Vehicle-Specific Power Tailgate Lift System



Toyota Highlander

2022-2024

Part no. ARTHLD22

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 buckles 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 ellipse 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 ellipse) 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 passenger side trim panel, storage box and door sill panel.



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



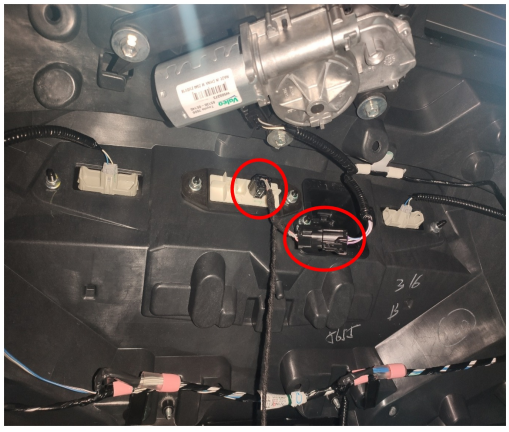
3 Remove the tailgate trim panels.



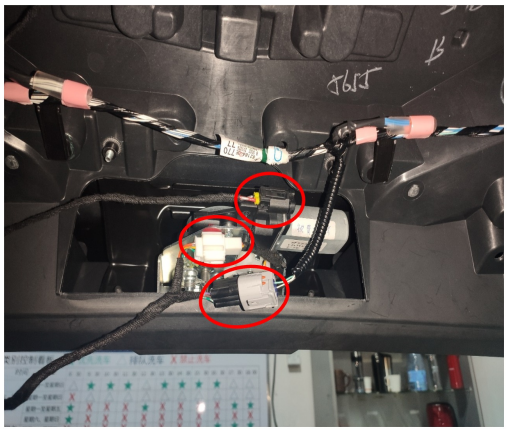
4 Remove the door sill panel, storage box and left side trim panel from the boot.



5 Remove the original latch and install the power latch.



6 Connect the connectors of the lock signal harness to the original tailgate switch.



7 Connect the connectors of the lock signal harness to the power latch.



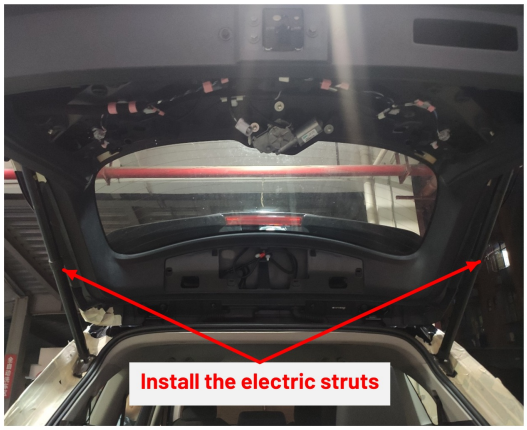
8 Install the new tailgate switch.



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



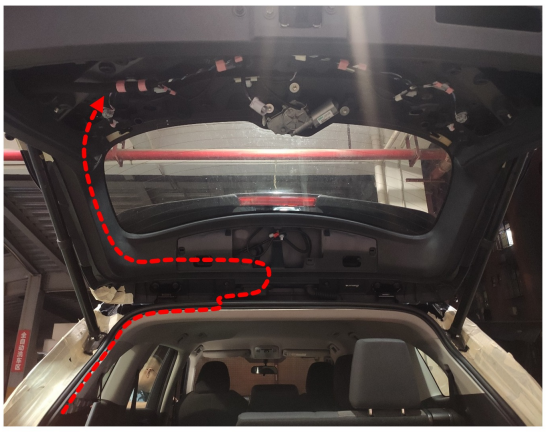
10 Replace the left and right body brackets.



