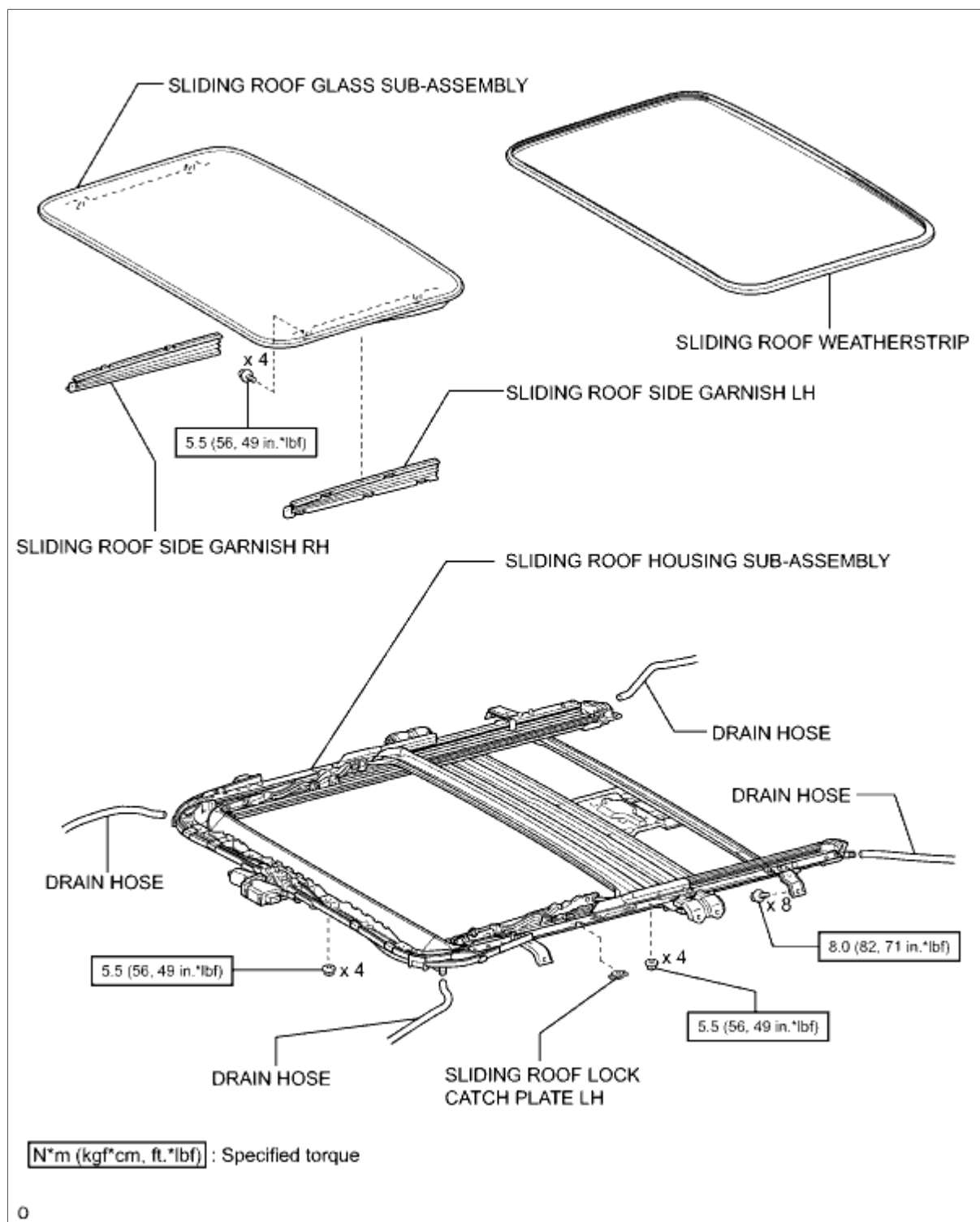


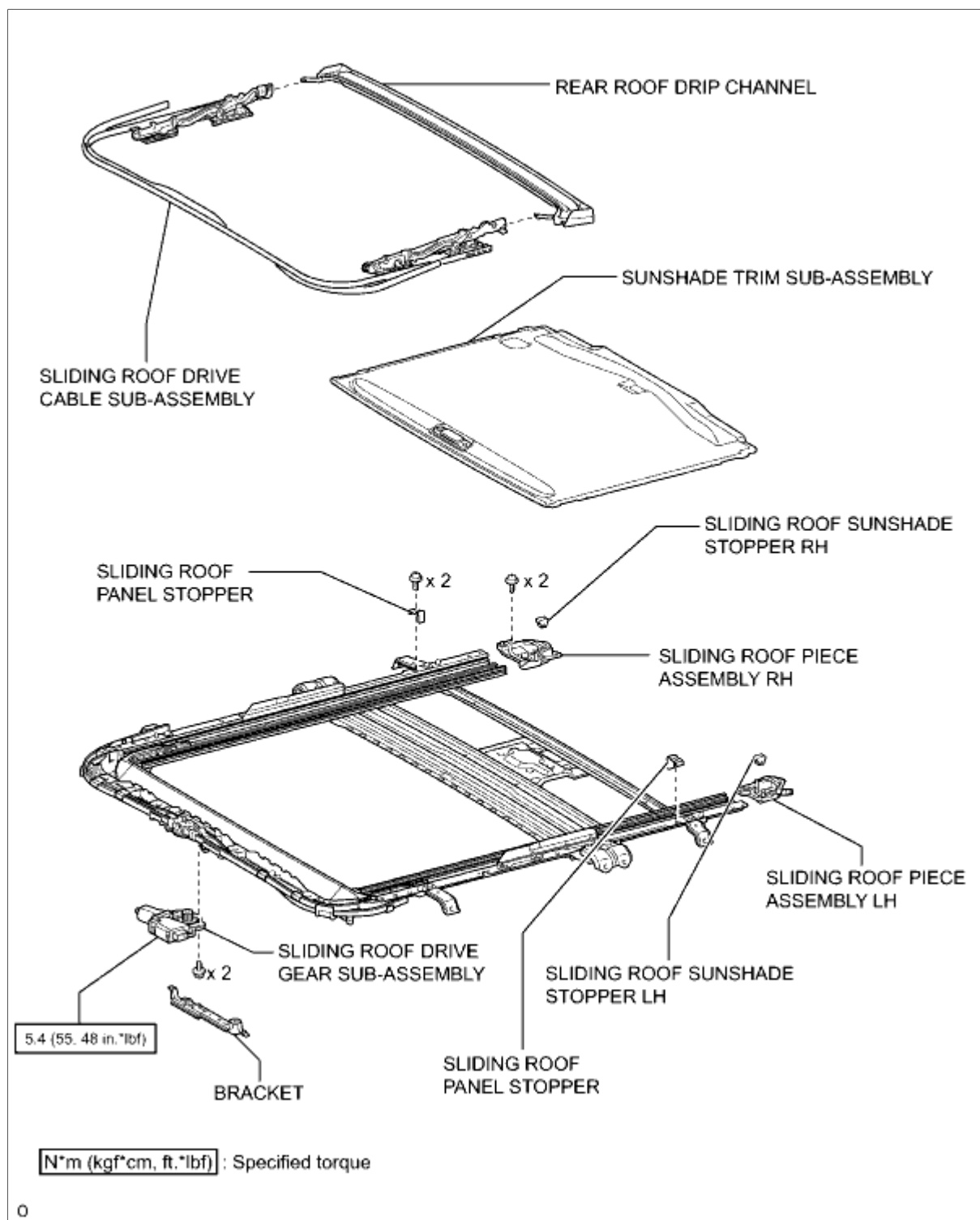
<b>Last Modified:</b> 5-10-2010	6.4 K	<b>From:</b> 200908
<b>Model Year:</b> 2010	<b>Model:</b> 4Runner	<b>Doc ID:</b> RM000004612000X
<b>Title:</b> SLIDING ROOF / CONVERTIBLE: SLIDING ROOF HOUSING: COMPONENTS (2010 4Runner)		

