# IMPORTANT UPDATE

# TECHNICAL INSTRUCTIONS

# **FOR**

# SAFETY RECALL GOP

# FRONT PASSENGER AIRBAG INFLATOR MODULE

# CERTAIN 2009 –2013 MODEL YEAR MATRIX

**Updated 4-18-18** 

#### Update 4-18-18

The parts section has been updated

#### Update 1-9-18

- Added 2013 MY

#### Update 8-31-17

- Update to include additional parts options.
- Added 2011 and 2012 MY
- Updated the Technician Certification requirement description.

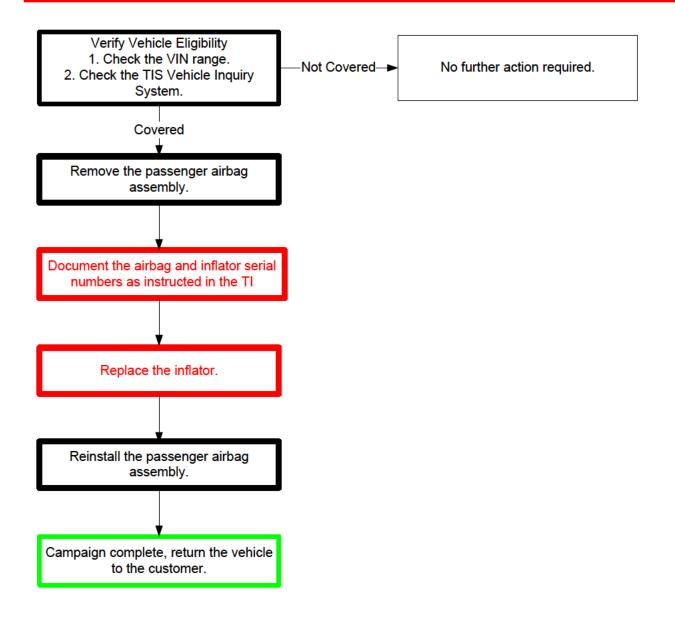
The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to currently hold at least one of the following certification levels

- · Toyota Expert (Electrical)
- Master
- Master Diagnostic Technicians

Always check which technicians can perform the recall remedy by logging on to <a href="https://www.uotdealerreports.com">https://www.uotdealerreports.com</a>. It is the dealership's responsibility to select technicians with the above certification level or greater to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

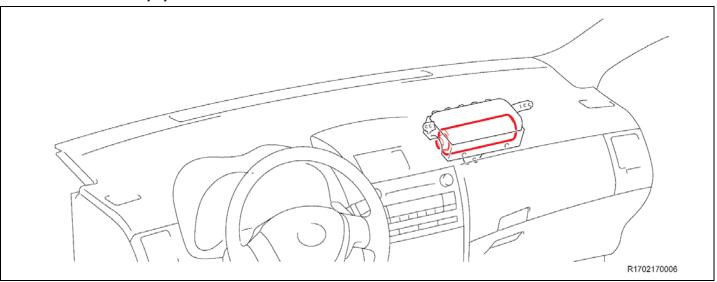
# I. OPERATION FLOW CHART

The flow chart is for reference only. *DO NOT* use it in place of the full technical instructions. Follow *ALL* steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



# II. BACKGROUND

The subject vehicles are equipped with front passenger airbag inflators produced by Takata. The propellant in these inflators may degrade after prolonged exposure to high absolute humidity and fluctuating high temperatures. Degraded propellant can cause inflator rupture during airbag deployment. In the event of an inflator rupture, metal fragments could pass through the airbag cushion material, striking the vehicle occupants, and result in serious injury or death.



# **III. IDENTIFICATION OF AFFECTED VEHICLES**

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

# IV. PREPARATION

# A. PARTS

Part Number	r	Part Description		Quantity
04007-06512	2	Instrument Panel Airbag In	flator Kit*	1
	*The	kit above includes the following	parts.	
		Inflator	1	
		Self Locking Nut	5	
F	Position D	etermining Plate (discard this plate)	1	
Dort Number	. 1	Part Description	1	Quantity
Part Number		Part Description		Quantity
04006-66108		A-Pillar Garnish Clip h (Vehicles with Side Curtai Airbag Only)		1
	* The	kit above includes the following	g parts.	
		Front Pillar Garnish Clip	2	
Part Number	•	Part Description		Quantity
04007-15112		Bracket Kit Matrix On	ly*	1
This bra	acket is	required to mount the inflat	or to the air	bag
	* The	kit above includes the following	parts.	_
-		Position Determining Plate	1	
-		Felt (discard felt)	1	

# OR

Part Number	Part Description	Quantity
04007-27112	Instrument Panel Airbag Inflator Kit	1
04006-66108	A-Pillar Garnish Clip Kit (Vehicles with Side Curtain Shield Airbag Only)	1

# Non-Desiccated Part Recovery

Dealers should <u>discontinue the installation</u> of the non-desiccated parts listed below for recall, customer pay repairs AND over-the-counter sales (if applicable).

