T-SB-0252-08

Rev1

August 14, 2008



# Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

Service

Category Vehicle Interior

Section Supplemental Restraint Systems

Market USA



#### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2005 – 2008	Sienna		

#### **REVISION NOTICE**

March ##, 2012 Rev1:

 An Important Note has been added before the Introduction, and a Service Bulletin Overview has been added.

Any previous printed versions of this bulletin should be discarded.

#### SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. EL001-08.

- Applicability has been updated to exclude 2004 model year vehicles.
- The repair procedure has been updated.

Service Bulletin No. EL001-08 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this service bulletin before proceeding.

#### **IMPORTANT NOTE**

To determine if this bulletin is applicable to the vehicle, first check the Certification label in the left front door jamb.

- If vehicle was built before December 2007:
  Replace the side aribag as outlined in this bulletin and replace the SRS connector on the floor harness only (refer to T-SB-\_\_\_\_-12, "SRS Airbag Light 'ON' B0111/B0116 Open Side Squib Circuit").
- If vehicle was built December 2007 or later:
  Replace the SRS connectors on the seat and floor harness (refer to T-SB-\_\_\_\_-12,
  "SRS Airbag Light 'ON' B0111/B0116 Open Side Squib Circuit").
   SB REFERENCED ABOVE IS IN PROCESS, WILL INSERT SB # & LINK WHEN PUBLISHED

Any previous printed versions of this service bulletin should be discarded.

#### Introduction

**TOYOTA** 

For vehicles that exhibit Diagnostic Trouble Code (DTC) B0111 and/or B0116, a new service part has been made available for 2005–2008 model year Sienna vehicles. Please refer to the following enhanced Repair Manual instructions for the proper installation procedure of the new service parts.

#### **NOTE**

This bulletin is not applicable to 2004 MY Sienna. If you encounter a 2004 MY Sienna with code B0111/B0116, diagnose per Repair Manual. If it is determined that the root cause is related to the side squib, the seat back will need to be replaced.

#### Service Bulletin Overview

After confirming the vehicle condition matches this bulletin, this SB will direct you to replace the side airbag or repair the side airbag harness depending upon the production date. The procedure to replace the side airbag is divided into three sections depending upon the seat type:

Section 1: Power Seat

Section 2: Manual Seat

Section 3: Fold Flat Seat

Ensure that the correct procedure is followed for the seat type in the vehicle. There are models where the seat type is different from left to right. The side airbag harness repair is covered in a separate Service Bulletin (T-SB-\_\_\_\_-12, "SRS Airbag Light 'ON' - B0111/B0116 Open Side Squib Circuit").

#### **Parts Information**

SEAT TYPE	CURRENT PART NUMBER	PART NAME	QTY
Driver Manual	73920-AE041	Airbog Assambly ED Soot I H	1
Driver Power	73920-AE031	Airbag Assembly, FR Seat, LH	1
Passenger Fold Flat	73910-AE031		1
Passenger Manual	73910-AE041	Airbag Assembly, FR Seat, RH	1
Passenger Power	73910-AE051		1
All	90080-17200	Nut	2
All	90468-18071	Clip (Hog Rings)	15

#### **Warranty Information**

**TOYOTA** 

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL7023	R & R Side Airbag Assembly (Driver Manual)	1.8	73920-AE041		71
EL7024	R & R Side Airbag Assembly (Driver Power)	1.8	73920-AE031		
EL7025	R & R Side Airbag Assembly (Passenger Manual)	1.8	73910-AE041	8C	
EL7026	R & R Side Airbag Assembly (Passenger Fold Flat)	1.9	73910-AE031		
EL7027	R & R Side Airbag Assembly (Passenger Power)	1.8	73910-AE051		
EL7028	R & R Side Airbag Assembly (Driver Manual and Passenger Manual)	3 4	73920-AE041		
EL7029	R & R Side Airbag Assembly (Driver Manual and Passenger Fold Flat)	3.5	73920-AE041		
EL7030	R & R Side Airbag Assembly (Driver Power and Passenger Manual)	3.4	73920-AE031		
EL7031	R & R Side Airbag Assembly (Driver Power and Passenger Power)	3.4			

#### **APPLICABLE WARRANTY**

- This repair is covered under the Toyota Restraint System Warranty. This warranty is in effect for 60 months or 60,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

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## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

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#### **Required Tools & Equipment**

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Plastic Pry Tool Set*	00002-06000-01	1
Occupant Classification Seat Weight Set	00002-09077-KIT	1

<sup>\*</sup> Essential SST.

#### **NOTE**

Additional SSTs may be ordered by calling SPX at 1-800-933-8335.

REQUIRED EQUIPMENT	QTY
Hog Ring Pliers	1

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 7.00.020 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

<sup>\*</sup> Essential SST.

#### **NOTE**

- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Toyota Diagnostic Tester and CAN Interface Module may also be used to perform the service procedures listed in this bulletin.

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Airbag Disposal**

Please refer to Service Bulletin <u>SS004-07</u>, "SRS Component Disposal as Hazardous Material Treatment" for proper disposal method of the side airbag assembly.

#### **Diagnostic Procedure**

Follow the diagnostic procedure in the Technical Information System (TIS), applicable model year Repair Manual:

#### B0111:

- 2005 Sienna: Vehicle Interior – Supplemental Restraint Systems – "Supplemental Restraint System: B0111/44 Open In Side Squib"
- 2006 / 2007 / 2008 Sienna:
   Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Airbag System: B0111/44 Open In Side Squib RH Circuit"

#### B0116:

- 2005 Sienna: Vehicle Interior – Supplemental Restraint Systems – "Supplemental Restraint System: B0116/48 Open In Side Squib"
- 2006 / 2007 / 2008 Sienna:
   Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Airbag System: B0116/48 Open In Side Squib LH Circuit"

#### NOTE

If no concern is identified after inspecting the floor harness and the center airbag sensor assembly, please follow the repair procedure below to replace the corresponding side airbag assembly.

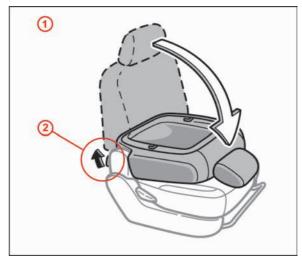


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#### **Repair Procedure Contents**

- Section 1: Power Seat (Page 6)
- Section 2: Manual Seat (Page 24)
- Section 3: Fold Flat Seat (Page 42)

Figure 1.



1	Fold Flat Seat
2	Fold Flat Release Lever

#### **Repair Procedure**

Section 1: Power Seat (Driver and Passenger)

#### **CAUTION**

- Always wear safety gloves because the edges of the seatback frame and seat adjuster are sharp and may cause injury.
- Work must be started more than 90 seconds AFTER the ignition switch is turned to the LOCK position and the negative (-) terminal cable is disconnected from the battery. (The SRS is equipped with a back-up power source. If work is started within 90 seconds from disconnecting the negative (-) terminal cable of the battery, the SRS may deploy.)

#### NOTICE

Be careful NOT to damage the body.

#### **NOTE**

- Installation is in the reverse order of removal. However, special points concerning installation are indicated.
- · Use the same procedures for the driver and passenger seat.

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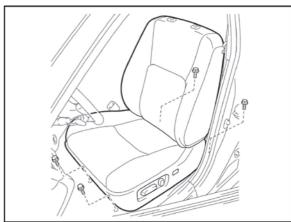
### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

1. Remove the headrest assembly.

Figure 2.



