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Creality Ender 3 V3 SE

Creality Ender 3 V3 SE 3D Printer and Clog Poke Instruction Manual

Model: Ender 3 V3 SE

1. Introduction

This manual provides comprehensive instructions for the safe and efficient operation, setup, and maintenance of your Creality Ender 3 V3 SE 3D Printer and the accompanying Creality Clog Poke. Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

2. Safety Instructions

- Always operate the 3D printer in a well-ventilated area.
- Keep the printer away from flammable materials and heat sources.
- Do not touch the hot nozzle or heated bed during operation or immediately after use. Allow components to cool down.
- Ensure the power supply is correctly connected and grounded.
- Keep children and pets away from the printer during operation.
- Use only recommended filaments and accessories.
- Disconnect power before performing any maintenance or cleaning.

3. Package Contents

Verify that all components are present in your package:

Image 1: The Creality Ender 3 V3 SE 3D Printer shown with the included Creality Clog Poke tool. The printer features a black frame, a build plate, and a control screen. The Clog Poke is a long, thin tool with a handle, designed for nozzle maintenance.

- Creality Ender 3 V3 SE 3D Printer (Main Unit)
- Creality Clog Poke (Nozzle Cleaning Tool)
- Power Cable
- Filament Holder
- Tool Kit (various wrenches, screwdrivers, etc.)
- Sample Filament
- USB Cable
- User Manual (this document)

4. Setup and Assembly

The Creality Ender 3 V3 SE is designed for quick assembly. Follow these steps to set up your printer:

1. **Unpacking:** Carefully remove all components from the packaging.
2. **Base Assembly:** Secure the gantry to the base unit using the provided screws.
3. **Cable Connections:** Connect all motor, endstop, and hotend cables according to the labels.
4. **Filament Holder:** Attach the filament holder to the designated position.

5. **Power Connection:** Connect the power cable to the printer and a grounded power outlet.
6. **Initial Power On:** Turn on the printer. The control screen should illuminate.
7. **Automatic Leveling:** The Ender 3 V3 SE features CR Touch auto-leveling and a strain sensor for auto Z-offset. Navigate to the 'Leveling' menu on the control screen and initiate the auto-leveling process. The printer will automatically probe the build surface.
8. **Filament Loading:** Insert the filament into the extruder. The "Sprite" direct extruder will automatically load the filament.

Image 2: A visual representation of the auto-leveling process on the Ender 3 V3 SE. The print bed is shown with a grid pattern indicating the probing points for the CR Touch sensor, simplifying calibration.

Image 3: Close-up view of the "Sprite" direct extruder. This full-metal, dual-gear extruder provides strong pushing force for smooth filament feeding and is compatible with various filament types, including flexible ones.

5. Operating Instructions

5.1 Preparing a Print

1. **Model Preparation:** Use a slicing software (e.g., Creality Print, Cura) to convert your 3D model (STL, OBJ) into G-code. Ensure print settings like layer height, infill, and temperature are appropriate for your filament.
2. **Transfer G-code:** Save the G-code file to a microSD card.
3. **Insert SD Card:** Insert the microSD card into the printer's card slot.

