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ENGINDOT RTD35ACL

ENGINDOT Rotary Tool Kit R3 Instruction Manual

MODEL: RTD35ACL

Your versatile tool for precision crafting and DIY projects.

1. Introduction and Overview

The ENGINDOT Rotary Tool Kit R3 is a high-performance, versatile tool designed for a wide range of applications including cutting, engraving, sanding, polishing, sharpening, and drilling. Its ergonomic design ensures comfortable use for extended periods, making it ideal for DIY enthusiasts and professionals alike. This manual provides essential information for safe and effective operation, maintenance, and troubleshooting.

dust masks, gloves, and hearing protection depending on the task.

- **Secure workpiece:** Always clamp or otherwise secure the workpiece to prevent movement during operation.
- **Maintain a clean work area:** Cluttered areas invite accidents. Ensure adequate lighting.
- **Avoid unintentional starting:** Ensure the switch is in the off position before plugging in the tool.
- **Do not overreach:** Maintain proper footing and balance at all times.
- **Disconnect power:** Always unplug the tool before changing accessories, making adjustments, or storing it.
- **Use correct accessories:** Only use accessories specifically designed for this rotary tool and ensure they are securely attached.
- **Keep children and bystanders away:** All visitors should be kept a safe distance from the work area.

3. Package Contents

The ENGINDOT Rotary Tool Kit R3 includes the following components:

- 1 x Rotary Tool
- 1 x Tool Box
- 1 x Accessory Case
- 1 x Transparent Shield
- 1 x Flexible Shaft
- 1 x Keyless Chuck
- 1 x Drilling Guide
- 25 x Fiberglass Cutting Off Wheels
- 1 x Drill Bit
- 5 x Mesh Cutting Discs
- 2 x Mandrels
- 3 x HSS Drills
- 14 x Sanding Bands
- 1 x Sanding Shank
- 30 x Sanding Papers
- 1 x Spanner
- 1 x Allen Wrench
- 1 x Collet $\varnothing 3.2\text{mm}$
- 3 x Diamond Grinding Needles
- 1 x Engraving Cutters
- 8 x Grinding Wheel with Shanks
- 4 x Felt Wheels
- 1 x Mandrel
- 1 x Steel Brush



Rotary Tool



Kit Box



Accessory Case

Attachment



Transparent Shield x1



Flexibl Driver X1



Drilling Guide X1



Quick change keyless chuck X1

Cutting/drilling



Fiberglass cutting off wheels x25



Drill bit X1



(5pcs) Mesh cutting disc



Mandrels X2



Hss drills X3

Sanding



Sanding bands X14



Sanding shank X1



Sanding papers X30

Accessories



Spanner X1



Allen wrench X1



Colletø3.2mm X1

Carving/Engraving



Diamond grinding needles X3



Engraving cutters X1

Grinding/Sharpening



Grinding wheel with shanks X8

Polishing/Cleaning



Felt wheels X4



Mandrel X1



Steel brush X1

Image: A comprehensive view of all accessories included in the kit.

4. Setup and Accessory Installation

Proper installation of accessories is crucial for safe and effective operation.

4.1. Keyless Chuck Installation

The 2.0 Keyless Chuck allows for quick and easy attachment changes without needing to switch collets. It accepts

all attachment sizes from 1/8" to 1/32".

1. Press the shaft lock button on the rotary tool.
2. Unscrew the existing collet nut counter-clockwise.
3. Screw the keyless chuck onto the rotary tool spindle clockwise until secure.
4. To insert an accessory, press the shaft lock button, open the chuck jaws by twisting, insert the accessory, and then tighten the chuck jaws by twisting until the accessory is firmly held.



Image: Visual guide for installing accessories using the keyless chuck.

4.2. Flexible Shaft Installation

The flexible shaft attachment provides greater maneuverability and precision for detailed work.

1. Ensure the rotary tool is unplugged.
2. Unscrew the collet nut and remove the collet from the rotary tool.
3. Insert the flexible shaft's drive end into the rotary tool's spindle.
4. Secure the flexible shaft by tightening its coupling nut onto the rotary tool's threads.
5. To install an accessory into the flexible shaft's handpiece, use the provided wrench to loosen the collet nut, insert the accessory, and then tighten the collet nut.

