

WOLFSTORM WSA230

WOLFSTORM LED Tail Lights for Jeep Wrangler JL (2018-2025) - Smoked Lens

Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your WOLFSTORM LED Tail Light Assembly. These tail lights are designed to enhance the rear lighting of your Jeep Wrangler JL/JLU, featuring sequential turn signals and a smoked lens finish. Please read this manual thoroughly before installation and retain it for future reference.



Image 1.1: WOLFSTORM LED Tail Lights (Smoked Lens) and a Jeep Wrangler JL.

2. SAFETY INFORMATION

- Always disconnect the vehicle's battery before performing any electrical work to prevent electrical shock or damage.
- Ensure the vehicle is parked on a level surface with the parking brake engaged.
- Wear appropriate personal protective equipment, such as gloves and eye protection, during installation.
- If you are unsure about any step of the installation process, consult a qualified automotive technician.
- Verify all connections are secure and correct before restoring power to the vehicle.

3. PACKAGE CONTENTS

Your WOLFSTORM LED Tail Light Assembly package should contain the following items:

- 1x Left LED Tail Light Assembly (Smoked Lens)
- 1x Right LED Tail Light Assembly (Smoked Lens)
- Necessary wiring harnesses (pre-attached or included for plug-and-play installation)

4. SPECIFICATIONS

Feature	Description
Brand	WOLFSTORM
Model Number	WSA230
Color	Smoke Lens
Auto Part Position	Rear
Special Features	LED Daytime Running Lights Design, LED Dynamic Sequential Turning Light Effect
Material	Plastic
Water Resistance Level	Water Resistant
Automotive Fit Type	Vehicle Specific Fit
Compliance	DOT/SAE Compliant
Item Weight	7.39 pounds (approx.)
Package Dimensions	20 x 11.06 x 10.35 inches (approx.)

Item Dimension



DOT/SAE Compliance



**Black housing/
Smoke lens**

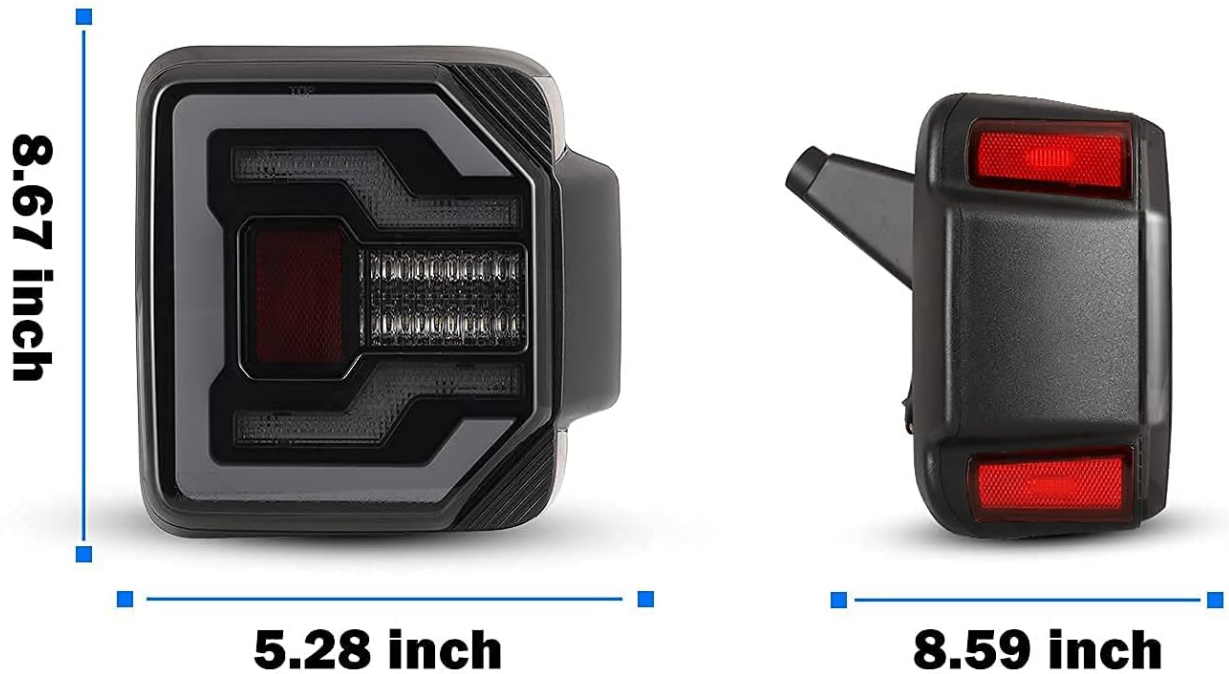


Image 4.1: Tail Light Dimensions.



