

NOTICE THIS LSC EXPIRES ON NOVEMBER, 30 2019

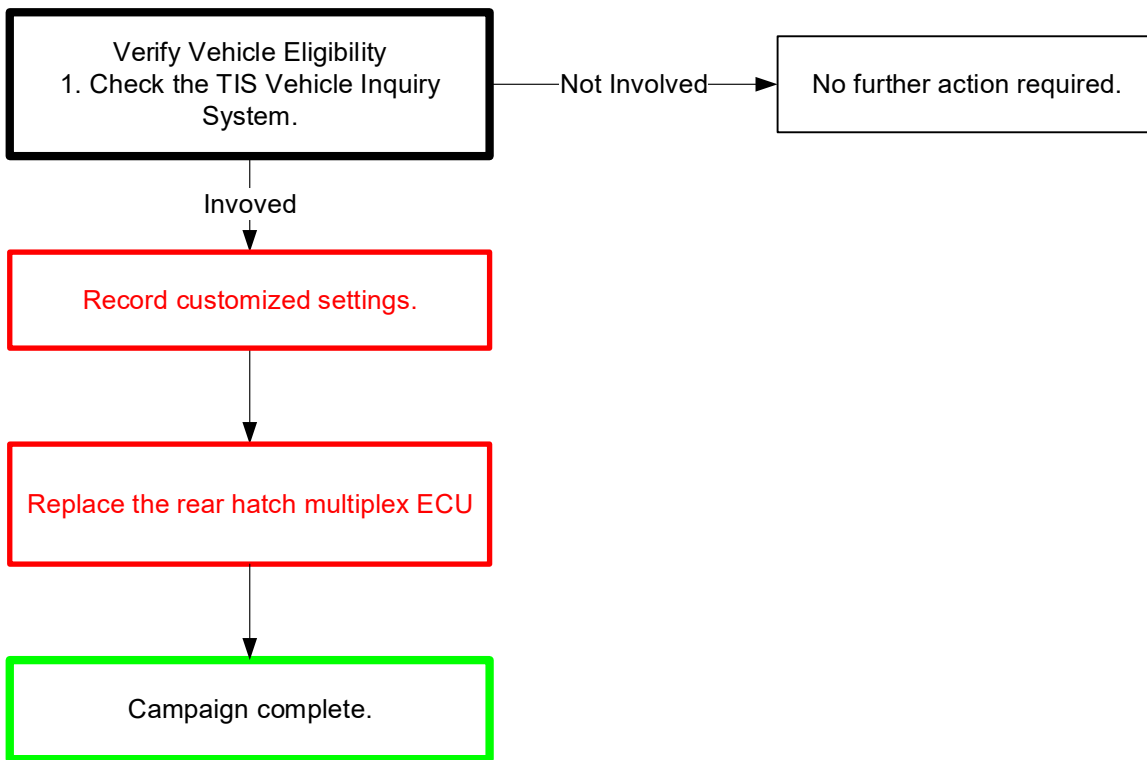
TECHNICAL INSTRUCTIONS FOR LIMITED SERVICE CAMPAIGN G0X POWER REAR HATCH MULTIPLEX ECU CERTAIN 2016 MODEL YEAR RAV4 & RAV4 HYBRID

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

- Toyota Certified (Any Specialty)
- Toyota Expert (Any Specialty)
- Master
- Master Diagnostic Technicians

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

A. COVERED VIN RANGE

- 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.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04006-44142	RAV4 Rear Hatch Multiplex ECU	1