5.2 Starting a Print

1. On the printer's control screen, navigate to the 'Print' menu.
2. Select your desired G-code file from the list.

3. Confirm the print selection. The printer will begin heating the nozzle and bed, then start printing.

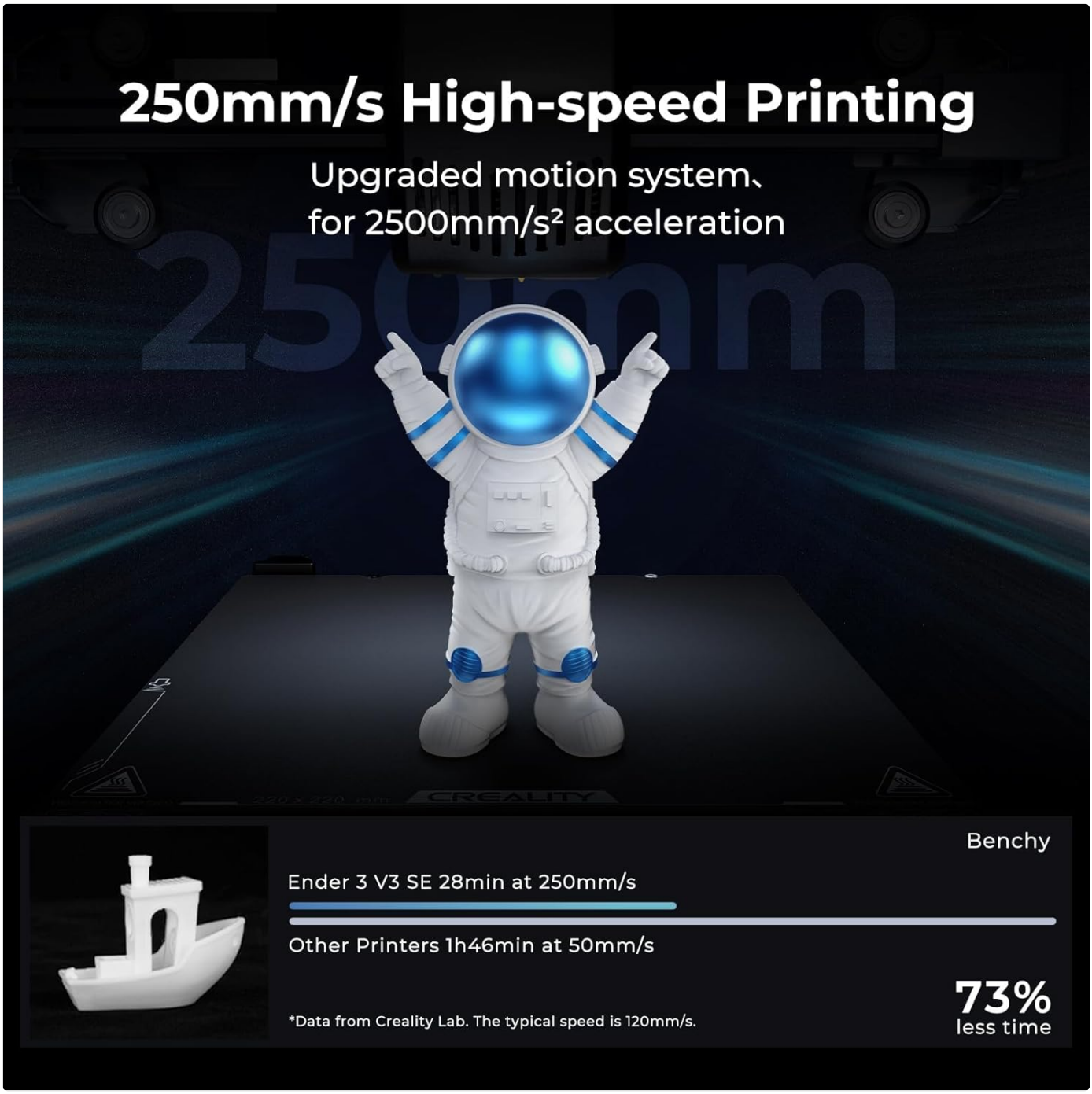

Image 4: This image highlights the 250mm/s high-speed printing capability of the Ender 3 V3 SE, achieved through an upgraded motion system with 2500mm/s² acceleration. A comparison chart shows significant time savings over other printers.

5.3 Monitoring and Pausing

- Monitor the print progress via the control screen.
- To pause a print, select the 'Pause' option on the screen.
- To resume, select 'Resume'. To stop, select 'Stop' (this will cancel the print).

5.4 Removing a Print

- Once the print is complete and the bed has cooled, gently remove the printed object from the PC spring steel build plate. The flexible plate allows for easy removal.

6. Maintenance

Regular maintenance ensures consistent print quality and extends the lifespan of your printer.

- **Clean the Build Plate:** After each print, clean the build plate with isopropyl alcohol to remove any residue.
- **Nozzle Cleaning:** If you experience clogs or poor extrusion, use the Creality Clog Poke (see Section 8) to clear the nozzle.
- **Lubricate Moving Parts:** Periodically apply a small amount of lithium grease to the Z-axis lead screws and Y-axis linear shafts to ensure smooth movement.
- **Check Belts:** Ensure the X and Y-axis belts are properly tensioned. Adjust if they are too loose or too tight.
- **Extruder Inspection:** Regularly check the "Sprite" direct extruder gears for any filament debris and clean as necessary.

Image 5: This image illustrates the stable motion system of the Ender 3 V3 SE, featuring dual Z-axis lead screws for reduced wobbling and two 8mm Y-axis linear shafts made of wear-proof steel, contributing to higher printing accuracy.

