Vehicle-Specific Power Tailgate Lift System

Toyota RAV4

2020-2024

Part no. ARTRAV20



Points to Note

- For safety and to ensure proper product use, we recommend professional installation. Do not attempt to disassemble or install the system yourself, as this may result in product damage or personal injury.
- Route each wire harness according to the instructions in this manual, securing them to the vehicle's factory harnesses with cable ties. Ensure the wiring is kept clear of fasteners and screw holes to prevent the harnesses from being crushed or pinched by trim panel clips and screws during reassembly.
- Some wire harness terminals (indicated by the red ellipses below) are left disconnected during manufacturing. Please insert these terminals into their corresponding connectors before routing the harnesses to prevent short circuits. Once routed, connect the remaining harness plugs (indicated by the blue ellipses) to the vehicle's factory plugs.



- Before beginning installation, inspect the vehicle's instrument panel display, verify that all buttons, doors, and windows operate correctly, and check for any pre-existing scratches on the interior or exterior. Report any issues to the customer immediately.

Installation Precautions

- Remove any metal accessories or hard objects from your person during installation to prevent damaging the vehicle's paint, seats, or interior. Carefully store all removed trim components in a safe location to avoid scratches.
- The illustrations in this manual are for reference only. While specific vehicle configurations may vary slightly from the pictures, the general installation methods remain the same.

In the Box

1		Strut	Qty 2
2		Tailgate ECU	Qty 1 set
3		Wire harness	Qty 1 set
4		Power latch	Qty 1
5		Tailgate switch	Qty 1

Other Accessories

Screws, brackets

Recommended Tools



Threading tools



Quick release ratchet wrench set



Electric drill and drill bits



Other tools

Kick Sensor (Sold Separately)

This kit is compatible with the Aerpro Power Tailgate Kick Sensor (part no. ARTGKS), sold separately. Once fitted under the rear bumper, it lets you open and close the tailgate with a light kick of your foot.

More information: **aerpro.com/ARTGKS**

Notice

This vehicle-specific kit converts the manual tailgate on the vehicle listed in this manual to power operation. Installation requires a good level of technical knowledge. Please read this manual in its entirety before you start.

Use the correct tools during installation to prevent damage to the vehicle or the product. Please note that we cannot be held liable for any issues arising from improper installation.

Before starting the installation, disconnect the negative battery terminal and make sure the ignition is off and the key is removed or kept away from the vehicle.

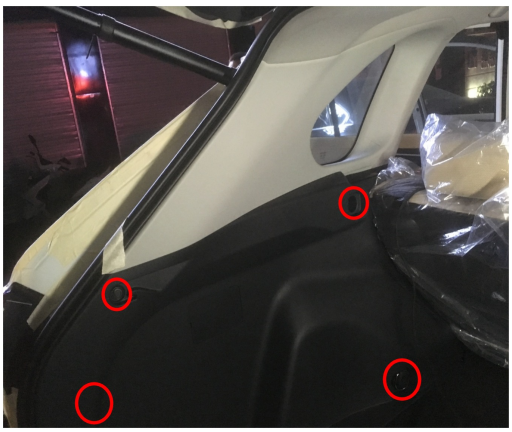
Installation



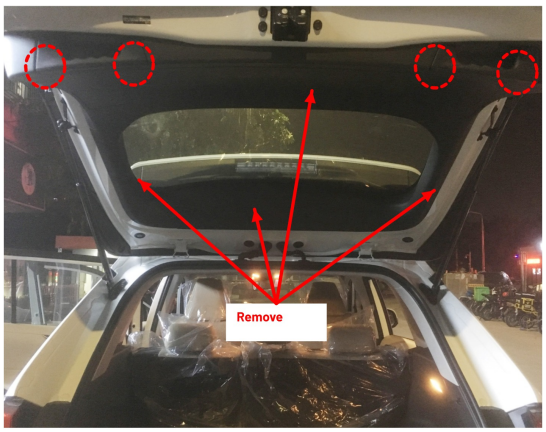
1 Remove the front left side trim panel and door sill panel.