- 2. Remove the seat assembly.
  - A. Using the plastic pry tool, pry off the 2 seat track covers.
  - B. Disconnect the connectors under the seat.
  - C. Remove the 4 bolts and the seat assembly.

#### **NOTICE**

Place protective cover over door sill. Be careful NOT to damage the body.

3. Remove the front seat side table leg cover.

Using the plastic pry tool, disengage the claws and remove the seat side table leg cover.

- 4. Remove the front seat side table.
  - A. Remove the 4 nuts and seat side table.
  - B. Remove the 2 clips and seat side table cover.

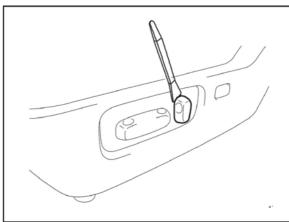
#### **Repair Procedure**

**TOYOTA** 

#### Section 1: Power Seat (Driver and Passenger) (Continued)

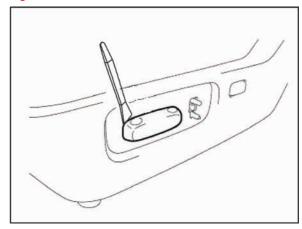
5. Using the plastic pry tool, remove the reclining power seat switch knob.

Figure 3.



6. Using the plastic pry tool, remove the slide and vertical power seat switch knob.

Figure 4.

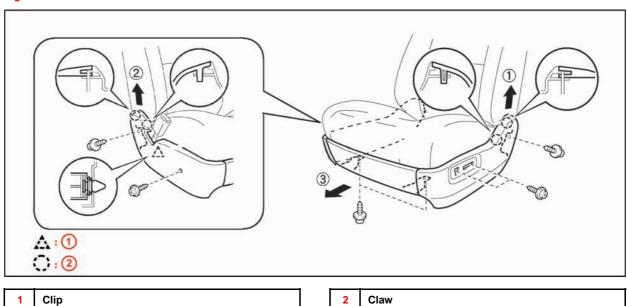


#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

- 7. Remove the seat cushion shields.
  - A. Remove the 7 screws.
  - B. Using the plastic pry tool, disengage the 4 claws and clip, and remove the outer seat cushion shield together with the inner seat cushion shield and No. 1 inner seat cushion shields.

Figure 5.

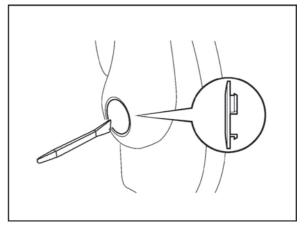


- 8. Remove the armrest assembly.
  - A. Using the plastic pry tool, pry out the armrest cap.
  - B. Remove the bolt and armrest assembly.

#### NOTICE

Be careful NOT to damage the seat cushion cover.

Figure 6.

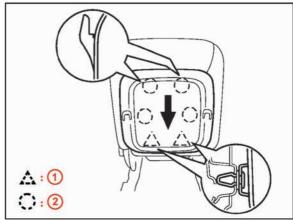


#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

- 9. Remove the front seatback board.
  - A. Disengage the clips.
  - B. Remove the seatback board by pulling it out in the arrow mark direction.
  - C. Remove the lower carpet trim piece from the seatback.

Figure 7.



1	Clip
2	Claw

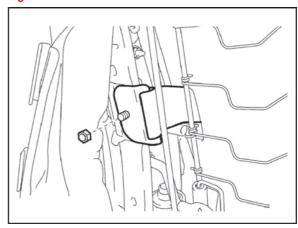
- 10. Remove the seatback cover with pad.
  - A. Remove the hog rings and disengage the hooks.
  - B. Remove the bolt and disengage the seatback cover bracket.

#### NOTE

Disconnect the seat heater connector (if equipped).

C. Remove the seatback cover with pad.

Figure 8.



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#### **Repair Procedure**

**TOYOTA** 

#### Section 1: Power Seat (Driver and Passenger) (Continued)

D. Remove the front seat head rest support by disengaging the claw while sliding the seat cover off.

Figure 9.

- 11. Remove the side airbag assembly.
  - A. Remove the 2 nuts from the side airbag assembly.
  - B. Remove the 1 clip holding the airbag wire harness.

#### **NOTE**

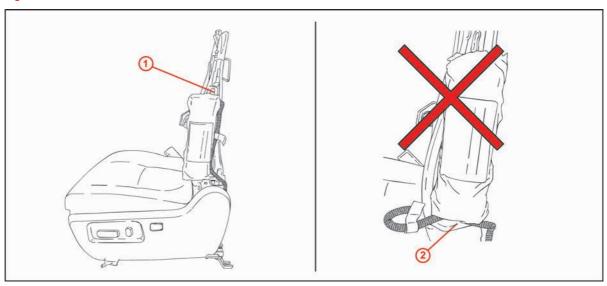
The remaining 5 clips holding the wire harness will be removed when installing the new airbag and wire harness.

#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

- 12. Install the NEW side airbag assembly.
  - A. Place the side airbag into the seat frame with the wire harness on the top.

Figure 10.



- 1 Position Airbag with Harness on the TOP
- 2 Do NOT Install Airbag with Harness on the Bottom

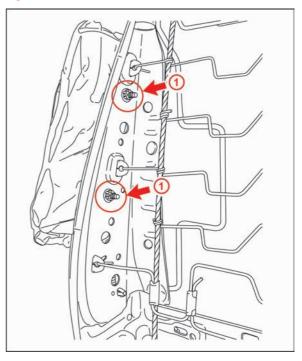
#### **Repair Procedure**

Section 1: Power Seat (Driver and Passenger) (Continued)

B. Secure the side airbag with 2 NEW nuts.

Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

Figure 11.



Nut

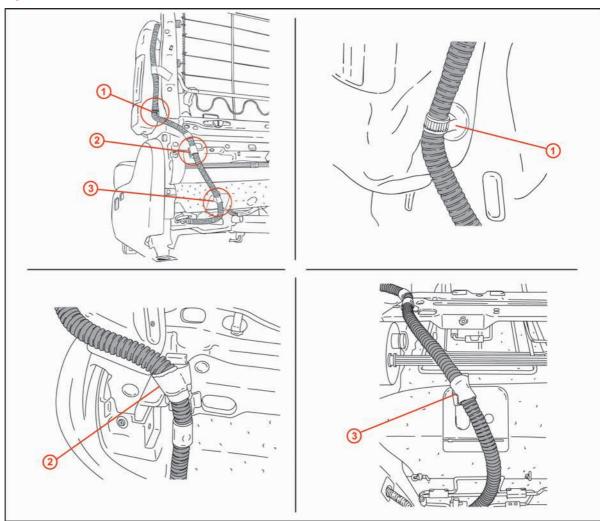


#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

C. Using Figures 12 through 18, remove the original wire harness while routing the new wire harness and attach the 6 retaining clips to the seat frame.

Figure 12.



