

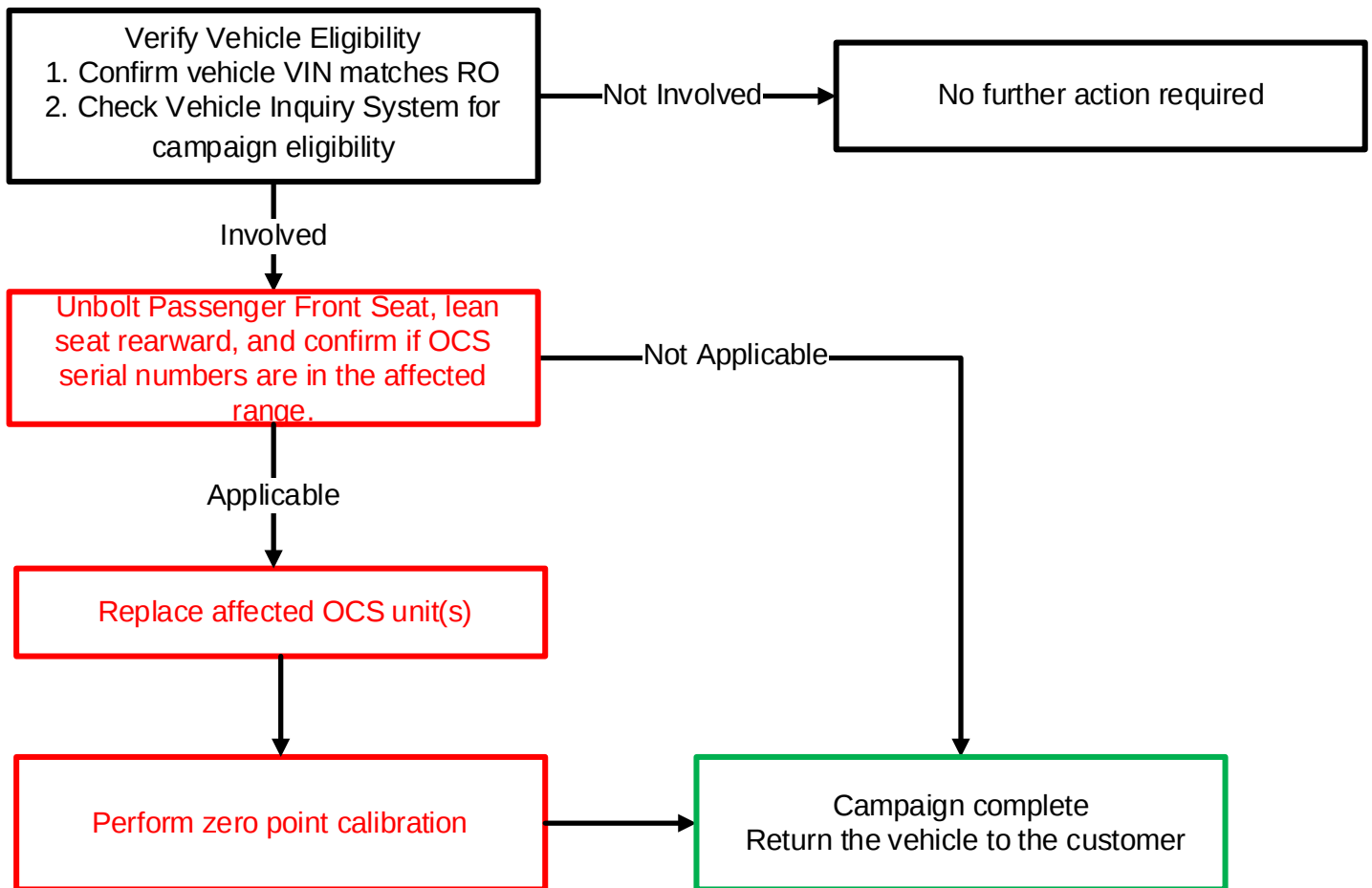
TECHNICAL INSTRUCTIONS
FOR
SAFETY RECALL - 23TA15
PASSENGER AIRBAG MAY NOT DEPLOY
CERTAIN 2020-2022 AVALON, AVALON HV, CAMRY, CAMRY HV VEHICLES

