# **IMPORTANT UPDATE**

# **TECHNICAL INSTRUCTIONS**

## FOR

## **SAFETY RECALL DSF and E04**

(Note: These technical instructions may be used on any vehicle covered under DSF or E04)

# FRONT PASSENGER AIRBAG INFLATOR MODULE

# **CERTAIN 2003 – 2006 MODEL YEAR TUNDRA**

# Updated 7-25-17

#### Update 7-25-17

#### - Removed Non-Desiccated Inflator Part Numbers

#### Update 2-9-17

Part number update for 2003 – 2004 MY.

#### Update 8-8-16

- Additional part number added for the 2005 – 2006 MY vehicles.

#### Update 11-12-15

- The TI has been updated to include recall DSF.

#### Update 6-15-15

- The Corolla now has its own instructions and the parts section has been updated.

#### Update 5-12-15

- E04 has been expanded to include 2005 and 2006 MY Tundra vehicles.
- The airbag/inflator scanning application screen shots have been updated.

#### Update 2-24-15

DISCONTINUED: Passenger Airbag disablement has been discontinued.

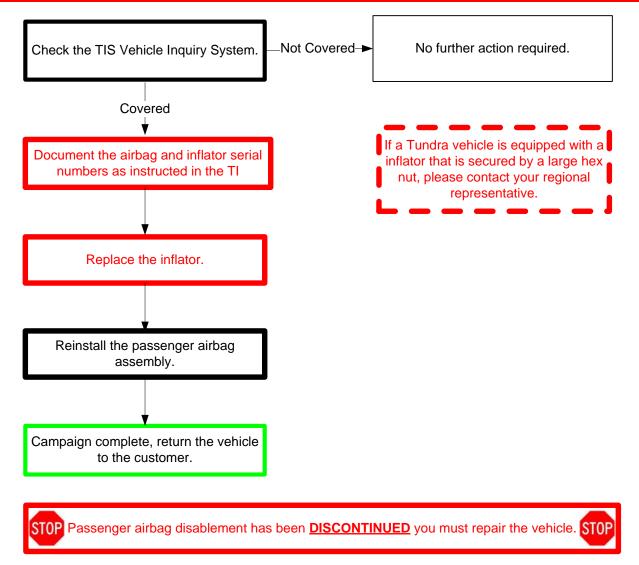
All dealership associates involved in the recall process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to have successfully completed E-Learning course SC13B, in addition to SC13A, and currently hold <u>at least one</u> of the following certifications levels:

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

NOTE: The videos in this document were created for D0F/DSF, but are used in this document to help supplement the technical instructions.

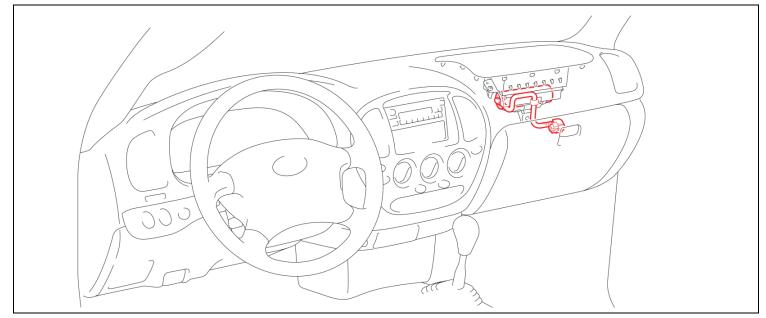
## I. OPERATION FLOW CHART

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 assemblies. When located in areas with consistently high absolute humidity, the front passenger airbag inflator could be susceptible to rupture in a crash. An inflator rupture may result in metal fragments striking and potentially seriously injuring the vehicle occupants. The cause of the potential ruptured inflators and influence of high absolute humidity are under investigation.



## **III. IDENTIFICATION OF AFFECTED VEHICLES**

#### A. INVOLVED 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



Only one inflator is required per vehicle, ensure you pick the correct part number for your location and model year so that the correct return shipping information is included.

Part Number	Part Description					
04006-0490C	2003-2004 MY, Instrument Panel Airbag Inflator Kit*					
	*The kit above includes the following p	oarts.				
]	Inflator	1				
-	Self Locking Nut	4				
[	Electro Tap	1				
Part Number	Part Description	Quantity				
04006-0620C	2005-2006 MY, Instrument Panel Airba	1				
	*The kit above includes the following p	oarts.				
]	Inflator	1				
-	Self Locking Nut	4				
	Electro Tap	1				

Part Number	Part Description (					
04006-0490C	2002-2004 MY, Instrument Panel Airb	ag Inflator Kit*	1			
	*The kit above includes the following	parts.				
Γ	Inflator	1				
	Self Locking Nut	4				
	Electro Tap	1				
Part Number	Part Description		Quantity			
04006-0620C	2005-2006 MY, Instrument Panel Airb	bag Inflator Kit*	1			
	*The kit above includes the following	parts.				
Γ	Inflator	1				
	Self Locking Nut	4				
	Electro Tap	1				

#### A. TOOLS & EQUIPMENT

- Standard hand tools
- Molding remover set
- Torque wrench

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- Electrical Tape
- Techstream
- Zip Tie

