TECHNICAL INSTRUCTIONS

SAFETY RECALL 21TA08

SECOND-ROW OUTBOARD SEAT BELT COULD TEAR IN A CRASH

CERTAIN 2022 MODEL YEAR SIENNA VEHICLES CONVERTED FOR WHEELCHAIR ACCESSIBILITY BY VANTAGE MOBILITY INTERNATIONAL (VMI)

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 recall repair are required to currently have completed all of the following courses:

T623 - Toyota Electrical Circuit Diagnosis

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.

MOBILITY VEHICLE ELIGIBILITY

<u>Are Sienna vehicles that have been converted for wheelchair accessibility able to have the remedy performed?</u>

The remedy, can be applied to Sienna vehicles that have been converted for wheelchair accessibility by a <u>Toyota-authorized</u> mobility conversion company. Conversion of Sienna vehicles using non-Toyota-approved parts and/or accessories may make is difficult or impossible for a dealer to install the remedy parts for this Safety Recall.

Who are the companies that have been authorized by Toyota to convert Sienna vehicles for wheelchair accessibility?

Below is the list of companies that offer Toyota-authorized conversions for Sienna vehicles for wheelchair accessibility.

- The Braun Corporation (BraunAbility)
- Vantage Mobility International (VMI)

What if a vehicle is converted by a non-authorized mobility conversion?

Sienna vehicles that have been converted for wheelchair accessibility by a non-Toyota authorized mobility conversion company have undergone an unauthorized modification to the factory condition of the vehicle. These modifications may make it difficult or impossible to apply the remedy in their current condition. Toyota does not recommend modifying vehicles and cannot evaluate how any aftermarket, non-Toyota approved parts and/or modifications could affect a vehicle's performance.

Subject to individual review by the dealer and notwithstanding Toyota's recommendation, some dealers may be willing to perform the Safety Recall remedy with the vehicle in its current modified condition. If your dealership is willing to do so, the customer may be responsible for the cost of parts and/or labor not otherwise covered by Toyota's Safety Recall. Toyota provides the specific remedy parts, and covers 1.1 hours of dealership labor expenses. The customer is responsible to pay any additional charges for parts and/or labor which are the result of the vehicle's non-Toyota-approved modifications.

Toyota is not responsible for later performance problems the vehicle may have that are the result of the non-Toyota-approved vehicle modifications.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

• Check the TIS Vehicle Inquiry System to confirm that each VIN is eligible for this Special Service Campaign, and that it has not already been completed prior to dealer shipment or by another dealer.

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

III. PREPARATION

A. PARTS

For Gray Trim (most common):

Part Number	Part Description	Quantity
73370-08150-B0	BELT ASSY, REAR SEAT 3 POINT TYPE, OUTER LH	1
73360-08160-B0	BELT ASSY, REAR SEAT 3 POINT TYPE, OUTER RH	1

For Ivory Trim:

Part Number	Part Description	Quantity
73370-08150-A0	BELT ASSY, REAR SEAT 3 POINT TYPE, OUTER LH	1
73360-08160-A0	BELT ASSY, REAR SEAT 3 POINT TYPE, OUTER RH	1

Note: The VMI MicroSpike rubber pad may need to be replaced. This part should be sourced from Vantage Mobility International ($P/N \rightarrow FN1628$)

B. TOOLS, SUPPLIES & EQUIPMENT

- Techstream
- Standard Hand Tools
- Torque Wrench

IV. CHECK IF VEHICLE HAS BEEN CONVERTED FOR WHEELCHAIR ACCESSIBILITY





V. REMOVE SECOND ROW OUTBOARD SEAT BELT ASSEMBLY (LR / RH)

- 1. RECORD SETTINGS OF THE AUDIO SYSTEM, AIR CONDITIONER, ETC.
- 2. CHECK FOR DTCs
- 3. MAKE SPACE FOR WORK
- 4. 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 pretension deployment. Follow all precautions as outlined on TIS before servicing the SRS system.

5. REMOVE 3RD ROW BENCH SEAT (VMI Conversion)

a) Remove the rear cargo cover by pulling the cover handle forward and up.



- b) Locate the four rear bench leg braces.
- c) Remove the indicated 3/8-18 bolts using a 9/16" socket.



d) Disconnect the rear seat electrical harnesses.



e) Pull the seat release latches and remove both sections of the 3rd row bench seats.