B. TOOLS & EQUIPMENT

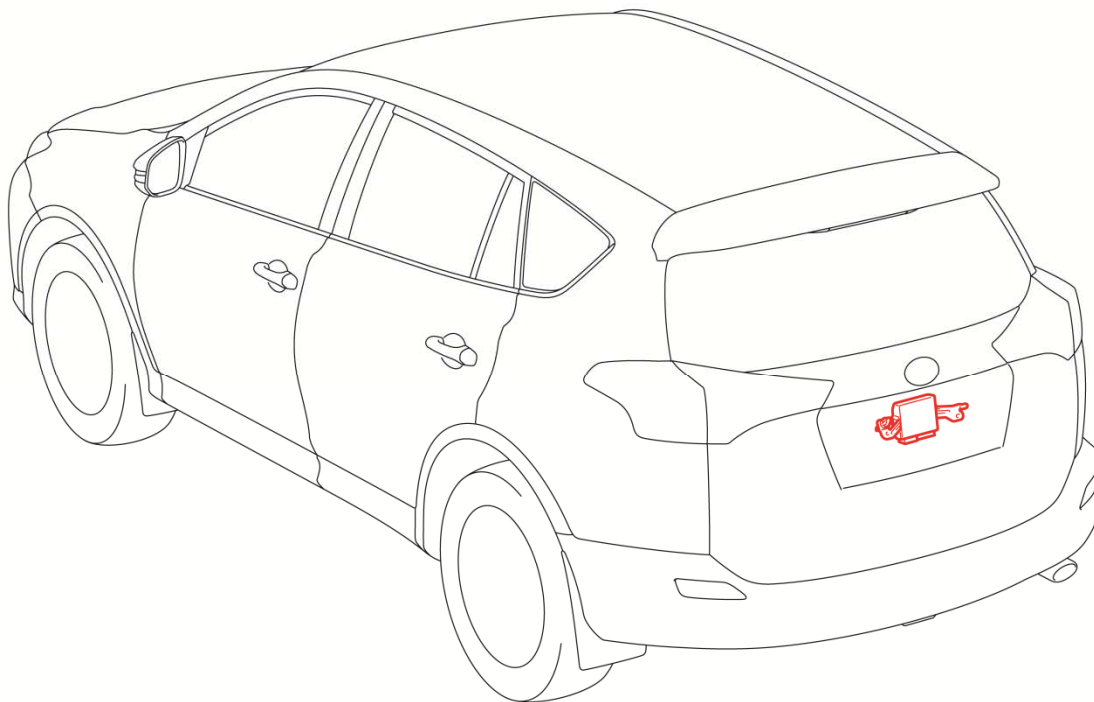
- Standard hand tools
- Techstream
- Torque wrench