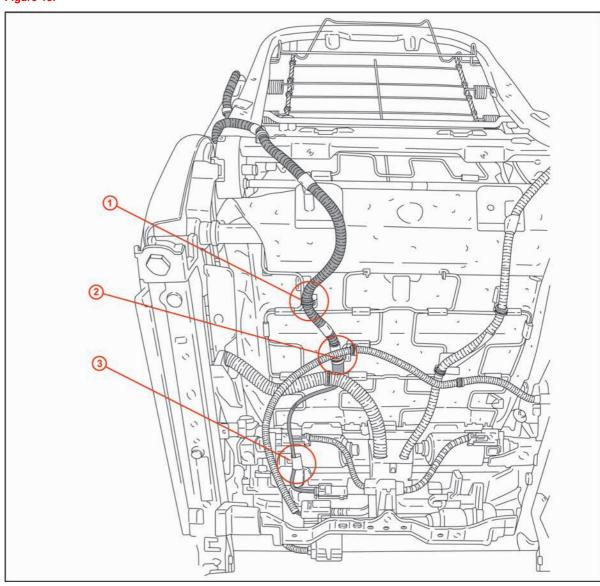
1	Clip No. 1
2	Clip No. 2
3	Clip No. 3

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 13.



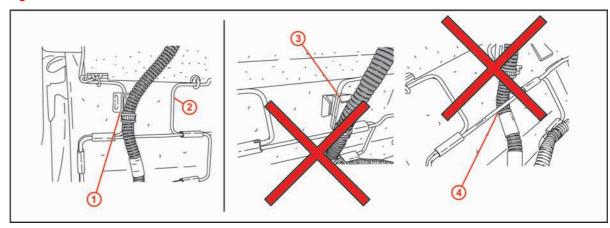
1	Clip No. 4
2	Clip No. 5
3	Clip No. 6

#### **Repair Procedure**

**TOYOTA** 

#### Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 14.



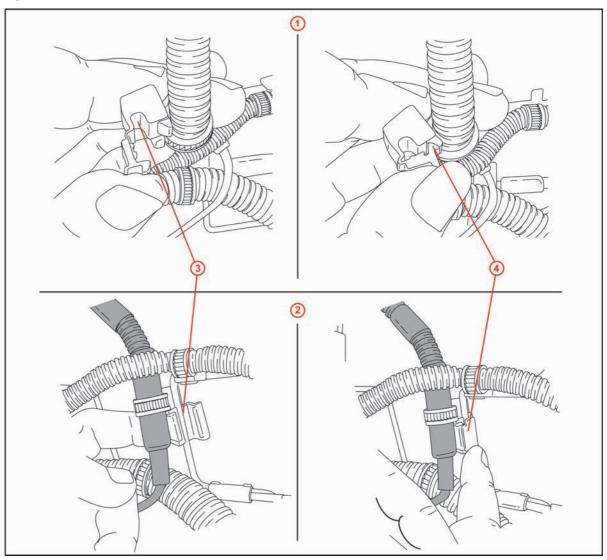
1 Detail of Clip No. 4 (Fix to OUTSIDE Spring)
2 Inner Spring
3 Do NOT Fixto Inner Spring
4 Do NOT Route Between Spring and Pad

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 15.



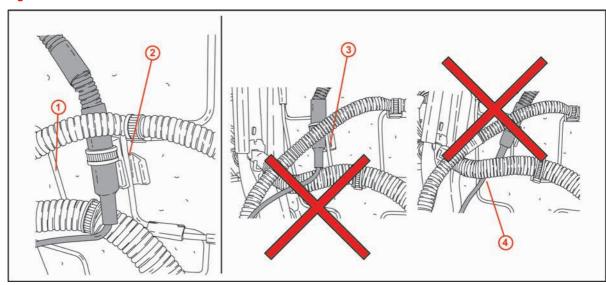
1	Installation for Clip No. 4
2	Installation for Clip No. 5
3	Place Spring in Ditch Part of Clip
4	Inserting the Locking Clasp

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 16.



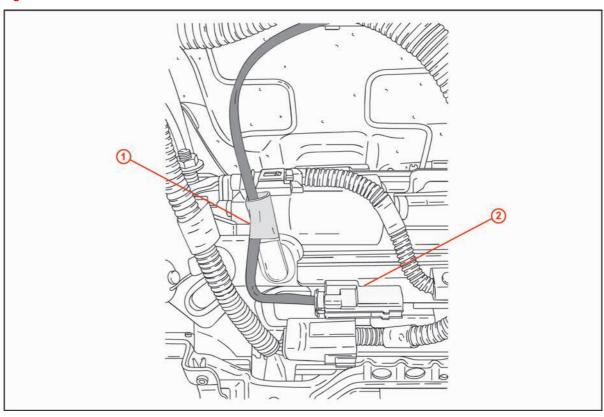
1	Outside Spring
2	Detail of Clip No. 5 (Fix to INNER Spring)
3	Do NOT Fix to Outer Spring
4	Do NOT Route Under the Seat Wire Harness

#### **Repair Procedure**

**TOYOTA** 

#### Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 17.



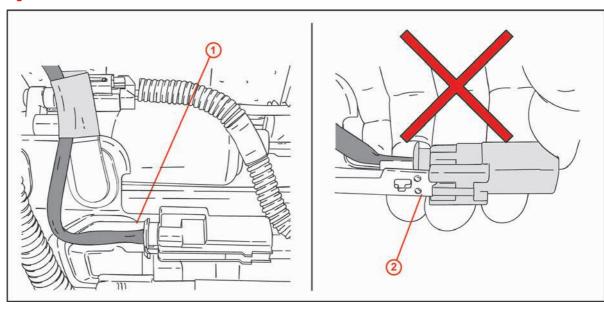
1	Clip No. 6
2	Harness Assembly Connector

#### **Repair Procedure**

**TOYOTA** 

#### Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 18.



- 1 Detail of Harness Assembly Connector (Install Connector UNDER the Bracket)
- 2 Do NOT Install Above the Bracket
- 13. Install the seatback pad and then the cover.
  - A. Install the seatback cover bracket with the bolt.

Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

B. Place the outside strap on first and then the inside strap.

#### **NOTE**

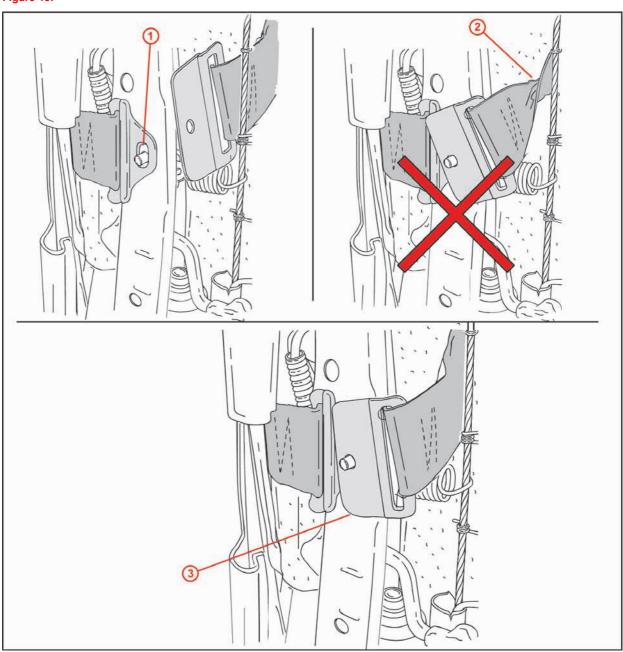
- For a vehicle with side airbag, the side airbag may NOT be activated normally unless the seatback cover is securely installed.
- · After installing the bracket, check that the strap is NOT twisted.

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

Section 1: Power Seat (Driver and Passenger) (Continued)

Figure 19.