## **COMPONENTS**

## **ILLUSTRATION**



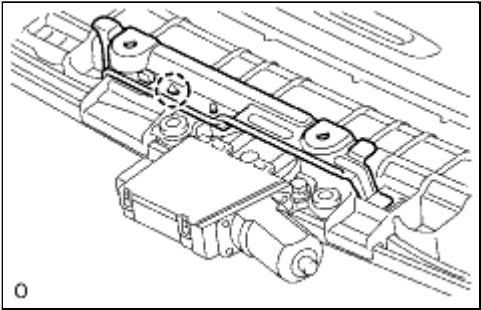
## ILLUSTRATION



<b>Last Modified:</b> 5-10-2010	6.4 A	<b>From:</b> 200908
<b>Model Year:</b> 2010	<b>Model:</b> 4Runner	<b>Doc ID:</b> RM000002LPC00RX
<b>Title:</b> SLIDING ROOF / CONVERTIBLE: SLIDING ROOF HOUSING: DISASSEMBLY (2010 4Runner)		

DISASSEMBLY

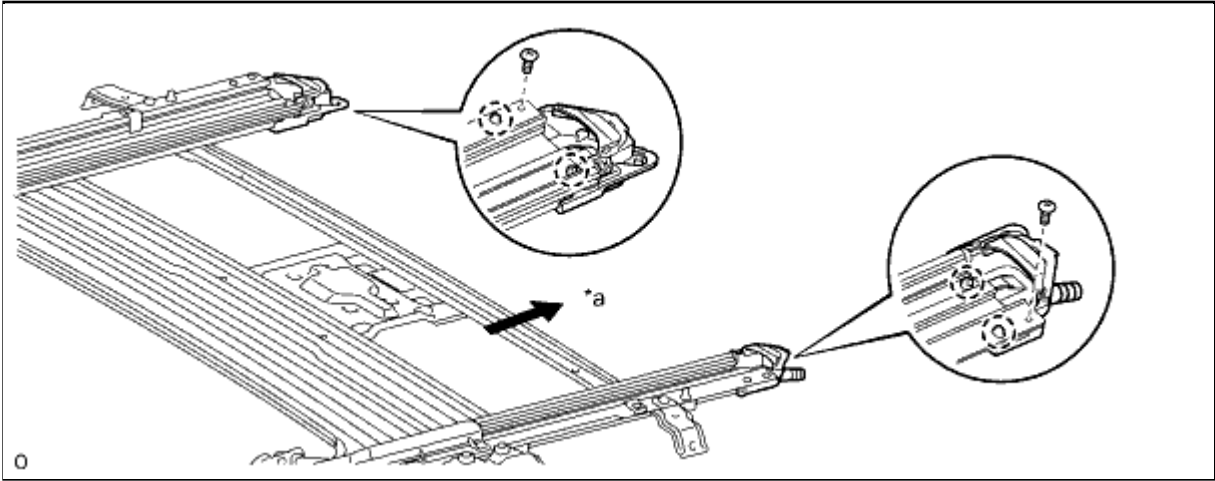
1. REMOVE SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY



(a) Detach the bracket claw and remove the bracket.

(b) Remove the 2 bolts and drive gear.

2. REMOVE SUNSHADE TRIM SUB-ASSEMBLY

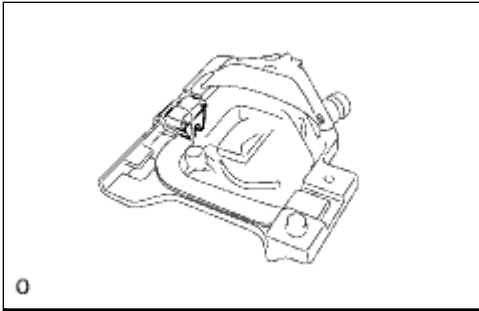


Text in Illustration

*a	Rearward	-	-
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- (a) Remove the 2 screws.
- (b) Detach the 4 claws and remove the sliding roof piece LH and RH.
- (c) Slide and remove the trim.

3. REMOVE SLIDING ROOF SUNSHADE STOPPER LH



(a) Remove the stopper.

#### 4. REMOVE SLIDING ROOF SUNSHADE STOPPER RH

##### **HINT:**

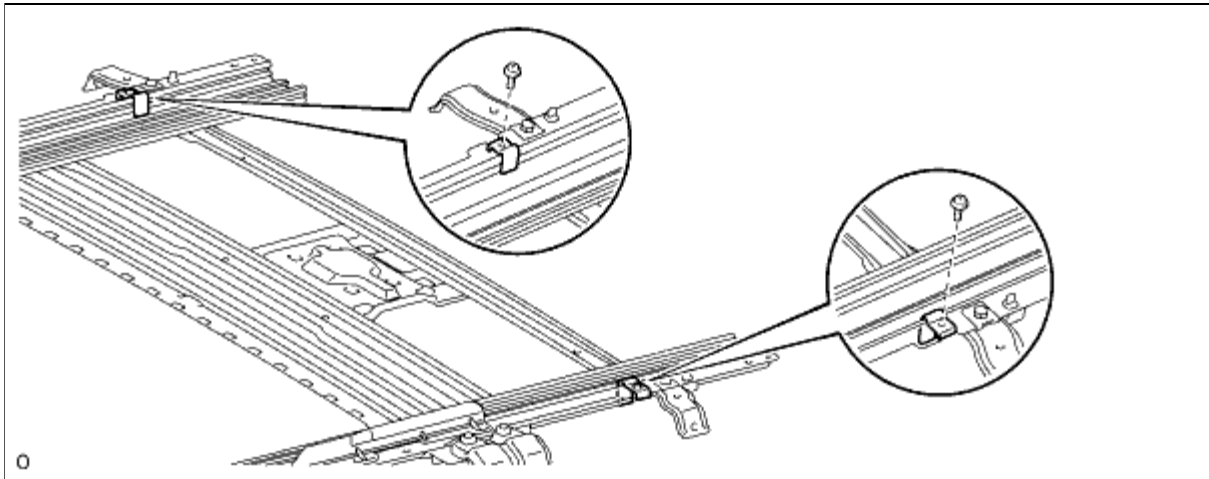
Use the same procedures described for the LH side.