Model	Model Year	Part Number	Part Description
Matrix	2009-2013	73970-02090	AIR BAG ASSY, INSTR PNL PASS

Toyota requires all dealers to return any parts listed above that still remain in dealer inventory by utilizing the Hazmat Part Return Program available. Dealers will be issued a refund for all part returns. This part return program is outlined in *PANT Bulletin 2014-042*.

# Important Note:

In order to return the inflator, packages must **NOT** be opened/tampered with.

# **B. TOOLS & EQUIPMENT**

Standard hand tools

Torque wrench

• Techstream • Molding remover set

**D0F CAMPAIGN TOOLS** – These tools where previously provided to the dealership for campaign D0F. These tools are required when performing this repair.

Image	Name	Quantity
Mounting Bracket  Support Bars  Airbag Mounting Support Bar Hardware	Airbag Mounting Bracket & hardware	1
	Adaptor set*	1

<sup>\*</sup>The adapter set was sent to dealers at the start of this campaign.

**SST** –These are essential service tools that the dealership should have.

Part Number	Part Name	Quantity
09950-50013	Puller C Set *	1
	* The set above includes the following tools.	
Part Number	Part Name	Quantity
09951-05010	Hanger 150	1
09952-05010	Slide Arm	2
09953-05020	Center Bolt 150	1
09954-05070	Claw No. 7	2

**OPTIONAL SST** – This is an essential special service tool that the dealership should have. However, this tool is not mandatory when performing this repair.

Part Number	Part Name	Quantity
09890-47010-01	Anti-Static Mat Set	1

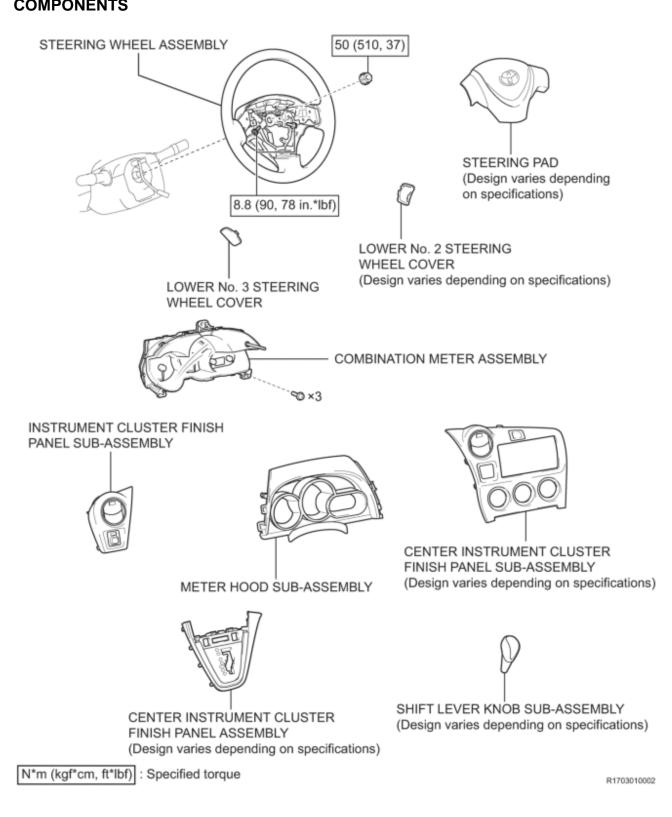
**F0J CAMPAIGN TOOLS** – This tool was provided to the dealership for campaign F0J and will be used for this campaign also. This tool is required when performing this repair.