Image 4.2: DOT/SAE Compliance Marking.

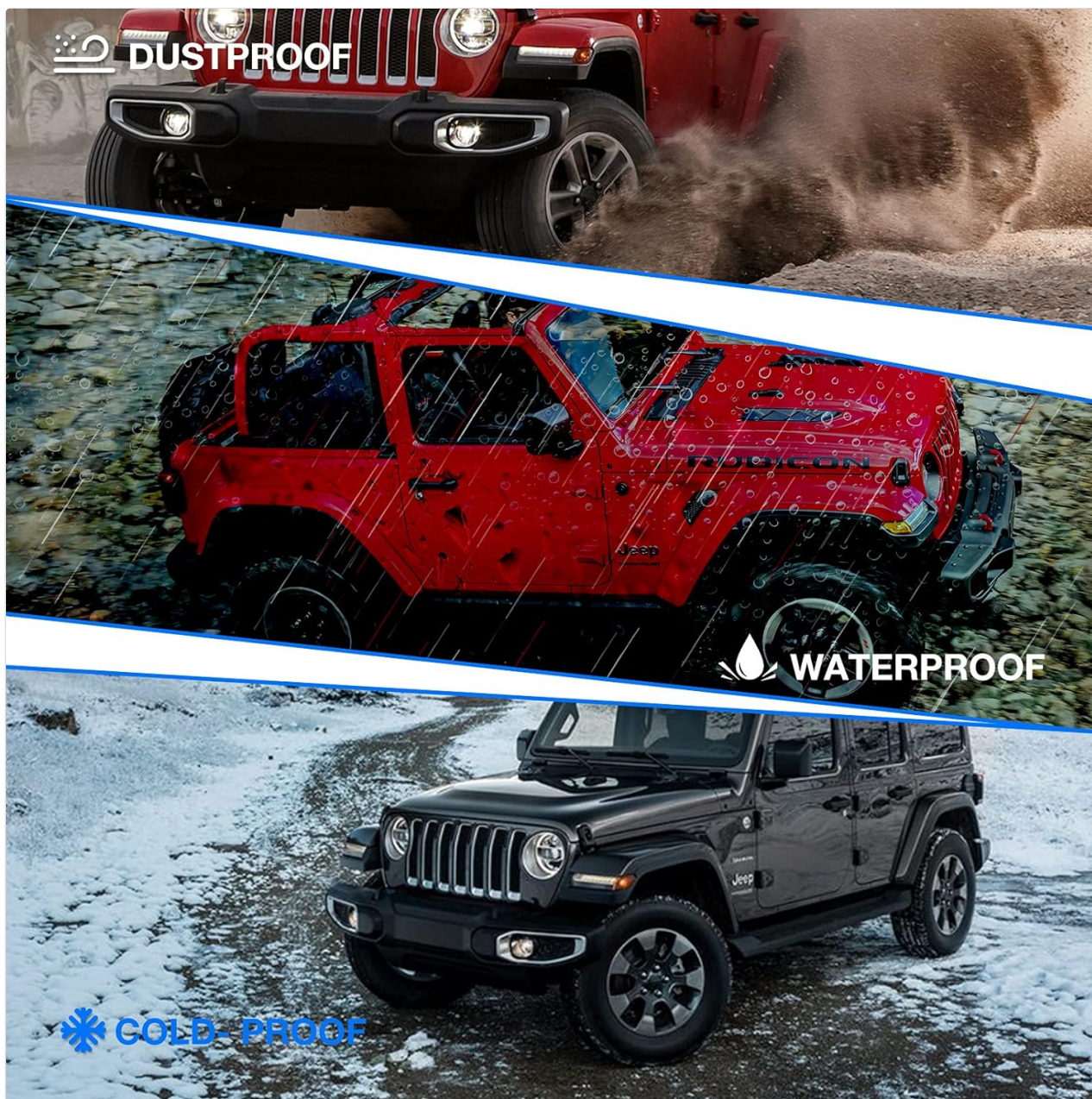


Image 4.3: Durability Features (Dustproof, Waterproof, Cold-proof).

5. COMPATIBILITY

These WOLFSTORM LED Tail Lights are designed for direct fitment on the following vehicles:

- Jeep Wrangler JL (2-door) models: 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025
- Jeep Wrangler JLU (4-door) models: 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025

Please ensure your vehicle is within the specified model years for proper fitment and functionality.

6. INSTALLATION GUIDE

The WOLFSTORM LED Tail Lights feature a plug-and-play design for straightforward installation. No modifications to the vehicle's wiring are typically required.