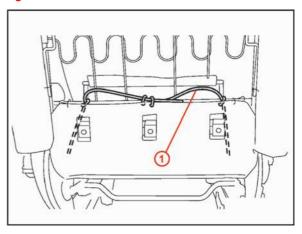
- 1 Place Outside Strap on FIRST
- 2 Do NOT Install if Strap Is Twisted
- 3 Secure Inside Strap over Outside Strap as Shown

#### **Repair Procedure**

#### Section 1: Power Seat (Driver and Passenger) (Continued)

C. Reconnect the seat heater connector (if equipped).

Figure 20.



1 Rubber Wire

D. Using hog ring pliers, install NEW hog rings and hooks.

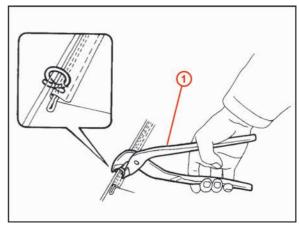
#### **NOTICE**

Be careful NOT to damage the cover.

#### **NOTE**

When installing the hog rings, take care to minimize wrinkles as much as possible.

Figure 21.



1 Hog Ring Pliers

- 14. Install the armrest assembly.
  - A. Install the armrest with the bolt.

    Torque: 20 N\*m (200 kgf\*cm, 14 ft\*lbf)
  - B. Install the armrest cap.

Figure 22.

### **TOYOTA**

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### Repair Procedure

#### Section 1: Power Seat (Driver and Passenger) (Continued)

15. Install the front seat side table.

Install the seat side table with 4 nuts.

Torque: 13 N\*m (133 kgf\*cm, 10 ft\*lbf)

- 16. Install the front seat assembly.
  - A. Place the seat assembly in the cabin.

#### **NOTICE**

Be careful NOT to damage the body.

- B. Connect the connectors under the seat assembly.
- C. Tighten the 2 bolts on the front side of the seat assembly.

Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)

D. Tighten the 2 bolts on the rear side of the seat assembly.

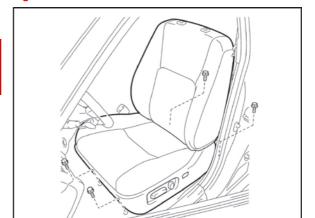
Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)

- E. Install the 2 seat track covers.
- 17. Check SRS warning lights.
- 18. Inspect power seat operation.
- 19. Check seat heater operation.
- 20. Initialize the front passenger Occupant Classification System (OCS) (passenger seat only).

#### **NOTE**

Follow the initialization procedure on TIS. Refer to applicable model year Repair Manual:

- <u>2005</u> Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Initialization"
- <u>2006</u> / <u>2007</u> / <u>2008</u> Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Occupant Classification System: Initialization"
- 21. Initialize power systems (windows, moonroof, etc). Refer to appropriate service bulletin.
- 22. Refer to the Airbag Disposal section to dispose of the side airbag assembly.





#### Repair Procedure (Continued)

#### Airbag Disposal

Please refer to Service Bulletin <u>SS004-07</u>, "SRS Component Disposal as Hazardous Material Treatment", for proper disposal method of the side airbag assembly.

#### Section 2: Manual Seat (Driver and Passenger)

#### **CAUTION**

- Always wear safety gloves because the edges of the seatback frame and seat adjuster are sharp and may cause injury.
- Work must be started more than 90 seconds AFTER the ignition switch is turned to the LOCK position and the negative (–) terminal cable is disconnected from the battery. (The SRS is equipped with a back-up power source. If work is started within 90 seconds from disconnecting the negative (–) terminal cable of the battery, the SRS may deploy.)

#### **NOTICE**

Be careful NOT to damage the body.

#### **NOTE**

- BEFORE starting, confirm the seat is a manual seat and NOT a fold flat seat. Refer to the illustration on page 5 to correctly identify a fold flat seat. For fold flat seats, use the fold flat seat Repair Procedure starting on page 41.
- Installation is in the reverse order of removal. However, special points concerning installation are indicated.
- Use the same procedure for the driver and the passenger seat.

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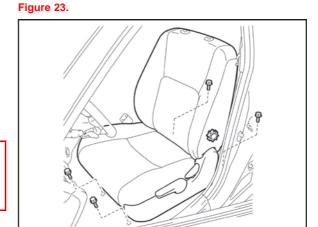
#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

- 1. Remove the headrest assembly.
- 2. Remove the front seat assembly.
  - A. Using the plastic pry tool, pry off the 2 seat track covers.
  - B. Disconnect the connectors under the seat assembly.
  - C. Remove the 4 bolts and the seat assembly.

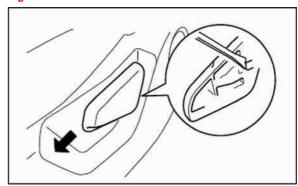
#### **NOTICE**

Place protective cover over door sill. Be careful NOT to damage the body.



- 3. Remove the front seat side table leg cover by using the plastic pry tool and disengaging the claws.
- 4. Remove the front seat side table.
  - A. Remove the 4 nuts and seat side table.
  - B. Remove the 2 clips and seat side table cover.
- 5. Remove the vertical seat adjuster knob (driver seat only).
  - A. Remove the screw and the vertical seat adjuster knob.
- Remove the reclining adjuster release handle by using the plastic pry tool and disengaging the claws.

Figure 24.



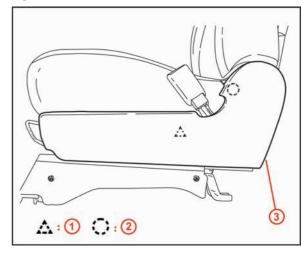
#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

- 7. Remove the lower carpet trim piece from the seatback.
- 8. Remove the outer seat cushion shield.
  - A. Remove the screw.
  - B. Using the plastic pry tool disengage the claws.

Figure 25.

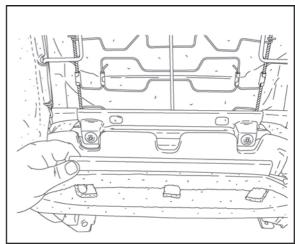
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1	Clip
2	Claw
3	Screw

- 9. Remove the front seatback board.
  - A. Disengage the clips.
  - B. Remove the seatback board.

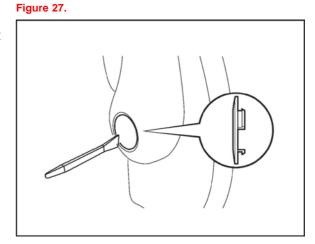
Figure 26.



#### **Repair Procedure**

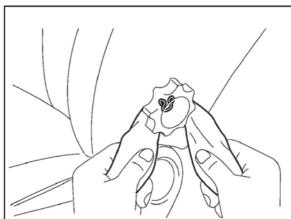
#### Section 2: Manual Seat (Driver and Passenger) (Continued)

- 10. Remove the armrest assembly.
  - A. Using the plastic pry tool, remove the armrest cap.
  - B. Remove the bolt and armrest.



11. Remove the lumbar support knob (driver seat only) by using a shop rag, and removing the snap and lumbar support knob.

Figure 28.

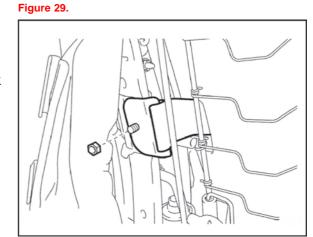


- 12. Remove the inner seat cushion shield.
  - A. Remove the screw.
  - B. Using the plastic pry tool, disengage the claws.