#### 5. REMOVE SLIDING ROOF DRIVE CABLE SUB-ASSEMBLY

##### **NOTICE:**

Do not disassemble the sliding roof drive cable sub-assembly except when replacing it.

(a) Remove the 2 screws and 2 stoppers.

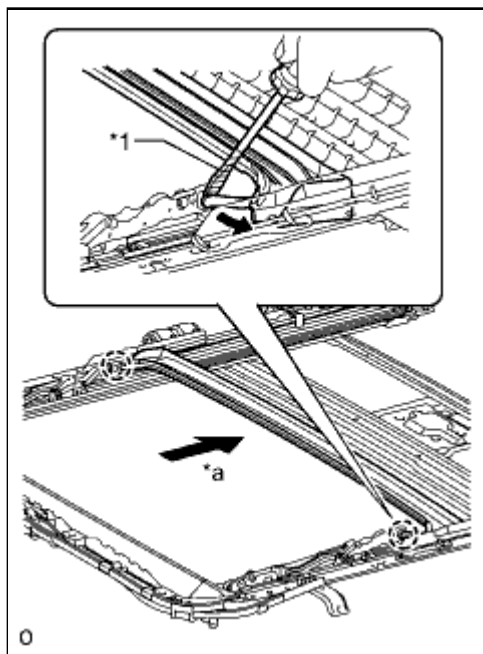


(b) Using a screwdriver, detach the 2 claws and slide the rear roof drip channel rearward to remove it.

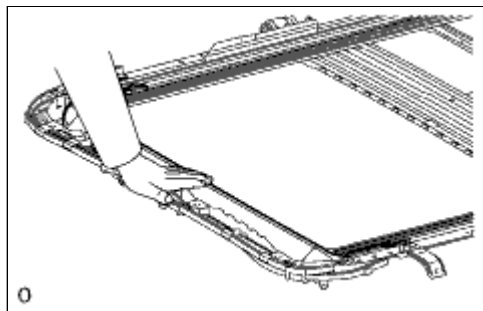
### Text in Illustration

* 1	Protective Tape
* a	Rearward

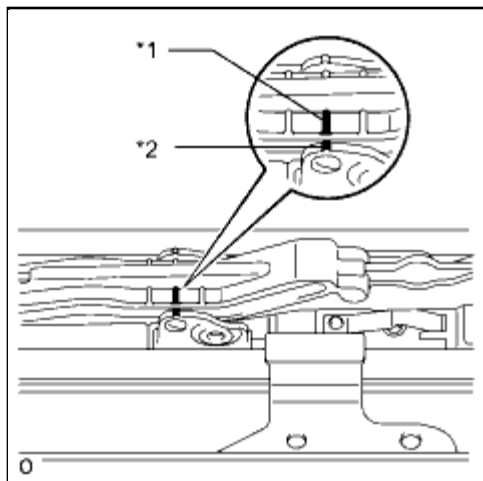
##### **HINT:**



**Tape the screwdriver tip before use.**



(c) Hold down the window deflector.

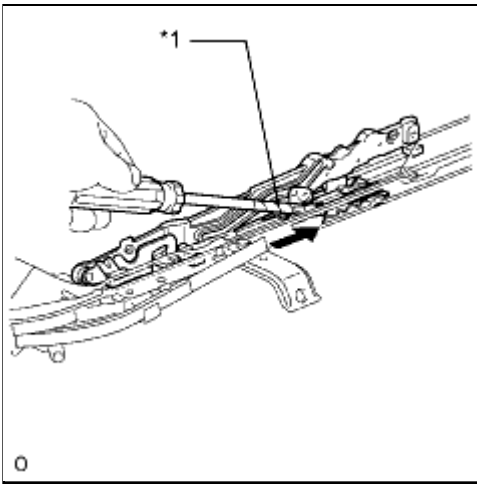


(d) Place matchmarks on the sliding roof drive cable sub-assembly at locations A and B as shown in the illustration.

### Text in Illustration

* 1	Matchmark A
* 2	Matchmark B

(e) Using a screwdriver, slide the sliding roof drive cable sub-assembly in the direction indicated by the arrow in the illustration to remove it.



Text in Illustration

* 1	Protective Tape
	Slide

HINT:

Tape the screwdriver tip before use.

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<b>Model Year:</b> 2010	<b>Model:</b> 4Runner	<b>Doc ID:</b> RM000002LPB00TX
<b>Title:</b> SLIDING ROOF / CONVERTIBLE: SLIDING ROOF HOUSING: REMOVAL (2010 4Runner)		

## REMOVAL

### 1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL


#### CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

#### NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected .

### 2. REMOVE ROOF HEADLINING ASSEMBLY

(a) Remove the roof headlining assembly .

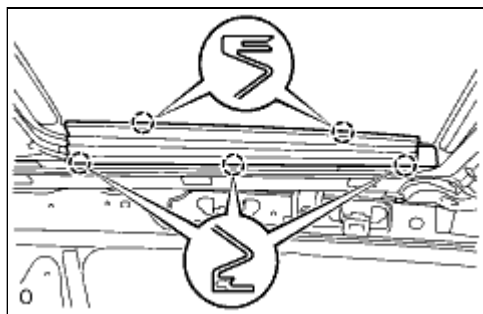
### 3. REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY LH

(a) Remove the curtain shield airbag assembly LH .

### 4. REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY RH

#### HINT:

Use the same procedures described for the LH side.



### 5. REMOVE SLIDING ROOF SIDE GARNISH LH

(a) Detach the 5 claws and remove the side garnish.

