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› HCMOTIONZ Full LED Headlights Instruction Manual for Lexus RX 330 350 400h (XU30, 2003-2009)

HCMOTIONZ 6641

HCMOTIONZ Full LED Headlights Instruction Manual

For Lexus RX 330, 350, 400h (XU30, 2nd Generation, 2003-2009)

Model: 6641

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your new HCMOTIONZ Full LED Headlights. These headlights are specifically designed for the Lexus RX 330, RX 350, and RX 400h, 2nd Generation (XU30 chassis) models manufactured between 2003 and 2009. They are designed for right-hand drive vehicles.

The HCMOTIONZ LED Headlights feature advanced LED technology, including full LED Daytime Running Lights (DRL), dynamic sequential turn signals, and powerful LED high and low beams. They are engineered to meet DOT and SAE certification standards, ensuring quality and safety.



Image 1.1: HCMOTIONZ LED Headlights shown installed on a Lexus RX vehicle and as individual units. The image highlights the modern design and integrated LED lighting elements.



Image 1.2: Front view of a Lexus RX vehicle with the HCMOTIONZ LED Headlights fully installed and illuminated, demonstrating the overall aesthetic and light output.

2. SAFETY INFORMATION

WARNING:

- Always disconnect the vehicle's battery before performing any electrical work to prevent electrical shock or damage to the vehicle's electrical system.
- Wear appropriate personal protective equipment, including safety glasses and gloves, during installation.
- Ensure all connections are secure and properly insulated to prevent short circuits.
- If you are unsure about any step of the installation process, it is highly recommended to seek professional assistance from a qualified automotive technician.
- Do not modify the headlight assemblies. Any modifications may void the warranty and compromise safety.

3. PACKAGE CONTENTS

Please verify that all items are present and undamaged before beginning installation:

- Left Headlight Assembly (1)
- Right Headlight Assembly (1)
- Installation Manual (this document)

4. SETUP AND INSTALLATION

The HCMOTIONZ LED Headlights are designed for a direct plug-and-play installation, requiring no additional modifications or drilling. However, professional installation is recommended for optimal results and to ensure proper functionality.

4.1. Preparation

1. Park your vehicle on a flat, level surface and engage the parking brake.
2. Open the hood and disconnect the negative terminal of the vehicle's battery.
3. Gather necessary tools, which typically include a ratchet, sockets, screwdrivers, and trim removal tools.

4.2. Removal of Existing Headlights

1. Carefully remove any clips, screws, or bolts securing the front bumper cover. You may need to partially or fully remove the bumper to access the headlight mounting points.
2. Locate and remove the mounting bolts/screws that hold the existing headlight assemblies in place.
3. Gently pull the old headlight assembly forward to detach it from the vehicle.
4. Disconnect all electrical connectors from the rear of the old headlight assembly.

4.3. Installation of New Headlights

1. Connect the electrical harnesses of the new HCMOTIONZ LED Headlight assembly to the corresponding vehicle connectors. Ensure all connections are firm and secure.
2. Carefully slide the new headlight assembly into its mounting position.
3. Secure the new headlight assembly using the original mounting bolts/screws. Do not overtighten.
4. Repeat the process for the other side.

4.4. Post-Installation Checks

1. Reconnect the vehicle's battery.
2. Test all lighting functions: Daytime Running Lights (DRL), low beams, high beams, and turn signals.
3. If all functions operate correctly, reattach the bumper cover and any other removed components.
4. Adjust the headlight beam aim if necessary, following local regulations and vehicle manufacturer guidelines.

取り付け効果の比較



Image 4.1: A visual comparison showing the 'Before' state with original halogen headlights and the 'After' state with the new HCMOTIONZ LED Headlights installed, highlighting the significant visual upgrade.

5. OPERATING INSTRUCTIONS

Your HCMOTIONZ LED Headlights offer enhanced visibility and modern lighting features.

5.1. Opening Animation

Upon vehicle startup, the headlights perform a brief, dynamic light sequence, known as the 'opening animation', adding a distinctive visual effect.



オープニングアニメーション



Image 5.1: A three-panel sequence illustrating the dynamic 'opening animation' of the LED headlights upon vehicle activation.