#### **Repair Procedure**

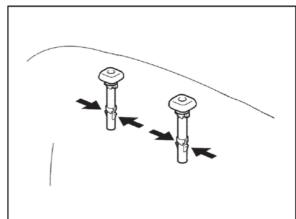
#### Section 2: Manual Seat (Driver and Passenger) (Continued)

- 13. Remove the seatback cover with pad.
  - A. Remove the 12 hog rings and disengage the hooks.
  - B. Remove the bolt and disengage the seatback cover bracket.
  - C. Remove the 2 seat cover clips from the lower edge of the seatback frame.



D. Remove the front seat headrest support by disengaging the claw while sliding the seat cover off.

Figure 30.



- 14. Remove the side airbag.
  - A. Remove the 2 nuts for the side airbag.
  - B. Remove the 1 clip holding the airbag wire harness.

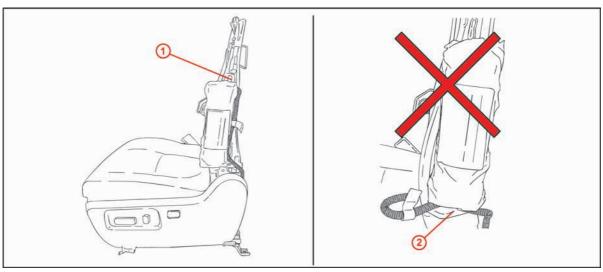
#### NOTE

The remaining 5 clips holding the wire harness will be removed when installing the new airbag and wire harness.

#### **Repair Procedure**

- 15. Install the NEW side airbag assembly.
  - A. Place the side airbag into the seat frame with the wire harness on the top.

Figure 31.



- 1 Position Airbag with Harness on the TOP
- 2 Do NOT Install Airbag with Harness on the Bottom

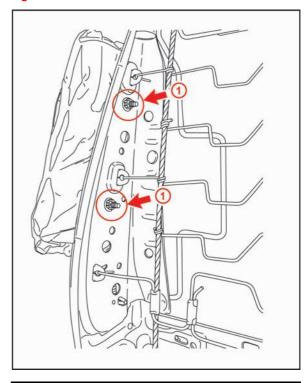
#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

B. Secure the side airbag with 2 NEW nuts.

Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

Figure 32.



1 Nut

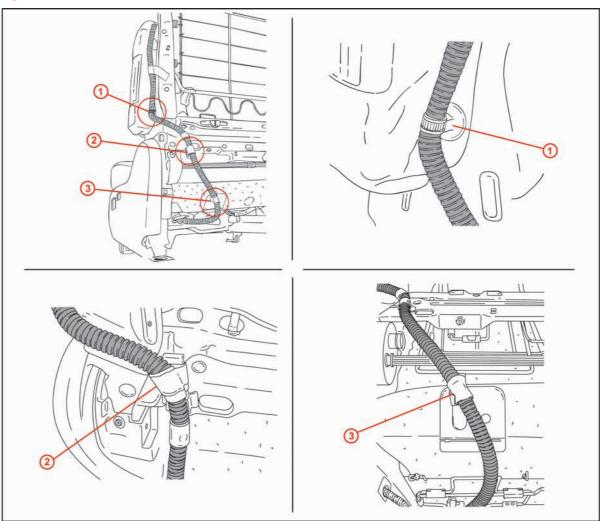
### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

C. Using Figures 33 through 39, remove the original wire harness while routing the new wire harness and attach the 6 retaining clips to the seat frame.

Figure 33.

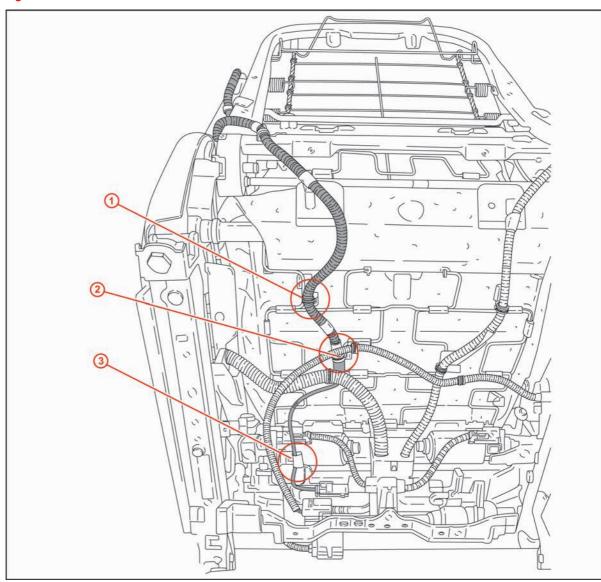


1	Clip No. 1	
2	Clip No. 2	
3	Clip No. 3	

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

Figure 34.

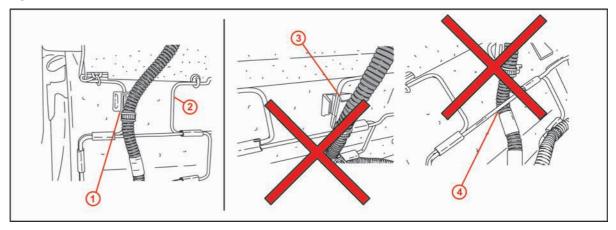


1	Clip No. 4
2	Clip No. 5
3	Clip No. 6

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

Figure 35.

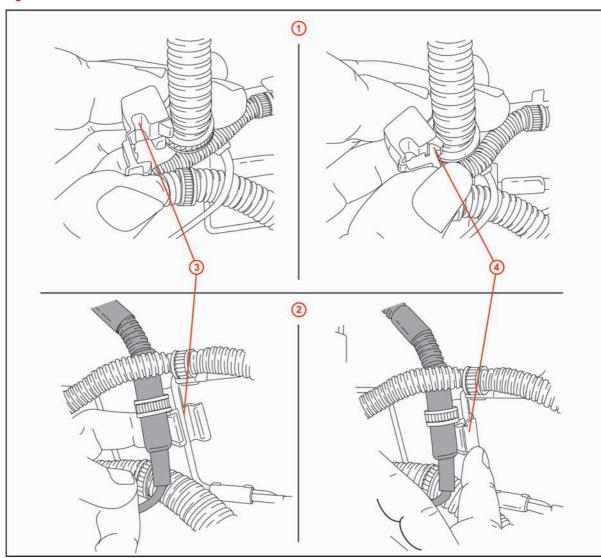


1	Detail of Clip No. 4 (Fix to OUTSIDE Spring)
2	Inner Spring
3	Do NOT Fixto Inner Spring
4	Do NOT Route Between Spring and Pad

## Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

Figure 36.

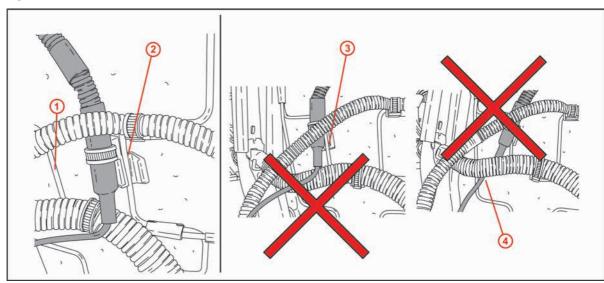


1	Installation for Clip No. 4
2	Installation for Clip No. 5
3	Place Spring in Ditch Part of Clip
4	Inserting the Locking Clasp

#### **Repair Procedure**

**TOYOTA** 

Figure 37.