### 6. REMOVE SLIDING ROOF SIDE GARNISH RH

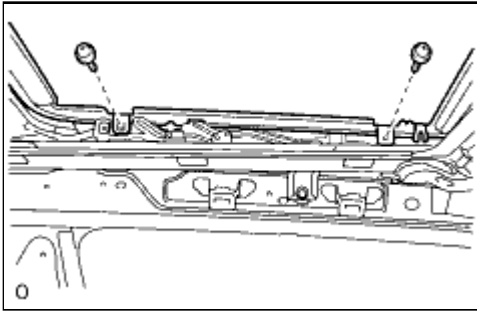
#### HINT:

Use the same procedures described for the LH side.

### 7. REMOVE SLIDING ROOF GLASS SUB-ASSEMBLY

(a) Using a T25 "TORX" driver, remove the 4 screws and glass.



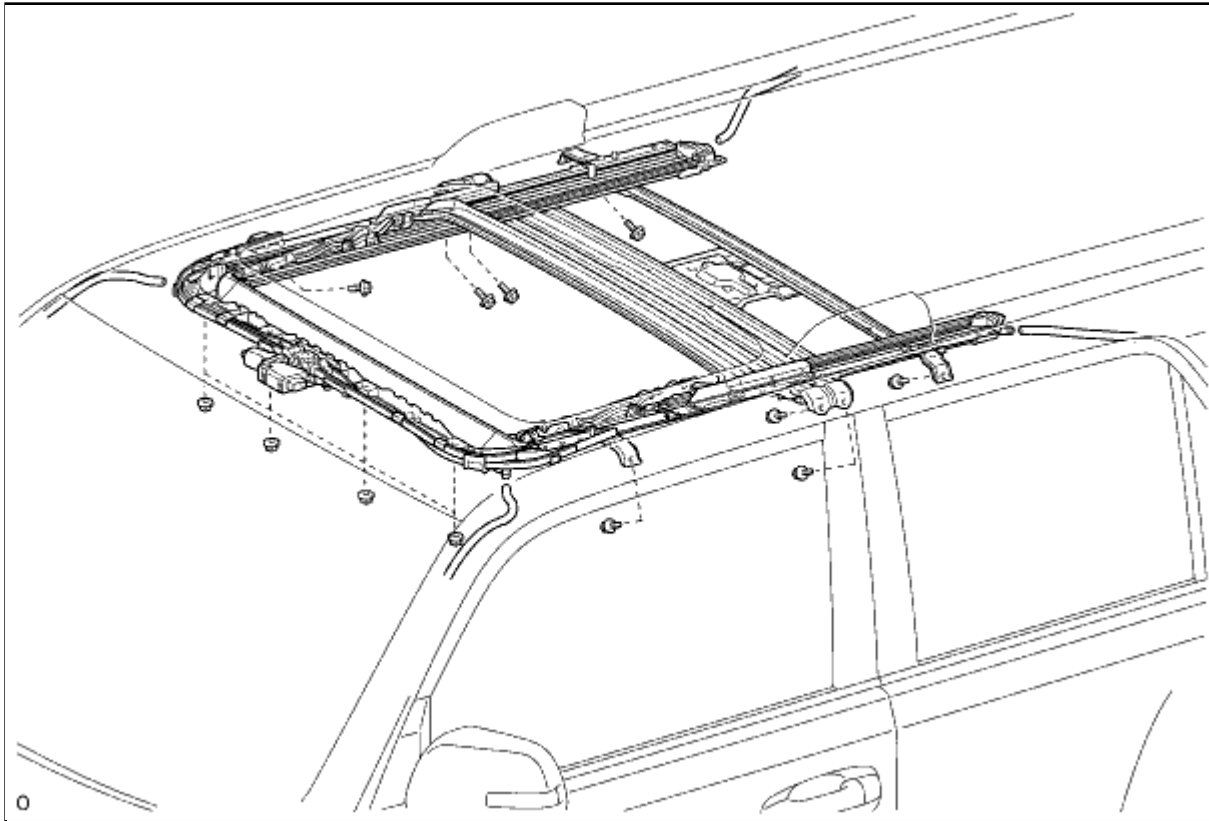


## **8. REMOVE SLIDING ROOF WEATHERSTRIP**

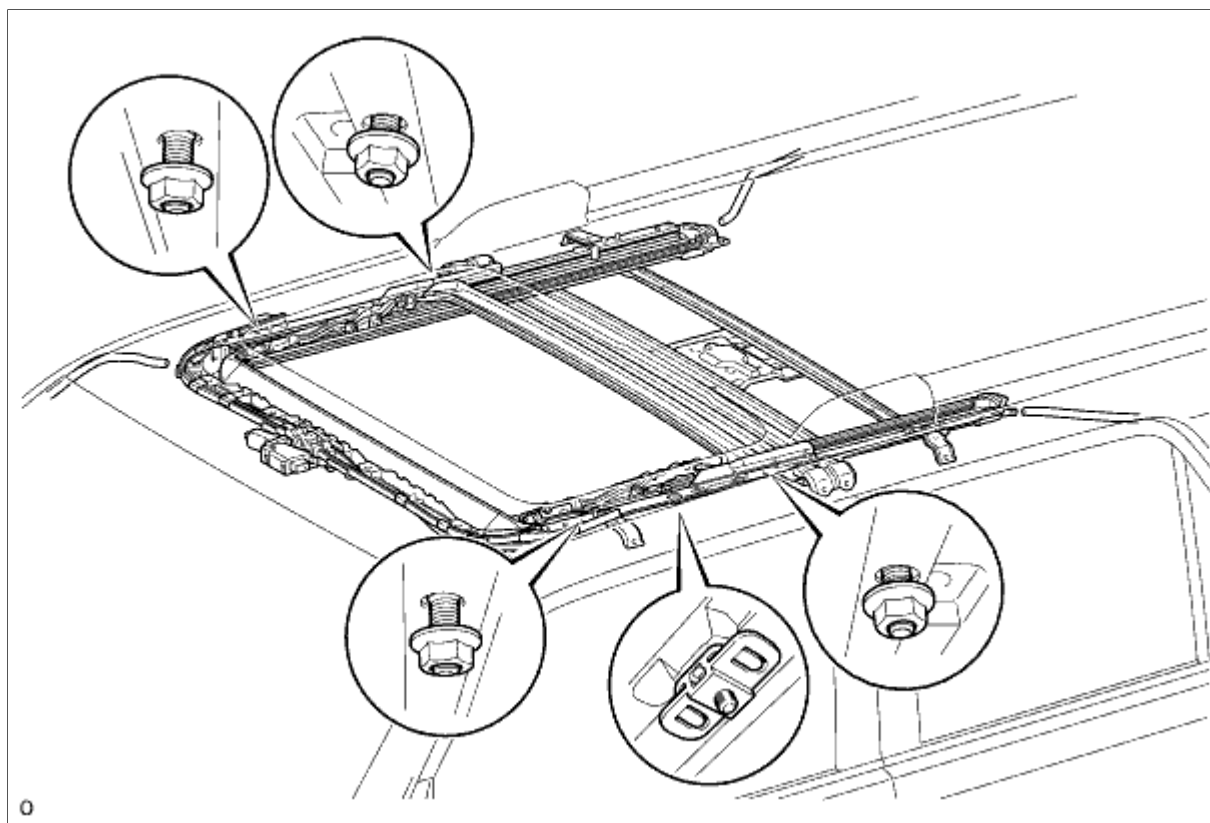
- (a) Remove the sliding roof weatherstrip.