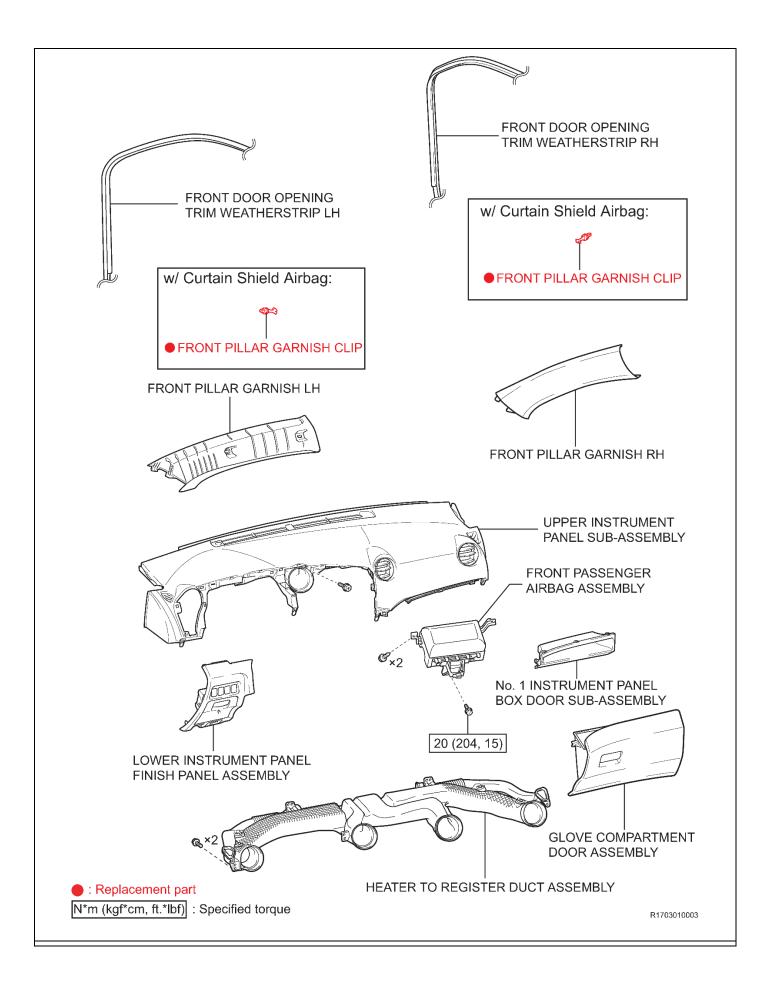
NOTE: The scanner for F0J must be used, because it has the capability to scan bar and QR codes.

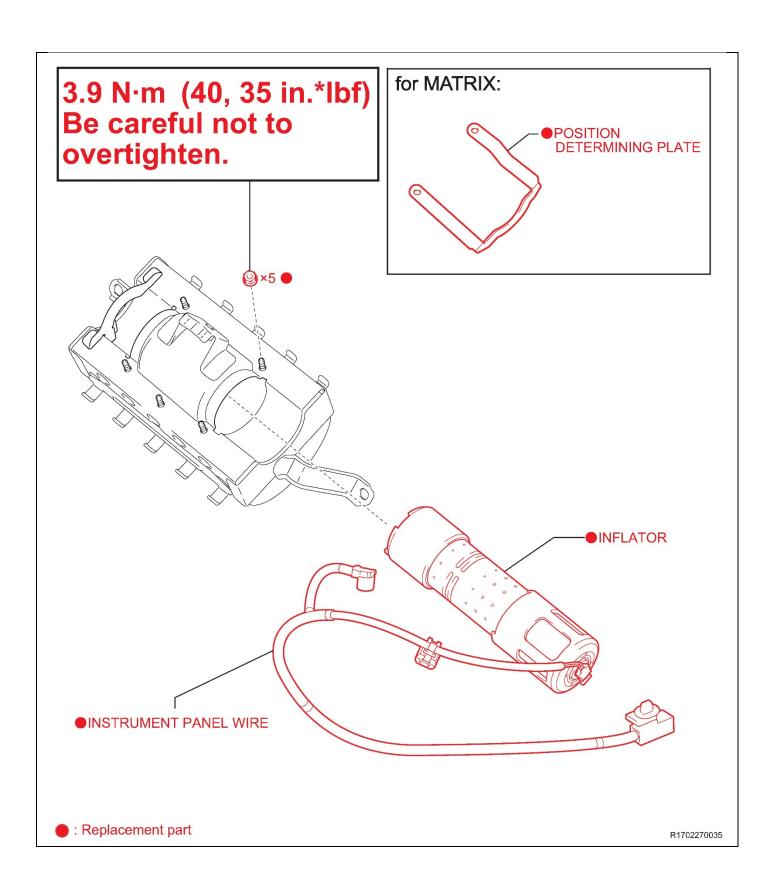
Image	Name	Quantity
	Barcode Scanner	1

NOTE: This tool *CANNOT* be ordered through the parts or tools system. If additional tools are needed, they can be sourced locally.

# V. COMPONENTS







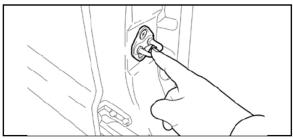
# VI. SAFETY PRECAUTIONS



# CRITICAL INFORMATION - READ THOROUGHLY



Failure to follow these procedures correctly could cause the SRS to unexpectedly deploy during servicing or the SRS may fail to operate correctly when required after reassembly. Confirm all work is performed as described in these instructions.



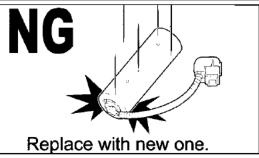
#### 1. ELIMINATE STATIC ELECTRICITY

 Before starting work and periodically while working on the vehicle, touch a metallic part of the vehicle to discharge static electricity in the body.