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

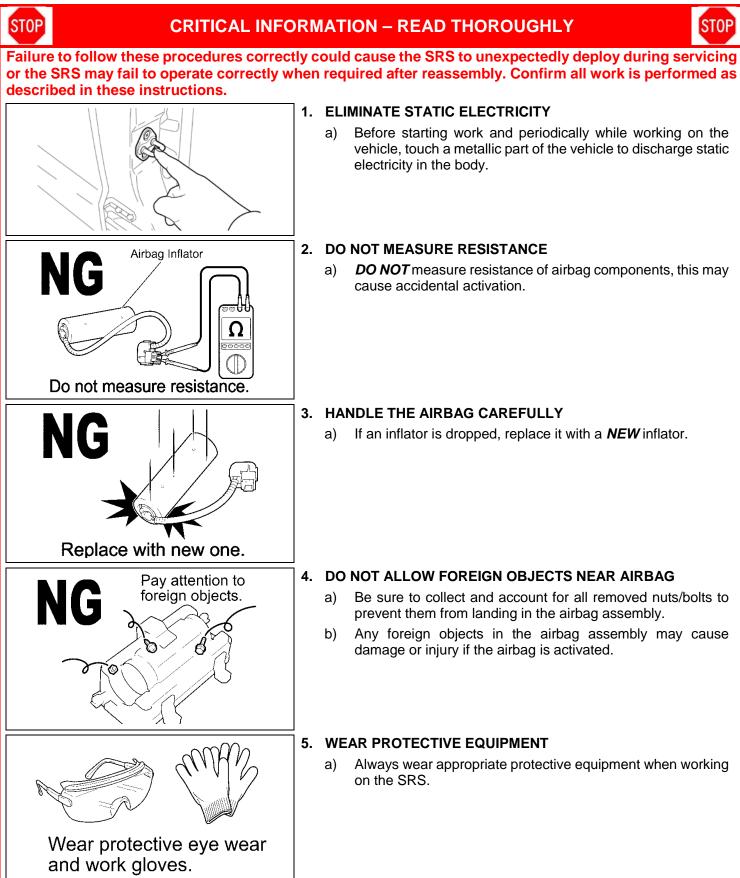
Part Number	Part Name	Quantity
09890-47010-01	Anti-Static Mat Set	1

**E04 CAMPAIGN TOOLS** – These tools where previously provided to the dealership for campaign D0F and will be used for campaign E04. These tools are required when performing this repair.

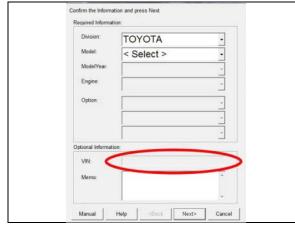
Image	Name	Quantity
Mounting Bracket Or Construction Or Construction Airbag Mounting Hardware	Airbag Mounting Bracket & hardware	1
	Barcode Scanner	1

NOTE: These tools *CANNOT* be ordered through the parts or tools system. There is a very limited supply of tools, but if additional tools are needed, contact your regional representative.

## **V. SAFETY PRECAUTIONS**



## VI. 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 **MUST** be entered manually.

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.

Note: The VIN may auto populate on the later model year vehicles, if this happens DO NOT change the VIN.

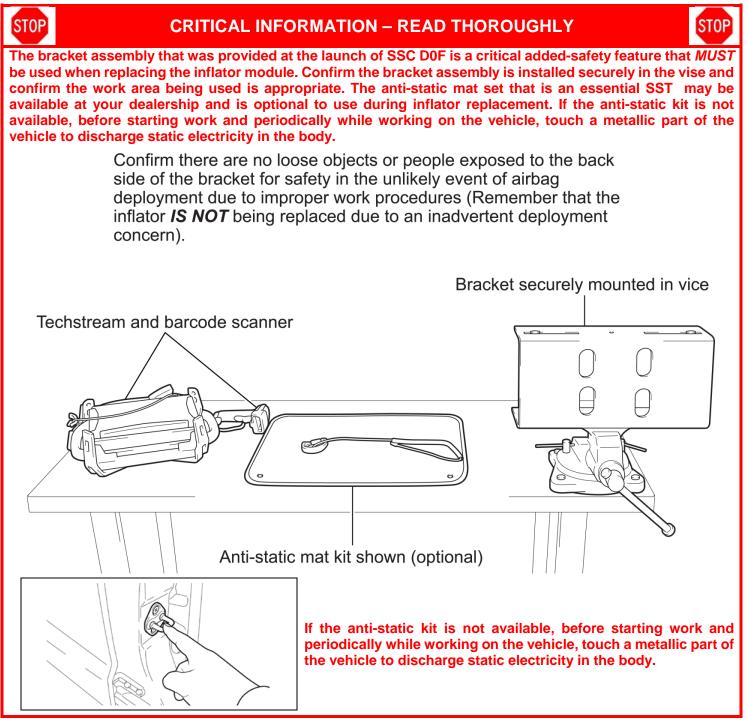
#### 2. RUN A DIAGNOSTIC REPORT

a) After the health check has completed, run a diagnostic report by clicking on the link on the health check screen.

