Bosch GKF18V-25N

BOSCH GKF18V-25N 18V Brushless Colt™ Palm Router Instruction Manual

Model: GKF18V-25N

INTRODUCTION

The Bosch GKF18V-25N 18V Brushless Colt™ Palm Router is a cordless power tool designed for precise woodworking applications such as edge forming, surface routing, and OSB flush cutting. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your router.

Figure 1: Bosch GKF18V-25N Palm Router and included accessories, such as dust hoods and a parallel guide.

SAFETY INFORMATION

Always read and understand all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

- Wear appropriate personal protective equipment (PPE), including eye protection, hearing protection, and a dust mask.
- Ensure the workpiece is securely clamped before routing.
- Keep hands and body clear of the rotating bit.
- Disconnect the battery pack before making any adjustments, changing accessories, or storing the tool.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Utilize the dust extraction system to minimize airborne dust.
- Be aware of the tool's safety features: drop detection automatically shuts off the router upon a fall, and restart protection prevents accidental startup when switching batteries.

COMPONENTS AND PACKAGE CONTENTS

The Bosch GKF18V-25N package typically includes the following items:

- (1) Bosch GKF18V-25 18V Brushless Colt™ Palm Router with Fixed Base

- (1) Chip Shield

- (1) Collet Chuck Wrench

- (1) PR012 Surface Routing Dust Hood

- (1) PR114 ¼ In. Self-Releasing Collet Chuck

- (1) Parallel Guide

- (1) RA1175 Edge Routing Dust Hood

Note: Battery and charger are sold separately as this is a bare tool.

BACKWARDS COMPATIBILITY
Works with all Colt™ PR20 accessories

POWERFUL BRUSHLESS MOTOR
Delivers 1.39 peak horsepower for optimum performance

FLIP-AND-RELEASE SPINDLE LOCK LEVER
For quick and easy bit changes

COMPACT, ERGONOMIC DESIGN
Soft upper and lower gripping positions for easier handling and routing vertically or horizontally

ENHANCED DUST EXTRACTION
Chip shield and two vac adapters to capture dust during edging and surface routing

ROUGH AND FINE DEPTH ADJUSTMENTS OPTIONS
For precise cuts in 1/64 In. increments, with a max depth cut of 1-11/32 In.

Figure 2: Key features of the Bosch GKF18V-25N Palm Router, including the brushless motor, ergonomic design, depth adjustment, spindle lock lever, and dust extraction points.

SETUP

1. Battery Installation

The GKF18V-25N is compatible with Bosch 18V AMPShare batteries. To install, align the battery pack with the tool's battery port and slide it in until it clicks into place. To remove, press the release button on the battery and slide it out.

Figure 3: Recommended Bosch AMPShare 18V batteries for use with the GKF18V-25N router.

2. Bit Installation and Removal

1. Ensure the battery pack is removed.
2. Press and hold the spindle lock lever to prevent the spindle from rotating.
3. Insert the desired router bit into the collet chuck. Ensure the shank is fully seated.
4. Use the provided collet chuck wrench to tighten the collet nut securely. Do not overtighten.
5. To remove the bit, reverse these steps.

3. Depth Adjustment

The router features a depth adjustment system for precise control:

- **Rough Adjustment:** Loosen the base clamp lever, adjust the motor housing up or down to the approximate desired depth, and then re-tighten the clamp.
- **Fine Adjustment:** Use the fine adjustment knob to make precise adjustments in 1/64 inch increments. Rotate clockwise to decrease depth, counter-clockwise to increase depth.

4. Dust Extraction System Attachment

Attach the appropriate dust hood (PR012 for surface routing or RA1175 for edge routing) to the router base. Connect a vacuum hose to the adapter for effective dust extraction.
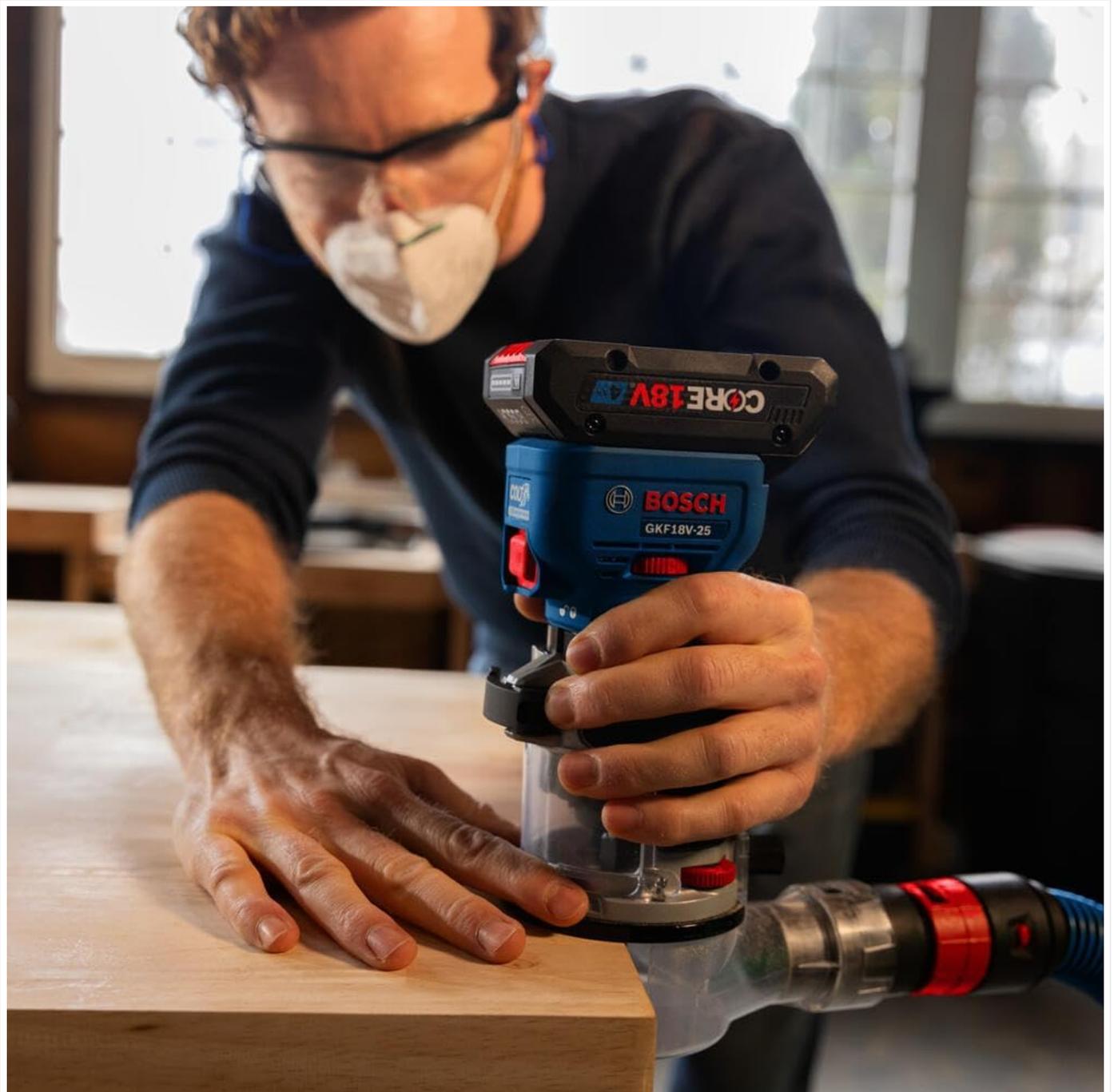

