

## Forney 32001

# Forney 32001 E7014 Welding Rod User Manual

Model: 32001 | Brand: Forney

## 1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of the Forney 32001 E7014 Welding Rod. Please read this manual thoroughly before use and retain it for future reference. The Forney E7014 welding rod is designed for general-purpose welding applications, offering ease of use and reliable performance.



Image 1: Forney 32001 E7014 Welding Rod in its protective green packaging. This image shows the product as it appears when purchased.

## 2. SAFETY INFORMATION

**WARNING: Welding can be dangerous. Always follow proper safety procedures to prevent injury or death.**

- Always wear appropriate personal protective equipment (PPE), including a welding helmet with proper shade, flame-resistant clothing, welding gloves, and safety glasses.
- Ensure adequate ventilation to avoid inhaling welding fumes.
- Protect bystanders from arc rays and hot metal.
- Be aware of fire hazards. Keep flammable materials away from the welding area.
- Ensure your welding machine is properly grounded.

- Do not weld on containers that have held flammable materials.

### 3. PRODUCT OVERVIEW

---

The Forney E7014 welding rod is a general-purpose electrode designed for mild steel applications. It features a high deposition rate and produces a smooth, stable arc. This rod is suitable for all-position welding.



*Image 2: A close-up view of several Forney E7014 welding rods, showing their uniform coating and metallic core.*

#### Key Characteristics:

- **Type:** E7014 (Iron Powder, Titania type)
- **Diameter:** 3/32-inch (2.4 mm)
- **Weight:** 1 pound (0.45 kg)
- **Arc:** Digging arc, deep penetration.
- **Applications:** Ideal for joints requiring deep penetration such as square edge butt welds. Effective on dirty or rusty materials, galvanized steel, and oily steel.
- **Positions:** All-position welding rod.

### 4. SETUP AND PREPARATION

---

#### 4.1 Workspace Preparation

- Ensure your welding area is clean, dry, and free from flammable materials.
- Provide adequate ventilation.

- Set up appropriate shielding to protect others from arc flash.

## 4.2 Material Preparation

- While E7014 rods are tolerant of some surface contaminants, optimal results are achieved on clean metal. Remove excessive rust, paint, oil, or scale if possible.
- Ensure proper fit-up of the workpieces.

## 4.3 Welding Machine Setup

- Connect the welding cables to your arc welding machine according to the manufacturer's instructions.
- Set the machine to the appropriate amperage for a 3/32-inch E7014 rod. A common range for this diameter is 80-120 amps, but always refer to your welding machine's recommendations and test on scrap material.
- E7014 rods can be used with both AC and DC (Direct Current Electrode Positive or Negative) power sources.



Image 3: Forney E7014 welding rods displayed in their open plastic storage case, ready for use.

## 5. OPERATING INSTRUCTIONS

### 5.1 Striking an Arc

- Grip the welding rod firmly in the electrode holder.
- Lower your welding helmet.
- Strike the arc by either scratching the rod against the workpiece like a match or by tapping it quickly.
- Once the arc is established, maintain a consistent arc length (typically equal to the rod's diameter).

### 5.2 Welding Technique

- Maintain a consistent travel speed and electrode angle (typically 10-30 degrees from vertical in the direction of travel).
- E7014 rods are known for their ease of use and smooth bead profile. They offer a high deposition rate, allowing for faster welding.
- For deep penetration, use a slight pushing angle and ensure the arc is directed into the joint.
- The slag produced by E7014 is generally easy to remove.

## 6. MAINTENANCE AND STORAGE

### 6.1 Rod Storage

- Store welding rods in a dry environment to prevent moisture absorption, which can affect welding performance and lead to porosity.
- Keep rods in their original sealed packaging until ready for use.
- If packaging is opened, store remaining rods in a sealed container or a rod oven, especially in humid conditions.