	Monitor Status	DTC	Curr	r Pend	<u>Hist</u>	Perm	SB	Calibration	Update	Ŷ	-		N was not entered in ALL CAPS when
+			]	<u> </u>	<u> </u>								is launched, an error will be displayed a prompt to reenter the VIN
			-	+			=			_	anu ur		e a prompt to reenter the vity
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							$\square$					Error Inpu	utting
+			—	-									
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-			+	+	-	$\square$	1			-1		-	Please re-enter VIN.
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R	Report												
		The									 s.0		ADO I a low shine the Techetroom
													APS when launching the Techstream or to the 2006 MY.
													performed within the last 36 hours and
T(	)P												healthcheck will not be recognized by
		TMS.											

• The serial number checker application will be disabled and the inspection cannot be completed if a health check and diagnostic report is not performed and recorded by TMS.

## **VII. WORK AREA PREPARATION**



## VIII. FRONT PASSENGER AIRBAG ASSEMBLY REMOVAL

## 1. DISCONNECT THE NEGATIVE BATTERY CABLE

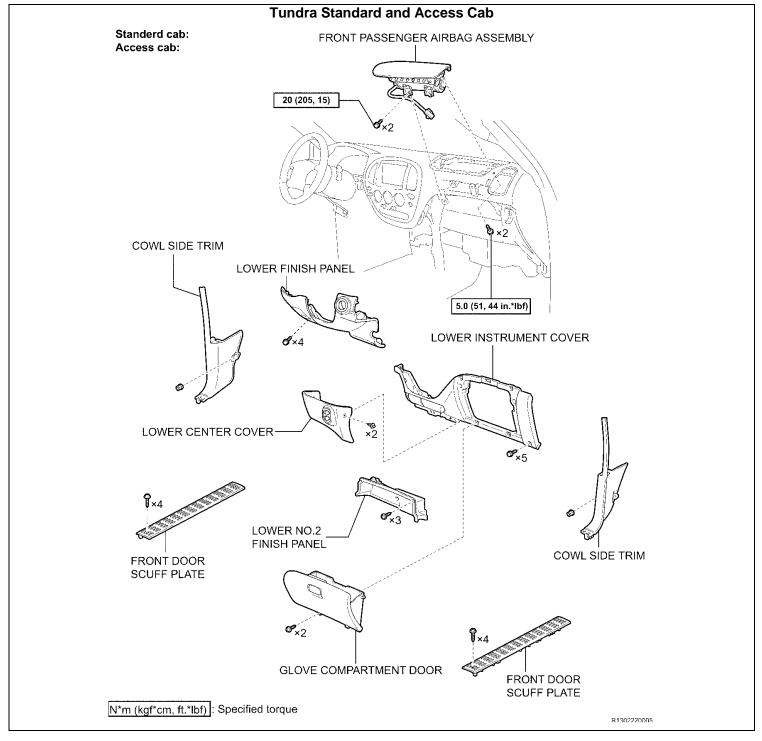


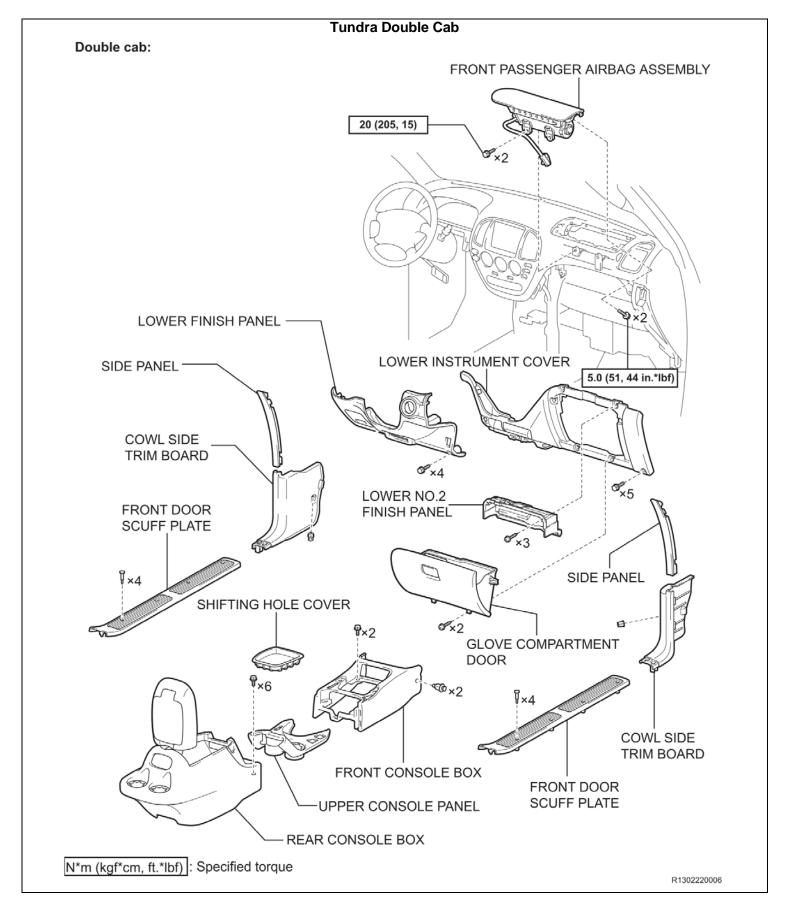
Wait at least 90 seconds after disconnecting the cable from the negative battery terminal to prevent airbag and seat belt pre-tensioner deployment.

