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## Lincoln Electric K1733-1

# Lincoln Electric K1733-1 Wire Straightener User Manual

Model: K1733-1

## PRODUCT OVERVIEW



An image of the Lincoln Electric K1733-1 Wire Straightener, showing its metallic body, rollers, and adjustment knob. This device is designed to straighten welding wire for improved feedability and weld quality.

The Lincoln Electric K1733-1 Wire Straightener is an essential accessory designed to improve the performance of your welding setup. It is engineered for use with 10-Series wire drives or can be mounted separately. This device effectively straightens cored wire up to 1/8 inch (3.2mm) and solid wire up to 3/32 inch (2.4mm), ensuring a smooth and consistent wire feed. Its incoming and outgoing bushings are compatible with existing incoming and gun receiver bushings, facilitating easy integration into your current system.

## Key Features:

- Designed for use with 10-Series wire drives or separate mounting.
- Capable of straightening cored wire up to 1/8 inch (3.2mm).
- Capable of straightening solid wire up to 3/32 inch (2.4mm).
- Features incoming and outgoing bushings compatible with existing setups.
- Enhances wire feed consistency and overall welding quality.

## SETUP INSTRUCTIONS

Proper setup of the K1733-1 Wire Straightener is crucial for optimal performance. Follow these steps for installation:

1. **Mounting:** The wire straightener can be mounted directly onto a 10-Series wire drive system or installed as a standalone unit. Ensure the mounting location is stable and allows for a straight path for the wire.
2. **Wire Path Alignment:** Position the straightener so that the wire feeds directly into the incoming bushing and exits cleanly through the outgoing bushing, aligning with your welding gun's receiver.
3. **Bushing Compatibility:** Verify that the straightener's bushings are compatible with your existing wire feed system. The K1733-1 is designed for broad compatibility with standard incoming and gun receiver bushings.
4. **Adjustment:** Once mounted, adjust the tension on the straightening rollers. Start with minimal tension and gradually increase it until the wire feeds straight without excessive resistance. Over-tightening can deform the wire or cause feeding issues.
5. **Secure Connections:** Ensure all mounting hardware is securely tightened to prevent movement during operation.

## OPERATING INSTRUCTIONS

Operating the Lincoln Electric K1733-1 Wire Straightener is straightforward once installed. Its primary function is to remove the cast and helix from welding wire, ensuring a smooth and consistent feed into the welding arc.

- **Wire Feeding:** Thread the welding wire through the incoming bushing of the straightener, ensuring it passes between the straightening rollers, and then out through the outgoing bushing towards your wire feeder or welding gun.
- **Adjusting Straightness:** The straightener features an adjustment mechanism (typically a knob or screw) that controls the pressure applied by the rollers on the wire. Turn this mechanism incrementally to achieve the desired level of wire straightness.
- **Observation:** Observe the wire as it exits the straightener and enters the wire feeder. It should appear noticeably straighter, reducing the likelihood of bird-nesting or erratic feeding.
- **Fine-Tuning:** If the wire is still not straight enough, increase the roller pressure slightly. If the wire shows signs of deformation or excessive resistance, reduce the pressure. The goal is to achieve straight wire with minimal effort from the wire feeder.
- **Regular Checks:** Periodically check the wire straightness during operation, especially when changing wire spools.

or types, and adjust as necessary.

## MAINTENANCE

To ensure the longevity and continued performance of your Lincoln Electric K1733-1 Wire Straightener, regular maintenance is recommended:

- **Cleaning:** Periodically clean the rollers and bushings to remove any accumulated wire dust, debris, or lubricant residue. Use a clean, dry cloth or compressed air. Avoid using harsh chemicals that could damage the components.
- **Inspection:** Regularly inspect the rollers for wear, damage, or flat spots. Worn rollers can reduce straightening effectiveness. Check bushings for signs of abrasion or enlargement, which could affect wire guidance.
- **Lubrication:** The rollers are typically sealed bearings and do not require lubrication. Do not apply grease or oil to the wire path, as this can contaminate the welding wire and affect weld quality.
- **Storage:** When not in use for extended periods, store the wire straightener in a clean, dry environment to prevent corrosion and damage.
- **Replacement Parts:** If any components, such as rollers or bushings, become excessively worn or damaged, contact Lincoln Electric or an authorized dealer for genuine replacement parts.

## TROUBLESHOOTING

If you encounter issues with your K1733-1 Wire Straightener, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Wire not straightening effectively	Insufficient roller pressure; Worn rollers; Incorrect wire size for straightener capacity.	Increase roller tension gradually; Inspect and replace worn rollers; Ensure wire diameter is within specified limits (cored up to 1/8 in, solid up to 3/32 in).
Wire feeding with excessive resistance	Excessive roller pressure; Misalignment of straightener; Debris in wire path.	Reduce roller tension; Realign the straightener with the wire path; Clean rollers and bushings.
Wire becoming deformed or flattened	Excessive roller pressure.	Immediately reduce roller tension. Adjust incrementally until wire is straight but not deformed.
Unusual noise during operation	Worn or damaged bearings in rollers; Loose mounting.	Inspect rollers for smooth rotation; Tighten all mounting hardware. If noise persists, consider professional inspection or replacement of components.

## SPECIFICATIONS

Detailed specifications for the Lincoln Electric K1733-1 Wire Straightener:

Attribute	Value
Model Number	K1733-1
Brand	Lincoln Electric
Material	Rubber, Thermoplastic Rubber, Stainless Steel, Alloy Steel
Color	Multicolor
Item Weight	3.74 pounds (1.7 Kilograms)
Product Dimensions	4.25 x 8.5 x 4.25 inches
Wire Capacity (Cored)	Up to 1/8 inch (3.2mm)
Wire Capacity (Solid)	Up to 3/32 inch (2.4mm)
Compatibility	10-Series wire drives, existing incoming and gun receiver bushings
UPC	015082505541
Date First Available	November 10, 2010

## SAFETY INFORMATION

**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Always follow general workshop safety practices when installing, operating, or maintaining the wire straightener. Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves. Ensure the power to welding equipment is disconnected before performing any installation or maintenance.

## WARRANTY AND SUPPORT

Lincoln Electric products are manufactured to high standards of quality and reliability. For specific warranty details regarding your K1733-1 Wire Straightener, please refer to the warranty documentation included with your purchase or visit the official Lincoln Electric website.

For technical support, replacement parts, or any inquiries regarding the operation and maintenance of your wire straightener, please contact Lincoln Electric Customer Service:

**Website:** [www.lincolnelectric.com](http://www.lincolnelectric.com)

**Contact Information:** Refer to the "Contact Us" section on the official website for phone numbers and email support.

When contacting support, please have your product model number (K1733-1) and purchase information readily available.