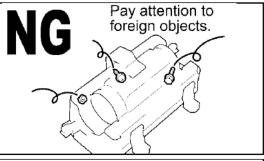
#### 2. DO NOT MEASURE RESISTANCE

 a) DO NOT measure resistance of airbag components, this may cause accidental activation.



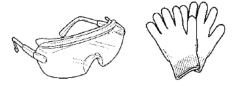
#### 3. HANDLE THE AIRBAG CAREFULLY

a) If an inflator is dropped, replace it with a NEW inflator.



#### 4. DO NOT ALLOW FOREIGN OBJECTS NEAR AIRBAG

- a) Be sure to collect and account for all removed nuts/bolts to prevent them from landing in the airbag assembly.
- b) Any foreign objects in the airbag assembly may cause damage or injury if the airbag is activated.

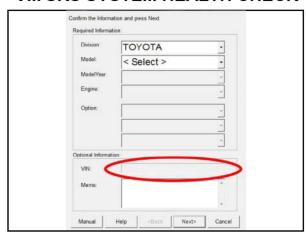


# Wear protective eye wear and work gloves.

# 5. WEAR PROTECTIVE EQUIPMENT

a) Always wear appropriate protective equipment when working on the SRS.

# VII. SRS SYSTEM HEALTH CHECK



#### 1. PERFORM A HEALTH CHECK

- a) Confirm the Techstream is connected to the dealership's internet.
- b) When launching the Techstream software the VIN MAY NEED to be entered manually depending upon model year.

NOTE: All letters of the VIN *MUST* be entered in ALL CAPS, or the VIN will need to be reentered when running the diagnostic report.

c) Perform a health check.



- The VIN MAY NEED to be entered manually in ALL CAPS when launching the Techstream software, the VIN MAY OR MAY NOT auto-populate due to model year.
- The serial number recording application will be disabled and the repair cannot be completed if a health check and diagnostic report is not performed and recorded by TMS.

# VIII. WORK AREA PREPARATION



# CRITICAL INFORMATION - READ THOROUGHLY



The anti-static mat set that is an essential SST may be available at your dealership and is optional to use during inflator replacement. If the anti-static kit is not available, before starting work and periodically while working on the vehicle, touch a metallic part of the vehicle to discharge static electricity in the body.



If the anti-static kit is not available, before starting work and periodically while working on the vehicle, touch a metallic part of the vehicle to discharge static electricity in the body.

#### IX. PASSENGER AIRBAG INFLATOR REPLACEMENT

#### 1. REMOVE THE AIRBAG ASSEMBLY



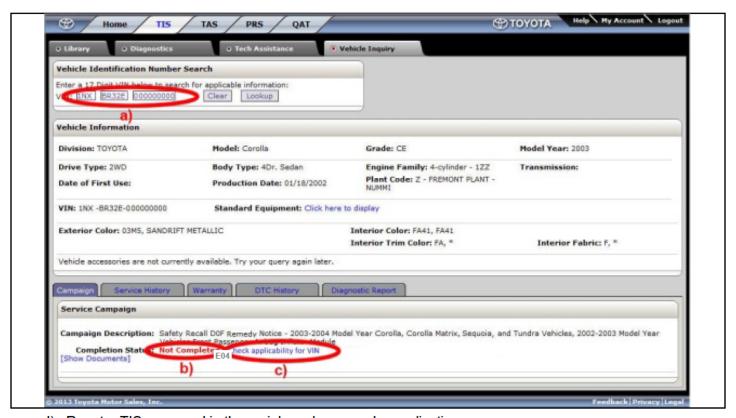
- Wait at least 90 seconds after disconnecting the cable from the negative battery terminal to prevent airbag and seat belt pre-tensioner deployment.
- Follow all precautions as outlined on TIS before servicing the SRS system.
- Refer to TIS for instructions on airbag removal:

<u>2009 MY</u> <u>2010 MY</u> <u>2011 MY</u> <u>2012 MY</u> <u>2013 MY</u>

#### 2. LAUNCH THE SERIAL NUMBER RECORDING APPLICATION

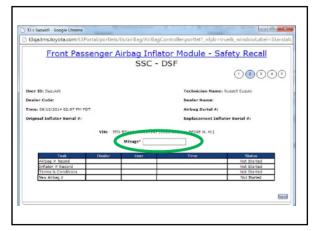


- The AIRBAG ASSEMBLY, ORIGINAL INFLATOR, and NEW INFLATOR serial numbers MUST be recorded using the barcode scanner (provided at the launch of SSC F0J).
- The barcode scanner application MUST be completed on every vehicle. These numbers MUST be included on every warranty claim that is submitted for inflator module replacement or the claim may be subject to debit.
- The technician performing the work MUST have valid TIS login credentials and an internet connection to perform the inspection and scanning process.
- a) Log in to TIS and input the VIN of the vehicle in the Vehicle Inquiry tab.
- b) Confirm the VIN is applicable and that the campaign has not been completed.
- c) Click on the link to launch the serial number recording application.