### 6.2 Post-Welding Care

- Allow welded parts to cool naturally.
- Remove slag using a chipping hammer and wire brush.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Difficulty striking arc	Low amperage, poor ground connection, damp rod.	Increase amperage, check ground clamp, ensure rods are dry.
Excessive spatter	Amperage too high, arc too long.	Reduce amperage, shorten arc length.
Poor penetration	Amperage too low, travel speed too fast, incorrect electrode angle.	Increase amperage, slow down travel speed, adjust angle.
Porosity (holes in weld)	Moisture in rod, contaminated base metal, insufficient shielding.	Dry rods, clean base metal, ensure proper arc length.

## 8. SPECIFICATIONS

Feature	Detail
Manufacturer	Forney
Part Number	32001
Item Model Number	32001
AWS Classification	E7014
Diameter	3/32-inch (2.4 mm)
Weight	1 pound (0.45 kg)
Product Dimensions	15.25 x 1.63 x 0.75 inches
Material	Metal
Included Components	Welding Rod

## 9. WARRANTY INFORMATION

The Forney 32001 E7014 Welding Rod comes with a**90-day warranty** against manufacturer defects. This warranty covers defects in materials and workmanship under normal use. For warranty claims or further details, please contact Forney customer support.

## 10. SUPPORT AND CONTACT


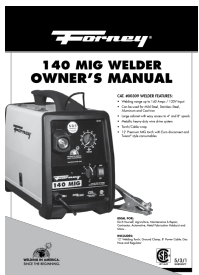
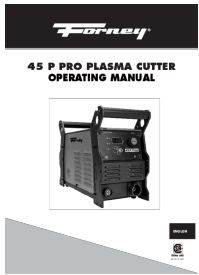
For technical assistance, product inquiries, or support regarding your Forney E7014 Welding Rod, please visit the official Forney website or contact their customer service department. Always refer to the manufacturer's official resources for the most up-to-date information.

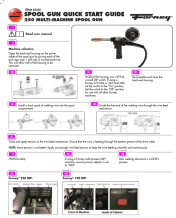


**Forney Website:** [www.forneyind.com](http://www.forneyind.com)

© 2023 Forney Industries. All rights reserved.

This manual is for informational purposes only. Forney reserves the right to make changes without prior notice.

### Related Documents - 32001

	<p><a href="#">Forney PRO ADF Welding Mask with Hood Owner's Manual</a></p> <p>Comprehensive owner's manual for the Forney PRO ADF Welding Mask with Hood, detailing safety precautions, specifications, operating instructions, maintenance procedures, and troubleshooting tips for optimal use.</p>
	<p><a href="#">Forney 140 MIG Welder Owner's Manual - Model #00309</a></p> <p>Comprehensive owner's manual for the Forney 140 MIG Welder (Cat. #00309), covering features, safety, installation, operation, troubleshooting, and parts list. Learn how to use your Forney welder effectively and safely.</p>
	<p><a href="#">Forney 45 P PRO Plasma Cutter Operating Manual</a></p> <p>Comprehensive operating manual for the Forney 45 P PRO Plasma Cutter, detailing installation, safety, operation, maintenance, and troubleshooting procedures. Includes specifications, parts diagrams, and guidance for optimal performance and safety.</p>

	<p><a href="#">Forney 85650 Spool Gun Quick Start Guide &amp; Troubleshooting</a></p> <p>A quick start guide and troubleshooting document for the Forney 85650 250 Multi-Machine Spool Gun, providing setup instructions, basic MIG welding settings for aluminum, and parts information. Includes tips for preventing burn-back and proper gas usage.</p>
	<p><a href="#">Forney EASY WELD 180 ST Welder Quick Start Guide</a></p> <p>Quick start guide for the Forney EASY WELD 180 ST welder, covering setup, operation, and troubleshooting for both TIG and Stick welding processes. Includes recommended settings and common issue resolutions.</p>
	<p><a href="#">Forney 45 P Pro Plasma Cutter Quick Start Guide</a></p> <p>Quick start guide for the Forney 45 P Pro Plasma Cutter, covering setup, operation tips, and troubleshooting. Includes model number 445 and brand Forney.</p>