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to 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 recall repair are required to have completed all of the following courses currently:

- TIC206A – Electrical Repair

Always check which technicians can perform the repair by logging on to <https://www.uotdealerreports.com>. The dealership is responsible for selecting technicians who have completed the above courses to perform this repair. Carefully review your resources, the technician’s skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure properly trained technicians are available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- Compare the vehicle's VIN to the VIN listed on the Repair Order to ensure they match.
- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign and that it has not already been completed.

NOTICE:

TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

III. PREPARATION

A. TOOLS AND EQUIPMENT

Standard Hand Tools	Techstream/GTS+	T50 "TORX" Socket
Torque Wrench	Flashlight	Masking Tape
Inspection Application	Protective Cover	Seat Jig Assembly
3.5-4.5" Spacer (foam block, wood block or equivalent)	OCS Inspection App. (Apple Only)	

NOTICE:

- Recall SST: Seat Jig Assembly (This was shipped to your dealer at Phase 1 Remedy Launch).**
- It is critical that the seat jig assembly is used during sensor replacement, so the seat tracks remain square and do not become misaligned. Seat track out of alignment will impact the occupant detection weight readings by the ECU.**



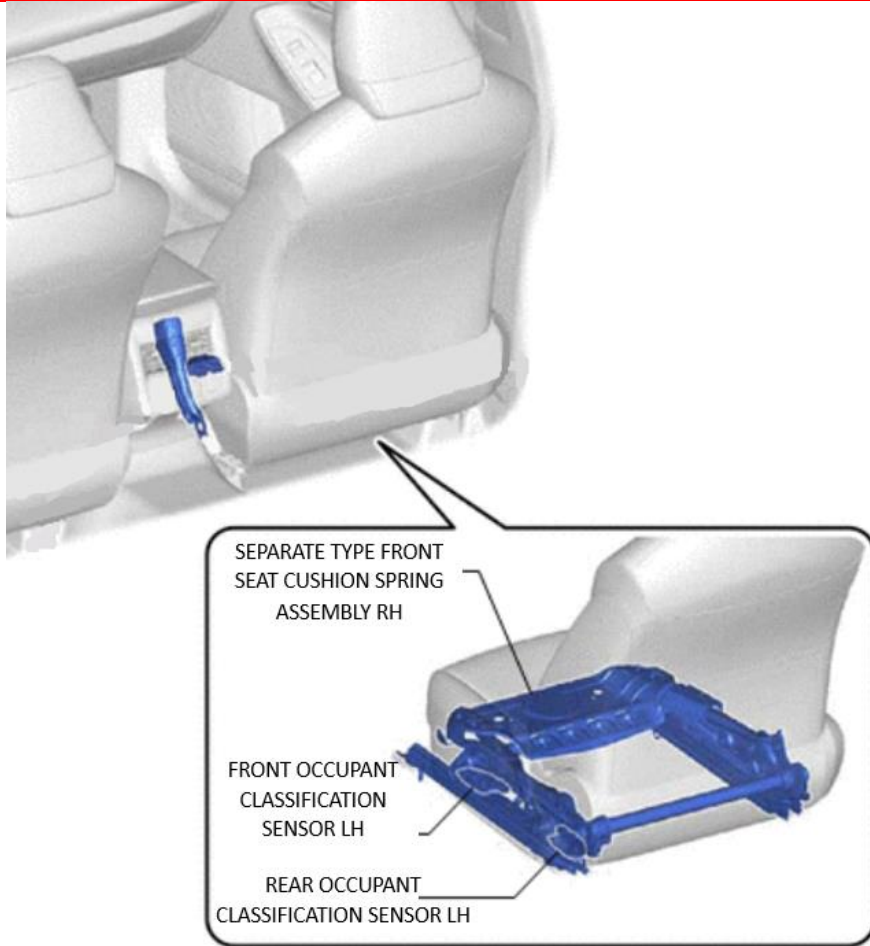
B. PARTS

Part Number	Part Description	Quantity
04003-60106	SENSOR SUB-ASSY, WEIGHT DETECTOR, FR	As needed
04003-60206	SENSOR SUB-ASSY, WEIGHT DETECTOR, RR	As needed