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

Part Number	Description	Quantity
00002-06000-01	Plastic Pry Tool Set	1

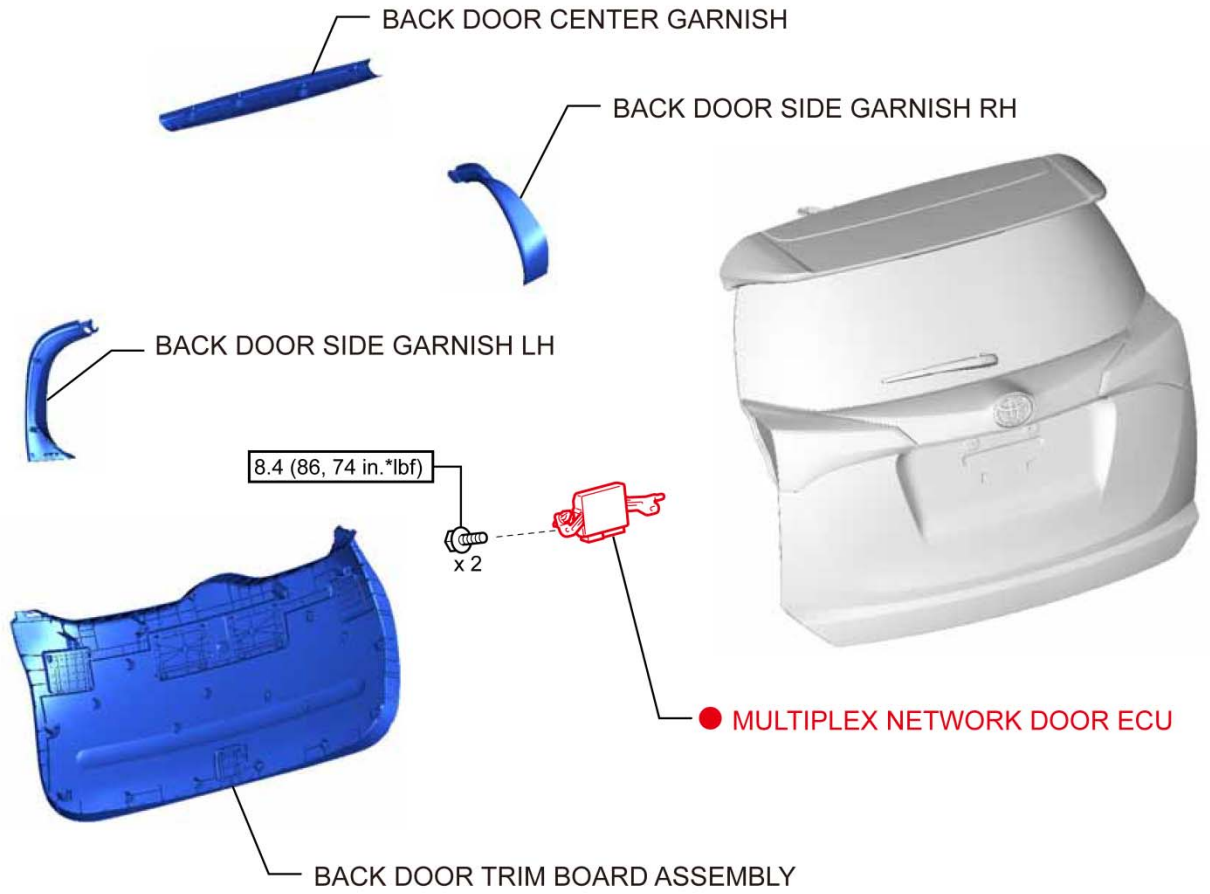
IV. BACKGROUND

In the subject vehicles the power function of the back door could become inoperative if there is interference with an object while using the power back door. Toyota has developed a new power back door Electronic Control Unit (ECU) to prevent this condition from occurring.



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V. COMPONENTS



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

● : Replacement part

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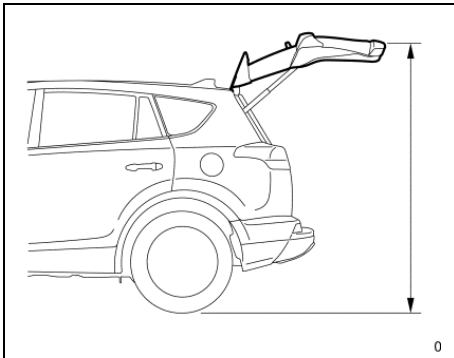
VI. WORK PROCEDURE

1. RECORD THE CUSTOMIZED SETTINGS



Ensure to record the customers customized setting for the rear hatch prior to multiplex ECU replacement.

- a) Using the steering wheel controls for the multi-information display go to:
 - Vehicle settings/PBD
- b) Connect Techstream and go to:
Utility/Customize/PSD & PBD operation
- c) Record to the customized settings sheet in **SECTION VII APPENDIX STEP A.**



With Techstream on the customized setting screen go to Power Back Door Opening Adjust then to the User Setting Position this will show that the customer set a customized value. To reprogram the rear hatch height setting that was set by the customer, measure the height of the fully open hatch from the floor, record this height and reset the customized position after replacing the multiplex ECU.

NOTE: When reprogramming the rear hatch height ensure the display is NOT in User Setting Position. Set the rear hatch to the measured height, then press and hold the door control switch on the bottom of the rear hatch until the buzzer sounds 4 times.

2. REPLACE THE REAR HATCH MULTIPLEX ECU

- a) Open the rear hatch.
- b) Disconnect the negative battery terminal.

NOTE: For vehicles equipped with navigation wait at least 6 minutes after IG OFF to disconnect the negative battery terminal. This allows time for the navigation systems memory to complete its processes.

- c) Replace the rear hatch multiplex ECU
Refer to the Technical Information System (TIS), using the applicable vehicle and model year.

2016 RAV4

[Remove](#)

2016 RAV 4 Hybrid

[Remove](#)

[Install](#)

[Install](#)

NOTE: Ensure to mark the old multiplex ECU so it is not reused.

- d) Reconnect the negative battery terminal.