Reenter TIS password in the serial number recorder application.

NOTE: The person logged-in to TIS MUST be the person performing the repair.



e) Record the vehicle mileage into the serial number recording application.

#### NOTE:

- A task status screen will populate next and at other intervals during the repair. This screen will indicate if the inflator was replaced or in some limited cases that the entire airbag assembly was replaced. Click 'next' to proceed to the next step. This information will be used for record keeping by TMS.
- If this screen indicates that the inflator has already been replaced on this VIN, there is no need to perform the campaign again.

#### 3. CONNECT THE BARCODE SCANNER

- a) Connect the barcode scanner to the USB port on the Techstream.
- The scanner will automatically connect and a beep will be heard when the scanner is ready.

#### NOTE:

- Use the scanner that was provided for SSC F0J. The scanner for F0J is needed due to its ability to read bar and QR codes.
- · The scanner works best in low light conditions.
- Always hold the scanner directly in front of and parallel to the barcode label.

#### 4. SCAN THE AIRBAG SERIAL NUMBER

- a) Scan the AIRBAG ASSEMBLY serial number 2 times.
  - Confirm the cursor is in the first serial number box then scan the serial.
  - 2) Position the cursor in the second serial number box then scan the serial.
- b) Click next.

#### NOTE:

- If both serial numbers that are entered do not match, confirm and reenter.
- If the serial number barcode will not scan, it can be entered manually.

# AIRBAG SERIAL NUMBER IDENTIFICATION

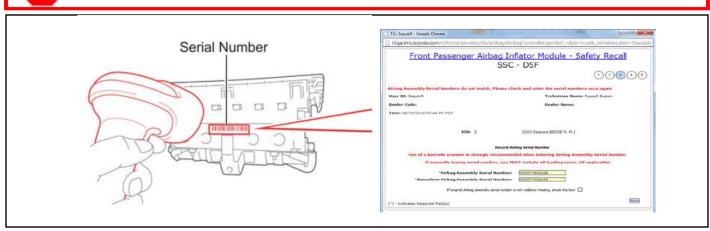
- The airbag serial number is *ALWAYS* the 12 *DIGITS* located between the asterisks.
- The 3 digits before the asterisk ARE NOT part of the serial number, and SHOULD NOT be entered or an inaccurate response may be returned.

**Airbag Serial Number Label Example** 





The AIRBAG ASSEMBLY serial number and the INFLATOR serial number are DIFFERENT. The AIRBAG ASSEMBLY serial number MUST be recorded prior to replacement.



# AIRBAG SERIAL NUMBER IS MISSING OR IS UNREADABLE



If the airbag serial number and barcode are not legible or are not present, check the box in the application indicating the serial number is not legible and contact your regional representative.

Front Passenger A	<u>irbag Inflator Module - Safety Recall</u>
	SSC - DSF
	1200
User ID: SuzukiR	Technician Name: Russell Suzuki
Dealer Code:	Dealer Name:
Time: 06/12/2014 03:43 PM PDT	
VIN: 1N	X BR32E 00000000 (2003 Corolla, Beige)
	Record Airbag Serial Number
Use of a barcode scanner is strong	gly recommended when entering Airbag Assembly Serial Number.
If manually typing serial o	number, you MUST include all leading zeros. (If applicable)
*Airbag Assembly S	erial Number;
*Reconfirm Airbag Assembly S	erial Number:
If original Airbag Assembly	serial number is not visible or missing, check this box 🗷
Please	e contact Region for further information
*) - Indicates Required Field(s)	Basis Next

# Front Passenger Airbag Inflator Module - Safety Recall SSC - DSF

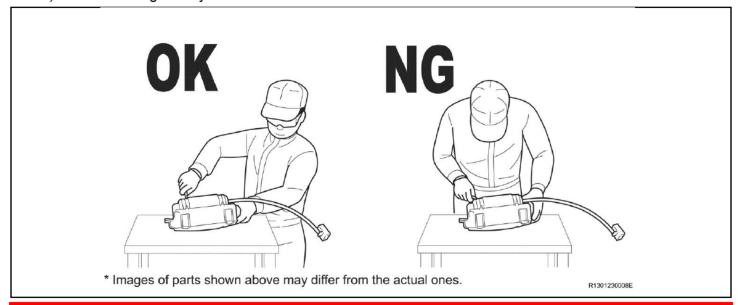


STOP

The new AIRBAG ASSEMBLY serial number MUST be recorded prior to reinstallation to track the airbag assembly to the vehicle.

#### 1. WORKING WITH AN AIRBAG

- a) Carefully place the airbag on the bench inflator side up.
  - NOTE: Place clean sheet(s) of paper on the bench to protect the airbag.
- b) Avoid standing directly over the inflator.

