

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL J0S

FRONT SEAT BELT BUCKLE
INSPECTION AND REPLACEMENT

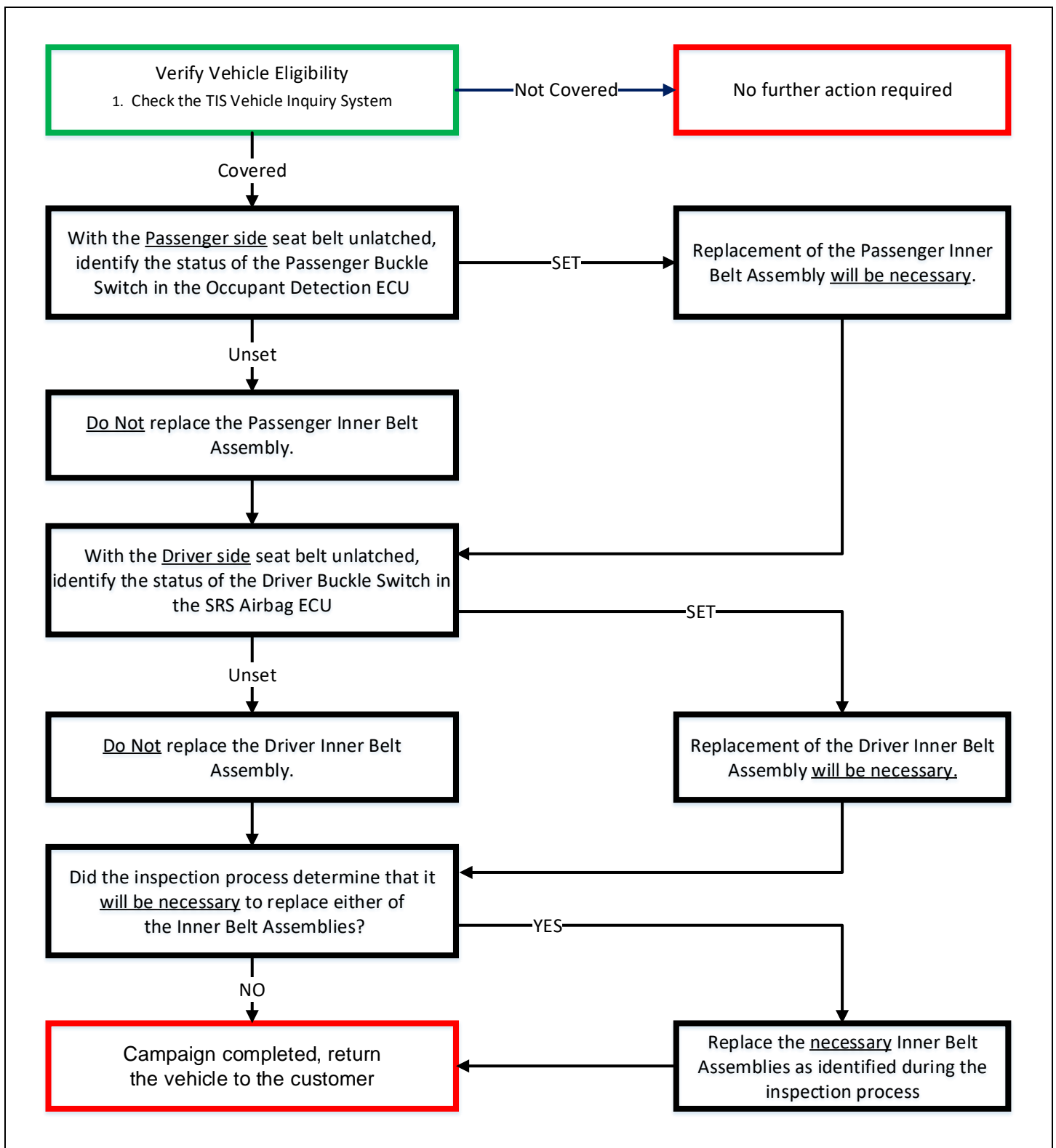
CERTAIN 2012 AVALON

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall 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 recall repair are required to currently hold at least one of the following certification levels:

- Certified Technician (any specialty)
- Expert Technician (any specialty)
- Master Technician
- Master Diagnostic Technician

It is the dealership’s responsibility to select technicians with the above certification level or greater to perform this recall 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



II. IDENTIFICATION OF AFFECTED VEHICLES

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

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
73230-07021-A0	BELT ASSY, FR SEAT, INNER RH	1 as needed*
73230-07021-B0		
73230-07021-C0		
73230-AC091-A0		
73230-AC091-B0		
73230-AC091-C0		
73240-AC061-A0	BELT ASSY, FR SEAT, INNER LH	1 as needed*
73240-AC061-B0		
73240-AC061-C0		

*Parts are only required if the result of the inspection requires part replacement. Follow the directions in these Technical Instructions for more detail.

B. TOOLS & EQUIPMENT

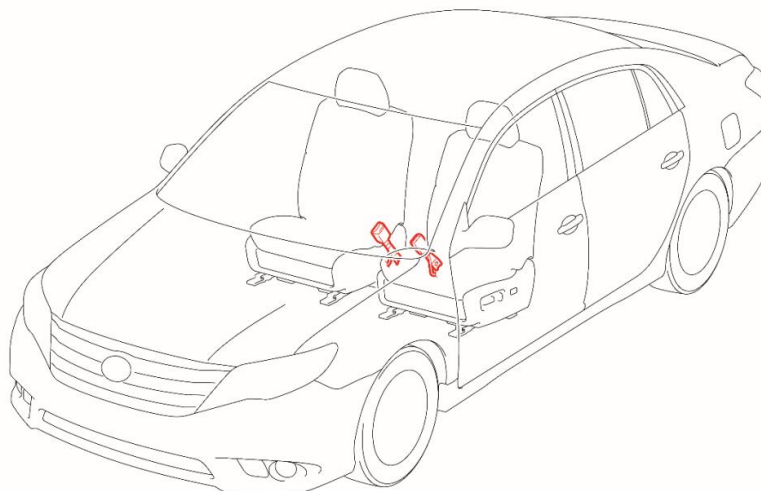
• Techstream	• Standard Hand Tools	• Torque Wrench
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SST – These Special Service Tools required for this repair:

Part Number	Tool Name	Quantity
00002-09090-01	Occupant Classification Seat Weight Set	3

