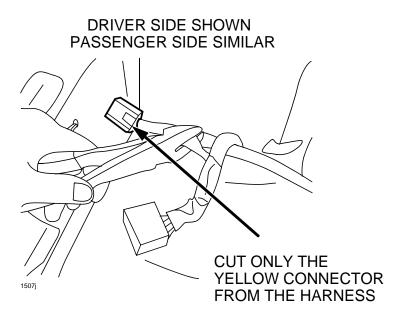
- h. Close body harness protector.
- i. Using cloth tape, secure overlay harness rear branch to body. Repeat step 4 for passenger's side.

## DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

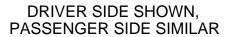


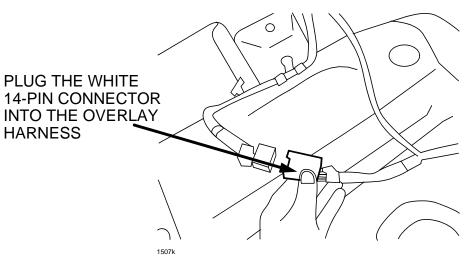
TAPE OVERLAY HARNESS TO BODY USING CLOTH TAPE

- 5. Route and connect overlay harness to driver's and passenger's seats harness connector.
  - a. Starting at driver's side, locate original Yellow two-pin connector on vehicle harness (driver's side = Y and LG wires, passenger's side = R/Y and L/W wires). Cut original vehicle harness at branch point.

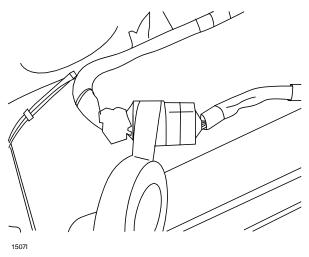


b. Connect the White 14-pin male overlay harness connector to the existing seat connector (white 14-pin female). Wrap this connection in electrical tape.





DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR



WRAP THE WHITE14-PIN CONNECTOR WITH ELECTRICAL TAPE

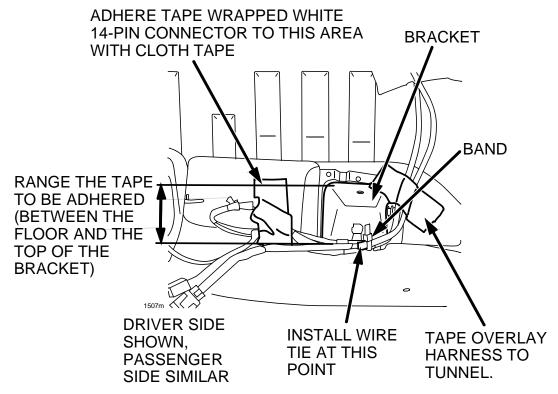
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- c. Using cloth tape, secure tape-wrapped connection to the vehicle floor in area shown.
- d. Tape and plastic tie overlay harness into position as shown. Repeat step 5 for passenger's side.

### NOTE:

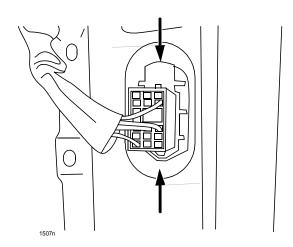
• The overlay harness White 14-pin female connector and Yellow 2-pin connector will plug into seat when seat is re-installed.



IF THE TAPE IS ADHERED OUTSIDE THIS RANGE, THE HARNESS MAY COME INTO CONTACT WITH THE SEAT WHEN THE SEAT IS SLID.

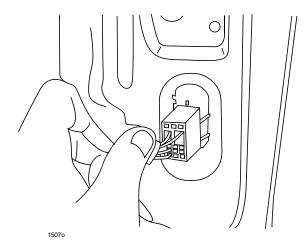
- 6. Route and connect overlay harness to rear doors.
  - a. Starting at driver's side, press connector mounting tabs (located on top and bottom of connector) to release the pass-through type connection from the body. Push connection through door jamb to outside of vehicle.

## PRESS DOWN ON TABS TO RELEASE CONNECTOR FROM BODY



DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

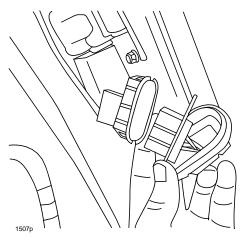
### REMOVE CONNECTOR FROM BODY



DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

b. Peel back weather seal from connector and disconnect door connector from original harness connector.

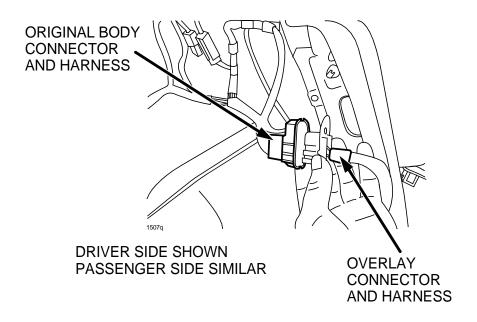




PULL BACK SEAL AND DISCONNECT CONNECTOR HALVES

- c. Push original harness connector back through to interior of vehicle.
- d. Connect overlay harness connector to original harness connector. Wrap this connection in electrical tape.