7. Troubleshooting

Problem	Possible Cause	Solution
Filament Not Extruding	Clogged nozzle, tangled filament, incorrect temperature.	Clear nozzle with Clog Poke, untangle filament, verify print temperature settings.
Poor First Layer Adhesion	Unleveled bed, dirty build plate, incorrect Z-offset.	Re-run auto-leveling, clean build plate with isopropyl alcohol, adjust Z-offset if necessary.
Layer Shifting	Loose belts, print speed too high, motor issues.	Check and tension X/Y belts, reduce print speed, inspect motor connections.
Stringing/Oozing	Incorrect retraction settings, high nozzle temperature.	Adjust retraction distance and speed in slicer, lower nozzle temperature slightly.

8. Creality Clog Poke Usage

The Creality Clog Poke is an essential tool for quickly clearing nozzle clogs. It is designed to be more effective and user-friendly than traditional small needles.

Image 6: This image highlights the key features of the Creality Clog Poke: an extended design for reach, a soft rubber handle for comfortable grip, and overall ease of use for quick nozzle maintenance.

8.1 How to Use the Clog Poke

1. **Heat the Nozzle:** Heat your printer's nozzle to the printing temperature of the filament that caused the clog (e.g., 200°C for PLA). This softens the clogged material.
2. **Insert the Poke:** Carefully insert the thin end of the Creality Clog Poke into the nozzle opening from below.
3. **Gently Push:** Gently push the poke upwards into the nozzle to dislodge the clog. You may need to twist it slightly.
4. **Remove and Test:** Remove the poke and attempt to manually extrude some filament or start a small test print to confirm the clog is cleared.

Note: Always handle the hot nozzle with extreme caution. The Clog Poke is suitable for most FDM 3D printers.