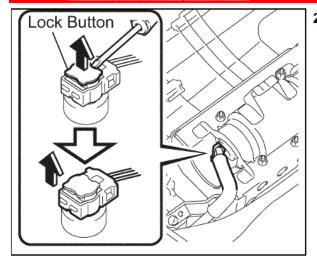




# **CRITICAL INFORMATION – READ THOROUGHLY**



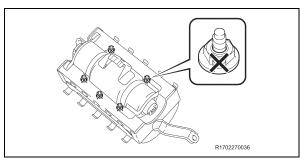
Remember to periodically touch a metallic part of the vehicle to discharge static electricity in the body if the anti-static kit is not being used.



#### 2. AIRBAG PREPARATION

- a) Use a screwdriver to release the lock button.
- b) Disconnect the connector.
- c) Disconnect the wire harness clamps.

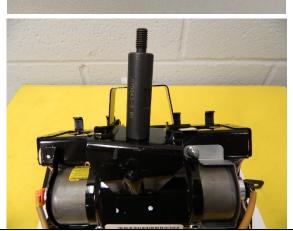
NOTE: Disconnect the connector where the fixed stop plate is located.



d) Mark all 5 nuts so they will not be reused.



e) Use the long adaptor shown.



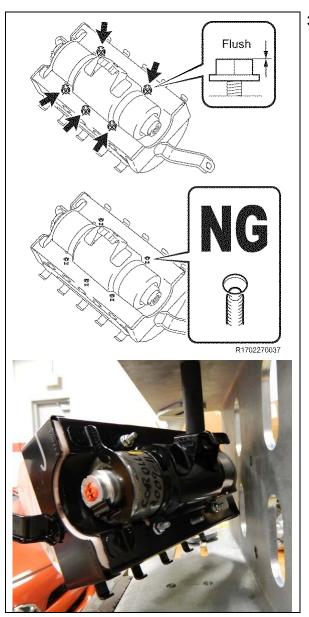
Thread the adaptor into the airbag as shown.

Note: Use the same mounting nut on the airbag that attaches the airbag to the vehicles cross tube.



g) Mount the airbag into the mounting bracket as shown. Pass the stud on the adaptor through the hole in the middle of the bracket with the nut.

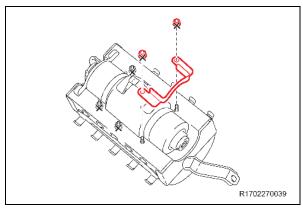




# 3. REMOVE THE SELF LOCKING NUTS

a) Loosen the 5 nuts until the nuts are at the top of the studs as shown, through the openings in the mounting bracket.

Note: The airbag may need to be turned to the left or right to access the center nut.



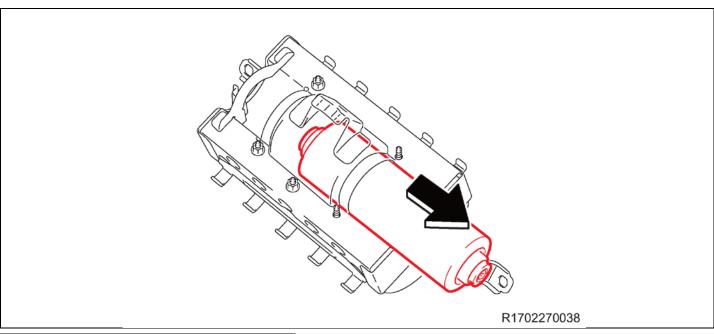
- b) Remove the 2 nuts on the end where the bracket is removable.
- c) Remove the bracket and discard.
- d) Reinstall the 2 nuts, until the nut is flush with the top of the stud.

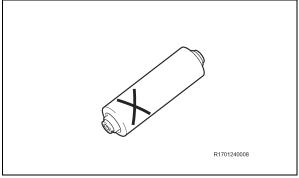
#### NOTE:

• DO NOT use power tools.

# 4. REMOVE THE INFLATOR

a) Gently push in the studs until the nuts make contact with the housing to loosen the inflator for removal.





- b) Remove the inflator from the airbag assembly and place it on a safe work surface.
- c) Mark the old inflator so it is not reused.

#### 5. SCAN THE OLD AND NEW INFLATOR SERIAL NUMBER

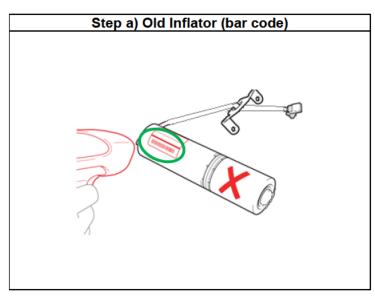
- a) Scan the OLD inflator bar code.
- b) Scan the **NEW** inflator QR code.

#### NOTE: This information is CRITICAL

- It is recorded by TMS to trace the return parts shipment.
- It is used to track the new inflator that is being installed on the vehicle.