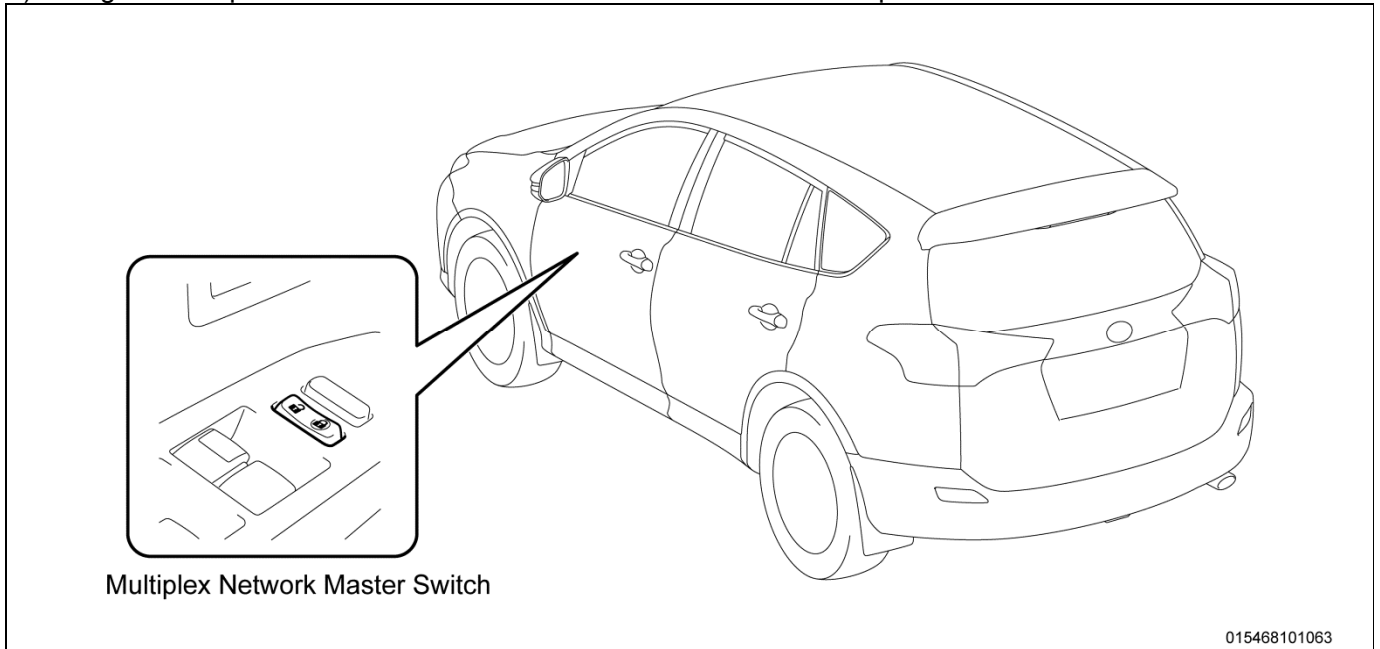
3. RESET THE REAR HATCH CLOSE POSITION

- a) Manually close the rear hatch to the partially closed position
- b) Check that the motor operates and fully closes the rear hatch.

NOTE: If the power rear hatch does not operate and/or open. Disconnect the negative battery cable for a minimum of 10 seconds and perform reinitialization after reconnecting the terminal.

4. POWER REAR HATCH OPERATIONAL CHECK

a) Using the multiplex network master switch check the lock / unlock operation of the door.



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b) Follow the flow chart to check the operation of all the rear hatch functions.
NOTE: This will check the systems connected to the multiplex ECU.

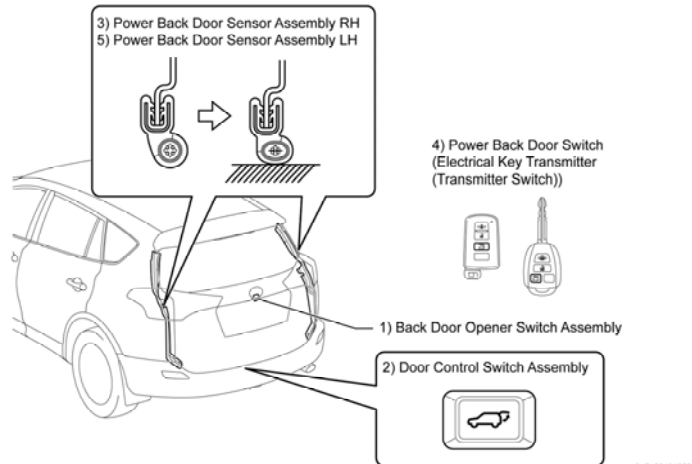
POWER REAR HATCH OPERATIONAL CHECK LIST

1. Push the rear hatch opener switch and check the following functions:
Rear hatch opens
The buzzer sounds
The hazard lights flash twice
(the rear hatch opener switch is located on the rear hatch behind the Toyota emblem)