## **9. REMOVE SLIDING ROOF HOUSING SUB-ASSEMBLY**

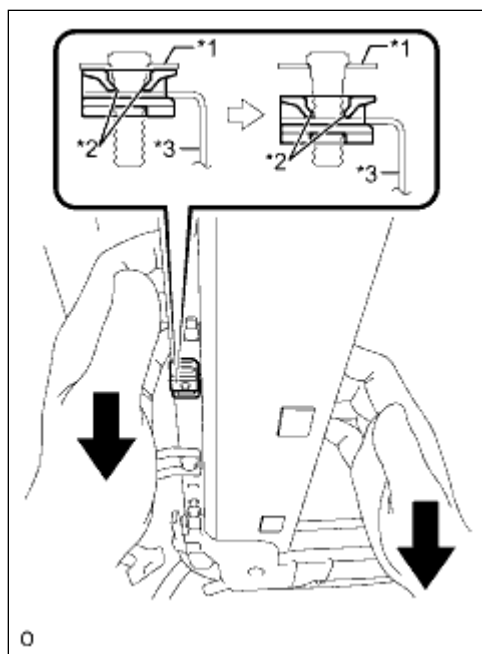
- (a) Disconnect the 4 sliding roof drain hoses.
- (b) Remove the 8 bolts and 4 nuts.



- (c) Loosen the 4 nuts as shown in the illustration.

**NOTICE:**

Be sure that the nuts are fully threaded onto the bolts.



(d) Pull the sliding roof housing sub-assembly downward and detach the 2 claws of the sliding roof lock catch plate LH from the stud bolt as shown in the illustration.

**Text in Illustration**

*1	Bracket (Roof Panel)
*2	Sliding Roof Lock Catch Plate LH Claw
*3	Sliding Roof Housing Sub-assembly

**NOTICE:**

Performing this procedure breaks the claws of the sliding roof lock catch plate LH so that the sliding roof housing sub-assembly can be removed. However, do not use excessive force.

(e) Remove the 4 nuts and sliding roof housing sub-assembly.

(f) Detach the 2 claws and remove the sliding roof lock catch

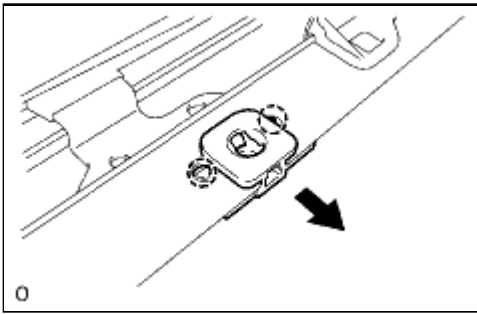


plate LH from the sliding roof housing sub-assembly.

**HINT:**

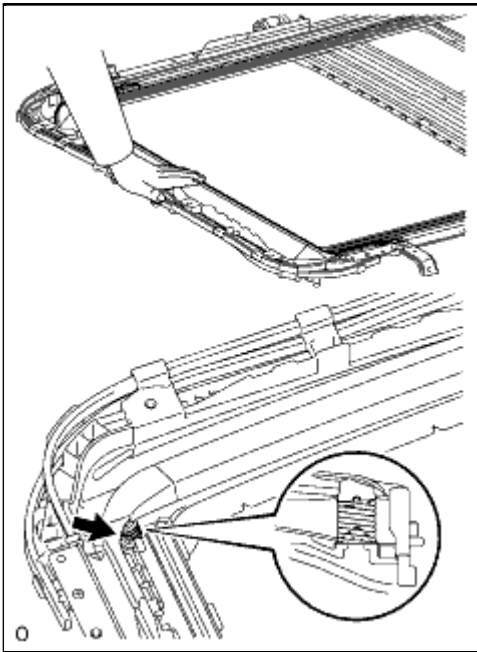
**The sliding roof lock catch plate LH is used when the vehicle is assembled at the factory and is not needed for reinstallation.**



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<b>Model Year:</b> 2010	<b>Model:</b> 4Runner	<b>Doc ID:</b> RM000002LPD00RX
<b>Title:</b> SLIDING ROOF / CONVERTIBLE: SLIDING ROOF HOUSING: REASSEMBLY (2010 4Runner)		

## **REASSEMBLY**

### **1. INSTALL SLIDING ROOF DRIVE CABLE SUB-ASSEMBLY**

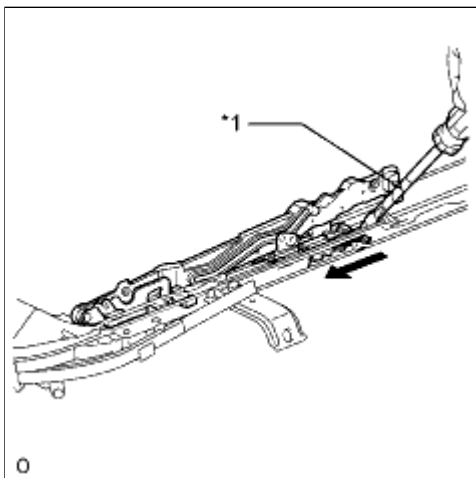


(a) Hold down the window deflector.

#### **NOTICE:**

**Make sure that the spring indicated by the arrow in the illustration is securely installed.**

(b) Using a screwdriver, slide the drive cable in the direction indicated by the arrow in the illustration to install it.