2 Remove the rear left B-pillar trim panel and door sill panel.



3 Remove the trim panel on the left side of the boot (there are screws in the circles).



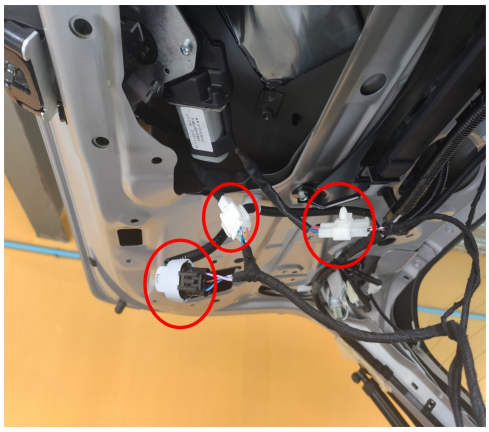
4 Remove the tailgate trim panels (there are screws in the circles).



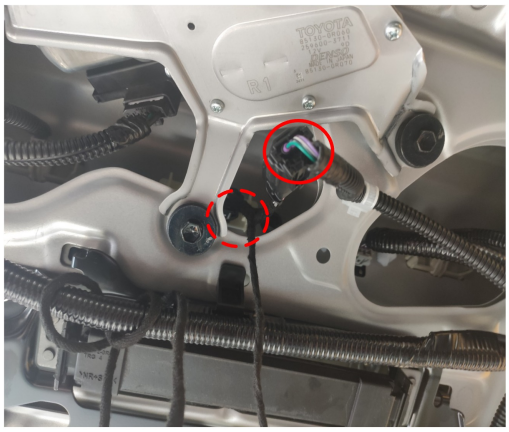
5 Remove the factory latch and install the power latch. If the mounting hole interferes with the latch, grind off the upper outer frame to allow installation.



6 Remove the factory latch and install the power latch.



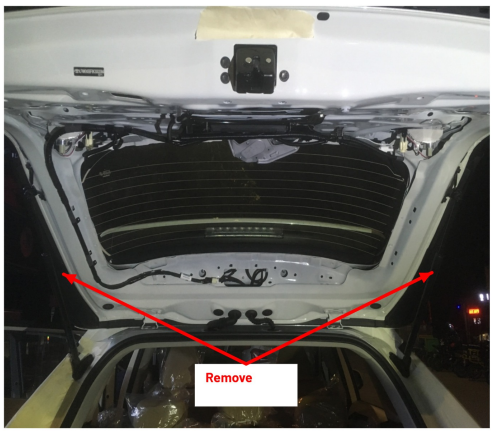
7 Connect the lock signal harness connector to the power latch.



8 Connect the lock signal harness connectors to the factory tailgate switch.



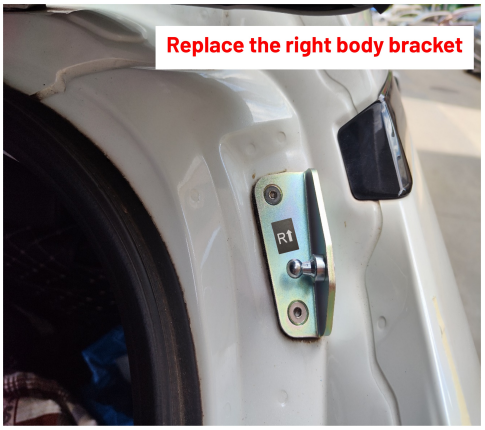
9 Install the new tailgate switch (the switch shown above is for reference only; the actual switch may differ).



10 Remove the gas struts. To do this safely, remove and replace one strut at a time.



11 Replace the left body bracket.



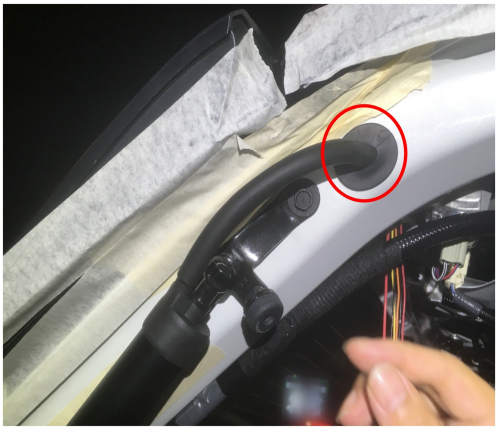
12 Replace the right body bracket.



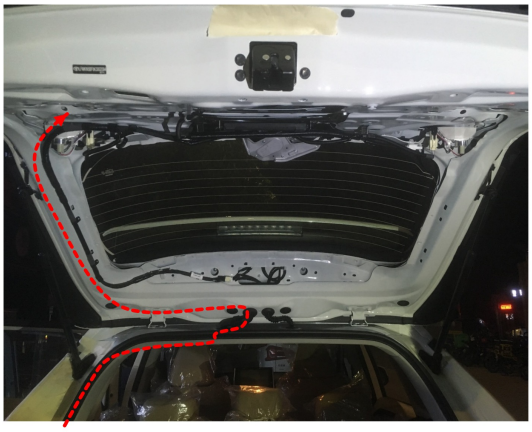
13 Install the electric struts (L for the left side, R for the right side, as indicated by the first letter of the strut code).