IV. WORK PROCEDURE TABLE OF CONTENTS

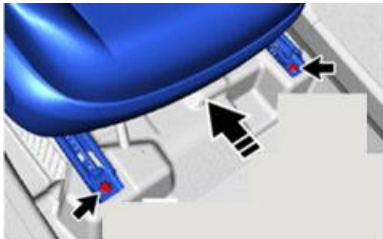
REMOVE PASSENGER FRONT SEAT AND INSPECT OCS SERIAL NUMBERS	SECTION VI.
REPLACE FRONT AND/OR REAR OCS ASSEMBLIES	SECTION VII.
CALIBRATION AND CONFIRMATION	SECTION VIII.
APPENDIX	SECTION IX.

V. BACKGROUND

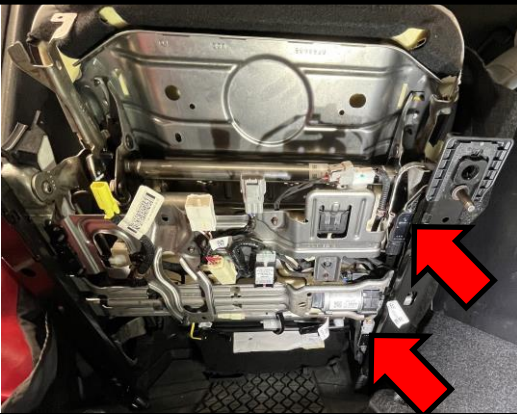


VI. INSPECT FRONT AND REAR OCS SERIAL NUMBERS

NOTE: Manual seat track assembly will follow the same inspection instructions.



Powered Seat



1. UNBOLT THE PASSENGER FRONT SEAT AND CONFIRM OCS SERIAL NUMBERS

- a) Install the mobile inspection app on your Apple device using the QR code or by clicking on the link below:
<https://apps.apple.com/us/app/qdamobile/id1640292519>

NOTE:

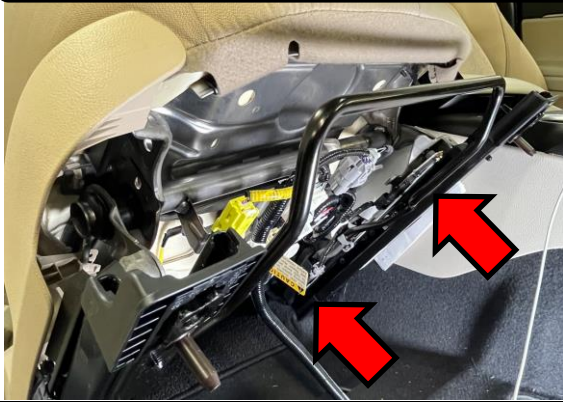
At launch, the inspection app will only be available for Apple devices. TMNA is working on an Android inspection app as well and anticipates it will be available in the first quarter of 2025.

- b) Take note of the passenger seat position, so seat can be returned to this position later.
- c) Place the passenger front seat in the following positions before unbolting:
- Recline Angle - Upright Position
 - Front Tilt Height – Highest Position
 - Seat Lifter Height – Highest Position
- d) Using a T50 “TORX” socket, unbolt the 4 passenger seat bolts.
- e) Lean the passenger front seat back to view the underside of the seat.



DO NOT disconnect any seat harness connectors at this time.