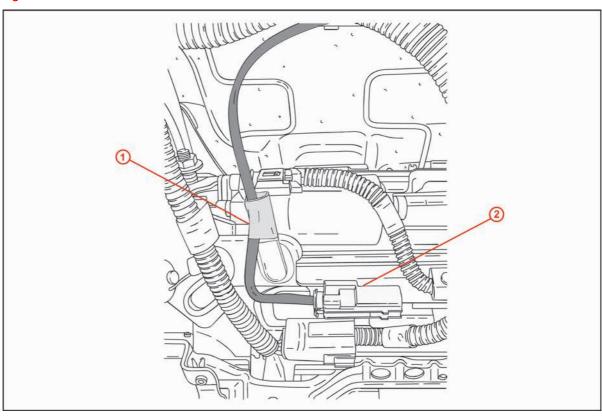


1	Outside Spring
2	Detail of Clip No. 5 (Fix to INNER Spring)
3	Do NOT Fixto Outer Spring
4	Do NOT Route Under the Seat Wire Harness

#### **Repair Procedure**

**TOYOTA** 

Figure 38.



1	Clip No. 6
2	Harness Assembly Connector

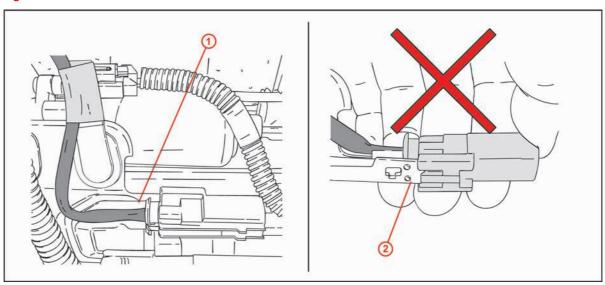
### **TOYOTA** Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side

#### **Repair Procedure**

**Squib Circuit** 

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

Figure 39.



- **Detail of Harness Assembly Connector (Install Connector UNDER the Bracket)**
- Do NOT Install Above the Bracket

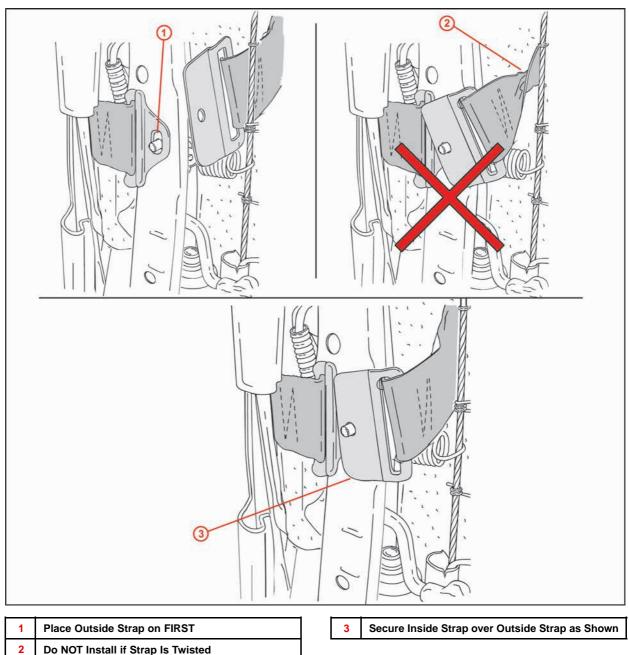
# Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

16. Install the seatback pad and then the cover.

Figure 40.



A. Place the outside strap on first and then the inside strap (see Figure 40).

#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

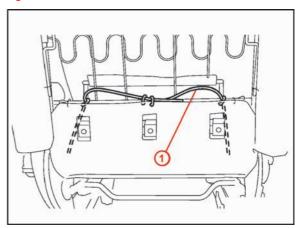
B. Install the seatback cover bracket with the bolt.

Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

#### **NOTE**

- For a vehicle with side airbag, the side airbag may NOT be activated normally unless the seatback cover is securely installed.
- After installing the bracket, check that the strap is NOT twisted.
- C. Engage the rubber wire to a hole of the front seatback frame with NEW hog rings, as shown in Figure 41.

Figure 41.



Rubber Wire

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

D. Using the hog ring pliers, install the NEW hog rings and hooks.

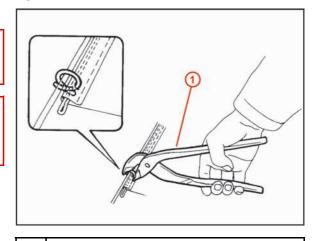
#### **NOTICE**

Be careful NOT to damage the cover.

#### **NOTE**

When installing the hog rings, take care to minimize wrinkles as much as possible.

Figure 42.



1 Hog Ring Pliers

17. Install the armrest assembly with the bolt.

Torque: 20 N\*m (200 kgf\*cm, 14 ft\*lbf)

Install the seat armrest cap.

18. Install the front seat side table with the 4 nuts.

Torque: 13 N\*m (133 kgf\*cm, 10 ft\*lbf)

- Install the front seat assembly.
  - A. Place the seat assembly in the cabin.
  - B. Connect the connectors under the seat assembly.
  - C. Tighten the 2 bolts on the front side of the seat assembly.

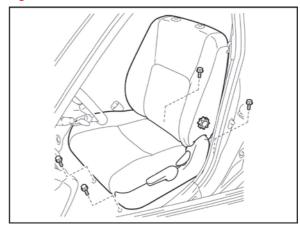
Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)

D. Tighten the 2 bolts on the rear side of the seat assembly.

Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)

- E. Install the 2 seat track covers.
- 20. Check SRS warning light.
- 21. Check seat slide adjuster locks.

Figure 43.



### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 2: Manual Seat (Driver and Passenger) (Continued)

22. Initialize the front passenger Occupant Classification System (OCS) (passenger seat only).

#### **NOTE**

Follow the initialization procedure on TIS. Refer to applicable model year Repair Manual:

- <u>2005</u> Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Initialization"
- 2006 / 2007 / 2008 Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Occupant Classification System: Initialization"
- 23. Initialize power systems (windows, moonroof, etc). Refer to appropriate service bulletin.
- 24. Refer to the Airbag Disposal section to dispose of the side airbag assembly.

#### **Airbag Disposal**

Please refer to Service Bulletin <u>SS004-07</u>, "SRS Component Disposal as Hazardous Material *Treatment*", for proper disposal method of the side airbag assembly.

Rev1

#### **Repair Procedure (Continued)**

Section 3: Fold Flat Seat (Passenger)

#### **CAUTION**

- Always wear safety gloves because the edges of the seatback frame and seat adjuster are sharp and may cause injury.
- Work must be started more than 90 seconds AFTER the ignition switch is turned to the LOCK position and the negative (–) terminal cable is disconnected from the battery. (The SRS is equipped with a back-up power source. If work is started within 90 seconds from disconnecting the negative (–) terminal cable of the battery, the SRS may deploy.)

#### NOTICE

Be careful NOT to damage the body.

#### **NOTE**

- BEFORE starting, confirm the seat is a fold flat seat and NOT a manual seat. Refer to the illustration on page 5 to correctly identify a fold flat seat. For manual seats, use the manual seat Repair Procedure starting on page 23.
- Installation is in the reverse order of removal. However, special points concerning installation are indicated.
- 1. Remove the seat headrest assembly.
- 2. Remove the RH front seat assembly.
  - A. Using the plastic pry tool, pry out the 2 seat track covers.
  - B. Disconnect the connectors under the seat assembly.
  - C. Remove the 4 bolts and the seat assembly.

#### **NOTICE**

Place protective cover over door sill. Be careful NOT to damage the body.

