January 9, 2014



Window Freezing, Losing Initialization

Service Category	Vehicle Exterior			Scion Supports
Section	Window/Glass	Market	USA	Scion Supports

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2013	FR-S	

Introduction

Some 2013 model year Scion FR-S vehicles may exhibit a loss of side window Auto initialization and the inability to raise the window after being lowered in freezing conditions. Diagnostic Trouble Code (DTC) B2316 or B2311 may accompany this condition. This can be caused when the side window is partially or fully frozen in place by the effects of ice and snow thawing and freezing common in many areas of the country. The detection logic for stuck window condition has been modified and replacement of the door Glass Lifters, both outer (lower) Door Weatherstrips, and Window Switches may be necessary depending upon production date.

NOTE

Verify there are no wind or water leaks prior to this procedure to ensure proper alignment. Repairing body/accident damage is NOT applicable to this bulletin. If damage is present, utilize the proper SSTs and procedure for glass alignment before performing the procedure in this bulletin.

Production Change Information

This bulletin applies to vehicles produced WITHIN the applicable VIN ranges shown below.

MODEL	DRIVETRAIN	APPLICABLE	PARTS TO BE REPLACED	
		START	END	PARTS TO BE REPLACED
FR-S	2WD	JF1ZNAA1#D#000001	JF1ZNAA1#D#725114	Window Switches, Outer Door Weatherstrips, Glass Lifters
		JF1ZNAA1#D#725115	JF1ZNAA1#D#725560	Window Switches, Outer Door Weatherstrips
		JF1ZNAA1#D#725561	JF1ZNAA1#D#725982	Outer Door Weatherstrips

* For detailed information on VINs, please reference the <u>2013 VIN Decoder Chart</u> found on the Technical Information System (TIS), under *Reference Information: Technician Group*.



Warranty Information

OP CODE	DESCRIPTION		OFP	T1	T2
EL1320	R & R Driver and Passenger Side Window Switches, Outer Door Weatherstrips, and Glass Lifters	Outer Door Weatherstrips, 3.4			
EL1321	R & R Driver and Passenger Side Window Switches and Outer Door Weatherstrips	2.1		9A	02
EL1313	R & R Driver and Passenger Side Outer Door Weatherstrips	1.8	SU003-04532		

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 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.

Parts Information

NOTE

BEFORE ordering parts, refer to applicable VIN ranges in Production Change Information section for appropriate parts for each vehicle.

PART N	IUMBER	PART NAME	
PREVIOUS	NEW		
SU003-04961		Glass Lifter	4
SU003-02457	SU003-04728	Passenger Side Power Window Switch	
SU003-04628	SU003-04725	Driver Master Switch Assembly	
SU003-04531	SU003-04771	Right Side Door Weatherstrip	
SU003-04532	SU003-04772	Left Side Door Weatherstrip	
SU003-02892		Nut, M6	4



Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY	
Techstream 2.0*		TS2UNIT		
TIS Techstream	ADE	TSPKG1	1	
Techstream Lite		TSLITEDLR01		

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 8.30.023 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Tool, Front Door Glass Adjusting*	<u>09812-18010-01</u>	1
Plastic Pry Tool Kit* (or equivalent)	00002-06020-01	1

NOTE

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

REQUIRED TOOLS & MATERIAL	QUANTITY
Glass Cleaner	As Needed
Wipes (for glass)	As Needed
3M [™] ScotchBlue [™] Painter's Tape (or equivalent)	1
Paint Stick (or equivalent marking tool)	1
3M™ Windo-Weld™ Round Ribbon Sealer (P/N 08620)**	1
Butyl Tape Replacement**	1
Toyota Genuine Adhesive 1344, Three Bond 1344, Loctite [®] 242, or Equivalent (optional for nuts)**	1

* Essential SST.

** Optional.



Repair Procedure

CAUTION

When working around door openings, be aware of sharp sheet metal edges and apply tape if necessary to prevent injury.

Preparation

NOTE

BEFORE performing the procedures in this bulletin, ensure there is no body or door damage that may affect the alignment of the side window glass and cause possible wind and water leaks.

If the window is not properly aligned, perform adjustment according to the Repair Manual.

Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

- 2013 FR-S: Vehicle Exterior – Door/Hatch – "Door/Hatch: Front Door: <u>Adjustment</u>"
- 1. Determine appropriate parts to be replaced based on the applicable VIN range listed in chart below.