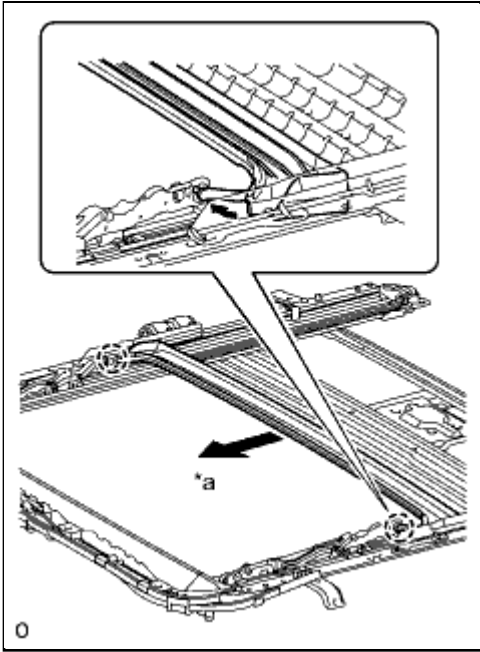


#### **HINT:**

**Tape the screwdriver tip before use.**

**Text in Illustration**

* 1	Protective Tape
	Slide

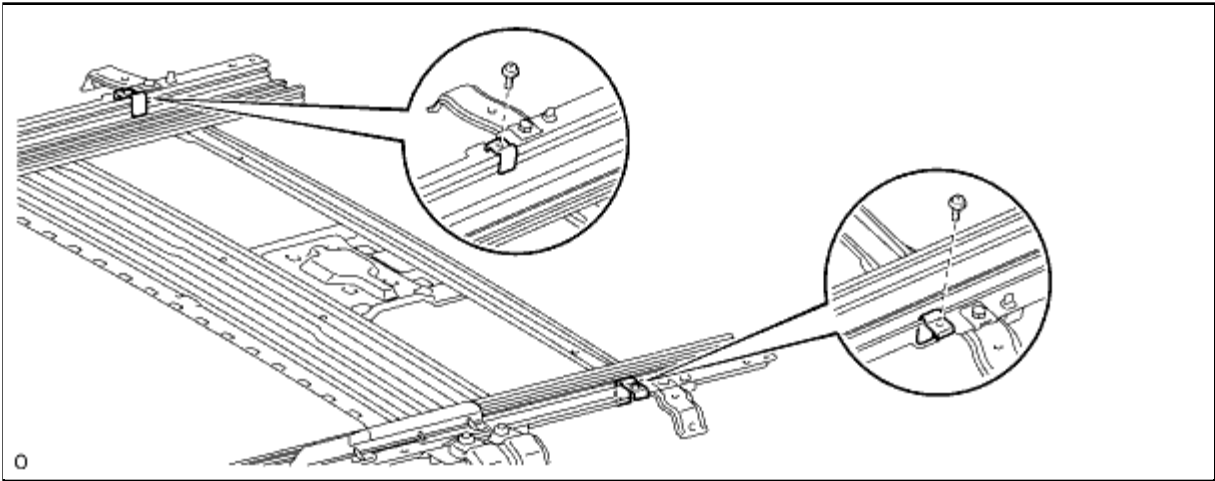


(c) Slide the rear roof drip channel forward and attach the 2 claws to install it.

**Text in Illustration**

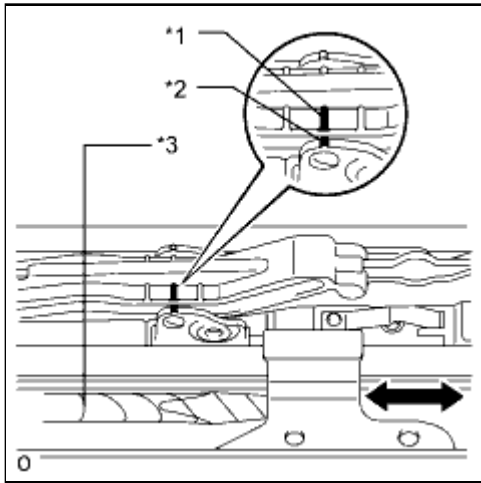
* a	Forward
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(d) Install the 2 stoppers with the 2 screws.



**2. ADJUST SLIDING ROOF DRIVE CABLE SUB-ASSEMBLY**

(a) Using a screwdriver, align the matchmarks by sliding the drive cable in the directions indicated by the arrow in the illustration.

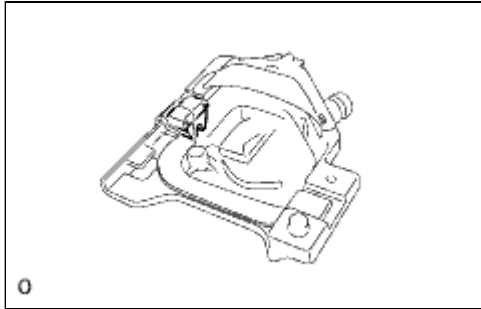


**HINT:**  
Tape the screwdriver tip before use.

### Text in Illustration

*1	Matchmark A
*2	Matchmark B
*3	Protective Tape

### 3. INSTALL SLIDING ROOF SUNSHADE STOPPER LH



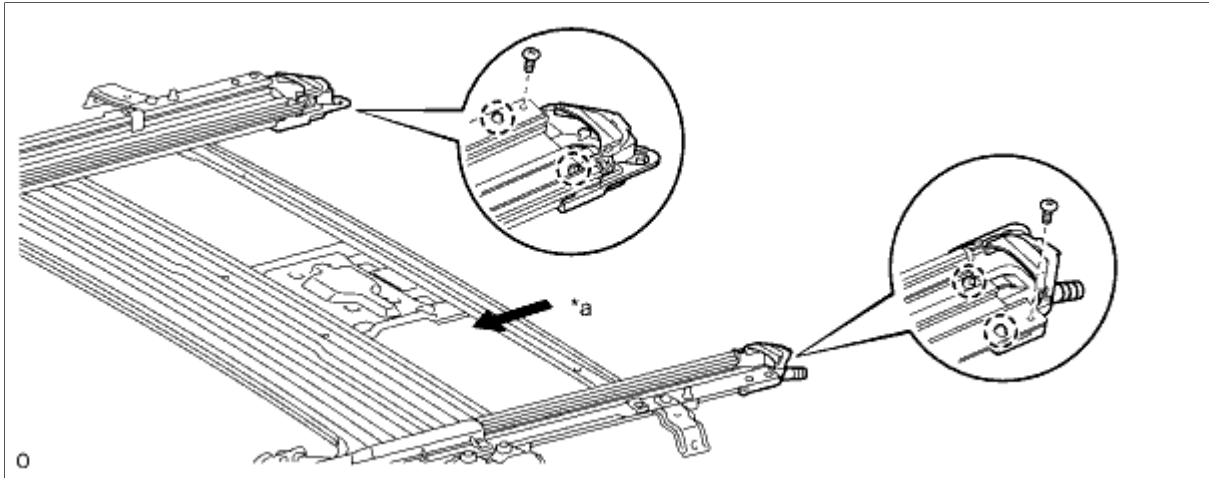
(a) Install the stopper.

### 4. INSTALL SLIDING ROOF SUNSHADE STOPPER RH

**HINT:**  
Use the same procedures described for the LH side.

### 5. INSTALL SUNSHADE TRIM SUB-ASSEMBLY

(a) Insert the sunshade trim into the sliding roof housing.