Follow all precautions as outlined on TIS before servicing the SRS system.

#### 2. REMOVE THE PASSENGER AIRBAG ASSEMBLY

a) Refer to TIS for instructions on airbag removal: 2002-2005MY 2006MY





#### 3. LAUNCH THE SERIAL NUMBER RECORDING APPLICATION Video Supplement: Serial Number Recording

Note: The Serial Number Recording Application for E04 is the same application used for DSF.

- The AIRBAG ASSEMBLY, ORIGNAL INFLATOR, and NEW INFLATOR serial numbers MUST be recorded using the barcode scanner (provided at the launch of SSC D0F).
- 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.
- d) Reenter TIS password in the serial number recording application.

#### NOTE: The person logged-in to TIS <u>MUST</u> be the person performing the repair.

	senger A	<u>irbag Infla</u>	tor Module - S	<u>Safety Recall</u>				
		SSC -	DSF					
				12345				
				00000				
ser ID: SuzukiR			Technician Nar	ne: Russell Suzuki				
ealer Code:			Dealer Name:					
ime: 06/10/2014 02:07 PM P	DT		Airbag Serial #:					
riginal Inflator Serial #:		Replacement Inflator Serial #:						
	VIN: 5TD		eia BEIGE M. M.]					
	C	Mileage*						
Task	Dealer		Time	Status				
Airbag # Record	Dealer	User	TIM8	Not Started				
Inflator # Record		<u> </u>		Not Started				
Terms & Conditions				Not Started				
				Not Started				

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 campaign has already been completed on this VIN, there is no need to perform campaign again.

#### 4. CONNECT THE BARCODE SCANNER

a) Connect the barcode scanner to the USB port on the Techstream.

b) The scanner will automatically connect and a beep will be heard when the scanner is ready.

NOTE:

**STOP** 

- The scanner was originally provided for SSC D0F.
- The barcode scanner works best in low light conditions.
- Always hold the scanner directly in front of and parallel to the barcode label.

5. SCAN THE AIRBAG SERIAL NUMBER

# **ATTENTION:** This information is **CRITICAL**

- a) Scan the AIRBAG ASSEMBLY serial number 2 times.
  - 1) 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:

STOP

- 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



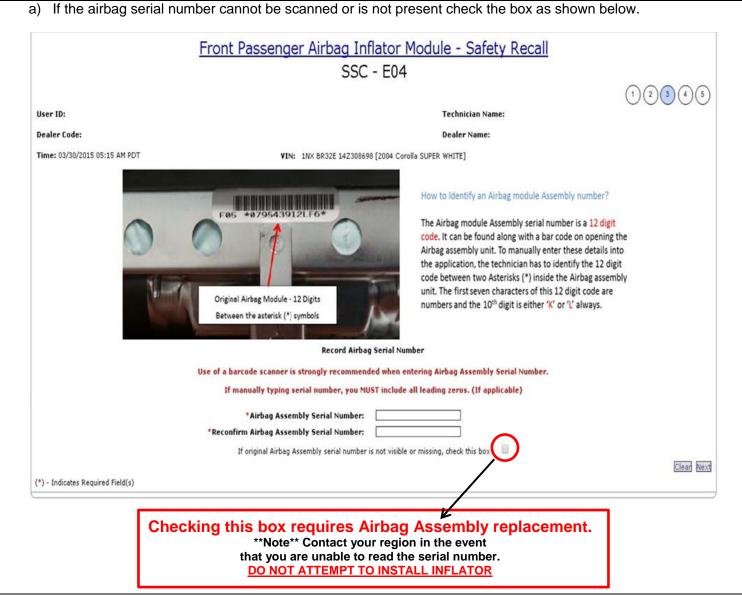
The AIRBAG ASSEMBLY serial number and the INFLATOR serial number are DIFFERENT. The AIRBAG ASSEMBLY serial number MUST be recorded prior to replacement.

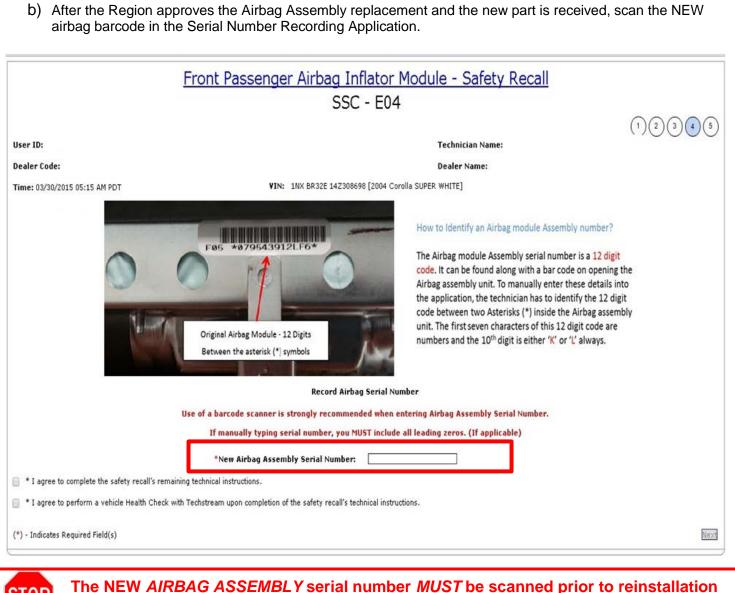
	Front Passenger Airbag Inflat	or Module - Safety Recall				
	SSC - E	504				
		()(2)(3)(	4)(			
User ID:		Technician Name:				
Dealer Code:		Dealer Name:				
Time: 03/30/2015 05:15 AM PDT	VIN: 1NX BR32E 14Z308698 [2004 Corolla SUPER WHITE]					
	Fø5 *ø79543912LF6* Original Airbag Module - 12 Digits Between the asterisk (*) symbols Record Airbag Serie					
	Use of a barcode scanner is strongly recommended w If manually typing serial number, you MUST in					
	*Airbag Assembly Serial Number: *Reconfirm Airbag Assembly Serial Number: If original Airbag Assembly serial number is not					
			ear A			