Figure 4: The router in use with the dust extraction system connected, demonstrating effective chip removal during operation.

OPERATING INSTRUCTIONS

1. Powering On and Off

- To turn on the router, slide the power switch to the "ON" position. The soft-start circuitry will gradually bring the motor up to speed.

- To turn off, slide the power switch to the "OFF" position. The convenience motor brake will quickly stop the bit rotation.

2. Variable Speed Control

The router features a variable speed dial (10,000 to 30,000 RPM). Adjust the speed according to the material being routed and the bit size. Lower speeds are generally used for larger bits and harder materials, while higher speeds are suitable for smaller bits and softer materials.

3. Routing Techniques

Always make test cuts on scrap material before routing your final workpiece.

- **Edge Forming:** Guide the router along the edge of the workpiece, maintaining consistent pressure and speed.
- **Surface Routing:** For wider cuts or dados, use a straight edge guide or the included parallel guide to ensure straight lines.
- **OSB Flush Cutting:** Ensure the bit is set to the correct depth to cut flush with the surface.

Figure 6: The router being used with the parallel guide for precise straight cuts along an edge.

4. Safety Features

- **Drop Detection:** The router is equipped with a sensor that automatically shuts off the tool if it detects a fall, preventing potential injury or damage.

- **Restart Protection:** This feature prevents the router from accidentally starting up when a battery is inserted if the power switch is already in the "ON" position. Always ensure the switch is "OFF" before inserting a battery.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Bosch GKF18V-25N router.

- **Cleaning:** After each use, clean the tool with a soft, damp cloth. Remove any dust or debris from the ventilation openings. Do not use harsh chemicals or abrasive cleaners.

- **Bit Care:** Keep router bits sharp and clean. Dull bits can cause overheating and poor cut quality.

- **General Inspection:** Periodically inspect the power cord (if using a corded accessory), switches, and housing for any damage. Ensure all screws are tight.
- **Storage:** Store the router in a clean, dry place, out of reach of children.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Router does not start.	Battery not charged or improperly inserted. Restart protection engaged.	Ensure battery is fully charged and properly seated. Turn power switch OFF, then ON again.
Motor stops during operation.	Overload protection activated. Drop detection activated.	Reduce cutting pressure. Allow tool to cool. Check for obstructions. If dropped, inspect for damage before restarting.
Poor cut quality or burning.	Dull bit. Incorrect speed setting. Feeding too fast.	Replace or sharpen bit. Adjust speed according to material. Reduce feed rate.
Excessive vibration.	Loose bit. Damaged bit.	Ensure bit is securely tightened. Replace damaged bit.

SPECIFICATIONS

Feature	Detail
Model Number	GKF18V-25N
Power Source	Battery Powered (18V Lithium-Ion)
Motor Type	Brushless
Peak Horsepower	1.39 hp
No-Load Speed	10,000 - 30,000 RPM (Variable)
Max Depth Cut	1-11/32 inches
Depth Adjustment Increments	1/64 inches
Item Weight	2.4 Pounds
Dimensions (W x H)	3.7"W x 6.6"H
Material	Metal, Plastic

WARRANTY

The Bosch GKF18V-25N 18V Brushless Colt™ Palm Router comes with a Five-Year Limited Warranty. This warranty covers defects in material or workmanship. For complete details regarding warranty coverage, terms, and conditions, please visit the official Bosch warranty page or contact Bosch customer service.

Figure 7: Bosch's 5-Year Limited Warranty information for 18V tools.

SUPPORT

For further assistance, technical support, or to inquire about replacement parts, please contact Bosch customer service:

- **Phone:** 1-877-BOSCH99 (1-877-267-2499)
- **Website:** Refer to the official Bosch Power Tools website for FAQs, service center locations, and additional resources.

Always provide your model number (GKF18V-25N) when contacting support for faster service.