- 3. Remove the inner seat cushion shield.
  - A. Remove the screw.
  - B. Using the plastic pry tool, disengage the claws and remove the cushion shield inner.

#### **Repair Procedure**

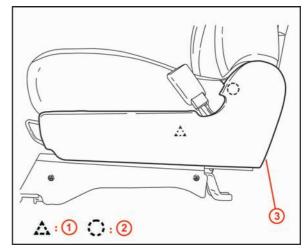
#### Section 3: Fold Flat Seat (Passenger) (Continued)

 Remove the reclining adjuster release handle by using the plastic pry tool and disengaging the claws.

Figure 44.

- 5. Remove the outer seat cushion shield.
  - A. Remove the screw.
  - B. Using the plastic pry tool, disengage the claws and remove the cushion shield.

Figure 45.



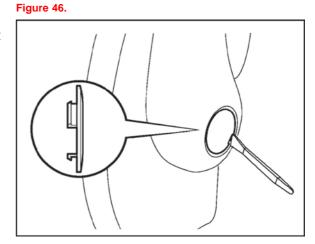
1	Clip
2	Claw
3	Screw

- 6. Remove the inner seat cushion shield.
  - A. Remove the screw.
  - B. Using the plastic pry tool, disengage the claws and remove the cushion shield.

#### **Repair Procedure**

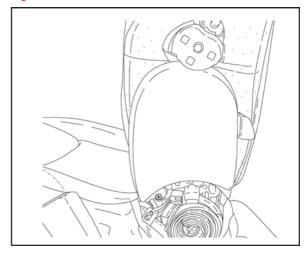
#### Section 3: Fold Flat Seat (Passenger) (Continued)

- 7. Remove the front armrest assembly.
  - A. Using the plastic pry tool, remove the armrest cap.
  - B. Remove the bolt and armrest assembly.



- 8. Remove the LH seatback shield.
  - A. Using the plastic pry tool, disengage the claws and remove the reclining adjuster release handle.
  - B. Remove the screw, disengage the 2 claws and remove the seatback shield.

Figure 47.



#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

9. Remove the RH seatback shield.

#### **NOTE**

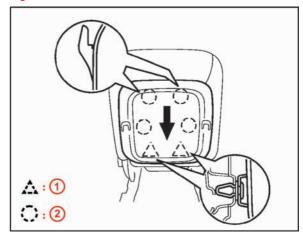
- The side airbag wire harness is routed through the RH seatback shield. Use caution when removing.
- Use the same procedure for the RH and LH side.

Figure 48. Airbag Wire Harness Routing on RH Shield

10. Remove the seatback board.

- A. Disengage the clips.
- B. Remove the seatback board by pulling it out in the arrow mark direction.

Figure 49.



1	Clip
2	Claw

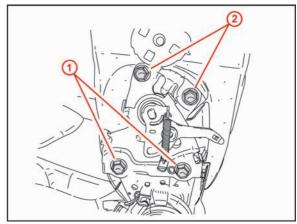
#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

11. Remove the seatback.

Remove the 2 lower bolts on the LH and RH side of the spring assembly. Remove the spring assembly together with the seatback.

Figure 50.



Page 46 of 58

1	2 Upper Bolts (Step 11)
2	2 Lower Bolts (Step 12)

12. Remove the front seatback lock assembly LH.

Remove the 2 bolts and seatback lock assembly.

13. Remove the front seatback lock assembly RH.

#### **NOTE**

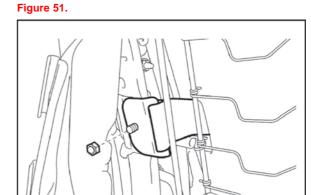
Make note of the position of the connection pipe prior to removing the seatback lock assembly

- A. Remove the 2 bolts and seatback lock assembly.
- B. Remove the reclining connecting pipe.

#### **Repair Procedure**

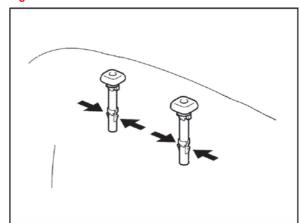
#### Section 3: Fold Flat Seat (Passenger) (Continued)

- 14. Remove the seatback cover and cushion from the frame.
  - A. Remove the 15 hog rings.
  - B. Remove the bolt and disengage the seatback cover bracket.
  - C. Remove the seatback cover together with the pad.



D. Remove the front seat headrest support by disengaging the 2 claws while sliding the seat cover off.

Figure 52.



- 15. Remove the side airbag assembly.
  - A. Remove the 2 nuts from the side airbag assembly.
  - B. Remove the 1 clip holding the airbag wire harness.

#### NOTE

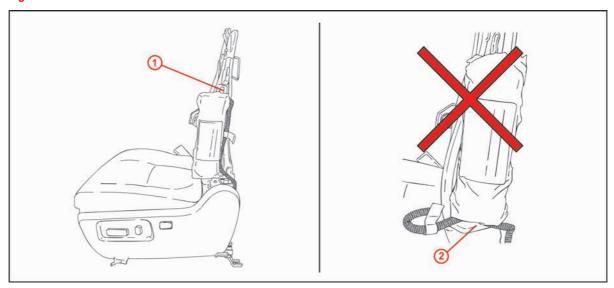
The remaining 4 clips holding the wire harness will be removed when installing the new airbag and wire harness.

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

- 16. Install the NEW side airbag assembly.
  - A. Place the side airbag into the seat frame with the wire harness connector on the top. Figure 53.



1 Position Airbag with Harness on the TOP
2 Do NOT Install Airbag with Harness on the Bottom

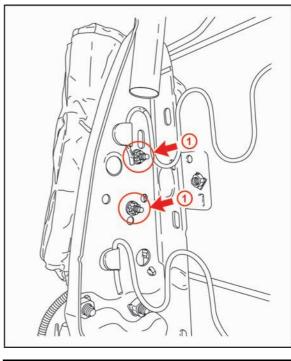
#### **Repair Procedure**

**TOYOTA** 

Section 3: Fold Flat Seat (Passenger) (Continued)

B. Secure the side airbag with 2 NEW nuts. Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

Figure 54.



1 Nut

C. Remove the side airbag assembly by pulling it through the seat cushion and cover.Attach the 1 retaining clip below the side airbag to the seat frame.

#### **NOTE**

The remaining portion of the side airbag wire harness will be installed during step 20.

# Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

17. Install the seatback cover and pad.

#### **NOTICE**

Be careful NOT to damage the cover.

#### **NOTE**

When installing the hog rings, take care to prevent wrinkles as much as possible.

- A. Place the outside strap on first and then the inside strap (see Figure 55).
- B. Install the seatback cover bracket with the bolt.

Torque: 5.5 N\*m (56 kgf\*cm, 48 in\*lbf)

#### **NOTE**

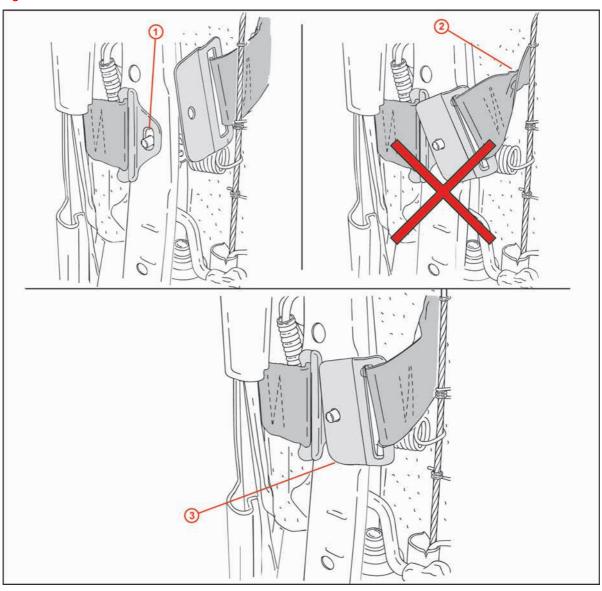
- For a vehicle with side airbag, the side airbag may NOT be activated normally unless the seatback cover is securely installed.
- · After installing the bracket, check that the strap is NOT twisted.