**Text in Illustration**

*a	Forward	-	-
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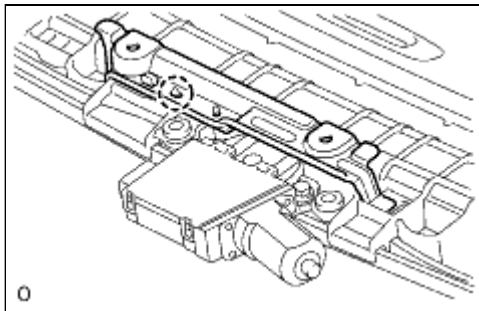
(b) Attach the 4 claws to install the sliding roof piece LH and RH.

(c) Install the 2 screws.

## 6. INSTALL SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY

(a) Install the drive gear with the 2 bolts.

**Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)**



(b) Attach the bracket claw to install the bracket.

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<b>Model Year:</b> 2010	<b>Model:</b> 4Runner	<b>Doc ID:</b> RM000002LP900TX
<b>Title:</b> SLIDING ROOF / CONVERTIBLE: SLIDING ROOF HOUSING: INSTALLATION (2010 4Runner)		

## INSTALLATION

### 1. INSTALL SLIDING ROOF HOUSING SUB-ASSEMBLY

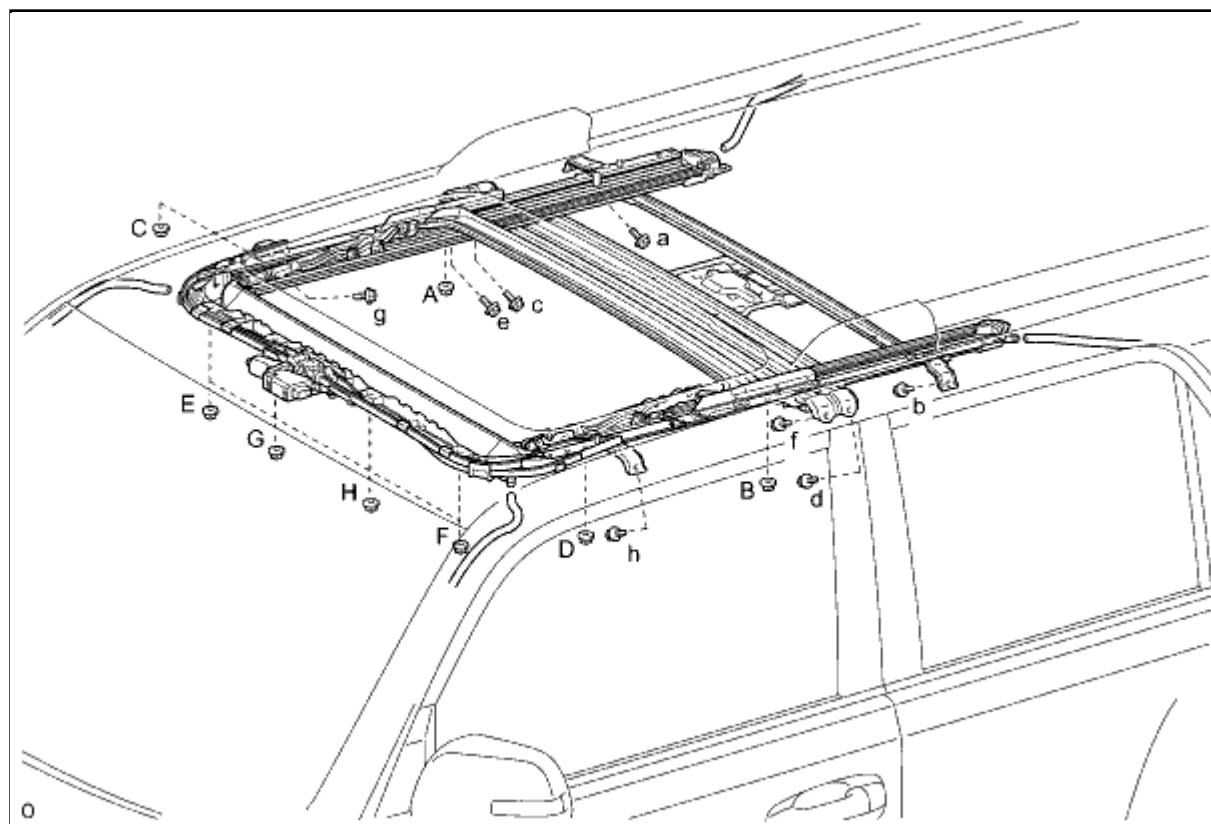
(a) Temporarily install the housing with the 8 bolts (vehicle body side) and 8 nuts.

(b) Tighten the 8 nuts in alphabetical order.

**Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)**

(c) Tighten the 8 bolts in alphabetical order.

**Torque: 8.0 N·m (82 kgf·cm, 71in·lbf)**



(d) Connect the 4 sliding roof drain hoses.

### 2. INSTALL SLIDING ROOF WEATHERSTRIP

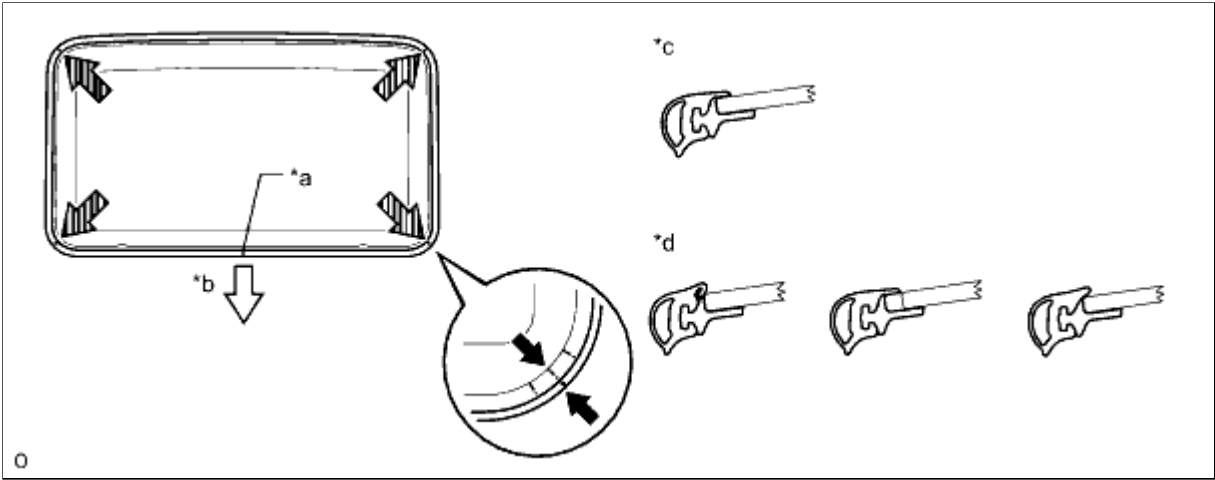
(a) Install the sliding roof weatherstrip as described below.