Manual Seat



2. IDENTIFY THE FRONT AND REAR OCS SERIAL NUMBERS

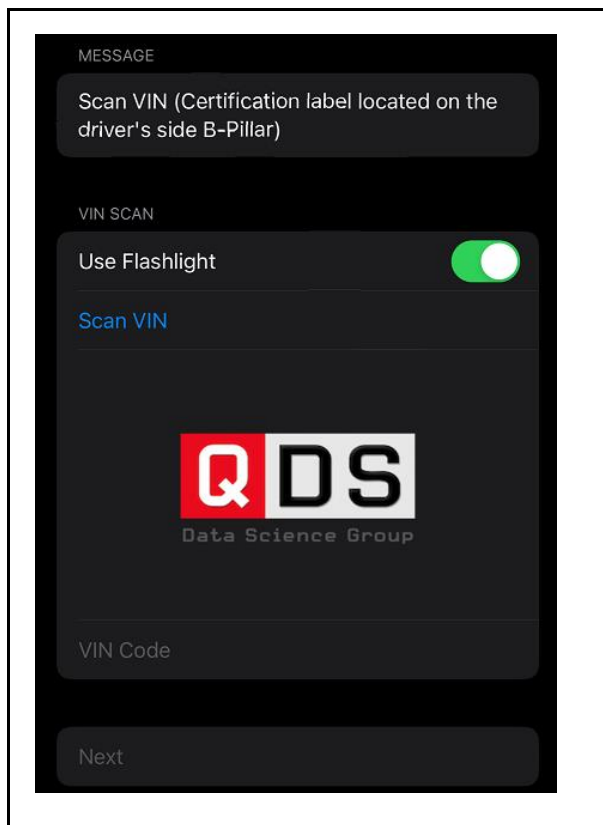
- a) Viewing from underneath the seat, locate and identify the front and rear OCSs.

Front



Rear





- b) Follow the instructions in the mobile inspection application to scan the VIN and both the front and rear OCS serial numbers.

Do the front and/or rear OCS units require replacement?

YES: Front and/or rear OCS require replacement; proceed to **Section VII**.

NO: Proceed to **step 3**.



NOTE:

In the event that the application cannot successfully scan the vinyl VIN certification label due to its compromised condition or if it is missing, please reach out to the Quality Compliance team at quality_compliance@toyota.com. Include a photograph of the damaged VIN label, if applicable, as well as the VIN label located beneath the windshield in your correspondence.



3. REINSTALL PASSENGER FRONT SEAT

- a) Install the passenger front seat following the repair manual steps:
- [Camry \(Manual Seat\)](#)
 - [Camry \(Power Seat\)](#)
 - [Avalon](#)

NOTE:

Be sure to tighten the bolts in the order shown in the repair manual.

4. RESTORE FRONT PASSENGER SEAT TO ORIGINAL POSITION

5. CAMPAIGN COMPLETE

VII. REPLACE FRONT AND/OR REAR OCS ASSEMBLIES

NOTE: Manual seat track assembly will follow the same repair instructions.

HINT:

Perform this procedure only when OCS replacement has been determined in the previous section.



1. REMOVE PASSENGER FRONT SEAT ASSEMBLY



Before removing the seat assembly, ensure that the rear seat track bolt holes are accessible for mounting to the jig assembly in step 3.

- a) Remove the passenger front seat following the repair manual steps:

- [Camry \(Manual Seat\)](#) (Steps 3-8 only)
- [Camry \(Power Seat\)](#) (Steps 1-7(f) only)
- [Avalon](#) (Steps 2-8(f) only)

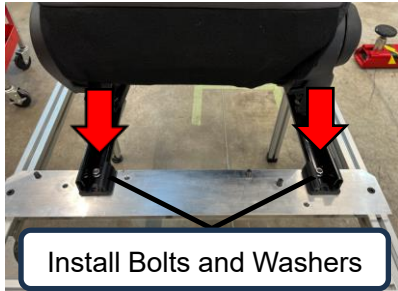
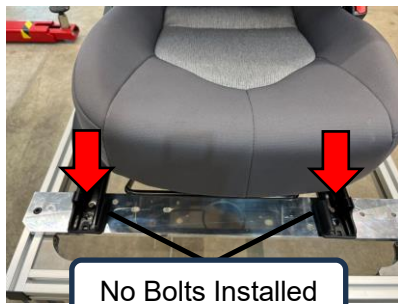
2. PREPARE THE JIG ASSEMBLY

- a) Identify the correct rear bolt and front alignment pinhole combination to match the seat frame type being mounted to the jig.