#### AIRBAG SERIAL NUMBER IS MISSING OR CANNOT BE SCANNED

STOP

If the airbag barcode cannot be scanned or is not present, check the box in the application indicating the barcode is not legible and contact your regional representative to replace the airbag assembly.



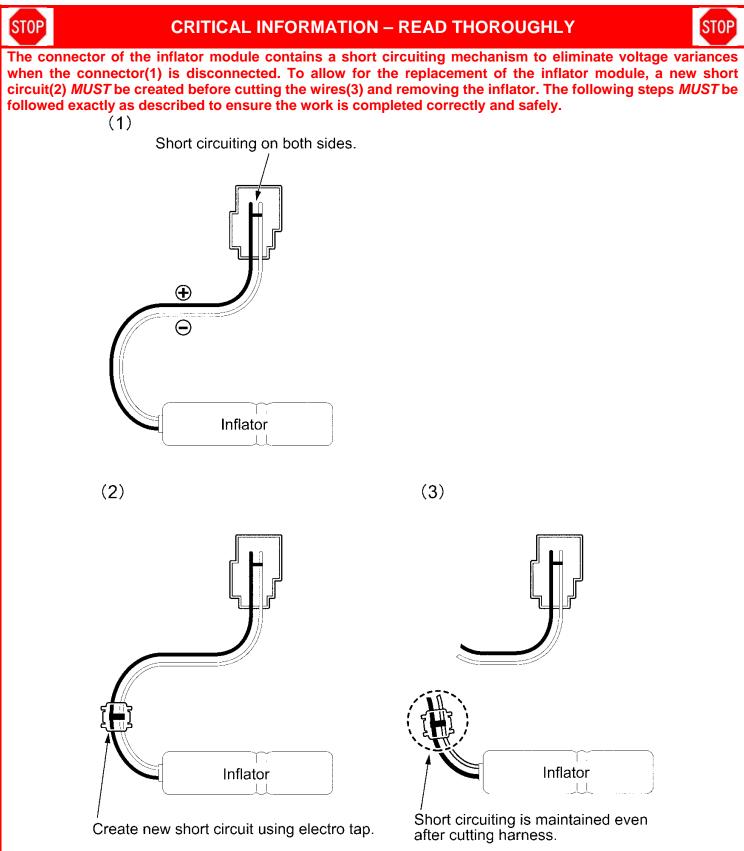


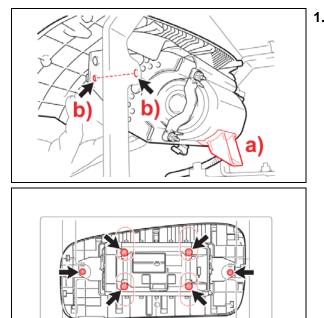
The NEW AIRBAG ASSEMBLY serial number MUST be scanned prior to reinstallation to track the airbag assembly to the vehicle.

## **IX. INFLATOR REPLACEMENT**

Video Supplement: Inflator Replacement

Note: The videos are the same videos as DSF and are intended to supplement the E04 TI.