Tools Required:

- Basic hand tools (e.g., screwdriver, socket wrench, trim removal tool if needed)

Installation Steps:

1. **Prepare the Vehicle:** Park your Jeep Wrangler JL/JLU on a level surface and engage the parking brake. Turn off the engine and remove the key from the ignition.
2. **Disconnect Battery (Recommended):** For safety, disconnect the negative terminal of your vehicle's battery.
3. **Remove OEM Tail Lights:** Locate the screws or clips securing the factory tail light assembly. Carefully remove them. Gently pull the tail light assembly away from the vehicle body.
4. **Disconnect Wiring:** Disconnect the electrical connector from the back of the OEM tail light.
5. **Install WOLFSTORM LED Tail Lights:** Connect the wiring harness of the new WOLFSTORM LED Tail Light to the vehicle's factory connector. Ensure the connection is secure.
6. **Secure New Tail Lights:** Align the new LED tail light assembly with the mounting points on the vehicle. Push it firmly into place and secure it using the original screws or clips.
7. **Repeat for Other Side:** Follow the same steps for the other tail light assembly.
8. **Reconnect Battery:** Reconnect the negative terminal of the vehicle's battery.
9. **Test Functionality:** Turn on your vehicle and test all tail light functions: running lights, brake lights, turn signals (left and right), and reverse lights.



Image 6.1: Installation Overview (Original Fitment & Plug & Play).



Image 6.2: Plug & Play Wiring Connection.



Image 6.3: Installed WOLFSTORM LED Tail Lights on a Jeep Wrangler JL.

7. OPERATION

The WOLFSTORM LED Tail Lights provide enhanced visibility and a distinct appearance with their multi-function LED design:

- **Running Lights:** Illuminate when your vehicle's headlights or parking lights are on, providing constant rear visibility.
- **Brake Lights:** Brightly illuminate when the brake pedal is pressed, signaling deceleration to following vehicles.
- **Dynamic Sequential Turn Signals:** The amber LEDs illuminate in a sequential pattern from the inside out

when the turn signal is activated, providing a clear and modern indication of your turning intention.

- **Reverse Lights:** Bright white LEDs activate when the vehicle is in reverse, illuminating the area behind the vehicle for improved visibility during backing maneuvers.