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

Figure 55.



_		
	1	Place Outside Strap on FIRST
	2	Do NOT Install if Strap Is Twisted
	3	Secure Inside Stran over Outside Stran as Shown

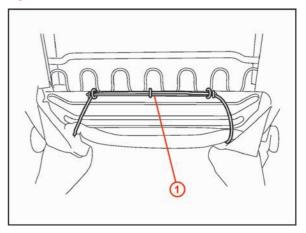
### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

C. Using hog ring pliers, attach the rubber wire with 3 new hog rings, as shown in Figure 56.

Figure 56.



Rubber Wire

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

D. Using the hog ring pliers, install the new hog rings.

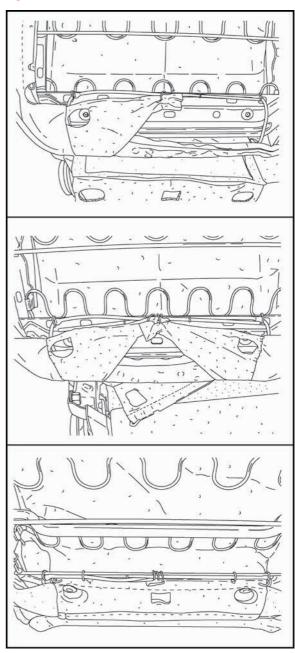
#### **NOTICE**

Be careful NOT to damage the cover.

#### **NOTE**

When installing the hog rings, take care to prevent wrinkles as much as possible.

Figure 57.



# Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

18. Install the front seatback lock assembly RH.

Install the seatback lock assembly with 2 bolts.

Torque: 43 N\*m (439 kgf\*cm, 32 ft\*lbf)

#### **NOTE**

Place the connecting pipe in position before attaching the RH seatback lock assembly.

19. Install the front seatback lock assembly LH

Install the seatback lock assembly with 2 bolts.

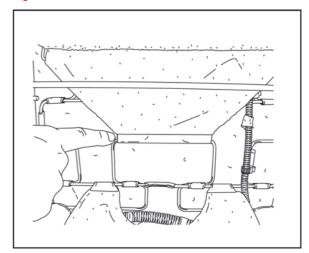
Torque: 43 N\*m (439 kgf\*cm, 32 ft\*lbf)

20. Install the seatback.

Torque: 43 N\*m (439 kgf\*cm, 32 ft\*lbf)

- 21. Install the side airbag wire harness.
  - A. Remove the 1 rear seat cushion upholstery clip from the bottom of the seat.

Figure 58.



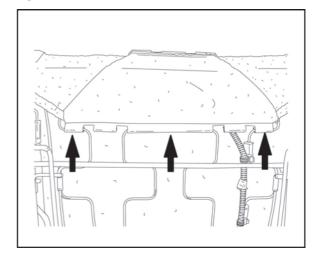
#### **Repair Procedure**

**TOYOTA** 

#### Section 3: Fold Flat Seat (Passenger) (Continued)

B. Remove the 3 rear seat cushion upholstery clips from the bottom of the seat.

Figure 59.



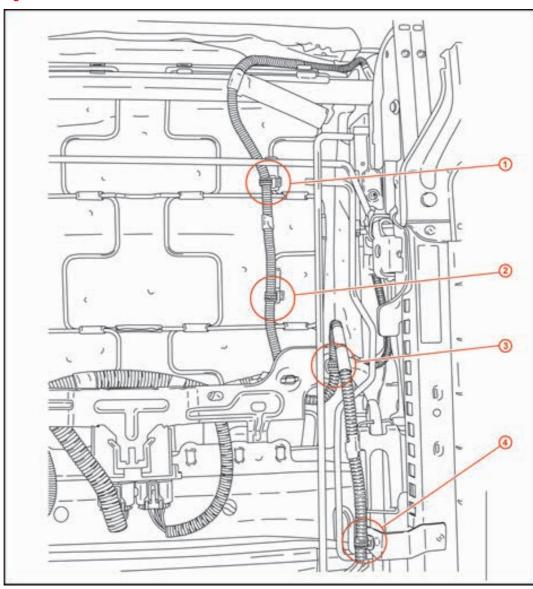
#### **Repair Procedure**

**TOYOTA** 

#### Section 3: Fold Flat Seat (Passenger) (Continued)

C. Using Figures 60 and 61, remove the original wire harness while routing the NEW wire harness and attach the 4 retaining clips to the seat frame.

Figure 60



1	Clip No. 1
2	Clip No. 2

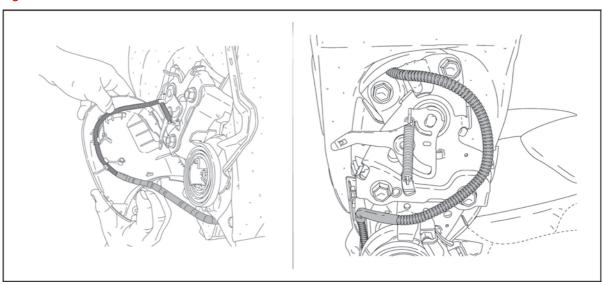
3	Clip No. 3
4	Clip No. 4

# Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

Figure 61.



22. Install the armrest assembly.

Torque: 20 N\*m (200 kgf\*cm, 14 ft\*lbf)

- A. Install the armrest assembly with the bolt.
- B. Install the armrest cap.
- 23. Install the front seat assembly.
  - A. Place the seat assembly in the cabin.
  - B. Connect the connectors under the seat assembly.

#### **NOTICE**

Be careful NOT to damage the body.

- C. Tighten the 2 bolts on the front side of the seat assembly.
  - Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)
- D. Tighten the 2 bolts on the rear side of the seat assembly.

Torque: 37 N\*m (375 kgf\*cm, 27 ft\*lbf)

- E. Install the 2 track covers.
- 24. Check SRS warning lights.
- 25. Check seat slide adjuster locks.

### Repair Manual Supplement: SRS Light "ON" - DTC B0111/B0116 - Open Side Squib Circuit

#### **Repair Procedure**

#### Section 3: Fold Flat Seat (Passenger) (Continued)

- 26. Check fold flat seat operation.
- 27. Initialize the front passenger Occupant Classification System (OCS).

#### **NOTE**

Follow the initialization procedure on TIS. Refer to applicable model year Repair Manual:

- <u>2005</u> Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Initialization"
- 2006 / 2007 / 2008 Sienna: Vehicle Interior Supplemental Restraint Systems "Supplemental Restraint System: Occupant Classification System: Initialization"
- 28. Initialize power systems (windows, moonroof, etc). Refer to appropriate service bulletin.

#### **Airbag Disposal**

Please refer to Service Bulletin <u>SS004-07</u>, "SRS Component Disposal as Hazardous Material *Treatment*", for proper disposal method of the side airbag assembly.