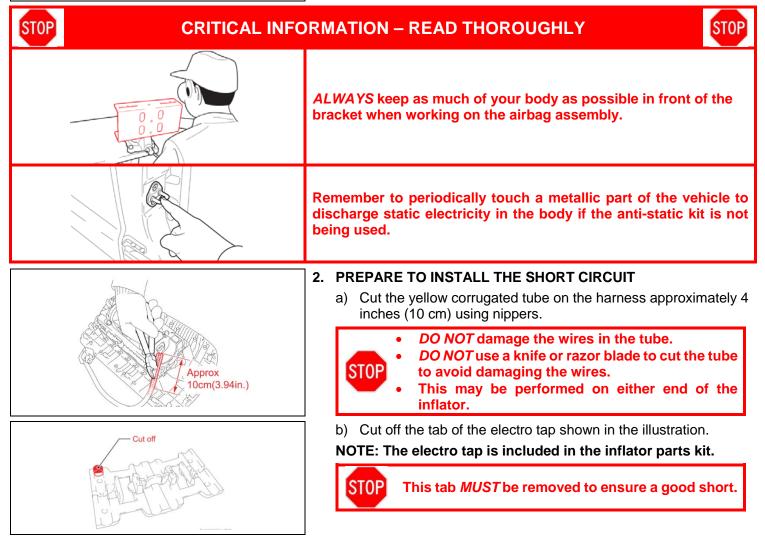
61

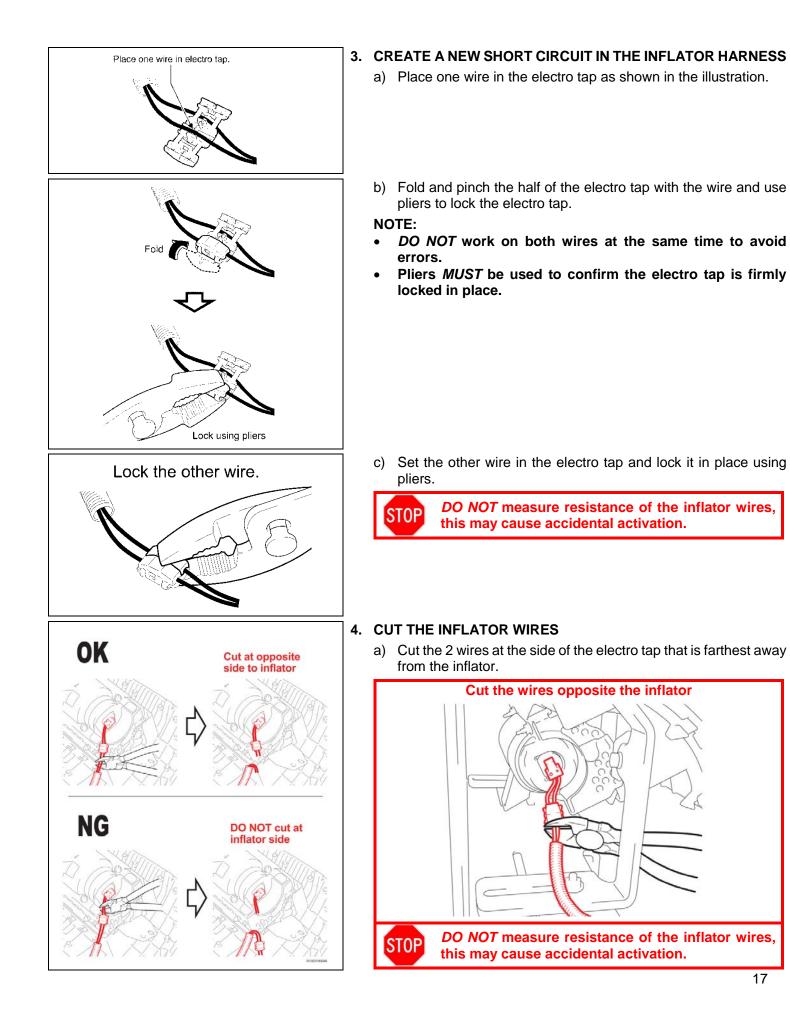
#### 1. MOUNT THE AIRBAG IN THE MOUNTING BRACKET

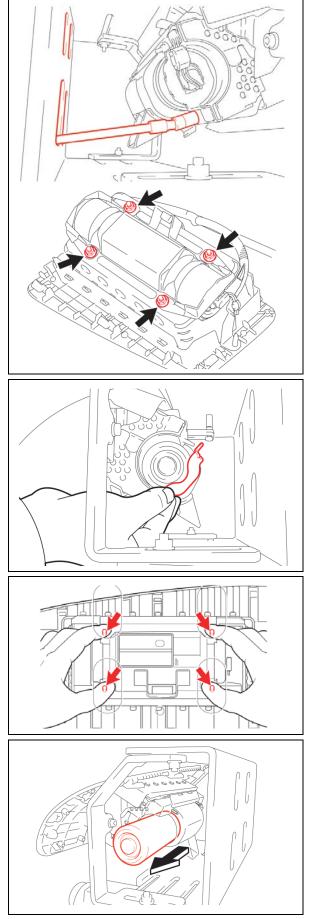
- a) Position the airbag assembly so that the center mounting bracket is facing towards the ground.
- b) Install the airbag to the support bars with the bolts supplied in the bracket kit.

NOTE: The airbag assembly will only fit on the support brackets one way.

- c) Position the airbag so that all four stopper plate nuts can be removed through the access holes.
- d) Tighten the bolts holding the support bars to the mounting bracket.
- e) Confirm the following:
  - Mounting bracket is secure in the vise.
  - Airbag is secure in the support bars.
  - The center mounting bracket on the airbag assembly is facing downward.
  - Support bars are secure on the mounting bracket using 1 bolt/nut at the top of each support bar and 2 nuts/bolts at the bottom of each support bar.







## 5. REMOVE THE SELF LOCKING NUTS

- a) Use the access holes in the bracket to remove the 4 nuts. **NOTE:**
- DO NOT use power tools.
- The bracket support bars may need to be repositioned to remove the nuts through the access holes.

b) Remove the stopper plate and place in a secure location because it will be reused.

**STOP** DO NOT discard the Stopper Plate, it will be reused.

c) Discard the 4 nuts as they are not to be reused. NOTE: *DO NOT* reuse the old nuts, new nuts *MUST* be used.

## 6. REMOVE THE INFLATOR

a) Gently push in the 4 studs to loosen the inflator for removal.

b) Remove the inflator from the airbag assembly and place it on a safe work surface.