5.2. Daytime Running Lights (DRL)

The full LED DRLs automatically illuminate when the vehicle is running, increasing daytime visibility and safety.

5.3. Sequential Turn Signals

When the turn signal is activated, the amber LEDs illuminate in a flowing, sequential pattern, providing a clear and modern indication of your intended turn.



シーケンシャルウィンカー



Image 5.2: A three-panel sequence demonstrating the sequential illumination pattern of the LED turn signals.

5.4. Low Beam and High Beam

The integrated LED low beams provide clear, focused illumination for regular driving, while the LED high beams offer powerful, extended light output for maximum visibility when needed.

4つの機能の詳細

4種類の機能付きライト，見た目も斬新



Image 5.3: Detailed views showcasing the four primary lighting functions: LED Daytime Running Lights, Sequential Turn Signals, LED Low Beam, and LED High Beam.

高輝度LED



Image 5.4: A visual comparison illustrating the distinct light patterns and intensity of the LED Low Beam and LED High Beam.



LED デイライト



シーケンシャルウィンカー



LED ロービーム



LED ハイビーム

Image 5.5: Separate views of the headlight unit demonstrating the illumination of the LED DRL, Sequential Turn Signal, LED Low Beam, and LED High Beam functions.

いろいろな天気の中ではっきり



Image 5.6: The headlights are shown operating effectively in simulated rain, snow, and fog conditions, demonstrating their robust performance in diverse weather.

6. MAINTENANCE

Proper care will ensure the longevity and optimal performance of your HCMOTIONZ LED Headlights.

6.1. Cleaning

- Clean the headlight lenses regularly with a soft cloth, mild automotive soap, and water.
- Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the lens surface.
- Rinse thoroughly with clean water and dry with a microfiber towel to prevent water spots.

6.2. Inspection

- Periodically inspect the headlight assemblies for any signs of damage, cracks, or loose connections.
- Ensure all mounting bolts remain secure.
- While the headlights are sealed to prevent moisture, if you notice any condensation inside the lens, contact

customer support.

7. TROUBLESHOOTING

If you encounter any issues with your HCMOTIONZ LED Headlights, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Headlights not illuminating	Loose electrical connection, blown fuse, incorrect wiring.	Check all electrical connections. Inspect vehicle fuses and replace if necessary. Verify wiring matches vehicle harness.
Lights flickering or inconsistent operation	Loose connection, electrical incompatibility (rare), faulty unit.	Ensure all connections are secure. If flickering persists, contact HCMOTIONZ customer support.
Moisture or condensation inside the lens	Seal compromise (unlikely due to sealed design), extreme temperature changes.	Small amounts of temporary condensation can occur with temperature changes and usually dissipate. If persistent or excessive, contact HCMOTIONZ customer support.
Turn signals not sequential	Wiring issue, control module issue.	Verify all turn signal connections. If the issue persists, contact HCMOTIONZ customer support.

If you cannot resolve the issue using the troubleshooting guide, please contact HCMOTIONZ customer support for further assistance.

8. SPECIFICATIONS

- **Brand:** HCMOTIONZ
- **Model Number:** 6641
- **Compatibility:** Lexus RX 330, RX 350, RX 400h (XU30, 2nd Generation, 2003-2009)
- **Light Type:** Full LED (Daytime Running Lights, Sequential Turn Signals, Low Beam, High Beam)
- **Features:** Opening Animation, High Beam, Dustproof, Waterproof
- **Certifications:** DOT, SAE
- **Assembly:** Not assembled (requires user installation)

9. WARRANTY AND SUPPORT

9.1. Warranty Information

HCMOTIONZ provides a **1-year warranty** from the date of purchase for these LED Headlights. This warranty covers manufacturing defects and malfunctions under normal use.

Additionally, a **30-day return and exchange policy** is available from the date of purchase. Please retain your proof of purchase for warranty claims.

9.2. Customer Support

For any defects, malfunctions, questions, or concerns regarding your HCMOTIONZ LED Headlights, please do not hesitate to contact our customer support team. We are committed to providing assistance and ensuring your satisfaction.

Please visit the HCMOTIONZ Store on Amazon for contact information or to learn more about our products.