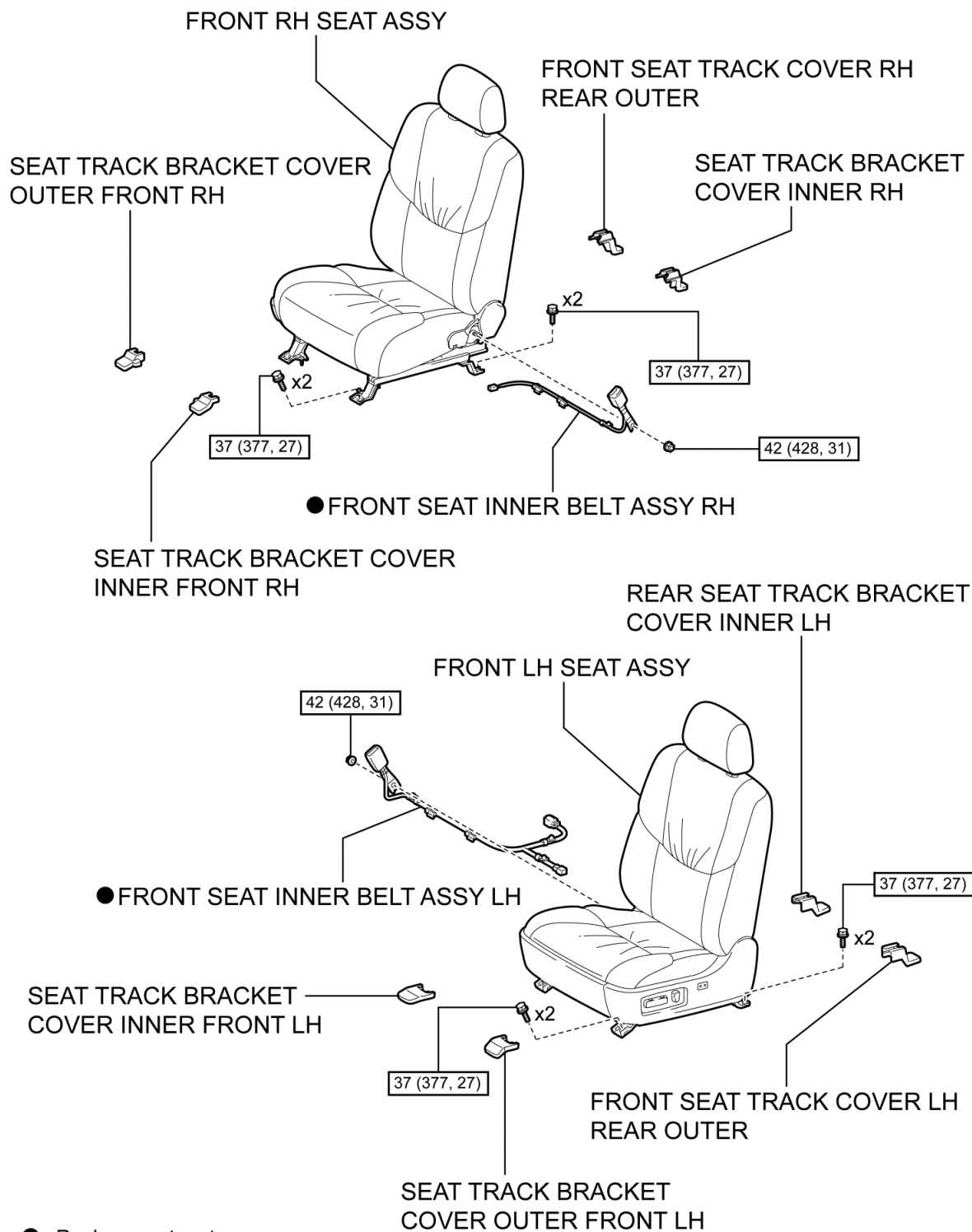
IV. BACKGROUND

Due to a service part manufacturing error, some vehicles may have had a front seat belt buckle replaced with one that does not correctly identify whether the seat belt is buckled. This could affect how the airbag system determines the appropriate airbag deployment method in a crash and could increase the risk of injury to the occupant where the seat belt buckle was replaced.



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V. COMPONENTS



● : Replacement part

N*m (kgf*cm, ft.*lbf) : Specified torque

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VI. INSPECTION OF PASSENGER SIDE INNER BELT ASSEMBLY

System Select Tab



Occupant Detection



Occupant Detection ECU



Passenger Buckle SW

1. DETERMINE VALUE OF PASSENGER SIDE INNER BELT ASSEMBLY

- a. Using the Techstream, select the following ECU from the System Select tab:

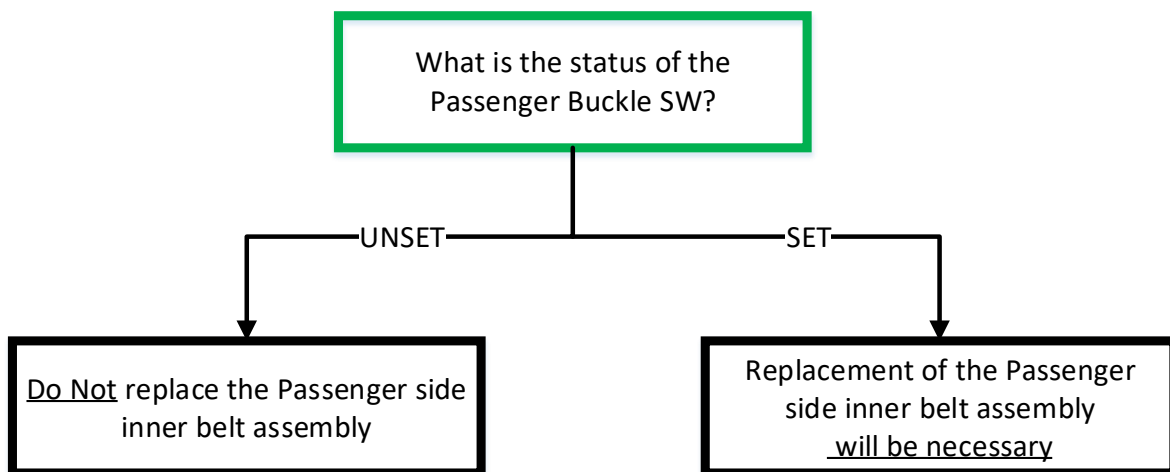
OCCUPANT DETECTION

- b. Confirm that the passenger side seat belt is not latched into the buckle.

- c. In the Data List of the Occupant Detection ECU, identify the value of the following data item:

PASSENGER BUCKLE SW

Note: The value will be indicated as either SET or UNSET.



VII. INSPECTION OF DRIVER SIDE INNER BELT ASSEMBLY

System Select Tab



SRS Airbag

1. DETERMINE VALUE OF DRIVERS SIDE INNER BELT ASSEMBLY

- a. Using the Techstream, select the following menu from the System Select tab:

SRS Airbag

- b. Confirm that the driver side seat belt is not latched into the buckle.



- c. In the Data List of the SRS Airbag ECU, identify the value of the following data item:

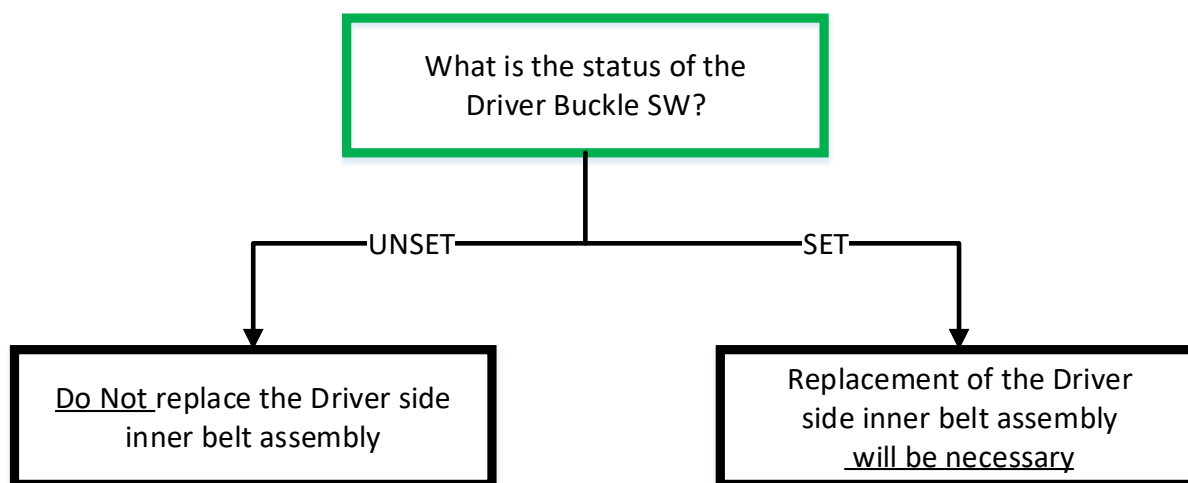
DRIVER BUCKLE SW

Note: The value will be indicated as either SET or UNSET.