# ENSURE YOU ENTER BOTH THE OLD AND NEW INFLATOR SERIAL NUMBERS IN THE APPROPRIATE SPOT OF THE APPLICATION

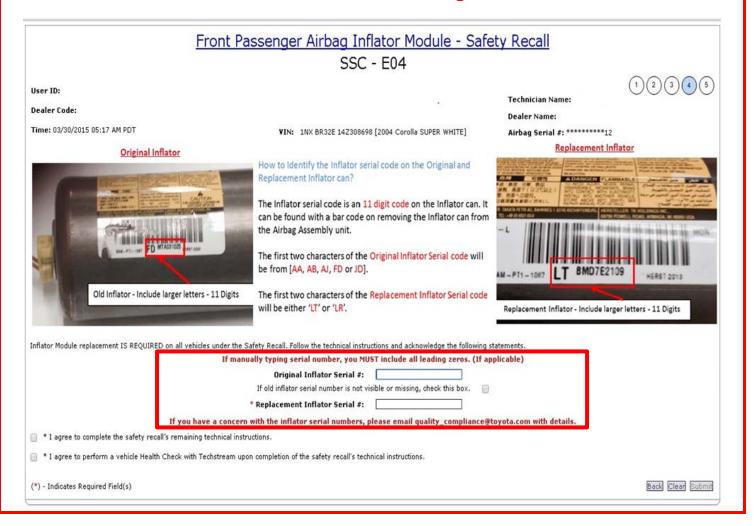
## 7. SCAN THE OLD AND NEW INFLATOR SERIAL NUMBER

- a) Scan the OLD inflator serial number and mark the old inflator so that it will not be reused.
- b) Scan the *NEW* inflator serial number.

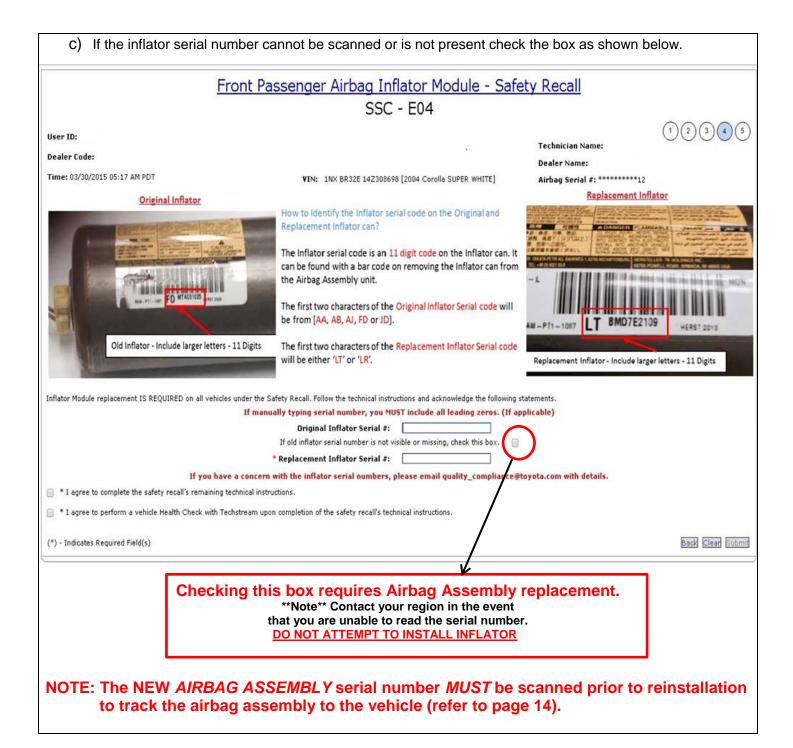
**STOP** 

# **ATTENTION:** This information is **CRITICAL**

- It is used to confirm the correct inflator is removed from the vehicle.
- It is recorded by TMS to trace the return parts shipment.
- It is used to track the new inflator that is being installed in the vehicle.



