

EVFRONTIERX Kia Carnival 2022-2024

EVFRONTIERX Power Liftgate Kit with Kick Sensor

Instruction Manual for Kia Carnival 2022-2024

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your EVFRONTIERX Power Liftgate Kit with Kick Sensor. This system is designed to enhance the convenience and functionality of your Kia Carnival's tailgate. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. PRODUCT OVERVIEW

The EVFRONTIERX Power Liftgate Kit provides an electric tailgate system for your Kia Carnival (2022-2024 models). It offers automatic opening and closing, adjustable height settings, and safety features such as obstacle detection and anti-pinch protection. The included kick sensor allows for hands-free operation, adding convenience when your hands are full.

3. PACKAGE CONTENTS

Verify that all components are present in your package:

- Control Box
- Struts (2)
- Connecting Wire Harness
- Front Button
- Rear Door Close Button
- Kick Sensor Module with Wiring

- Installation Manual (this document)



Figure 3.1: Complete EVFRONTIERX Power Liftgate Kit components.

Foot Sensor



Figure 3.2: Foot Sensor module and wiring.

4. KEY FEATURES

- **Automatic Operation:** Effortless opening and closing of the tailgate.
- **Adjustable Height:** Customize the maximum opening height to suit your needs.
- **Obstacle Detection & Anti-Pinch Protection:** Enhances safety by stopping movement if an obstruction is detected.
- **Memory Function:** Saves your preferred tailgate opening height.
- **Multiple Control Modes:** Operate via original car key fob, front button, rear button, or foot sensor.
- **Soft-Close Feature:** Ensures gentle and quiet closing of the tailgate.



Figure 4.1: Electric Tailgate Lift features and control options.

5. INSTALLATION (SETUP)

Professional installation is highly recommended for this product to ensure correct functionality and to avoid damage to your vehicle. The installation process involves replacing the original tailgate struts, connecting the control box, and integrating the control buttons and kick sensor into the vehicle's electrical system.

Electric Tail Gate Lift, Easily to control your trunk



- Factory Remote Control
- Front & Rear Buttons
- Height Adjustment
- Intelligent Anti-Pinch
- Foot Sensor (optional)
- Voice Control (optional)

Figure 5.1: Installation Demo Diagram. This diagram illustrates the general placement of components such as the control box, left and right poles (struts), latch box, electric suction lock, tailgate button frame, and central control button. For detailed step-by-step instructions, please refer to the specific installation guide provided with your kit or consult a qualified automotive technician.

6. OPERATION

The power liftgate system offers several convenient ways to operate your Kia Carnival's tailgate:

6.1. Using the Original Car Key Fob

Press the tailgate unlock button on your original car key fob to open or close the tailgate automatically from a distance.



Figure 6.1: Tailgate operation via factory remote control.

6.2. Using the Front Button

A dedicated button installed in the driver's cab allows for convenient opening and closing of the tailgate from inside the vehicle.



Figure 6.2: Tailgate operation using the front button in the driver's cabin.

6.3. Using the Rear Button

A button located on the tailgate itself allows for direct opening and closing when you are at the rear of the vehicle.



Figure 6.3: Tailgate operation using the rear button.

6.4. Foot Sensor Operation (Hands-Free)

With the kick sensor installed, you can open or close the tailgate by simply waving your foot under the rear bumper. Ensure the key fob is within range for this function to work.



Figure 6.4: Hands-free tailgate operation with the foot sensor.



Figure 6.5: Demonstrating the foot sensor activation.

6.5. Height Adjustment

To set a custom opening height, manually adjust the tailgate to your desired position, then press and hold the tailgate close button until you hear a confirmation beep. The system will remember this height for future operations.



Figure 6.6: Adjusting the tailgate opening height.

6.6. Anti-Pinch Protection

The system is equipped with an anti-pinch feature. If an obstruction is detected during closing, the tailgate will automatically reverse its movement to prevent injury or damage.



Figure 6.7: Intelligent Anti-Pinch feature in action.

6.7. Operational Videos

Video 6.1: Demonstration of the Electric Tailgate system on a Kia Carnival 2022-2024, showing automatic opening and closing.

Video 6.2: Explanation and demonstration of how the tailgate foot sensor operates for hands-free access.

7. MAINTENANCE

To ensure the longevity and optimal performance of your power liftgate system, consider the following maintenance guidelines:

- **Regular Cleaning:** Keep the tailgate area, especially around the struts and latch, free from dirt, debris, and ice.
- **Inspect Struts:** Periodically check the struts for any signs of wear, damage, or leakage.
- **Wiring Inspection:** Ensure all wiring connections are secure and free from corrosion or damage.
- **Avoid Obstructions:** Always ensure the tailgate path is clear before operating to prevent unnecessary strain on the system.
- **Professional Check-ups:** If you notice any unusual noises, slow operation, or inconsistent behavior, consult a professional technician.

8. TROUBLESHOOTING

If you encounter issues with your power liftgate, try the following basic troubleshooting steps:

- **Tailgate Not Opening/Closing:**

- Check if the vehicle battery is sufficiently charged.
- Ensure all doors are properly closed.
- Verify that the key fob is within range and has a working battery.

- **Intermittent Operation:**

- Inspect for any loose wiring connections.
- Clear any obstructions around the tailgate or sensor area.

- **Tailgate Stops Mid-Movement:**

- This may indicate the anti-pinch feature has been activated. Check for obstructions.
- If no obstruction is present, try resetting the system by manually closing the tailgate and then attempting operation again.

- **Foot Sensor Not Responding:**

- Ensure the key fob is on your person and close to the vehicle.
- Perform the foot gesture smoothly and directly under the sensor area.
- Check if the sensor is clean and free from dirt or snow.

If these steps do not resolve the issue, please contact EVFRONTIERX customer support for further assistance.

9. SPECIFICATIONS

Feature	Detail
Compatibility	Kia Carnival 2022-2024
Material	Metal
Auto Part Position	Rear
Package Dimensions	32.28 x 8.27 x 6.69 inches
Item Weight	13.78 Pounds
Model Number	851a6ef1-8168-4adf-8bca-fe8f063dfca6

10. WARRANTY AND SUPPORT

EVFRONTIERX provides a **1-Year Warranty** for this Power Liftgate Kit. For any questions, technical assistance, or warranty claims, please contact EVFRONTIERX customer service. We are committed to providing hassle-free support and assisting with effortless installation.

For further assistance, please visit the [EVFRONTIERX store on Amazon](#) or refer to your purchase documentation for contact details.