(1) Attach each corner of the weatherstrip so that each weatherstrip mark is aligned with the sliding roof glass center mark. After attaching the entire weatherstrip, check that all weatherstrip marks are within the sliding roof glass end marks.

(2) Make sure the weatherstrip cutout is toward the rear side of the vehicle and centered.

(3) Make sure the weatherstrip is securely installed as shown in the illustration.

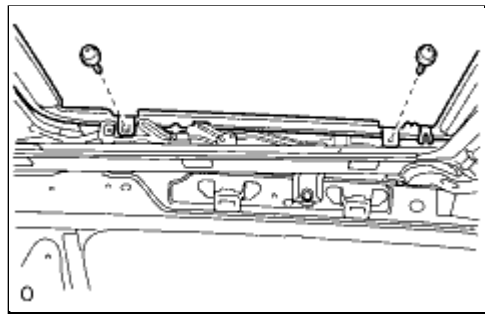




Text in Illustration

*a	Cutout	*b	Rear Side
*c	CORRECT	*d	INCORRECT

3. INSTALL SLIDING ROOF GLASS SUB-ASSEMBLY



(a) Using a T25 "TORX" driver, temporarily install the glass with the 4 screws.

(b) Perform a level check.

(1) Check the difference in the level between the roof panel and upper surface of the weatherstrip labeled "a" when the sliding roof glass is fully closed.

Standard:

AREA	SPECIFIED CONDITION
A - A	0 +/-1.5 mm (0 +/-0.0591 in.)
B - B	
C - C	
D - D	

HINT:

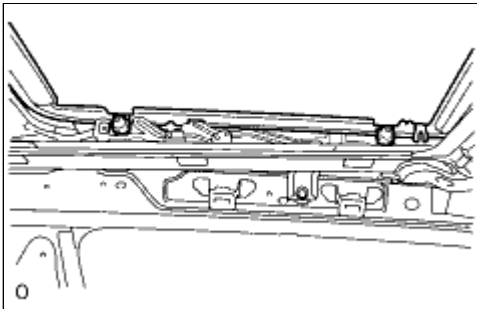
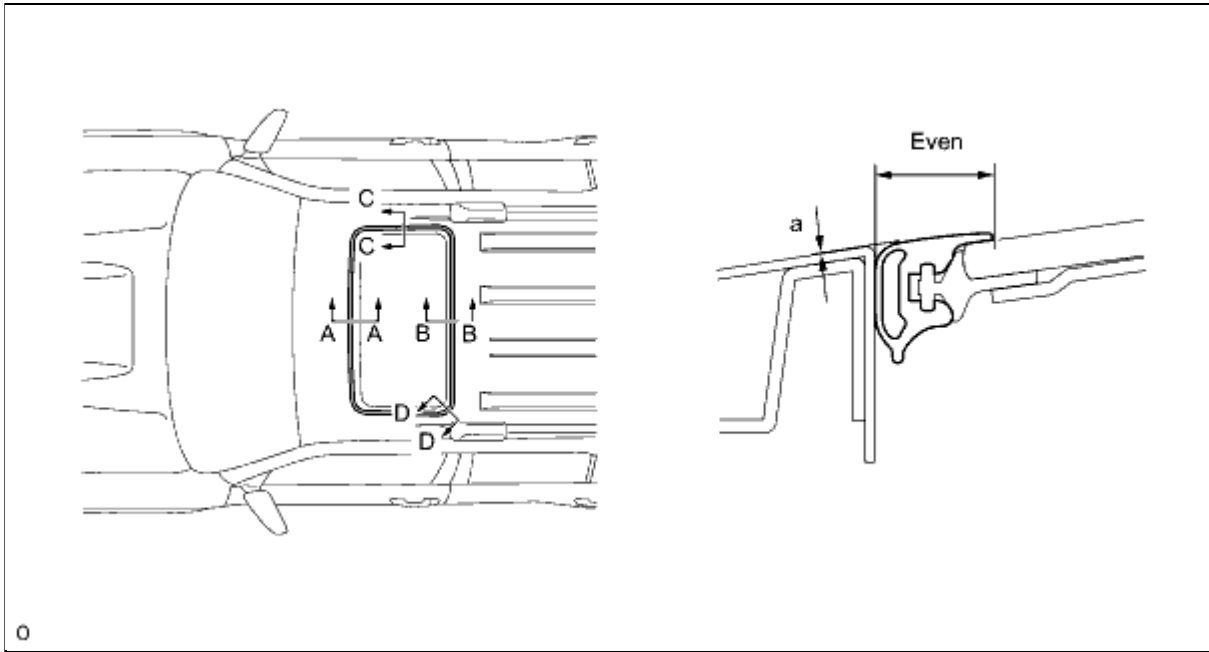
"+" represents the condition that the glass is above the panel level. "-" represents the condition that the glass is below the panel level.

(2) Perform a gap check.

Check the gap between the roof panel and roof glass.

**NOTICE:**

The gap must be even all around.



(c) Tighten the 4 screws.

**Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)**

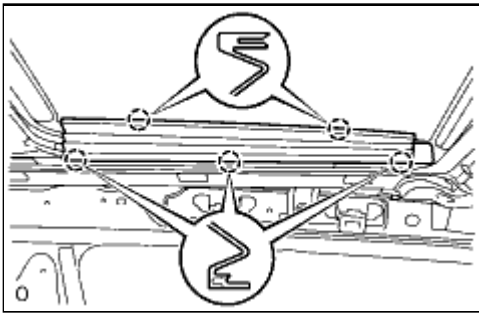
#### 4. CHECK FOR WATER LEAK

(a) After adjusting the sliding roof glass sub-assembly, check for water leaks.

If there are any leaks, readjust the sliding roof glass sub-assembly.

#### 5. INSTALL SLIDING ROOF SIDE GARNISH LH

(a) Attach the 5 claws to install the sliding roof side garnish.




## 6. INSTALL SLIDING ROOF SIDE GARNISH RH

### HINT:

Use the same procedures described for the LH side.

## 7. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY LH


- (a) Install the curtain shield airbag assembly LH .

## 8. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY RH

### HINT:

Use the same procedures described for the LH side.

## 9. INSTALL ROOF HEADLINING ASSEMBLY

- (a) Install the roof headlining assembly .

## 10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

### **NOTICE:**

When disconnecting the cable, some systems need to be initialized after the cable is reconnected .

## 11. CHECK SRS WARNING LIGHT

- (a) Check the SRS warning light .