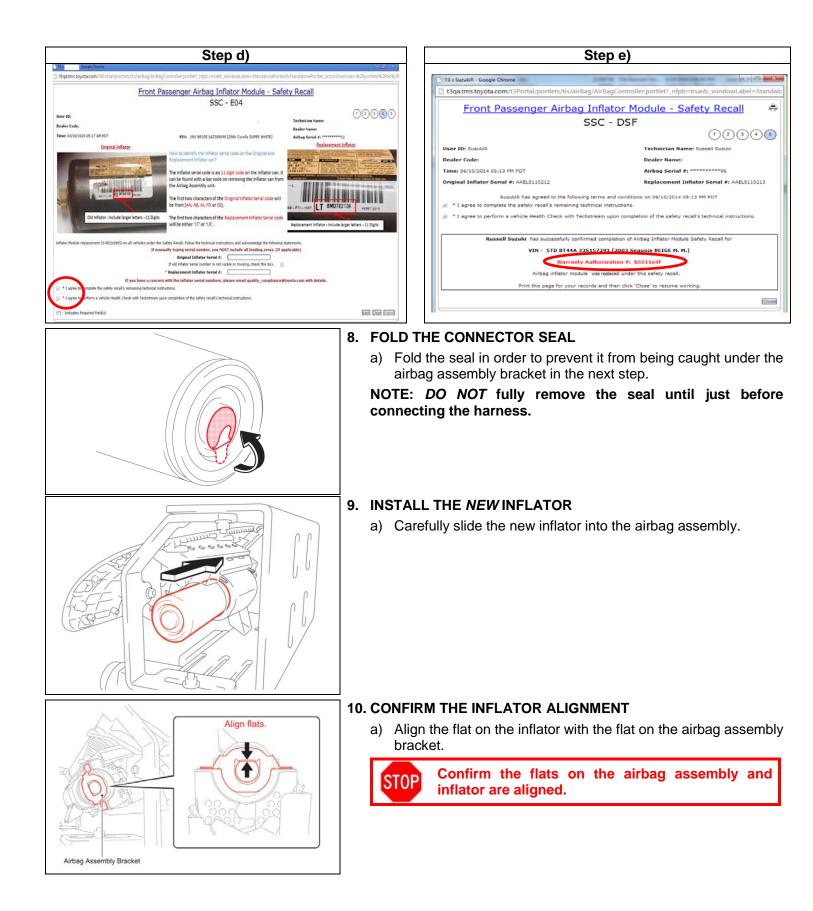
STOR

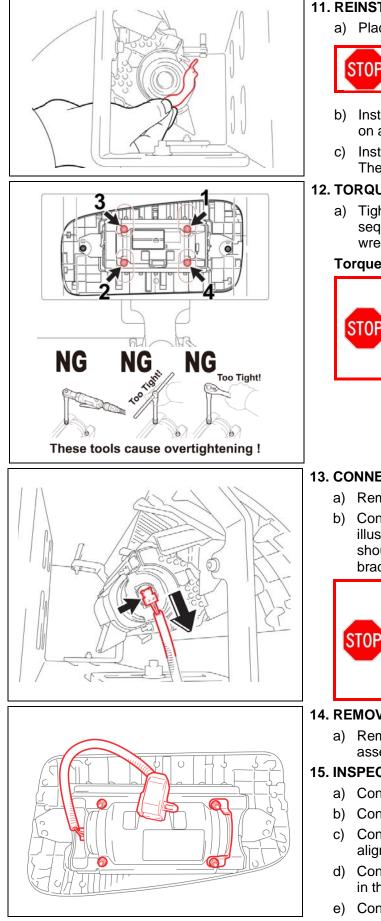


- d) Confirm agreement by checking the two boxes in the lower left hand corner of the screen.
- e) Record the Warranty Authorization # to be included in the warranty claim.
- f) Place the old inflator in the parts box and take it immediately to the parts department.

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.





## 11. REINSTALL THE STOPPER PLATE.

a) Place the stopper plate on the airbag assembly.

The inflator stopper plate is reused at this step; a new one is not included in the inflator kit.

- b) Install stopper plate nuts (NEW) by hand. They will be torqued on a later step.
- c) Install the **NEW** nuts on the airbag assembly bracket by hand. They will be torqued on a later step.

## **12. TORQUE THE PLATE NUTS**

a) Tighten the nuts evenly in two increments following the sequence shown in the illustration. 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.

## **13. CONNECT THE INFLATOR CONNECTOR**

- a) Remove the connector seal from the inflator.
- b) Confirm the alignment of the harness connector as shown in the illustration, then connect the harness. The connector wires should lead downward toward the center airbag mounting bracket.
  - connector should be connected The **IMMEDIATELY** after removing the seal.
  - The connector is one-way, once it is installed it CANNOT be removed.
  - If the connector is installed in the incorrect orientation the terminals may be bent or the connector may not fully engage.

### 14. REMOVE THE AIRBAG ASSEMBLY FROM THE BRACKET

a) Remove the two bolts and the airbag assembly, then place the assembly on a cloth or the anti-static mat if it being used.

## **15. INSPECT THE AIRBAG BEFORE INSTALLATION**

- a) Confirm that the 4 NEW nuts are installed and tight.
- b) Confirm the stopper plate is reinstalled.
- c) Confirm the flats on the airbag assembly bracket and inflator are aligned.
- d) Confirm the inflator harness connector is secure and installed in the correct direction.
- e) Confirm that the harness is engaged in the clamp.

## X. FRONT PASSENGER AIRBAG ASSEMBLY INSTALLATION

1. REINSTALL THE AIRBAG ASSEMBLY

Note: During reinstallation of the airbag assembly, ensure the 12mm bolt and two 10mm nuts securing the airbag assembly to the instrument panel are installed and torqued to the required specification identified on TIS.

b) Refer to TIS for instructions on airbag installation: 2002-2005MY 2006MY

- 2. RECONNECT THE NEGATIVE BATTERY CABLE
- 3. PERFORM A HEALTH CHECK AND DIAGNOSTIC REPORT

NOTE: Enter the VIN when performing the health check in order for the data to be recorded by TMS.

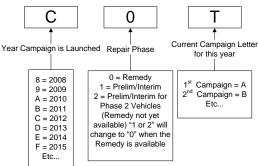
# ◄ VERIFY REPAIR QUALITY ►

- 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 is installed correctly

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

### **XI. APPENDIX**

A. CAMPAIGN DESIGNATION DECODER



#### **B. CAMPAIGN PARTS DISPOSAL**

#### Video Supplement: Parts Handling

**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
- Included in the parts box
- The laminated aid that was provided at the launch of the campaign