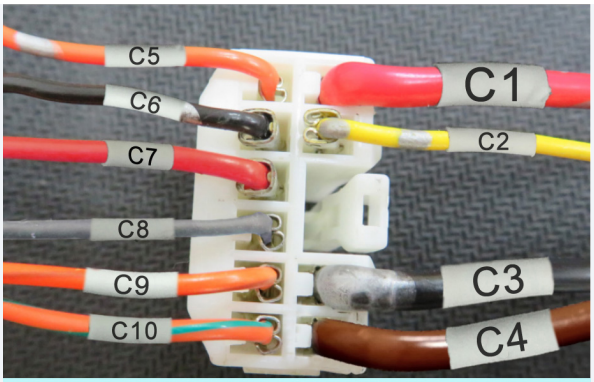
14 Thread the strut wire harnesses through the factory holes and route them as shown above.



15 Seal the left and right holes with grommets.

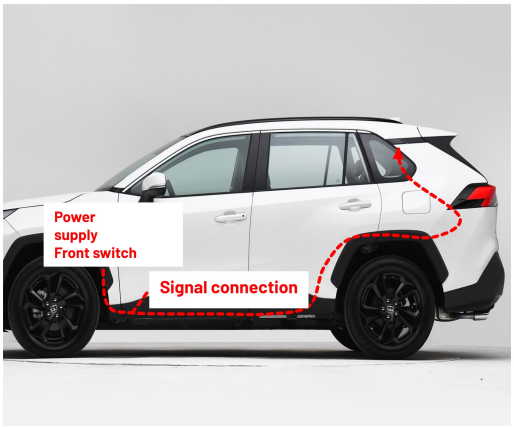


16 Route the power harness to the tailgate (insert the terminals into the wire harness connector before connecting the plugs).



Note: For models with fewer than 10 wires, just insert them according to the corresponding label or color.

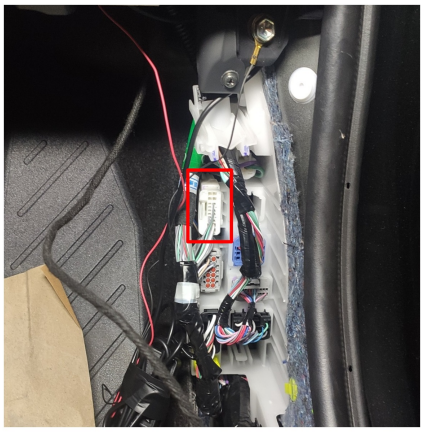
17 Insert the power harness terminals into the wire harness connector as shown above.



18 Route the power harness.



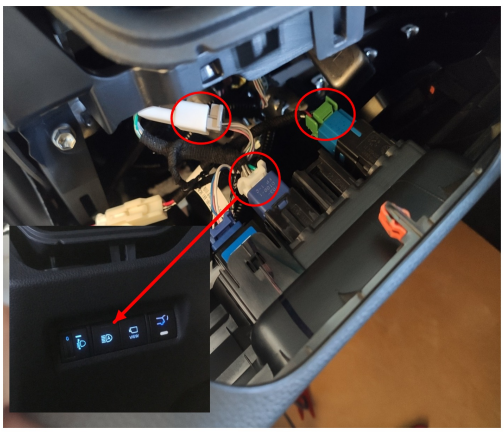
19 Secure the ground wire connector to the factory grounding point on the left side of the boot.



20 Connect the power harness connectors to the signal connector and socket near the pedals.



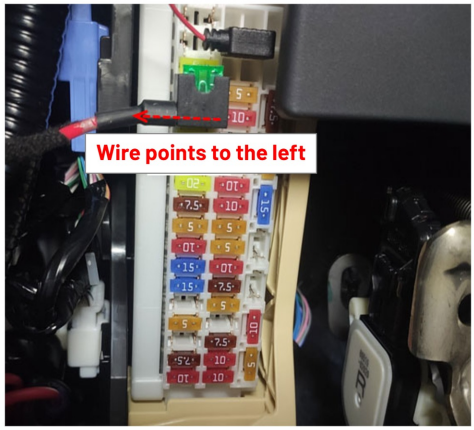
21 Install the front switch in the reserved slot on the switch panel.