Discard the positioning determination plate included with the new inflator. It is for Corolla only. The Matrix requires an additional bracket kit see the parts section for details

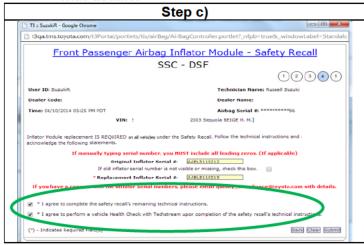




- c) Confirm agreement by checking the two boxes.
- d) Record the Warranty Authorization # to be included in the warranty claim.
- e) Place the old inflator in the parts box and return it immediately to the parts department.

#### NOTE:

- Confirm the cursor is in the correct serial number input box before scanning.
- If the serial number barcode will not scan, it can be entered manually.
- If there are any difficulties or concerns with this process, email quality\_compliance@toyota.com with details.



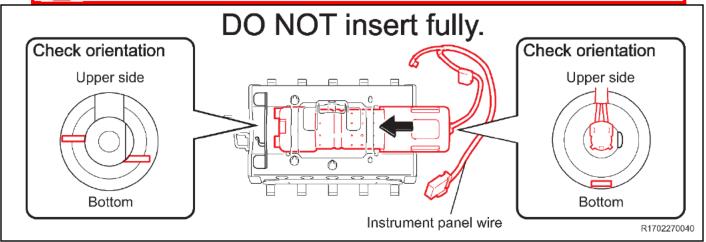


#### 6. INSTALL THE NEW INFLATOR

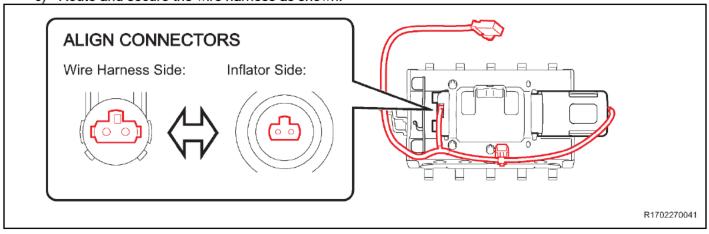
a) Carefully slide the new inflator into the airbag assembly and align as shown.



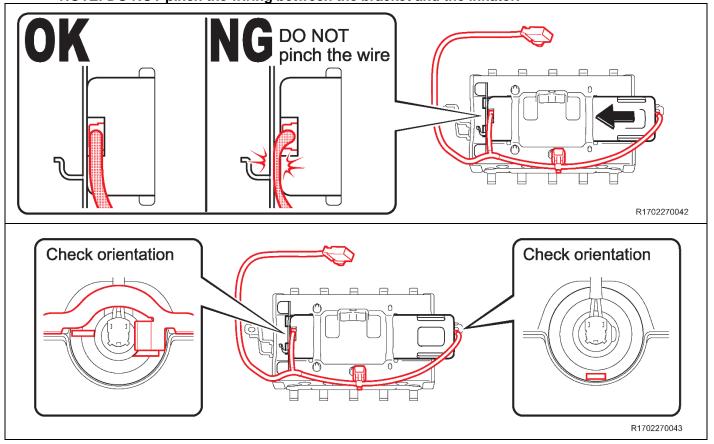
**DO NOT** connect the inflator harness at this time. It is **CRITICAL** to first confirm that the inflator is installed in the correct position before connecting the harness.

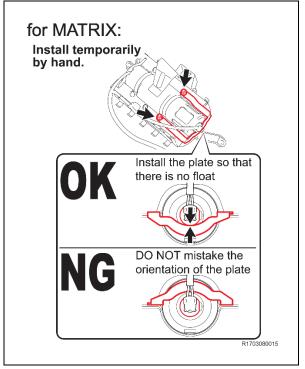


- b) Connect the connector to the inflator and ensure that the connector lock is fully engaged as shown.
- c) Route and secure the wire harness as shown.



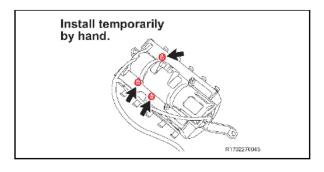
d) Fully insert the inflator and ensure that the inflator is correctly orented as shown. NOTE: DO NOT pinch the wiring between the bracket and the inflator.





- e) Install the **NEW** stopper plate.
- f) Install 2 **NEW** nuts by hand.

NOTE: Ensure that the stopper plate is the one from the bracket kit and installed in the correct orientation.



- g) Remove the 3 remaining nuts and install the 3 **NEW** nuts
- h) Loosely tighten the nuts by hand. They will be torqued on a later step.

NOTE: You may need to turn the airbag to the left or right to access the center nut.

i) Push the inflator towards the position determining plate and eliminate any gaps.



If any gaps exist, the flats may move apart and could result in abnormal operation during airbag deployment.