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Video: Demonstrates how to assemble various accessories, including the flexible shaft, onto the rotary tool.

4.3. Protective Cover and Cutting Guide Installation

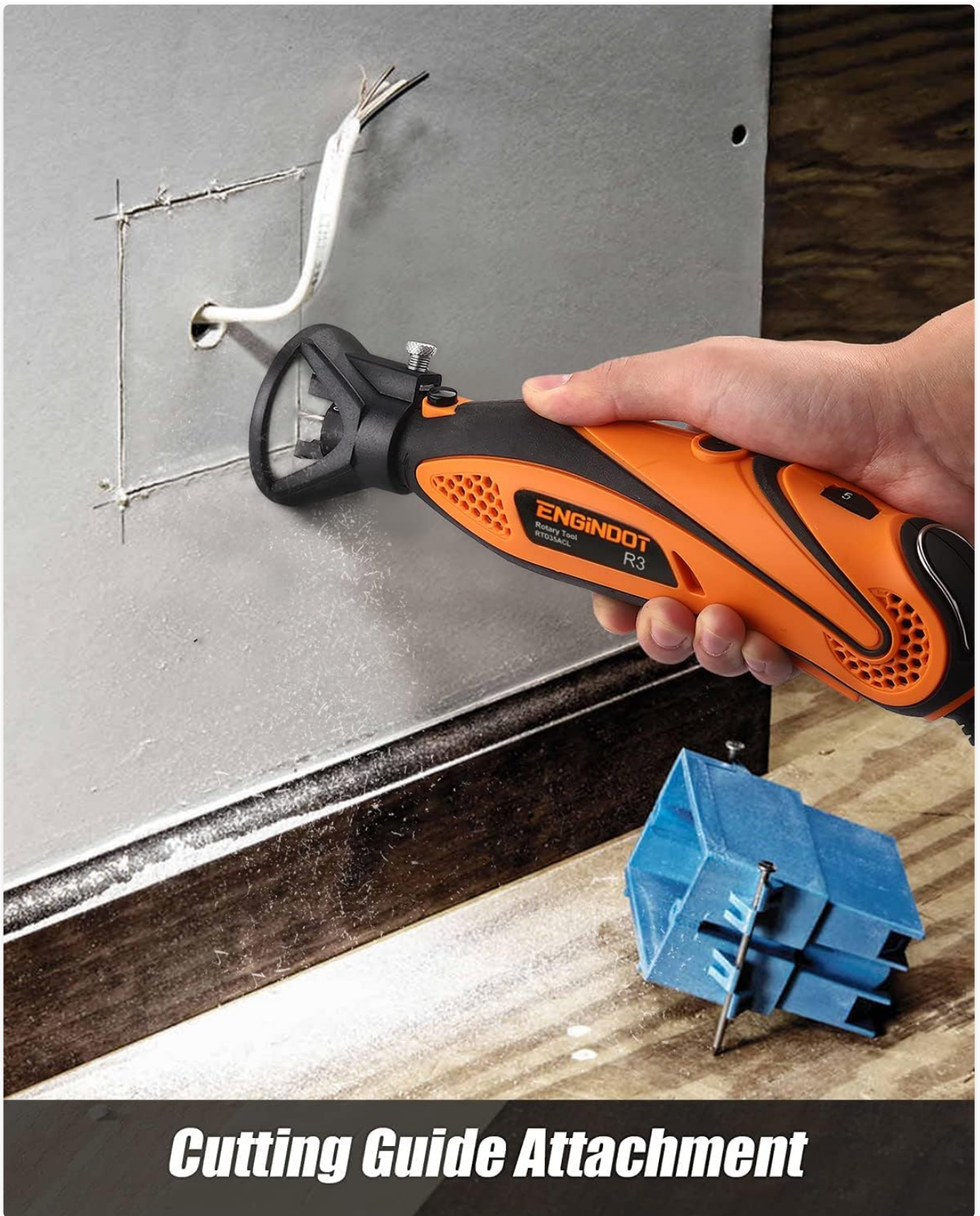
These attachments enhance safety and control during specific operations.