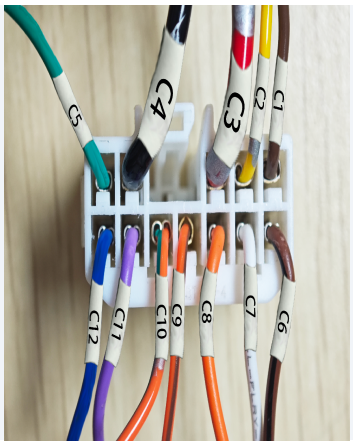
11 Install the electric struts (L for the left side, R for the right side, as indicated by the first letter of the strut code).



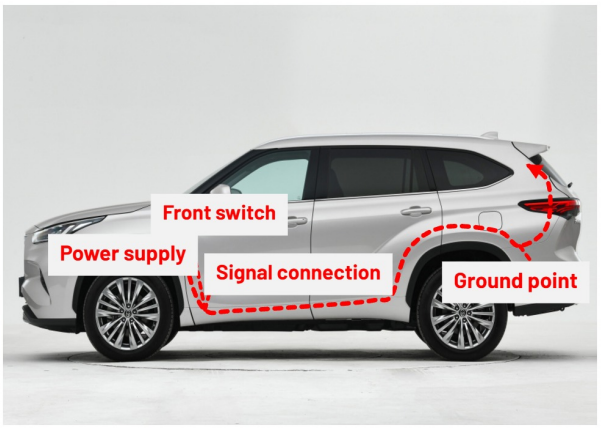
12 Thread the strut wire harness through the indicated hole and seal the hole with the rubber plug. Repeat on both sides.



13 Route the power harness to the tailgate. Do not connect the plugs until you have inserted the terminals into the wire harness connector.



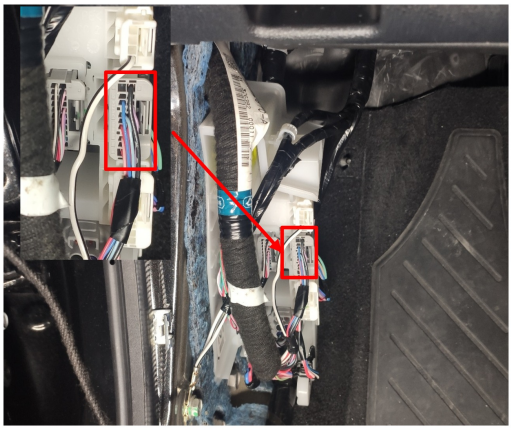
14 Insert the power harness terminals into the wire harness connector according to the diagram.



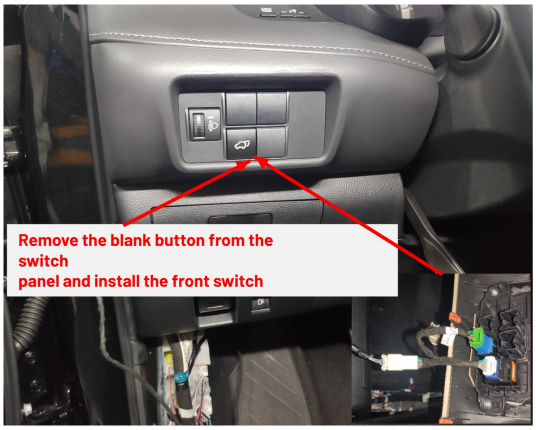
15 Route the power harness.



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



17 Connect the power harness to the signal plug and socket on the left side of the front passenger seat.



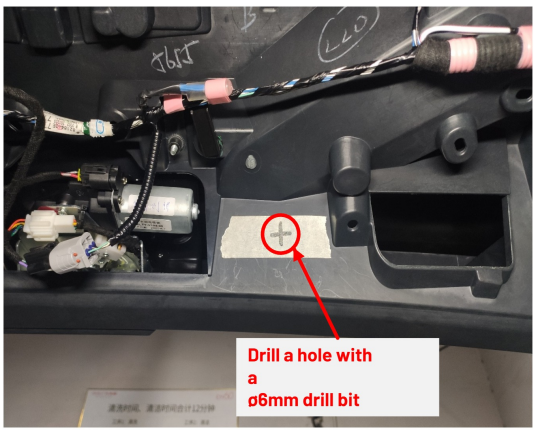
18 Remove the blank button from the switch panel, install the front switch, and connect the backlight connectors behind the switch panel.