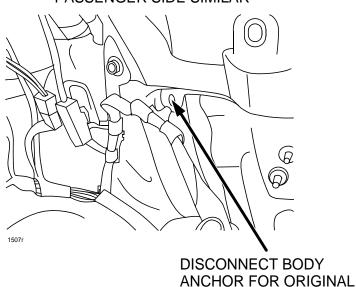
## CONNECT OVERLAY CONNECTOR TO ORIGINAL BODY DOOR CONNECTOR



e. Disconnect original harness anchor from body, then place tape wrapped connection into body cavity. **NOTE:** 

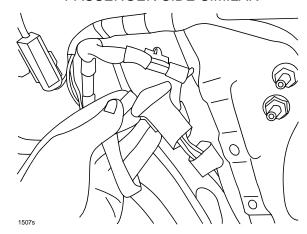
 When placing tape-wrapped connection into body cavity, insulate the connection using foam or other insulation materials to prevent rattles.

### DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR



DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

HARNESS FROM BODY



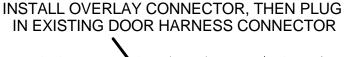
STUFF WRAPPED CONNECTOR INTO BODY CAVITY, THEN INSULATE THE CONNECTION USING FOAM OR OTHER INSULATION MATERIALS TO PREVENT RATTLES

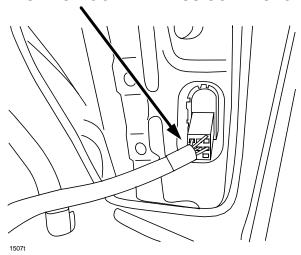
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f. Snap overlay harness connector into hole in door jamb, then reconnect door harness connector.

### NOTE:

Ensure weather seal is returned to proper position to prevent leaks and/or damage to connector.





DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

- g. Repeat step 6 for passenger's side.
- 7. Route and connect overlay harness to side curtain air bags.

### NOTE:

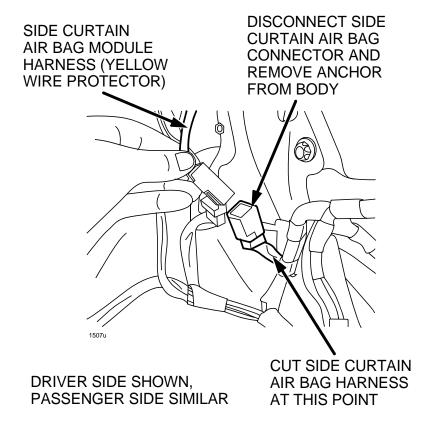
- Driver's side overlay harness side curtain air bag connector wire colors: P/L and P.
- Passenger's side overlay harness side curtain air bag connector wire colors: V and V/W.
- a. Starting at driver's side, locate side curtain air bag connector. Disconnect original harness connector from side curtain air bag connector.
- b. Remove original harness body anchor from body.

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c. Cut original harness at branch point.

### **CAUTION:**

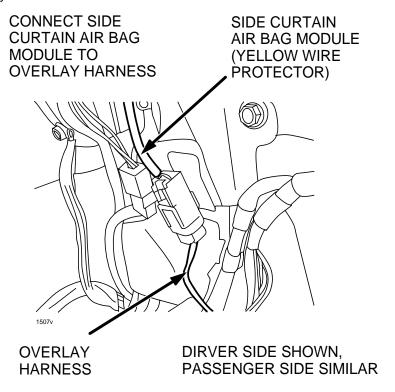
• DO NOT cut the connector for the side curtain air bag module. Side curtain air bag module harness will have a Yellow sleeve.



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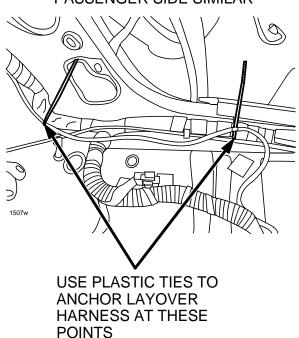
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d. Connect overlay harness connector to side curtain air bag module connector and secure harness anchors to body.



e. Secure overlay harness with plastic ties as shown. Repeat step 7 for passenger's side.

# DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR



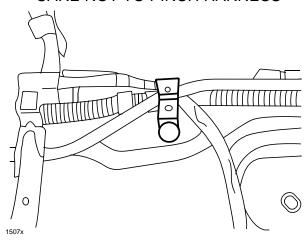
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8. Reassemble interior of vehicle in reverse order as outlined in step 1.

### NOTE:

- When installing front center console bracket, arrange overlay harness being careful not to pinch wiring or interfere with console mounting.
- When installing seat belt rails, it may be necessary to pull slack from the rear door retractors. If this is necessary, battery must be connected for retractors to release belt slack.

### ROUTE OVERLAY HARNESS THROUGH CENTER CONSOLE BRACKET - USE CARE NOT TO PINCH HARNESS



DRIVER SIDE SHOWN, PASSENGER SIDE SIMILAR

9. Verify repair. Program customer radio stations presets recorded at the begining of the procedure.

### PART(S) INFORMATION

| Part Number | Description         | Qty. | Notes |
|-------------|---------------------|------|-------|
| FEY1-67-230 | Service Harness Kit | 1    |       |

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### **WARRANTY INFORMATION**

### NOTE:

 This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.

• Additional diagnostic time cannot be claimed for this repair.

| Warranty Type                   | А                  |
|---------------------------------|--------------------|
| Symptom Code                    | 62                 |
| Damage Code                     | 9S                 |
| Part Number Main Cause          | FEY1-67-230        |
| Quantity                        | 1                  |
| Operation Number / Labor Hours: | XXB061RX / 1.9 Hrs |