TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL EOL

PHASE 2

DRIVER SIDE AND PASSENGER SIDE SEAT TRACKS REPLACEMENT

CERTAIN 2006-2010 YARIS 3 DOOR HATCHBACK

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 currently hold <u>at least one</u> of the following certifications levels:

- Toyota Certified (any classification)
- Toyota Expert (any classifications)
- Master
- Master Diagnostic Technicians

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

In the seat rail of the driver and front passenger seats of the subject vehicles, the springs used for the mechanism which locks the seat rail in its adjusting positions could break. This can happen if the seat is adjusted forward and/or rearward with high frequency. If a seat rail spring breaks, the seat may not lock into the adjusted position. If the vehicle is operated with a broken seat rail spring, the seat could move in the event of a crash, increasing the risk of injury to the occupant.

III. PREPARATION

A. PARTS

Both parts kits are required to perform the camapaign.

Yaris 3 Door Hatchback Driver Seat Track

Part Number	Part Description	Quantity	
04002-19252	Track Assy, FR Seat, LH	1	
*The kit above contains the following parts			
72120 - 52051	TRACK ASSY, FR SEAT, OUTER LH	1	
72118 - 52030	RAIL, FR INNER SEAT TRACK, LWR LH	1	
72443 - 52010	NUT (INNER, Black)	4	
90178 - 08012	NUT (OUTER, with thread locker)	4	

Yaris 3 Door Hatchback Passenger Seat Track

Part Number	Part Description	Quantity		
04004-36752	Track Assy, FR Seat, RH	1		
*The kit above contains the following parts				
72110 - 52091	TRACK ASSY, FR SEAT, OUTER	RH 1		
72117 - 52060	RAIL, FR INNER SEAT TRACK, LW	/R RH 1		
72443 - 52010	72443 - 52010 NUT (INNER, Black)			
90178 - 08012	08012 NUT (OUTER, with thread locker)			
96160-00600	96160-00600 RING, E			

B. TOOLS & EQUIPMENT

- Techstream
 - Protective gloves
 - T40 "Torx" socket
- Standard hand toolsSeat cover
- Torque wrench
- Round file
- ocket Feeler gauge

SST- These are essential special service tools that your dealership should have.

Part Number	Part Name	Quantity
00002-09090-01	Occupant Classification Seat Weight Set	1

CAMPAIGN TOOLS



C. MATERIALS

- Protective Tape
- Protective Blanket
- Rope/Tie Down
- Packing Tape
- Adhesive 1324 medium strength thread locking compound (local source)

IV. 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.

V. COMPONENTS

A. DRIVER'S SEAT COMPONENTS



B. PASSENGER SEAT COMPONENTS



VI. DRIVER'S SEAT WORK PROCEDURE

A. DRIVER'S SEAT ASSEMBLY REMOVAL

1. ADJUST THE POSITION OF THE SEAT

- a) Move the seat to the center position.
- b) Move the seatback to the upright position.
- 2. CHECK FOR DTCS FOR VEHICLES EQUIPPED WITH SIDE AIRBAGS
- 3. RECORD SYSTEM SETTINGS (RADIO PRESETS, A/C SETTINGS, ETC)
- 4. DISCONNECT THE NEGATIVE BATTERY TERMINAL (FOR VEHICLES EQUIPPED WITH SIDE AIRBAGS)

Wait at least 90 seconds after disconnecting the cable from the negative battery terminal to ST0P prevent airbag and seat belt pretensioner deployment.

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



5. REMOVE THE HEADREST ASSEMBLY

6. REMOVE THE SEAT ASSEMBLY BOLTS

- a) Cover expose areas of interior trim with protective tape and place a soft blanket over the door panel to protect it while removing the seat.
- b) Remove the 4 bolts.

7. REMOVE THE SEAT ASSEMBLY

- a) Tip the seat back and disconnect the connectors on the bottom of the seat.
- b) Using 2 people, carefully remove the seat from the vehicle and place it on a clean bench.



- Use care when removing the seat, if the vehicle is experiencing the recall condition the seat track rail may suddenly move while removing the seat.
- To prevent damaging and/or soiling of the seat, place the seat on a clean bench that has been covered with a clean blanket.

B. FRONT SEAT TRACK ASSEMBLY REMOVAL





- e) Remove the 2 nuts securing the seat position sensor and front part of the seat track assembly.
- f) Place the seat position sensor in a safe location where it cannot be damaged.
- g) Remove the 2 remaining nuts securing the inner seat track.
- h) Using the seat track wrench, remove the 4 nuts from the outer track.
- i) Carefully remove both seat tracks from the seat assembly.
- **STOP**
- Remove the seat position sensor first to ensure it is not dropped or damaged.
 DO NOT remove the put identified below.