SRS Airbag ECU



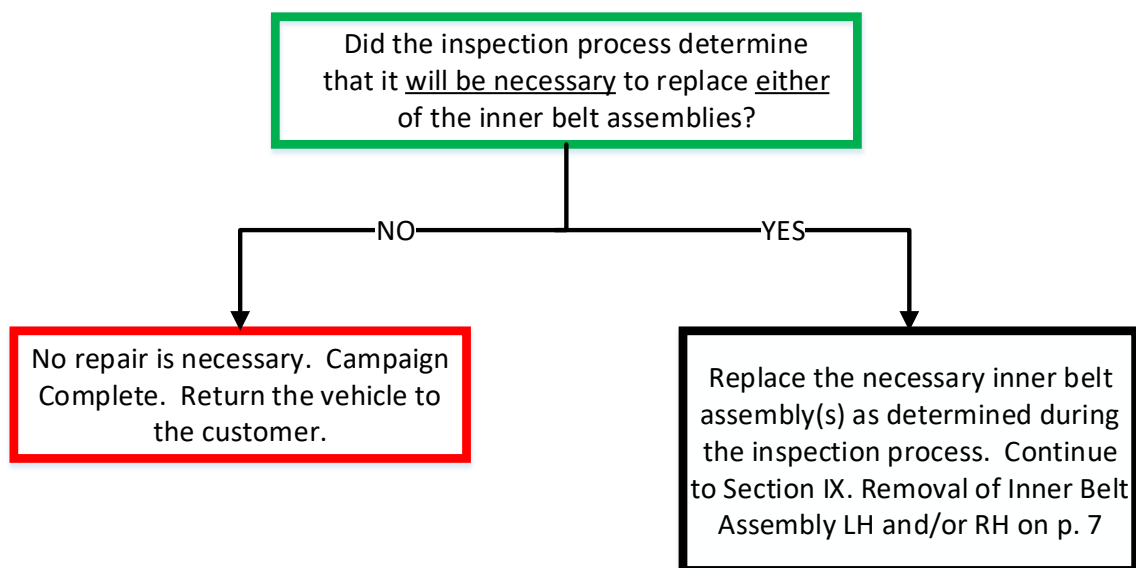
Driver Buckle SW



VIII. ANALYSIS OF INSPECTIONS

1. DETERMINE IF REPAIR IS NEEDED

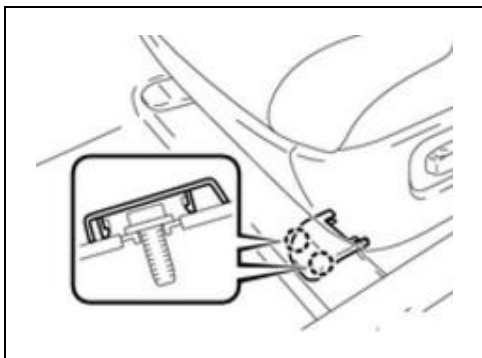
a. Use the following flowchart to determine the next step.



IX. REMOVAL OF INNER BELT ASSEMBLY LH and/or RH



Proceed with replacement of the Inner Belt Assembly(s) **ONLY** if the inspection process determined that it will be necessary.



1. REMOVE 4 SEAT TRACK COVERS

a. Disengage the 2 claws from each of the 4 seat track bracket covers.

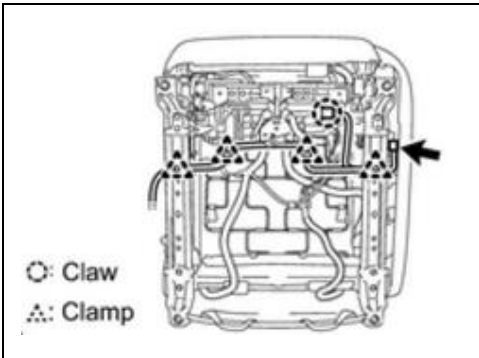


2. REMOVE 4 SEAT TRACK MOUNTING BOLTS

a. Remove the 4 bolts securing the seat to the floorboard.

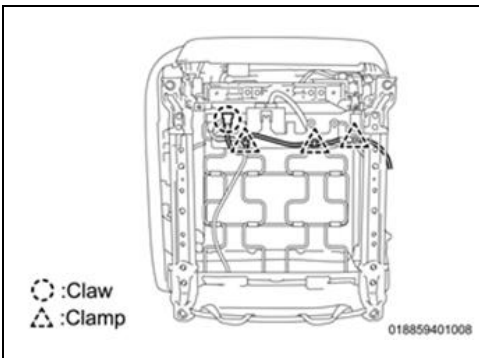
3. DISCONNECT 12V BATTERY

- a. Remove the negative terminal from the 12v battery.