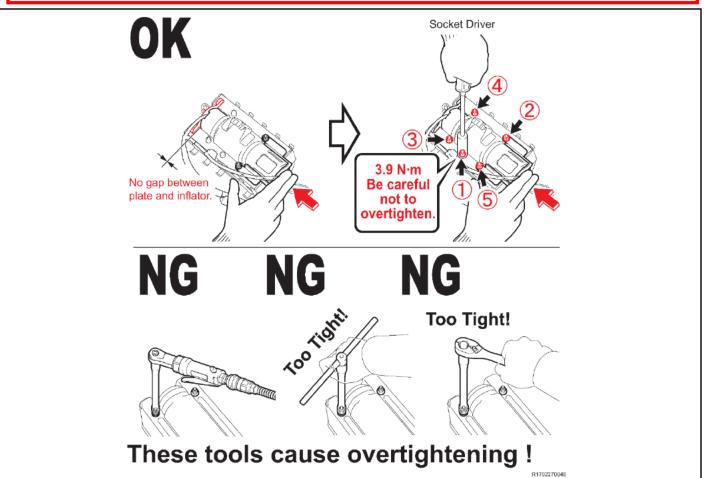
#### 7. TORQUE THE PLATE NUTS

a) Tighten the 5 nuts evenly in several increments in the sequence shown. Use a socket driver or torque wrench to tighten the nuts.

Torque: 35in. lbf (3.9N·m)



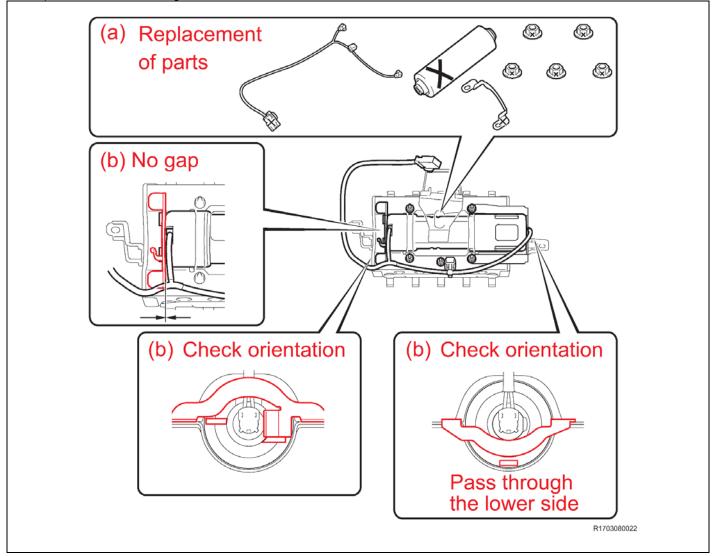
- There will be some resistance when tightening the nuts because they are self-locking, confirm the nuts are tightened correctly.
- DO NOT use a power tool, T-handle, or ratchet when tightening the nuts to avoid over torqueing and deforming the studs.
- You may need to turn the airbag to the left or right with in the mounting bracket to access the center nut.



b) Remove the airbag from the bracket and remove the adaptor.

# 8. INSPECT THE AIRBAG BEFORE INSTALLATION

- a) Confirm the **NEW** inflator and 5 **NEW** nuts have been installed.
- b) Confirm the position of the inflator and position determining plates are correct.
- c) Confirm the routing of the inflator wire harness.



#### XI FRONT PASSENGER AIRBAG ASSEMBLY INSTALLATION

- 1. REINSTALL THE AIRBAG ASSEMBLY
- a) Refer to TIS for instructions on airbag installation:

2009 MY 2010 MY 2011 MY 2012 MY 2013 MY

- 2. RECONNECT THE NEGATIVE BATTERY CABLE
- 3. PREFORM ANY NEEDED VEHICLE INITIALIZATIONS
- 4. PERFORM A HEALTH CHECK AND DIAGNOSTIC REPORT

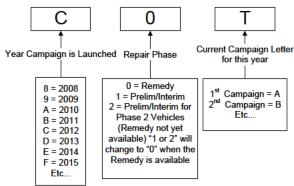
# ■ VERIFY REPAIR QUALITY ▶

- Confirm all precautions are follow to ensure safety during the repair
- Confirm the entire serial number checker application is completed and the warranty authorization # is recorded on EVERY vehicle
- Confirm the old inflator is handled safely and given to the appropriate parts professional for shipment
- Confirm the inflator harness connector is fully engaged and that the stopper plate and position determining plate are installed correctly

If you have any questions regarding this update, please contact your regional representative.

#### XII APPENDIX

#### A. CAMPAIGN DESIGNATION DECODER



#### B. CAMPAIGN PARTS DISPOSAL

**ALL** inflators that are removed from vehicles under this campaign **MUST** be packaged and shipped back to the inflator manufacturer following the manufacturer's instructions. The instructions can be found in the following locations:

· Attached to the dealer letter