5. REMOVE THE SEAT TRACK ADJUSTMENT HANDLE

a) Using a flat tip screw driver, disengage the spring by lifting the spring upward and pull out the adjusting handle from the seat track assembly.



 b) Lift the seat adjustment handle to release the lock and pull out the upper rail to access the adjustment handle lock plate.



c) Using a flat tip screw driver, press the lock plate down and lightly turn the adjustment handle back and forth to remove it from the seat track.



C. NEW SEAT TRACK INSTALLATION







- c) Check that the center clip of the outer shield is still disengaged.
- d) In order to maintain the clip disengaged place a new clean cloth between the outer seat track and outer shield.

- e) Install the seat track adjustment gauge to the seat track holes and ensure that all 4 pins are properly installed and flush.
 - Always use the gauge when installing the seat tracks to prevent the tracks from being misaligned.
 - Do not press hard on the gauge, otherwise the gauge may become deformed.
 - Ensure all 4 pins are properly installed.





f) Check that gauge pins are properly seated and secure the gauge to the seat assembly using packing tape.



- g) Using a feeler gauge, adjust the clearance between the inner track and seat position sensor so that it is approximately 1.0 mm (0.04 in)
- h) Using the seat track wrench, tighten the 2 nuts to spec.

Standard Torque: 25 Nm (255 kgf cm, 18 ft lbf)

Torque table is used when using seat track wrench.

Torque Wrench Length (in.)	Calculated Torque (ft·lbf)	NOTE: The seat track wrench
10 " to 11"	13	provided MUST be
12" to 15"		used when using
16" to 20"	15	the values in the
		table.

- i) Remove the feeler gauge.
- j) Using the seat track wrench, tighten the remaining 6 nuts to spec.
- k) Ensure that the track adjustment gauge pins are still flush with the seat track and that the track orientation did not move while torqueing the nuts.



Ensure all 4 pins are properly installed before and after torqueing the nuts.





7. RECONNECT THE SEAT POSITION SENSOR CONNECTOR



8. REINSTALL SEAT CUSHION INNER SHIELD SCREW

- a) Remove the rope/tie down securing the seat to the table.
- b) Remove the seat cover.
- c) Reinstall the seat cushion inner shield.

D. FRONT DRIVER'S SEAT REINSTALLATION



1. REINSTALL THE SEAT INTO THE VEHICLE

- a) Using 2 people carefully place the seat into the vehicle.
- b) Align the alignment pins on the front of the seat tracks with alignment holes in the floor pan.
- c) Tilt the seat back and reconnect the connectors.
- d) Reinstall the 4 seat bolts and torque to spec.

Torque: 37 Nm (375 kgf cm, 27ft lbf)

- e) Reinstall headrest.
- f) Remove protective tape and protective blanket.

VII. PASSENGER SEAT WORK PROCEDURE

A. PASSENGER SEAT REMOVAL



4. REMOVE THE FRONT SEAT INNER AND OUTER TRACKS



a) Remove the screw and washer securing the cable end as shown.

b) Loosen the lower nut while holding the upper nut in place and disconnect the cable.



DO NOT loosen the upper nut because it is fixed in place with thread locking agent.

c) Remove the spring from the outer seat track.

d) Remove the screw and washer securing the cable as shown.

- e) Remove the E-ring, and then detach the lever as shown in the illustration.
- f) Discard the E-ring so that it cannot be reused.



g) Apply protective tape to the edge of the seat cushion shield to prevent scratching.

h) Disengage the clip located in the center seat cushion shield. Place a clean cloth in between the seat cushion shield and i) outer track to keep the clip disengaged.

- Using the seat track wrench remove the 4 outer seat track nuts.
- Using the seat track wrench remove the 4 nuts on inner seat track ensuring you remove nut "L" last.



a) Discard the old nuts to ensure that they are not reused.

6. REMOVE THE SEAT TRACK ADJUSTMENT HANDLE e) Using a flat tip screw driver, disengage the spring by lifting the spring upward and pull out the adjusting handle from the seat track assembly. Spring Pull out Handle f) Lift the seat adjustment handle to release the lock and pull out the upper rail to access the adjustment handle lock plate. Pull out Upper Rail Unlock

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C. NEW PASSENGER SEAT TRACK INSTALLATION







- c) Check that the center clip of the outer shield is still disengaged.
- d) In order to maintain the clip disengaged place a new clean cloth between the outer seat track and outer shield.