19 Locate the constant power fuse slot (fifth in the right column).



20 Move the original fuse from the fuse box to the fuse tap, then plug the fuse tap into the fuse box. Note the orientation of the wire.



21 Using a 6mm drill bit, drill a hole on the left side of the tailgate as indicated above, then secure the tailgate ECU at the hole.



22 Insert the strut wire harnesses ①②, lock signal harness ③, and power harness ④ into the tailgate ECU in sequence.



23 Press the new tailgate switch to open and close the tailgate once. System initialisation is now complete. Test the functions of the electric tailgate.



24 Reinstall all trim panels and install the new tailgate switch (remove the original small cover 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 to close the tailgate.
   - Press the front switch: 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 Setting the Maximum Opening Height

Press and hold the switch button on the tailgate. Release it after hearing one long beep - the height has been successfully memorised.

Tip: While the tailgate is in motion, pause it, then manually push it up to the desired height.

2 Adjusting Closing Speed

Press and hold the switch button on the tailgate. Release it after hearing two short beeps - the closing speed-up function has taken effect.

There are five speed levels. Repeat this process to increase the speed by one level.

3 Adjusting Opening Speed

Press and hold the switch button on the tailgate. Release it after hearing three short beeps - the opening speed-up function has taken effect.

There are five speed levels. Repeat this process to increase the speed by one level.

4 Adjusting Braking Force

Press and hold the switch button on the tailgate. Release it after hearing one long beep and one short beep - the braking force has been increased.

There are five levels. Repeat this process to increase the level by one.

5 Switch Reminder Sound Toggle

Press and hold the switch button on the tailgate. Release it after hearing one long beep and two short beeps - the switch reminder sound toggle has taken effect. (Default is silent. Repeat the setting to cycle through the options.)

6 Entering the Voice Wake-Up Word and Command Word Modification Menu

Press and hold the switch button on the tailgate. Release it after hearing one long beep and three short beeps - the voice wake word and command word modification menu entered.

7 Voice Switch Power-Off Toggle Between 72 Hours and 0.5 Hours

Press and hold the switch button on the tailgate. Release it after hearing two long beeps and one short beep - the voice switch power-off toggle between 72 hours and 0.5 hours has taken effect.

8 Voice Switch On and Off

Press and hold the switch button on the tailgate. Release it after hearing two long beeps and two short beeps - the voice switch ON/OFF toggle has taken effect. (Default is ON. Repeat this step to cycle through the options.)

9 Kick Sensor On and Off

Press and hold the switch button on the tailgate. Release it after hearing two long beeps and three short beeps - the kick sensor ON/OFF toggle has taken effect. (Default is ON. Repeat the setting to cycle through the options.)

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

Press and hold the switch button on the tailgate. Release the switch after hearing three long beeps and one short beep - the toggle between double and triple tapping has taken effect. (Default is triple tapping. Repeat this step to cycle through the options.)

11 Tap Sensor On and Off

Press and hold the switch button on the tailgate. Release the switch after hearing three long beeps and two short beeps - the tap sensor ON/OFF toggle has taken effect. (Default is ON. Repeat this step to cycle through the options.)

12 Toggle Between 2-Press and 3-Press of the Unlock Button On Remote Key

Press and hold the switch button on the tailgate. Release the switch after hearing three long beeps and three short beeps - the toggle between 2-press and 3-press has taken effect. (Default is 3-press. Repeat this step to cycle through the options.)

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

Press and hold the switch button on the tailgate. Release the switch after hearing four long beeps and one short beep - the toggle between quick press and slow press has taken effect. (Default is quick press. Repeat this step to cycle through the options.)

14 Factory Reset

Press and hold the switch button on the tailgate. Release the switch after hearing five long beeps. The factory reset has taken effect.

Buzzer Sound Indicators

One Beep: The tailgate immediately opens, closes, or pauses in response to an open, close, or pause signal.

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.

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.

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