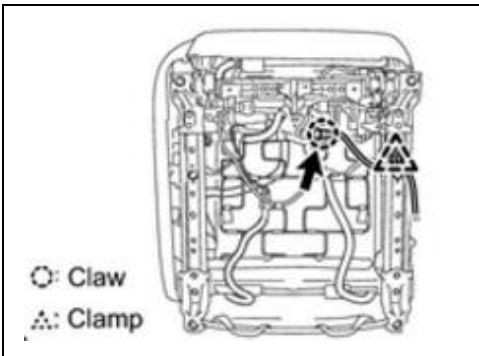
4. DISCONNECT FRONT SEAT INNER BELT WIRE (Driver's Seat)

- a. Disconnect the electrical connector.
- b. Disengage the claw and 4 clamps.



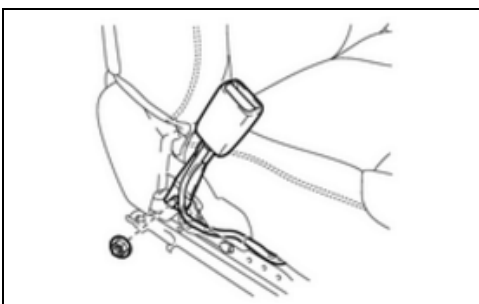
5. DISCONNECT FRONT SEAT INNER BELT WIRE (Passenger manual seat)

- a. Disconnect the electrical connector
- b. Disengage the claw and 3 clamps.



6. DISCONNECT FRONT SEAT INNER BELT WIRE (Passenger power seat)

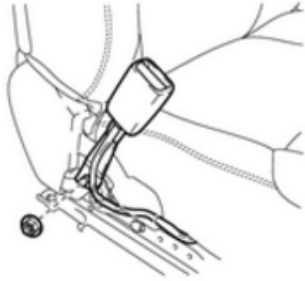
- a. Disconnect the electrical connector.
- b. Disengage the claw and the clamps.



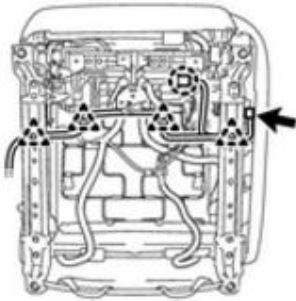
7. REMOVE FRONT SEAT INNER BELT ASSEMBY

- a. Remove the nut to remove the seat belt assembly.

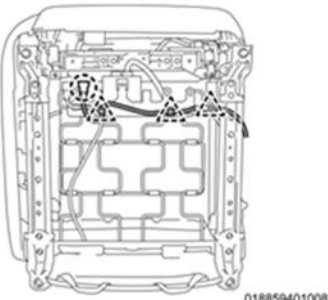
X. INSTALLATION OF INNER BELT ASSEMBLY LH and/or RH



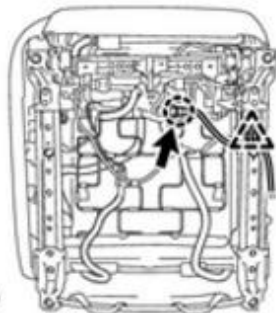
8. **INSTALL *NEW* FRONT SEAT INNER BELT ASSEMBLY**
a. Install the *NEW* front seat belt assembly with the nut.
Torque: 31 ft.lbs {42 N·m, 428 kgf·cm}



9. **CONNECT FRONT SEAT INNER BELT WIRE (DRIVERS SEAT)**
a. Connect the electrical connector.
b. Engage the claw and 4 clamps.



10. **CONNECT FRONT SEAT INNER BELT WIRE (Passenger manual seat)**
a. Connect the electrical connector
b. Engage the claw and 3 clamps.



11. **CONNECT FRONT SEAT INNER BELT WIRE (Passenger power seat)**
a. Connect the electrical connector.
b. Engage the claw and the clamps.

XI. INSTALLATION OF SEAT ASSEMBLY LH and/or RH

1. RE-CONNECT 12V BATTERY

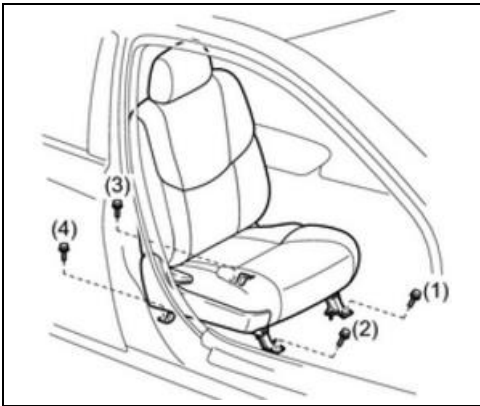
- Connect the negative terminal to the 12v battery.