- e) Install the seat track adjustment gauge to the seat track holes and ensure that all 4 pins are properly installed and flush.
 - Always use the gauge when installing the seat tracks to prevent the tracks from being misaligned.
 - Do not press hard on the gauge; otherwise the gauge may become deformed.
 - Ensure all 4 pins are properly installed.





f) Check that gauge pins are properly seated and secure the gauge to the seat assembly using packing tape.

g) Using the seat track wrench, tighten the 8 nuts to spec.

Standard Torque: 25 Nm (255 kgf cm, 18 ft lbf)

Torque table is used when using seat track wrench.

Torque Wrench Length (in.)	Calculated Torque (ft·lbf)
10 " to 11"	13
12" to 15"	14
16" to 20"	15

NOTE: The seat track wrench provided *MUST* be used when using the values in the table.

h) Ensure that the track adjustment gauge pins are still flush with the seat track and that the track orientation did not move while torqueing the nuts.



- Always use the gauge when installing the seat tracks to prevent the tracks from being misaligned.
- Do not press hard on the gauge; otherwise the gauge may become deformed.
- Ensure all 4 pins are properly installed before and after torqueing the nuts.



i) Remove the adjustment gauge.

- j) Remove the cloth and protective tape.
- k) Engage the center clip of the seat cushion outer shield.

I) Fasten the lever with the NEW E-ring

- m) Clean and degrease the screw.
- n) Apply an adhesive to the screw thread **Adhesive:**

Toyota Genuine Adhesive 1324, Three Bond 1324 or equivalent medium strength thread locking compound

- o) Fasten the cable with the screw and washer.
- p) Install the spring.





d) Confirm that the seat adjustment handle is fully seated and secured by the locking plate and spring.

5. ADJUST SEAT RAIL POSITION

b) Adjust the seat rail position so that the upper and lower seat rail are flush in the front: this will make it easier to install the seat in the car.





7. REINSTALL SEAT CUSHION INNER SHIELD SCREW

- d) Remove the rope/tie down securing the seat to the table.
- e) Remove the seat cover.
- f) Reinstall the seat cushion inner shield screw.

D. FRONT PASSENGER SEAT REINSTALLATION



1. REINSTALL THE SEAT INTO THE VEHICLE

- a) Using 2 people carefully place the seat into the vehicle.
- b) Align the alignment pins on the front of the seat tracks with alignment holes in the floor pan.
- c) Tilt the seat back and reconnect the connectors.
- d) Reinstall the 4 seat bolts and torque to spec.

Torque: 37 Nm (375 kgf cm, 27ft lbf)

- e) Reinstall headrest.
- f) Remove protective tape and protective blanket.

2. RECONNECT BATTERY (FOR VEHICLES EQUIPPED WITH SIDE AIRBAGS)

- a) Reconnect battery ground cable.
- b) Reset radio and car presets.
- 3. PERFORM THE ZERO POINT CALIBRATION FOR THE OCCUPANT CLASSIFICATION SYSTEM
- 4. CHECK FOR DTCs.

◄ VERIFY REPAIR QUALITY ►

- Confirm that the correct nuts are used for each seat track
- Confirm that the seat tracks are aligned properly both before and after torqueing the seat track nuts
- Confirm that the seat track nuts are torque to spec
- Confirm that the seat position sensor gap is correctly set
- Confirm that the seat is clean and free of dirt and grease.

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

VIII. APPENDIX

STOP

A. SEAT TRACK ALIGNMENT HOLE COATING REMOVAL

Only remove coating from the holes that do not allow the gauge pins to seat flush.

• DO NOT file the coating too much, only remove the coating as necessary.

1. DETERMINE WHICH HOLES PREVENT THE TOOL FROM SITTING FLUSH

2. ELONGATED ALIGNMENT PIN HOLE COATING REMOVAL



- a) Confirm that the upper rail is positioned one notch (approx. 10mm, 0.39 in.) from the rear of the lower rail for both tracks.
- b) If the upper rail is not in the correct position, pull the seat levers to adjust the upper rail positions.



If the upper rail is not in the specified position, damage to the seat track can occur from the filings.

- c) Using a round file, remove a little bit of the coating on the inner side wall.
- d) Check to see if the gauge alignment pin will fit properly.
- e) If not repeat steps c) and d) until it fits properly.



3. ROUND ALIGNMENT PIN HOLE COATING REMOVAL



a) Pull the seat adjustment lever and adjust the upper rail so that it is in the forward most position.

If the upper rail is not in the specified position, damage to the seat track can occur from the filings.

- b) Using a round file, remove a little bit of the coating on the inner side wall.
- c) Check to see if the gauge alignment pin will fit properly.
- d) If not repeat steps c) and d) until it fits properly.



DO NOT remove too much of the coating. Otherwise the alignment gauge pin can easily move or come out during seat track installation. A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS DISPOSAL

Make sure all campaign 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.*