HINT:

Be sure to position the jig safely and clear of any moving vehicles or machinery.



3. INSTALL SEAT ASSEMBLY TO THE JIG

- a) Place the passenger front seat assembly onto the jig and secure it using the 2 provided bolts, nuts, and washers through the rear seat track mounting holes.

Torque: 27 N*m (20 ft.*lbf)

NOTICE:

Wear protective gloves. Sharp areas on the seat track parts may injure your hands.

- b) Ensure seat is properly secured to the jig.





4. DISCONNECT THE OCS CONNECTORS

- Disconnect the front and rear OCS connectors.

NOTICE:

Be sure to disconnect both front and rear OCS connectors before lifting up the seat track in the following step.



5. REMOVE LEFT SIDE SEAT TRACK NUTS



DO NOT loosen any nuts other than the ones instructed.





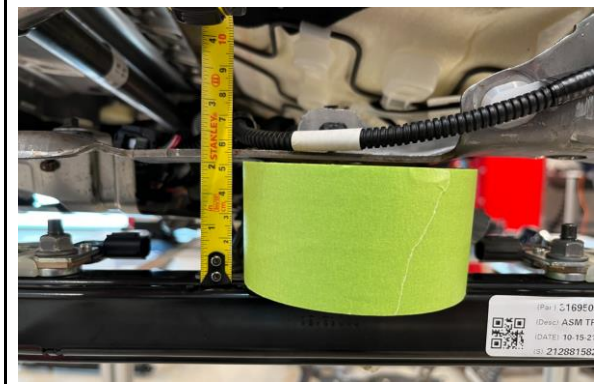
6. INSTALL A 3.5-4.5" SPACER BETWEEN THE LOWER SEAT TRACK RAIL AND THE UPPER TRACK ASSEMBLY

HINT:

Be sure to use a foam block, tape roll, wood block, or similar, to provide enough space to access the front and rear OCS nuts.



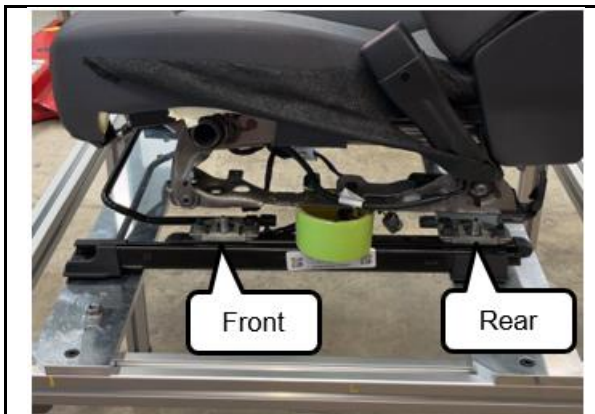
DO NOT exceed 4.5" of space when inserting tape roll. Damage may occur if this is not followed.



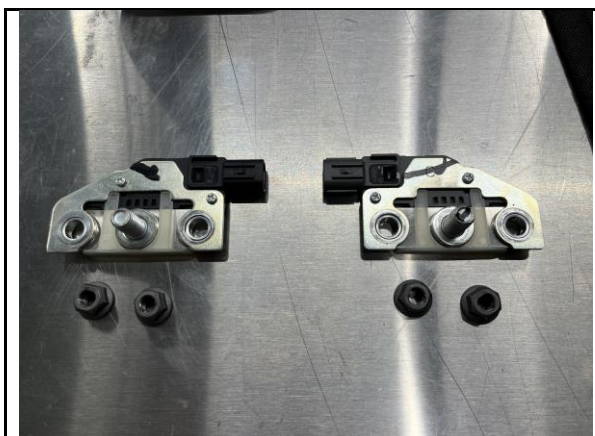
7. REMOVE OCS(S)



DO NOT loosen any nuts other than the ones instructed.



