

ECCO DS-1500

ECCO DS1500 Reverse Motion Sensor User Manual

Model: DS-1500

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the ECCO DS1500 Reverse Motion Sensor. Please read this manual thoroughly before using the device to ensure safe and efficient operation.

Product Overview

The ECCO DS1500 is a sophisticated reverse motion sensor designed to enhance safety by activating a back-up alarm when a vehicle moves in reverse. It is specifically engineered for use with electronic speedometers and features a non-contact switch for extended durability.

- Activates the back-up alarm when the vehicle moves backwards, regardless of ignition state (in gear, ignition on or off).
- Designed for seamless integration with electronic speedometers.
- Features a non-contact switch mechanism for enhanced longevity and reliability.
- Compact profile design allows for versatile mounting options.
- Meets California alarm device requirements for refuse trucks.



Figure 1: ECCO DS1500 Reverse Motion Sensor. This image displays the compact design of the sensor unit.

2. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and safety of the DS1500 sensor. It is recommended that installation be performed by a qualified technician.

Safety Precautions

- Disconnect vehicle battery before beginning installation to prevent electrical shock or damage.
- Ensure all wiring connections are secure and properly insulated.
- Mount the sensor in a location that is protected from extreme weather conditions and physical damage.

Installation Steps

1. **Identify Mounting Location:** Select a suitable location on the vehicle that allows for clear detection of reverse motion and is compatible with the sensor's compact profile. While the specification mentions "Ceiling Mount", for a vehicle reverse motion sensor, a chassis or transmission-mounted location is typical. For this manual, we will assume a general vehicle mounting.
2. **Wiring Connections:**
 - Connect the sensor's power input to a switched 12V or 24V power source (depending on vehicle voltage) that is active when the vehicle is in operation.
 - Connect the sensor's output to the back-up alarm system.
 - Ensure proper grounding of the sensor.
3. **Electronic Speedometer Integration:** The DS1500 is designed to interface with the vehicle's electronic speedometer signal. Connect the appropriate signal wire from the speedometer to the sensor's input as per the vehicle's wiring diagram.
4. **Secure Mounting:** Securely fasten the sensor using appropriate hardware to prevent vibration or displacement during vehicle operation.
5. **Test Functionality:** After installation, reconnect the vehicle battery and test the system by engaging reverse gear to ensure the back-up alarm activates correctly.

3. OPERATING INSTRUCTIONS

The ECCO DS1500 Reverse Motion Sensor operates automatically once properly installed and connected to the vehicle's electrical and speedometer systems.

Automatic Activation

The sensor continuously monitors the vehicle's motion via the electronic speedometer signal. When the vehicle begins to move in reverse, the DS1500 detects this motion and immediately triggers the connected back-up alarm. This activation occurs whether the ignition is on or off, as long as the vehicle is in reverse gear and moving.

System Status

There are no user-adjustable settings or indicators on the DS1500 sensor itself. Its operation is entirely automatic. The primary indication of its functionality is the activation of the back-up alarm when the vehicle is reversing.

4. MAINTENANCE

The ECCO DS1500 Reverse Motion Sensor is designed for low maintenance. Regular inspections can help ensure its continued reliable operation.

- **Periodic Visual Inspection:** Annually, or more frequently in harsh environments, visually inspect the sensor and its wiring for any signs of physical damage, corrosion, or loose connections.
- **Cleaning:** If the sensor becomes excessively dirty, gently clean its exterior with a damp cloth. Avoid using harsh chemicals or abrasive materials.
- **Connection Integrity:** Ensure all electrical connections remain tight and free from corrosion.

No internal user-serviceable parts are present. Do not attempt to open or repair the sensor unit.

5. TROUBLESHOOTING

If the ECCO DS1500 Reverse Motion Sensor or the connected back-up alarm is not functioning as expected, refer to the following common issues and their potential solutions.

| Problem | Possible Cause | Solution |
|---|--|--|
| Back-up alarm does not activate when reversing. | No power to sensor. Loose or corroded wiring connections. Faulty electronic speedometer signal. Faulty back-up alarm unit. Sensor malfunction. | Check power supply to the sensor. Inspect and secure all wiring connections. Verify speedometer signal integrity. Test the back-up alarm unit independently. Contact customer support for further diagnosis. |
| Back-up alarm activates intermittently. | Intermittent power supply. Loose signal wire connection. Vibration affecting sensor. | Check power source stability. Secure speedometer signal wire. Ensure sensor is securely mounted. |
| Back-up alarm activates when not reversing. | Incorrect speedometer signal interpretation. Sensor malfunction. | Verify correct speedometer signal connection. Contact customer support for diagnosis. |

If the problem persists after attempting these solutions, please contact ECCO customer support.