2. Check the rear hatch control switch for the following function:
Push the rear hatch control switch and ensure that the rear hatch fully closes
(the rear hatch control switch is located on the dash left of the steering column)

3. Push the rear hatch opener switch and ensure the rear hatch fully opens.
(the rear hatch opener switch is located on the rear hatch behind the Toyota emblem)

4. Check the power rear hatch right sensor for the following function:
Press the door control switch and while the hatch is closing press the right sensor and check that the hatch stops and reverses direction.
(the door control switch is located on the bottom of the hatch)



5. Check operation of wireless function:
Push the transmitter switch and check that the rear hatch fully opens.

6. Check the power rear hatch left sensor for the following function:
Press the door control switch and while the hatch is closing press the left sensor and check that the hatch stops and reverses direction.
(the door control switch is located on the bottom of the hatch)

7. Press the door control switch and ensure the rear hatch fully closes.
(the door control switch is located on the bottom of the hatch)

8. Operational check complete.

5. RESTORE THE CUSTOMIZED SETTINGS

a) Using the customized setting sheet restore the rear hatch settings.

6. CHECK FOR DTC'S

◀ VERIFY REPAIR QUALITY ▶

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

VII. APPENDIX

A. CUSTOMIZED SETTINGS SHEET

CUSTOMIZED SETTINGS SHEET

a) Multi-information display: Vehicle settings / PBD

Function	Settings (Put a check into applicable setting.)		
System settings	<input type="checkbox"/> All On	<input type="checkbox"/> Touchless Sensor Off (if equipped)	<input type="checkbox"/> All Off

b) Techstream: PSD & PBD operation

Function	Settings (Put a check into applicable setting.)				
PBD SW Operation	<input type="checkbox"/> 0.0s	<input type="checkbox"/> 0.8s			
Door Unlock with 1 Motion	<input type="checkbox"/> BackDoor	<input type="checkbox"/> ALL DOORS			
Wireless Power Rear Hatch Open	<input type="checkbox"/> Lock: OFF / Unlock: OFF	<input type="checkbox"/> Lock: OFF / Unlock: ON	<input type="checkbox"/> Lock: OFF / Unlock: Twice	<input type="checkbox"/> Lock: OFF / Unlock: 0.8s	<input type="checkbox"/> Lock: Twice / Unlock: Twice
	<input type="checkbox"/> Lock: 0.8 s / Unlock: 0.8s				
PBD Assist Open Operation	<input type="checkbox"/> OFF	<input type="checkbox"/> ON			
PBD/Emblem Sensor Function*	<input type="checkbox"/> PBD OFF / Emblem OFF	<input type="checkbox"/> PBD ON / Emblem OFF	<input type="checkbox"/> PBD ON / Emblem ON		
PBD Buzzer Volume Adjust	<input type="checkbox"/> Small	<input type="checkbox"/> Middle	<input type="checkbox"/> Large		
PBD Buzzer Function	<input type="checkbox"/> OFF	<input type="checkbox"/> Start Buzzer ON / In Operation Buzzer OFF	<input type="checkbox"/> Start Buzzer OFF / In Operation Buzzer ON	<input type="checkbox"/> ON	
PBD Buzzer Tone	<input type="checkbox"/> Pattern A	<input type="checkbox"/> Pattern B	<input type="checkbox"/> Pattern C		
PBD Assist Close Operation	<input type="checkbox"/> OFF	<input type="checkbox"/> ON			
Power Rear Hatch Opening Adjust	<input type="checkbox"/> 1: Min	<input type="checkbox"/> 2: Small	<input type="checkbox"/> 3: Middle	<input type="checkbox"/> 4: Large	<input type="checkbox"/> 5: Max
	<input type="checkbox"/> User Setting Position				



Back door height measurement value	In. (mm)
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B. CAMPAIGN DESIGNATION DECODER