6. REMOVE LOWER 3rd ROW PLASTICS (VMI Conversion)



a) If MicroSpike rubber is installed on the 3rd-row footrest, peel back the covering to expose the six bolts.

Note: This will destroy the adhesive backing and a new cover will need to be installed. Refer to VMI P/N FN1628.



b) Remove the six flathead bolts from the footrest.c) Remove the footrest bar.



d) Remove the six footrest spacer tubes

e) Remove the two screws in the lower joints between C-Middle and C-Corner plastics.

Remove the two screws in the upper portion of the C-Middle plastic around the center bench dogbone.

g) Remove the four screws connecting each C-Corner VMI plastic to the Toyota-factory installed quarter-panels.



h) If a dome light (circled in yellow) is present on the passengerside C-Corner plastic, disconnect the wiring.

i) Remove the two corner C-plastics. The middle plastic may stay in place.

7. REMOVE THE SECOND ROW OUTBOARD SEAT BELT ASSEMBLIES (LH and RH)

Refer to TIS for instructions on SEAT BELT / REAR NO. 1 SEAT OUTER BELT ASSEMBLY (for 60/40 Split Seat Type) / REMOVAL (Doc ID: RM10000001NT97).

NOTE:

Reference and perform the following procedures on TIS repair manual until the step "j"

- a) Disconnect the rear door opening trim weatherstrip LH & RH.
- b) Remove the quarter trim front lower cover LH & RH.
- c) Disconnect the No. 2 rear door wire LH & RH.
- d) Disconnect rear seat 3 point type outer belt assembly (remove floor anchor bolt LH & RH.
- e) Remove the rear seat outer belt cover LH & RH.
- f) Disconnect rear No. 2 seat outer belt assembly (remove c-pillar anchor bolt LH &RH.
- g) Remove the luggage hold belt striker assembly.
- h) Remove the back door scuff plate.
- i) Remove the spare wheel cover assembly (w/ spare tire).



- j) Remove the Toyota factory quarter trim front panel assembly LH (refer to TIS repair manual).
- bisconnect the ramp deploy and SureDeploy switch cables from the back of the LH quarter panel assembly (VMI Conversion, picture to the left).

- I) Remove the Toyota factory quarter trim front panel assembly RH (refer to TIS repair manual).
- m) If the ParkSmart option is installed in the front of the RH quarter panel, disconnect its wires (VMI Conversion, picture to the left).

n) Remove the rear window side garnish assembly LH & RH - (refer to TIS repair manual).



- o) DO NOT REMOVE the rear shoulder belt anchor plate subassembly LH & RH
- p) Remove the nut to disconnect the shoulder anchor of the rear 3 point type outer belt assembly LH & RH.

q) DO NOT REMOVE the rear shoulder belt anchor adjuster assembly LH & RH.

r) Remove the 2 bolts.

Disengage the 2 guides to separate the rear 3 point type outer belt assembly LH & RH.



s) Using a screwdriver with its tip wrapped in protective tape, pull out the locking button to release the lock to disconnect the pretensioner connector as shown in the illustration.

*a	Locking Button
*b	Protective Tape

NOTE:

Use the same procedure for LH side and RH side.

VI. INSTALL NEW SECOND ROW OUTBOARD SEAT BELT ASSEMBLY (LR / RH)



1. CONFIRM THE "L" OR "R" MARK ON NEW SEAT BELT

STOP DO NOT install seat belt on incorrect side

2. INSTALL NEW REAR SEAT 3 POINT TYPE OUTER BELT ASSEMBLY LH AND RH Refer to TIS for instructions on SEAT BELT / REAR NO. 1 SEAT OUTER BELT ASSEMBLY (for 60/40 Split Seat Type) / INSTALLATION (Doc ID: RM10000001NT99).

NOTE:

Reference and perform the following procedures on in this document and then switch to TIS repair manual on step "f"



a) Connect the pretensioner connector and lock the locking button as shown in the illustration.

*a	Locking Button
*b	Lock

- b) Engage the 2 guides to temporarily install the rear 3 point type outer belt assembly.
- c) Temporarily install the 2 bolts.
- d) Tighten the bolt (A) and then the bolt (B).

Torque: Bolt (A) 12.5 N*m (127 kgf*cm, 9 ft.*lbf) Bolt (B) 42 N*m (428 kgf*cm, 31 ft.*lbf)



e) Install the shoulder anchor of the rear 3 point type outer belt assembly with the bolt

Torque: 42 N*m (428 kgf*cm, 31 ft.*lbf)

f) Install the rear window side garnish assembly (refer to TIS repair manual).