- a) Using a 13mm box wrench or socket wrench, remove the front and/or rear OCS as instructed by the mobile inspection app.



8. INSTALL NEW OCS(s) TO THE SEAT TRACK ASSEMBLY

NOTICE:

Wear protective gloves. Sharp areas on the seat track parts may injure your hands.



- a) If necessary, install the **NEW** rear OCS to the seat track assembly.

NOTICE:

When installing, be sure to use your thumb to gently push on the left corner of each sensor to seat the **NEW** OCS properly.

Torque: 30 N*m (22.5 ft.*lbf)



- b) If necessary, install the **NEW** front OCS assembly to the seat track assembly.

NOTICE:

When installing, be sure to use your thumb to gently push on the left corner of each sensor to seat the **NEW** OCS properly.

Torque: 30 N*m (22.5 ft.*lbf)



- c) Remove the spacer and place the upper seat assembly back onto the seat track assembly.



d) Re-install the rear seat track nut.

Torque: 47 N*m (35 ft.*lbf)

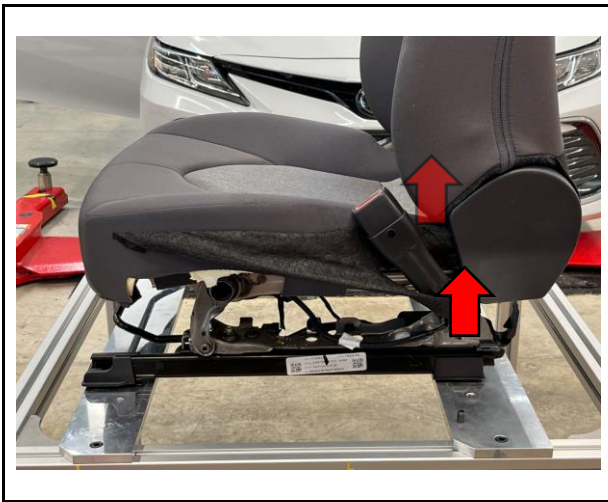


e) Re-install the front seat track nut.

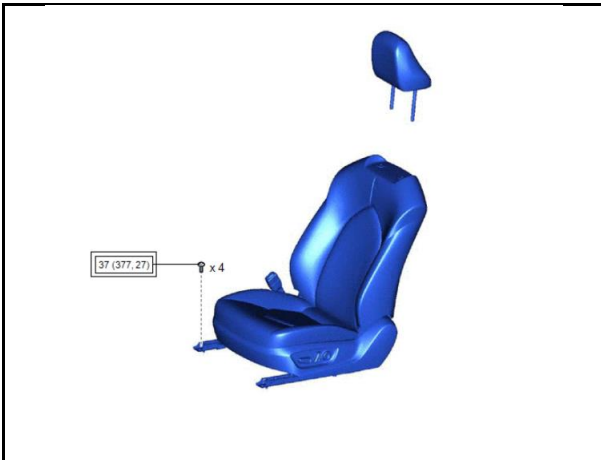
Torque: 47 N*m (35 ft.*lbf)



f) Reconnect both front and rear OCS connectors.



- g) Remove the 2 mounting nuts securing the seat assembly to the jig and remove the seat assembly from the jig.



9. REINSTALL PASSENGER FRONT SEAT

- a) Install the passenger front seat following the repair manual steps:
- [Camry \(Manual Seat\)](#)
 - [Camry \(Power Seat\)](#)
 - [Avalon](#)
- b) Continue to Zero Point Calibration section VIII.

VIII. CALIBRATION AND CONFIRMATION

1. PERFORM ZERO POINT CALIBRATION

Refer to the Repair Manual for instructions on Vehicle Interior / SUPPLEMENTAL RESTRAINT SYSTEMS / OCCUPANT CLASSIFICATION SYSTEM / INITIALIZATION.