MODEL	DRIVETRAIN	APPLICABLI	PARTS TO BE REPLACED	
WODEL		START	END	PARTS TO BE REPLACED
FR-S		JF1ZNAA1#D#000001	JF1ZNAA1#D#725114	Window Switches, Outer Door Weatherstrips, Glass Lifters
	2WD	JF1ZNAA1#D#725115	JF1ZNAA1#D#725560	Window Switches, Outer Door Weatherstrips
		JF1ZNAA1#D#725561	JF1ZNAA1#D#725982	Outer Door Weatherstrips

- 2. Prepare the outside of the driver and passenger side window glass.
 - A. Use an appropriate glass cleaner to remove all contamination and debris from the glass. Ensure side window surfaces are clean and dry before continuing.

Figure 1.



Repair Procedure

Preparation (Continued)

B. Visually inspect any door/body damage or damaged Door Weatherstrips prior to disassembly.

NOTE

- Damage is NOT covered by this bulletin.
- The weatherstrip at the top of the window will not be replaced as part of this bulletin.
- C. Apply 3M[™] ScotchBlue[™] Painter's Tape (or equivalent) to window parallel to outer Door Weatherstrip.
 - Apply tape horizontally to about 1 inch (15 mm) from the rear edge of the passenger and driver side windows and about 1 inch (15 mm) from the front outer Door Weatherstrip, as shown.
 - Apply the tape parallel to the outer Door Weatherstrip as shown in Figures 2 – 6.

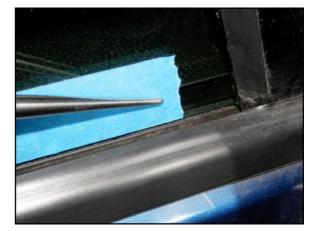
Figure 2.



Figure 3. Example of Tape Applied to Front of Outer Door Weatherstrip



Figure 4. Example of Tape Applied to Rear of Outer Door Weatherstrip



Repair Procedure

Preparation (Continued)

NOTE

- There should be no gap between the outer Door Weatherstrip and tape.
- If the window was not properly aligned prior to this repair, the procedure will not be successful.

Figure 5. No Gap Between Tape and Outer Door Weatherstrip



D. Apply a strip of 3M[™] ScotchBlue[™] Painter's Tape (or equivalent) vertically on the glass, parallel and adjacent to the front weatherstrip. There should be no gap between the weatherstrip and tape.

The tape should extend within 2 inches (or closer) to the top and bottom of the glass. This will aid in aligning the window during installation.

Figure 6. No Gap Between Tape and Outer Door Weatherstrip



3. Remove and replace the applicable parts determined in step 1. Refer to the appropriate section in this bulletin for detailed supplemental information.

NOTE

- It is NOT necessary to remove the fixed window (front) glass. Side glass removal is only required if the Glass Lifters are being replaced.
- When following these steps, before loosening any bolts or nuts on the inside of the door, mark a circle around them with a paint stick (or similar marking device) so the window can be aligned back in the same location.
- These steps require the battery to be disconnected. Note all audio presets prior to proceeding.



Repair Procedure (Continued)

Replacement of Glass Lifters

For replacement of Glass Lifters, remove the window glass assemblies according to Repair Manual instructions. Pay careful attention to the following steps during disassembly and reassembly.

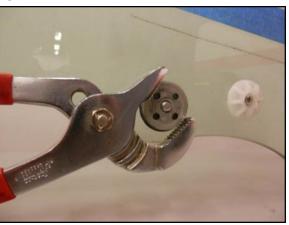
Refer to TIS, applicable model and model year Repair Manual:

- 2013 FR-S: Vehicle Exterior – Door/Hatch – "Door/Hatch: Front Door: Disassembly / Reassembly"
- 1. When removing the door armrest cover, be sure to pry at the lower part of the cover first.
- 2. When removing the front door glass sub-assembly, Figure 7. the nuts and studs may turn freely in the window glass. If this happens, follow the steps below.
 - Use a tool like slip-joint pliers to carefully hold the round stud in the back side of the window close to the door skin. This will prevent the 2 nuts from turning during removal.
 - Wrap the jaws of the pliers in tape to prevent damage to the glass (see Figure 7 for an example of the stud in the back of the window).

NOTICE

In Figure 7, tape has been removed from pliers to show clarity. Be careful NOT to touch the pliers against the glass.

3. After the glass assemblies have been removed. carefully remove the 2 (white) door glass window lifters from the driver and passenger side glass.







Glass Lifter



Repair Procedure

Replacement of Glass Lifters (Continued)

4. Using a ruler as a guide, install the NEW Glass Lifters. Ensure the flat edge at the top of the Glass Lifter is facing the top of the glass and is parallel to the masking tape on the glass as shown below.