6. SPECIFICATIONS

Technical specifications for the ECCO DS1500 Reverse Motion Sensor.

| Attribute | Detail |
|--------------|-----------------|
| Model Number | DS-1500 |
| Brand | ECCO |
| Power Source | Corded Electric |

| Attribute | Detail |
|--------------------|--|
| Compatible Devices | Electronic Speedometer |
| Item Weight | 2.2 Pounds (approx. 1 kg) |
| Package Dimensions | 11 x 4.5 x 3 inches (approx. 27.9 x 11.4 x 7.6 cm) |
| Mounting Type | Designed for vehicle mounting (Note: "Ceiling Mount" in some specifications may refer to a general mounting category, but for this product, vehicle-specific mounting is implied.) |
| Battery | Not included (device is corded electric) |

7. WARRANTY INFORMATION

ECCO products are manufactured to high-quality standards. For specific warranty terms and conditions applicable to your DS1500 Reverse Motion Sensor, please refer to the warranty card included with your product or visit the official ECCO website. Keep your proof of purchase for warranty claims.


8. CUSTOMER SUPPORT



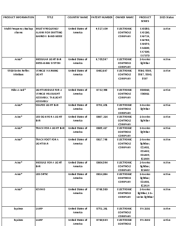
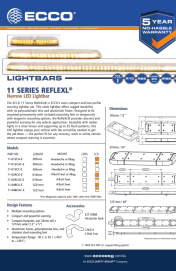
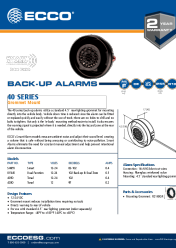
For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact ECCO customer support:

- **Website:** Visit the official ECCO website for support resources, FAQs, and contact information.www.ecco.com
- **Phone:** Refer to the contact section on the ECCO website for regional support phone numbers.

When contacting support, please have your product model number (DS-1500) and purchase date available.

Related Documents - DS-1500

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|  | <p>ECCO Connect Kit EC101 Installation and Operation Instructions</p> <p>Comprehensive guide for installing and operating the ECCO Connect Kit EC101, detailing safety precautions, product specifications, kit contents, wiring diagrams, flash pattern configurations, and warranty information for ECCO vehicle warning systems.</p> |
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|  | <p>ECCO 12 Series Vantage Lightbars: Installation and Operation Instructions</p> <p>Comprehensive guide for installing and operating ECCO 12 Series Vantage™ Lightbars, covering specifications, mounting, wiring, maintenance, and troubleshooting.</p> |
|  | <p>ECCO 12+ Pro Vantage™ Series Lightbars: Installation and Operation Manual</p> <p>Comprehensive installation and operation guide for ECCO 12+ Pro Vantage™ Series Lightbars. Covers safety, mounting, wiring, maintenance, troubleshooting, and parts. Essential for emergency vehicle lighting systems.</p> |
|  | <p>ECCO Product Catalog and Patent Information</p> <p>A comprehensive list of vehicle lighting and accessory products from Electronic Controls Company (ECCO), detailing product series, patent numbers, and status. Includes information on light bars, beacons, sounders, and more.</p> |
|  | <p>ECCO 11 Series ReflexL® Narrow LED Lightbar - Compact Warning Light</p> <p>Discover the ECCO 11 Series ReflexL® Narrow LED Lightbar. Compact, durable, and versatile warning light with multiple mounting options, 35 flash patterns, and SAE Class 1, R10, R65, IP65/IP69K ratings. Ideal for work and utility vehicles.</p> |
|  | <p>ECCO 40 Series Back-Up Alarms - Grommet Mount Product Overview</p> <p>Detailed information on ECCO's 40 Series Grommet Mount Back-Up Alarms, featuring Smart Alarm technology, easy installation, and key specifications for vehicle safety.</p> |