- [Camry](#)
- [Camry HV](#)
- [Avalon](#)
- [Avalon HV](#)

2. PERFORM OCCUPANT CLASSIFICATION SYSTEM – DATA LIST/ACTIVE TEST

Occupant Detection

DTC
Data List
Active Test
Utility
Dual Data List

STATUS

MONITOR
Frame: -
Time: -
SamplingRate: 167ms
Flag Count: -

FL Sensor Weight Information	1.458 lbs	Yaw Rate/G Sensor Assembly Information	OK
RL Sensor Weight Information	1.360 lbs	Passenger Detection(Airbag)	ON
Total Weight Information	2.818 lbs	Passenger Detection(Belt Warning)	OFF
Weight Forward and Rearward Difference	-0.097 lbs	Driving Status	Stop
Airbag Total Weight	2.818 lbs	Passenger Buckle SW	Unset
Belt Warning Total Weight	2.818 lbs	The Number of DTCs	0
VSC Status	ON		
VSC Vehicle Speed	0.00 MPH		
VSC Zero Point1	0.0718 m/s2		
VSC Zero Point2	0.0718 m/s2		
VSC Calibration Status	Calibrated		
VSC Assembly Information	Normal Position		
Yaw Rate/G Sensor Voltage Invalid Flag	ON		
Yaw Rate/G Sensor Malfunction Flag1	OK		
Yaw Rate/G Sensor Invalid Flag1	ON		

All Data

Sort by default
Sort by name

Sort by selection
Sort by unit

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Action	4-Way Seat	6-Way / 8-Way Seat
Once the Zero Point Calibration has been completed, confirm the "Total Weight Information" at each numbered position.		
Seat Position Steps		
Confirmation Points		
Target Value	±3.70 lbs	±4.80 lbs

a. Refer to the Repair Manual for instructions on Vehicle Interior / SUPPLEMENTAL RESTRAINT SYSTEMS: OCCUPANT CLASSIFICATION SYSTEM: DATA LIST / ACTIVE TEST.

- [Camry](#)
- [Camry HV](#)
- [Avalon](#)
- [Avalon HV](#)

b. For 4-way seat:

Confirm that the Total Weight Information value is within ±3.70 lbs at each confirmation point.

HINT: Refer to the chart above for reference.

- 1) With the seat in the lowest and forward most position, move the seat to the rear most position and confirm the “Total Weight Information” value in the data list.
- 2) Move the seat to the forward most position and confirm the “Total Weight Information” value in the data list.

Do all the confirmation point values fall within the target range value?

YES – Proceed to **Step 3**.

NO – **STOP** and contact FTS to report findings.

c. For 6-way and 8-way seats:

Confirm that the Total Weight Information value is within ±4.80 lbs at each confirmation point.

HINT: Refer to the chart above for reference.

- 1) With the seat in the lowest and forward most position, move the seat to the rear most position and confirm the “Total Weight Information” value in the data list.
- 2) Move the seat to the rear upper position and confirm the “Total Weight Information” value in the data list.
- 3) Move the seat to the front upper position and confirm the “Total Weight Information” value in the data list.
- 4) Move the seat to the front lower position and confirm the “Total Weight Information” value in the data list.

Do all the confirmation point values fall within the target range value?

YES – Proceed to **Step 3**.

NO – **STOP** and contact FTS to report findings.

3. PERFORM FINAL CONFIRMATION CHECK

Sit on the passenger front seat and confirm if the airbag light changes from “**OFF**” to “**ON**”.

Does the passenger airbag indicator light switch to ON?

YES – Campaign complete.

NO – Perform zero point calibration again and recheck.