Lights Function

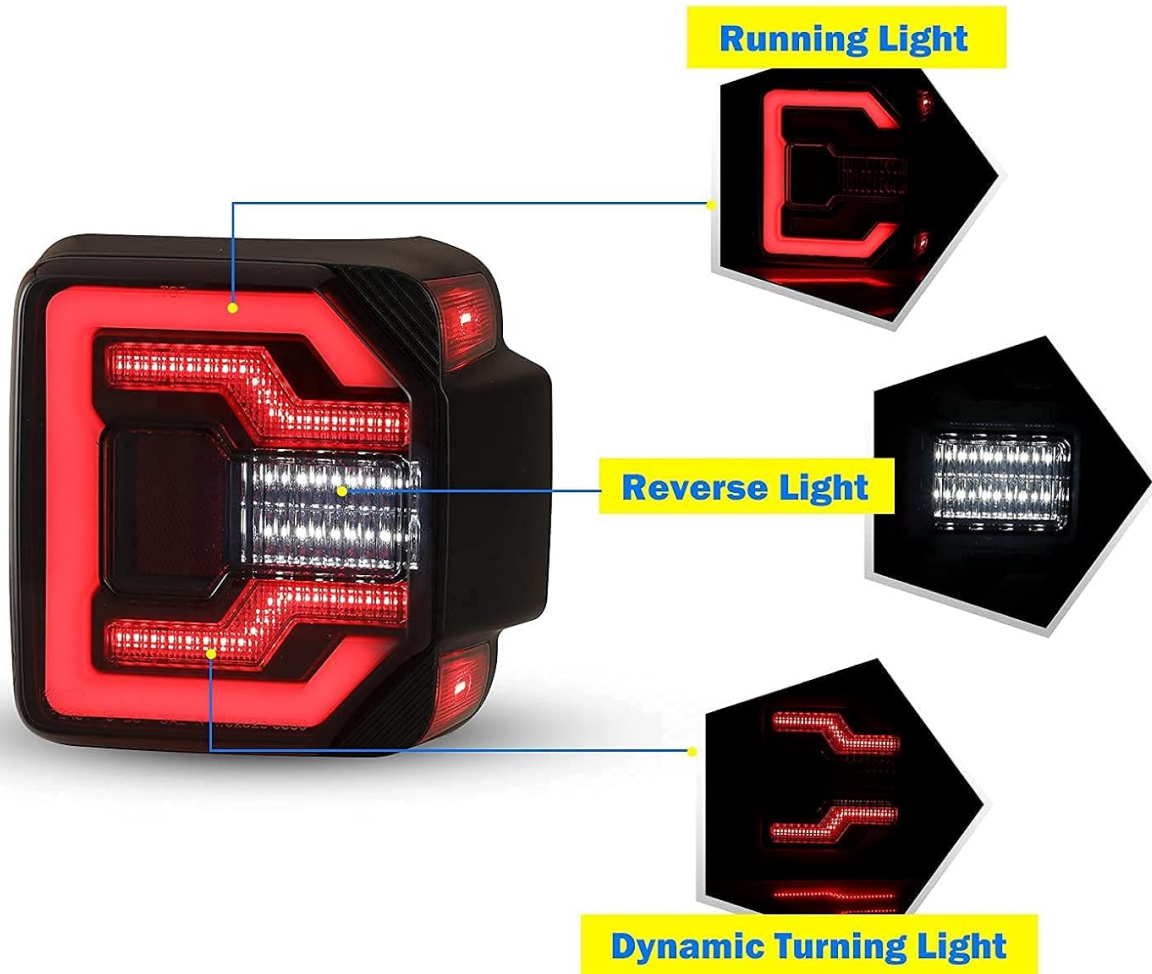


Image 7.1: Tail Light Functions.

NIGHT EFFECT



Image 7.2: Night Effect of Tail Light Functions.



Image 7.3: Dynamic Sequential Turn Signal Effect.

8. CARE AND MAINTENANCE

To ensure the longevity and optimal performance of your WOLFSTORM LED Tail Lights, follow these care guidelines:

- **Cleaning:** Clean the lens with a soft cloth and mild soap and water. Avoid abrasive cleaners or harsh chemicals that could damage the lens material.
- **Inspection:** Periodically inspect the tail lights for any signs of damage, loose connections, or debris accumulation.

- **Water Resistance:** While the lights are water-resistant, avoid directing high-pressure water jets directly at the seals during washing.

9. TROUBLESHOOTING

If you encounter any issues with your WOLFSTORM LED Tail Lights, refer to the following common troubleshooting steps:

- **Lights Not Functioning:**
 - Check all electrical connections to ensure they are securely plugged in.
 - Verify that the vehicle's fuses related to tail lights are intact and not blown.
 - Ensure the vehicle's battery is properly connected and charged.
- **Condensation Inside Lens:**
 - Minor condensation can occur due to temperature changes and is often temporary. It should dissipate as the lights warm up during operation.
 - If excessive or persistent condensation occurs, inspect the housing for cracks or improper sealing. Contact customer support if the issue persists.
- **Flickering or Irregular Operation:**
 - Check for loose wiring connections.
 - Ensure the vehicle's electrical system is providing stable voltage.

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

10. WARRANTY AND SUPPORT

WOLFSTORM stands behind the quality of its products. Your LED Tail Light Assembly is covered by a **12-month warranty** from the date of purchase.

Additionally, we offer a **30-day free return policy** if you are not satisfied with the product.

For warranty claims, technical support, or any questions regarding your WOLFSTORM LED Tail Lights, please contact our customer service team through the retailer where the product was purchased or visit the official WOLFSTORM brand store online.

WOLFSTORM is a manufacturer with over 20 years of experience in vehicle lighting, committed to providing reliable and high-quality products.



Step-by-step installation guide for WOLFSTORM Front Fender Flares (Model NJT01H101-F) designed for the 2019-2022 Jeep Gladiator JT. Includes required tools, parts list, safety warnings, and detailed assembly instructions.



Quick start guide for the Wolfstorm Adaptable Front Bumper for Jeep JK models (WSAJT01H101-BX-R), detailing the brand's inspiration drawn from wolves and providing a link to the installation video.



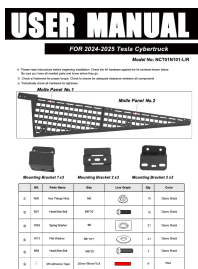
Quick start guide for the WOLFSTORM Jeep JK Adaptable Front Bumper (WSAJL01A102-BX). WOLFSTORM, inspired by wolves and off-roading, offers this bumper for Jeep JK, JL, and JT models. Includes link to installation video.



User manual for WOLFSTORM Front Inner Fender Flares, compatible with 2018-2022 Jeep Wrangler JL and 2019-2022 Jeep Gladiator JT. Includes product specifications, required tools, parts information, and detailed installation instructions.



Comprehensive user manual for the WOLFSTORM Front Bumper Skid Plate (Model NCT01A101-4) designed for the 2024-2025 Tesla Cybertruck. Includes detailed parts information, required tools, safety warnings, cautions, and step-by-step installation instructions.



Comprehensive installation guide for WOLFSTORM Metal Molle Panel Accessories (Model NCT01N101-L/R) designed for the 2024-2025 Tesla Cybertruck. Includes a detailed parts list, step-by-step instructions, and alternative mounting options.