1. Ensure the rotary tool is unplugged and the desired accessory (e.g., cutting disc) is installed.
2. Align the protective cover or cutting guide with the rotary tool's threaded collar.
3. Screw the attachment onto the tool until it is securely fastened.
4. Adjust the depth of the cutting guide as needed for your application.



Protective Cover Attachment

Image: The rotary tool with the protective cover attachment installed.



Cutting Guide Attachment

Image: The rotary tool with the cutting guide attachment installed.

5. Operating Instructions

5.1. Speed Adjustment

The rotary tool features a 6-step variable speed adjustment knob, allowing you to control the rotational speed from 10,000 RPM to 32,000 RPM. Select the appropriate speed based on the material and task:

- **Setting 1:** 10,000-11,000 RPM (Ideal for delicate tasks, plastics, and materials that melt at low temperatures).
- **Setting 2:** 11,000-13,000 RPM
- **Setting 3:** 14,000-16,000 RPM
- **Setting 4:** 17,000-20,000 RPM
- **Setting 5:** 22,000-28,000 RPM
- **Setting 6:** 29,000-32,000 RPM (Suitable for hard materials and tasks requiring high speed, such as cutting soft wood).

For aluminum, tin, copper, lead, and zinc alloys, any speed may be used depending on the cutting type. Use paraffin or other suitable lubricant to prevent material adhesion to the cutter teeth.

5.2. General Usage

The ENGINDOT Rotary Tool is designed for a variety of applications. Always ensure the correct accessory is installed and the appropriate speed setting is selected for the material and task.



Sanding: Smooth surfaces and edges.



Drilling: Create precise holes.



Carving: Detail work on various materials.



Polishing

Polishing: Restore shine to surfaces.



Cutting

Cutting: Make precise cuts in various materials.



Grinding

Grinding: Sharpening and material removal.

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Video: Demonstrates the wide range of uses for the ENGINDOT rotary tool across different materials and tasks.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your rotary tool.

- **Cleaning:** After each use, clean the tool and accessories to remove dust and debris. Use a soft cloth, and avoid harsh chemicals.
- **Brush Cap Replacement:** The motor features replaceable carbon brush caps. If the tool experiences reduced power or intermittent operation, the carbon brushes may need replacement. Refer to the diagram for location.
- **Accessory Storage:** Store all accessories in their designated case to prevent damage and loss.

- **Cord Inspection:** Regularly inspect the power cord for any signs of damage. Do not use the tool if the cord is damaged.



Image: Diagram illustrating the components of the rotary tool, including the brush cap.

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Video: Guide on how to replace accessories, which is part of routine maintenance.

7. Troubleshooting

If you encounter issues with your ENGINDOT Rotary Tool, refer to the following common troubleshooting tips:

- **Tool does not turn on:** Check if the power cord is securely plugged into a working outlet. Ensure the ON/OFF

switch is in the 'ON' position.

- **Reduced power or intermittent operation:** This may indicate worn carbon brushes. Refer to the Maintenance section for brush replacement.
- **Excessive vibration:** Ensure the accessory is correctly and securely installed in the collet or keyless chuck. The accessory might be bent or damaged and needs replacement.
- **Overheating:** Avoid applying excessive pressure during operation. Ensure the tool's vents are clear of debris to allow for proper heat dissipation. Operate within recommended speed settings for the material.

For persistent issues not covered here, please contact customer support.

8. Specifications

Feature	Specification
Brand	ENGINDOT
Model Number	RTD35ACL
Voltage	120 Volts
Power Source	Corded Electric
Wattage	135 Watts
Maximum Rotational Speed	32000 RPM
Minimum Speed	10000 RPM
Item Weight	4.03 pounds
Product Dimensions	9.25 x 2.36 x 1.97 inches
Color	Orange

Mains Voltage	220V-240V
Frequency	50Hz
Power Input	135W
No load Speed	10000-32000 RPM
Variable Speed	1-6 Grades



Technical Specifications of Rotary Tool

Image: Technical specifications of the rotary tool.

9. Warranty and Support

For warranty information, technical support, or to purchase replacement parts, please refer to the contact information provided with your product packaging or visit the official ENGINDOT website. Keep your purchase receipt as proof of purchase.