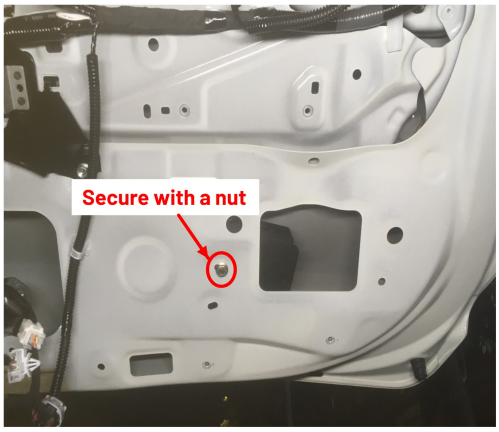
22 Connect the indicated connectors for the button light.



23 The fuse slot for constant power is indicated in the diagram.



24 Plug the fuse tap into the fuse box, ensuring the wire is correctly oriented.



25 Secure the tailgate ECU bracket at the indicated hole on the left side of the tailgate.



26 Insert the strut wire harnesses ①②, lock signal harness ③, and power harness ④ into the tailgate ECU in sequence, then mount the tailgate ECU on its bracket.



27 Initialise the system, then test each function of the electric tailgate.



28 Remove the indicated tailgate handle (after removing part A, unscrew the screws, then remove part B).



29 Fit the trim panel for the new tailgate switch (do not install the screw) and mark the indicated location for the hole.



30 After opening the hole, pull out the connector of the tailgate switch.



31 Install the trim panel for the new tailgate switch (install the screw), then install the new tailgate switch.



32 Install the bottom trim panel.

System Initialisation

1. Press the newly installed tailgate switch to close the tailgate automatically.
2. Press the exterior tailgate switch to open it; you will hear a long beep.
3. System initialisation is now complete.

Operating Instructions

1. **Opening and Closing the Tailgate:**
   - Press the unlock button on the remote key three times;
   - Press the unlock button in the driver's area three times;
   - Press the factory tailgate switch;
   - Press the newly installed tailgate switch;
   - Press the front switch: press and hold for 4 seconds to open, or press briefly to close.
2. **Pausing the Tailgate:**

   While the tailgate is in motion, press any of the control buttons to pause it. Pressing a button again will reverse the tailgate's direction.

Configuring the Tailgate Switch Settings

1 Adjusting Closing Speed

Press and hold the newly installed tailgate switch until you hear a single short beep. Release the button; a short beep confirms the new closing speed is set. There are five speed settings. Repeat this process to increase the speed by one level.

2 Adjusting Opening Speed

Press and hold the newly installed tailgate switch until you hear two short beeps. Release the button; two short beeps confirm the new opening speed is set. There are five speed settings. Repeat this process to increase the speed by one level.

3 Setting the Maximum Opening Height

Press and hold the newly installed tailgate switch until you hear three short beeps. Release the button; three short beeps confirm the height setting is complete. Tip: While the tailgate is moving, pause it, then push it to the ideal height.

4 Remote Key Unlock Button Sensitivity (Quick/Slow Press)

Press and hold the newly installed tailgate switch until you hear four short beeps. Release the button; four short beeps confirm the remote key button sensitivity setting is complete.

5 Remote Key Activation (Double-Press vs. Triple-Press)

Press and hold the newly installed tailgate switch until you hear five short beeps. Release the button; a long beep confirms the remote key activation setting is complete.

6 Adjusting Braking Force

Press and hold the newly installed tailgate switch until you hear six short beeps. Release the button; two long beeps confirm the braking force setting is complete. There are five settings. Repeat this process to increase the braking force by one level.

7 Factory Reset

Press and hold the newly installed tailgate switch until you hear seven short beeps. Release the button; three long beeps confirm the reset is complete.

Buzzer Sound Indicators

One Beep: The tailgate receives an open, close, or pause signal and responds immediately.

Two Beeps: The tailgate is fully opened or fully closed.

Three Beeps: The tailgate encountered excess resistance; the intelligent anti-pinch safety feature has been activated.

One Long Beep: Height memory is complete.

Technical Support

If you need help setting up or using your Aerpro product, now or in the future, call Aerpro Support Australia on 03 8587 8889, Monday to Friday, 9am to 5pm AEST.

To download a digital copy of this manual, or other Aerpro manuals and software, visit aerpro.com.