◀ **VERIFY REPAIR QUALITY** ▶

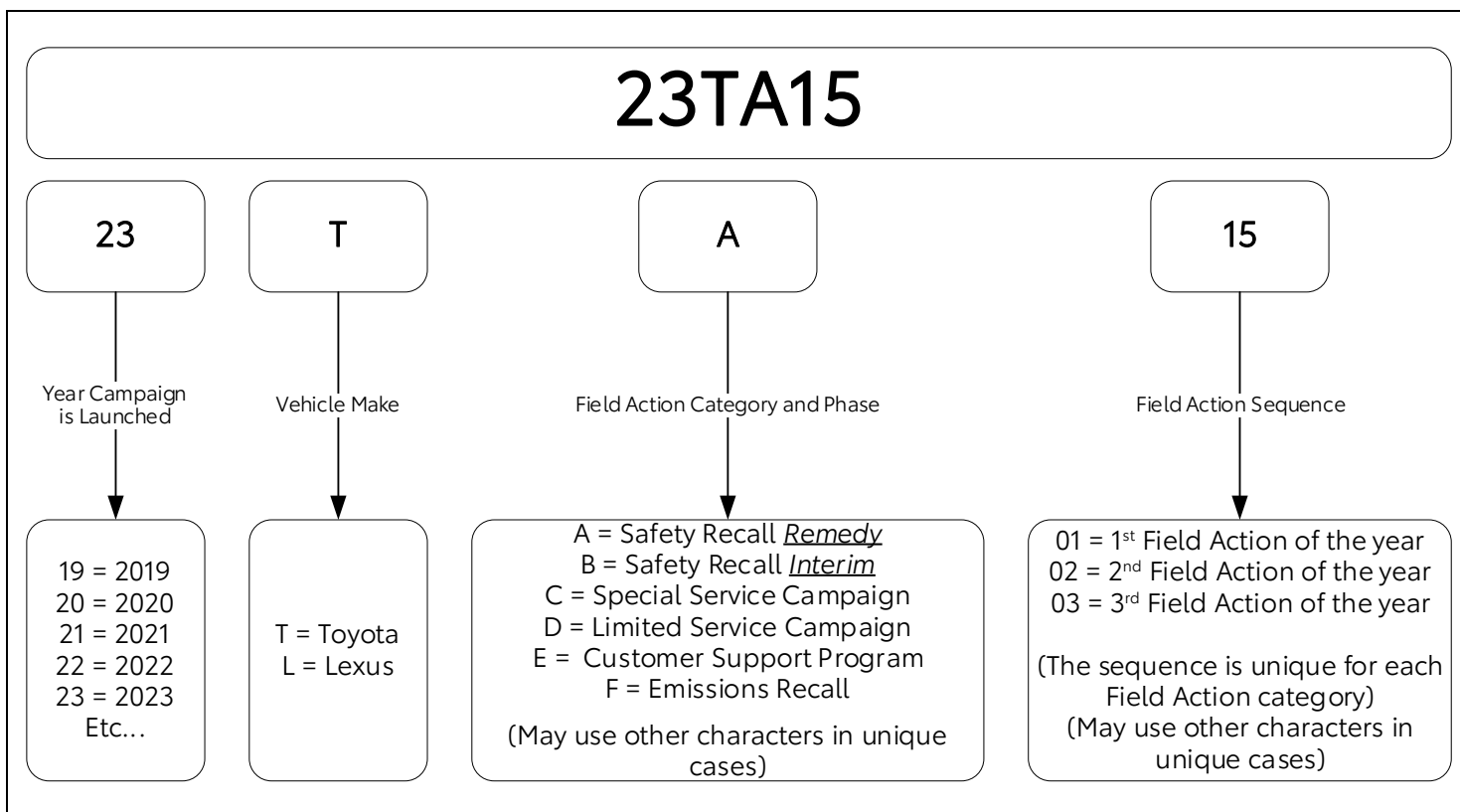
- Confirm all bolts are properly torqued.
- Confirm all seat track bolts and wire harness connectors are installed correctly.
- Confirm no DTCs present after repair.

IX. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***

B. CAMPAIGN DESIGNATION DECODER



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019

20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021