Torque: 48 in.lbs {5.4 N·m, 55 kgf·cm}



2. INSTALL 4 SEAT TRACK MOUNTING BOLTS

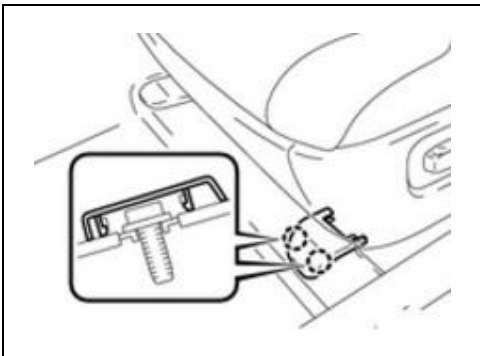
- Install the 4 bolts securing the seat to the floorboard, leaving them loose for positioning.



- Torque the 4 bolts securing the seat to the floorboard in the order shown.

Torque: 27 ft.lbs {37 N·m, 377 kgf·cm}

Note: During sliding operation of the front manual seat, check that the left and right adjusters move together smoothly and lock simultaneously. If the seat adjusters do not lock simultaneously, loosen the bolts securing the seat to adjust the adjuster position.



3. INSTALL 4 SEAT TRACK COVERS

- Engage the 2 claws on each of the 4 seat track bracket covers.

XII. PERFORM OCCUPANT CLASSIFICATION SYSTEM ZERO POINT CALIBRATION AND SENSITIVITY CHECK

1. CONFIRM THE FOLLOWING CONDITIONS:

- The vehicle is parked on a level surface.
- No objects are placed on the front passenger seat.
- The front passenger seat belt buckle is not connected.

2. ADJUST THE PASSENGER SEAT POSITION



The passenger seat must be in the correct position to correctly recalibrate the OCS system.

- Slide Detection: Rearmost Position
- Reclining Angle: Upright Position
- Headrest Height: Lowest Position
- Lifter Height: Lowest Position

3. PERFORM THE ZERO POINT CALIBRATION

- a. Turn the IG on and connect the Techstream to the DLC3.
- b. Enter the following menus:
Body Electrical > Occupant Detection > Utility > Zero Point Calibration
- c. Perform the zero point calibration by following the prompts on the Techstream screen until OK: "Zero Point Calibration is complete." is displayed.

4. PERFORM THE SENSITIVITY CHECK

- a. Enter the following menus:
Body Electrical > Occupant Detection > Utility > Sensitivity Check
- b. Perform the sensitivity check by following the prompts on the Techstream screen.
- c. Confirm that the beginning sensor reading within standard value.
Standard value: -3.2 to 3.2 kg (-7 to 7 lb)
- d. Place three (3) of the Occupant Classification Seat Weights onto the front passenger seat. This will add 66 lbs. (30kG.) of weight to the seat.
SST: 00002-09090-01 (qty. 3)
- e. Confirm that the sensor reading is within standards.
Standard: 27 to 33 kg (59.52 to 72.75 lb)

NOTICE:

- The "Zero Point Calibration" must be performed first.
- Ensure that the seat is in the correct position.
- If the seat weight reading is out of spec, reposition weights on the seat cushion and recheck reading.

5. COMPLETE INITIALIZATIONS AFTER CONNECTING THE NEGATIVE TERMINAL

The following system will need to be initialized after disconnecting the battery:

- Power Window Control System
- Sliding Roof system

◀ VERIFY REPAIR QUALITY ▶

- Check seat heater operation (if equipped)
- Turn on the ignition switch (IG) and check that the SRS warning light comes on for approximately 6 seconds, then turns off.

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

XIII. APPENDIX

A. PARTS DISPOSAL

As required by Federal Regulations, 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 DECORDER