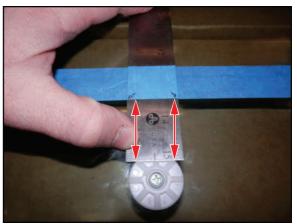
NOTE

- Be sure the flat edge on the Glass Lifter is parallel to the tape applied in earlier steps. If necessary, loosen and realign the Glass Lifter to ensure it is parallel to the tape.
- If new nuts are not available to install the window to the regulator, use Toyota Genuine Adhesive 1344, Three Bond 1344, Loctite[®] 242, or equivalent, to reinstall the nuts.

Figure 9. Edge of Ruler Against Flat Side of Glass Lifter



Figure 10. Edge of Ruler Parallel to Tape



5. When reinstalling the side windows, ensure all paint marks around the bolts and nuts are still in the original position.



Repair Procedure (Continued)

Replacement of Door Weatherstrips

For replacement of outer Door Weatherstrips, follow Repair Manual instructions. Pay careful attention to the following steps during disassembly and reassembly.

Refer to TIS, applicable model and model year Repair Manual:

• 2013 FR-S: Vehicle Exterior – Door/Hatch – "Door/Hatch: Front Door: Disassembly / Reassembly"

NOTE

It is NOT necessary to remove the fixed window. If only the outer Door Weatherstrips or Master Switches are being replaced, the side window glass does not need to be removed. Merely lower the glass to the lowest position after removing the door panels to gain access to the bolt for the outer Door Weatherstrip.

- 1. Ensure the bolt holding the outer Door Weatherstrip is removed.
- 2. Disengage the clip holding the weatherstrip.
 - A. At the front of the door is a hole where the clip is engaged. Use a plastic pry tool to gently pry out and up on the weatherstrip in this location at the front of the door. This will allow the clip in the weatherstrip to disengage.
 - B. After disengaging the clip, lift up on the outer Door Weatherstrip starting where the bolt is.

Figure 11. Hole for Clip in Outer Door Weatherstrip at Front of Door



Figure 12.



- 3. Verify the tape applied to the windows is still parallel to the outer Door Weatherstrips indicating original glass alignment. Verify that the outer Door Weatherstrips are installed correctly.
- 4. If the tape is not parallel to the outer Door Weatherstrip, be sure the weatherstrip is fully seated by applying firm pressure downward on it.



Repair Procedure

Replacement of Door Weatherstrips (Continued)

- 5. The bolt for the outer Door Weatherstrip at the rear of the door should be loose when seating the weatherstrip.
- 6. Gently apply a small amount of force and pull up on the outer Door Weatherstrip slightly to ensure it is properly seated and not loose.

Replacement of Window Switches

For replacement of driver's Master Switch and/or passenger Window Switches, follow Repair Manual instructions. Pay careful attention to the following steps during disassembly and reassembly.

Refer to TIS, applicable model and model year Repair Manual:

• 2013 FR-S: Vehicle Exterior – Door/Hatch – "Door/Hatch: Front Door: Disassembly / Reassembly"

When removing the switches from the armrest base panel (bezel), there are 2 tabs on each side of the switch that will require removal from the armrest base panel slot (see Figure 13).

NOTICE

Be careful NOT to damage the armrest base panel (switch bezel) by applying too much force to it.



Figure 13.





Repair Procedure (Continued)

Window Alignment

Using the SST as instructed in the Repair Manual, ensure the driver and passenger side window measurements are within specifications.

SST: 09812-18010-01

NOTE

If previous steps were followed closely, the glass should be returned to the original position and additional adjustment should not be necessary.

If measurements are not within specifications, diagnose the cause (for example, ensure accident body damage is repaired, recheck bolt/nut markings and tape position), then correct and proceed.

If adjustment is needed, refer to TIS, applicable model and model year Repair Manual:

 2013 FR-S: Vehicle Exterior – Door/Hatch – "Door/Hatch: Front Door: <u>Adjustment</u>"

Final Reassembly

During final reassembly, ensure all tape is removed and follow Repair Manual instructions for installing the door panels.

NOTE

If the front door service hole cover butyl tape was removed and damaged, replace with 3M[™] Windo-Weld[™] Round Ribbon Sealer (3M[™] P/N 08620), or equivalent, to replace damaged parts of the tape.

- 1. Reinitialize windows and other affected electrical systems, and reset audio presets.
- 2. Verify window moves up and down appropriately, and window "Auto" function is restored. If it is not, follow the Repair Manual to diagnose any DTCs that may be present.
- 3. Clear all DTCs.
- 4. Verify all windows are clean and free from fingerprints.