- g) Connect the wires for Ramp (pink arrow) and *Sure Deploy* (green arrow) switches in the LH quarter panel trim as shown (VMI conversion, picture to the left).
- h) Install the Toyota factory quarter trim front panel assembly LH (refer to TIS repair manual).

- i) Reconnect the ParkSmart button wires if vehicle is equipped with this option (VMI conversion, picture to the left).
- j) Install the Toyota factory quarter trim front panel assembly RH (refer to TIS repair manual).

- k) Install the spare wheel cover assembly, vehicles w/ spare tire (refer to TIS repair manual).
- I) Install back door scuff plate (refer to TIS repair manual).
- m) Install luggage hold belt striker assembly (refer to TIS repair manual).
- n) Connect the rear No. 2 seat outer belt assembly with the bolt (refer to TIS repair manual). **Torque:**

42 Nm (428 kgf cm, 31 ft lbs)

o) Install the rear seat outer belt cover - (refer to TIS repair manual).



s) Connect the No. 2 rear door wire. **Torque:**

11 Nm (112 kgf cm, 8 ft lbs)

- t) Install the quarter trim front lower cover.
- u) Connect the rear door opening trim weatherstrip.
- v) Install quarter trim front lower cover
- w) Connect rear door opening trim weather strip
- x) Install the rear door scuff plate

NOTE:

Use the same procedure for LH side and RH side.

3. INSTALL VMI C-PILLAR PLASTICS (VMI Conversion)



a) Position the C-Pillar Middle Trim, MP9515 so it fits between the rear bench dog bone mounting points.

NOTE: Rear bench is not installed at this point.

b) If the passenger-side C-Pillar plastic's dome light was disconnected, reconnect the wires.

- Reinstall the 4X Self Tap Screws into the LH C-pillar plastic using the existing holes.
 - NOTE: Ensure the middle C-plastic is sitting flat with no bulges and is behind the corner plastics.



- d) Reinstall the 4X Self Tap Screws into the RH C-pillar plastic using the existing holes.
 - NOTE: Ensure the middle C-plastic is sitting flat with no bulges and is behind the corner plastics.

e) Reinstall the lower screw joining the middle C-plastic to the corner plastics (LH)



f) Reinstall the lower screw joining the middle C-plastic to the corner plastics (RH)

Reinstall the upper two screws on either side of the middle bench seat dog bone.

4. REINSTALL BENCH FOOTREST (VMI Conversion)



h) Insert the six footrest spacers into the slots in the C-plastics. Align them with the threaded holes in the frame.



Place the footrest on top of the spacers with the countersunk side facing up. Align the six holes with the spacers Reinstall the 6x bolts using a 3/16 hex head.



STOP Do NOT torque these bolts.

Install a *new* Footrest Microspike FN1628 strip on top of the footrest bar, being careful to align all corners.

5. REINSTALL 3RD ROW BENCH SEAT (VMI Conversion)



a) Install the front legs of the 3rd row bench seat in their dog bones.

b) Before latching the rear bench legs in place, align the reinforcement bracket slots with the threaded holes in the frame. Then latch the bench legs in place.

c) Reinstall washer and bolt for rear bench brackets

Torque: 42 Nm (428 kgf cm, 31 ft lbs)



d) Place the rear cargo cover behind bench and ensure the handle insert locks into place within the cutout in the rear hatch scuff plate.

6. RECONNECT THE NEGATIVE BATTERY CABLE



7. INSPECT SRS WARNING LIGHT

- f) Check that the airbag warning light lights when the power switch is turned on.
- g) Check that the airbag warning light goes off approximately 6 seconds after turning on of the ignition switch.

NOTE:

If the airbag warning light remains on, it is likely to be caused by connection failure of the pretensioner connector.

- 8. CHECK FOR DTCs
- 9. Refer to TIS for instructions on General / SETUP / WHEN DISCONNECTING OR RECONNECTING BATTERY TERMINAL / WORK PROCEDURE (Doc ID: RM10000001O3VN)
- 10. RETURN THE VEHICLE TO THE ORIGINAL STATE

◄ VERIFY REPAIR QUALITY ►

- Confirm applicable initializations have been performed.
- Confirm there are no DTC's after the replacement

VII. 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.*

Campaign Designation / Phase Decoder