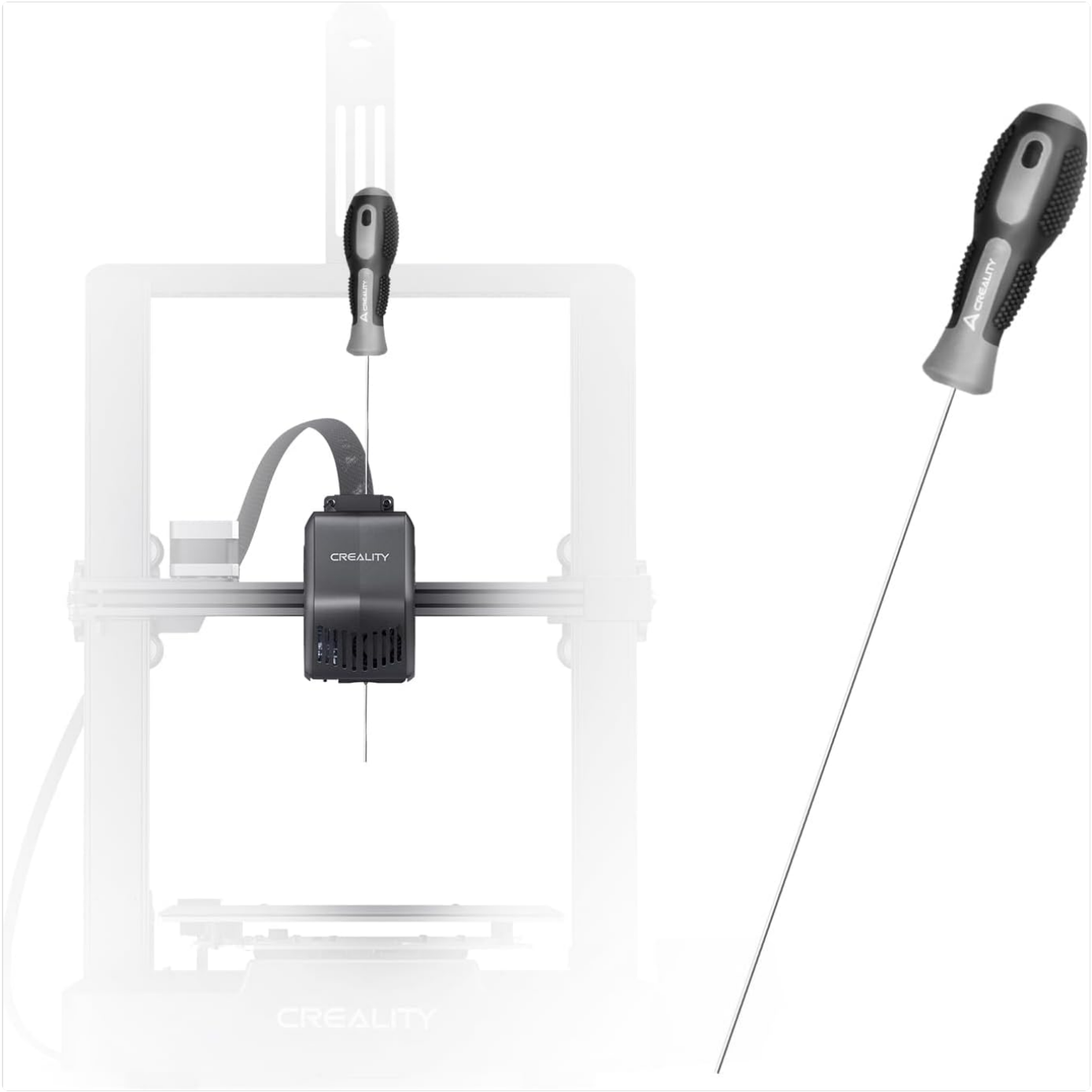

Image 7: A visual demonstration of the Creality Clog Poke being used to clear a nozzle. The long, thin metal rod is inserted into the nozzle opening, illustrating its function in dislodging blockages.

Image 8: This image shows the Creality Clog Poke alongside several different FDM 3D printer models, indicating its broad compatibility with various brands and types of 3D printers for nozzle maintenance.

9. Specifications

Creality Ender 3 V3 SE 3D Printer

- **Printing Technology:** FDM (Fused Deposition Modeling)
- **Printing Speed:** Up to 250mm/s (typical), 2500mm/s² acceleration
- **Extruder:** "Sprite" Direct Extruder (Full-metal, Dual-gear)
- **Leveling Mode:** CR Touch Automatic Leveling + Strain Sensor Auto Z-offset
- **Build Surface:** PC Spring Steel Plate
- **Z-axis:** Dual Z-axis Lead Screws
- **Y-axis:** Dual Linear Shafts (8mm, wear-proof steel)

- **Supported Filaments:** PLA, PETG, TPU, etc.
- **Connectivity:** MicroSD Card, USB

Creality Clog Poke

- **Design:** Extended, thin metal rod
- **Handle:** Soft rubber grip
- **Compatibility:** Suitable for most FDM 3D printer nozzles

10. Warranty and Support

For warranty information and technical support, please refer to the official Creality website or contact their customer service directly. Keep your purchase receipt as proof of purchase.
Official Creality Website: www.creality.com

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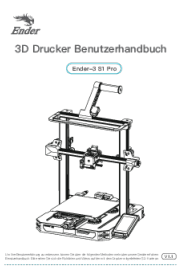
Related Documents - Ender 3 V3 SE

	Creality CR Touch Manual: Auto Bed Leveling Sensor for 3D Printers Comprehensive manual for the Creality CR Touch auto bed leveling sensor. Includes installation, firmware updates, setup, and compatibility information for Ender 3, Ender 5, CR-10 series, and more. Optimized for 32-bit motherboards.
	Creality Clog Poke: Operating Manual and Usage Guide for 3D Printer Nozzle Cleaning Learn how to use the Creality Clog Poke tool to effectively clean and unblock your 3D printer's extruder nozzle. Includes product dimensions and step-by-step instructions.
	Creality Sonic Pad User Manual: Your Guide to Enhanced 3D Printing Comprehensive user manual for the Creality Sonic Pad, a 7-inch control display designed to enhance 3D printing operations with compatible FDM printers like Ender-3 S1, Ender-3 V2, and Ender-3 S1 Pro. Learn setup, usage, upgrades, and troubleshooting.
	Creality Ender-3 S1 Pro 3D Printer User Manual | Setup, Operation, and Specifications Comprehensive user manual for the Creality Ender-3 S1 Pro 3D printer. Learn about setup, safety precautions, parts identification, installation steps, leveling procedures, filament loading, using the Creality Slicer software, and detailed technical specifications.

	[BLTouch Firmware Versions for 32-bit Motherboards] Reference guide for BLTouch firmware versions compatible with various 32-bit 3D printer motherboards, including Ender-3, Ender-5, CR-10 series, and more. Details firmware compatibility with adapter boards and filament sensors.
	[Ender-3 V2 3D Printer User Manual] Comprehensive user manual for the Ender-3 V2 3D printer by Creality, covering setup, operation, safety guidelines, specifications, and component details for optimal printing.