

BARGAINWORLDDUK E52

BARGAINWORLDDUK Carbon Brushes Instruction Manual (Model E52)

For Erbauer, Bosch, and Ryobi Power Tools

1. INTRODUCTION

This manual provides essential information for the safe and effective installation and maintenance of BARGAINWORLDDUK replacement carbon brushes, model E52. Carbon brushes are critical components in many electric motors, facilitating the transfer of electrical current to the motor's rotating parts. Regular inspection and timely replacement ensure optimal performance and longevity of your power tools.

2. PRODUCT OVERVIEW

The BARGAINWORLDDUK Model E52 carbon brushes are designed as direct replacements for worn brushes in compatible power tools. Each package contains a pair of brushes, complete with springs and terminals, ready for installation.



Figure 1: A pair of BARGAINWORLDDUK carbon brushes with springs and terminals.

These brushes are manufactured to precise specifications to ensure proper fit and electrical conductivity within your power tool's motor.

3. COMPATIBILITY

The BARGAINWORLDDUK Model E52 carbon brushes are compatible with a range of power tools, including but not limited to:

- **Erbauer:** ERB150D, ERB567DR, R10W25, ERB1500, ERB 150 R, ERA177DRH, ERB255GS
- **Bosch Mitre Saws:** GCM 10, GCM 10 SD, GCM 12, GCM 12 SD, GCM 8S
- **Ryobi:** RMS 1825, RMS 2030

Note: Some models of Erbauer 150 switches may require slightly smaller brushes (e.g., E80 6.5x16mm). Please verify your tool's specific requirements before purchase and installation.

4. SAFETY INFORMATION

Always observe the following safety precautions when working with power tools and electrical components:

- **Disconnect Power:** Before attempting any maintenance or installation, always unplug the power tool from its power source to prevent accidental startup and electrical shock.
- **Wear Protective Gear:** Use appropriate personal protective equipment, such as safety glasses and gloves.
- **Work in a Well-Lit Area:** Ensure adequate lighting to clearly see components and avoid errors.
- **Consult Tool Manual:** Refer to your power tool's original instruction manual for specific disassembly and reassembly procedures.
- **Professional Assistance:** If you are unsure about any step, seek assistance from a qualified technician.

5. INSTALLATION INSTRUCTIONS (SETUP)

Follow these general steps for replacing carbon brushes. Specific procedures may vary slightly depending on your power tool model.

1. **Disconnect Power:** Ensure the power tool is unplugged from the electrical outlet.
2. **Locate Brush Caps:** Identify the brush caps on the motor housing. These are typically small, round, or rectangular covers that can be unscrewed or unclipped.
3. **Remove Old Brushes:** Carefully remove the brush caps. The old carbon brushes, along with their springs, will be accessible. Note their orientation before removal.
4. **Inspect Commutator:** While the brushes are out, inspect the commutator (the copper segments on the motor's armature). It should be clean and smooth. If it's excessively grooved or dirty, professional servicing may be required.
5. **Insert New Brushes:** Place the new BARGAINWORLDDUK carbon brushes into the brush holders, ensuring they are oriented correctly. The carbon block should slide smoothly into the holder, and the spring should apply gentle pressure to push the brush against the commutator.
6. **Secure Brush Caps:** Reattach the brush caps securely. Do not overtighten.
7. **Test Tool:** Plug the power tool back in and perform a brief test run. It is normal for new brushes to spark slightly during the initial break-in period. This should reduce with use.



Figure 2: BARGAINWORLDDUK carbon brushes with dimensions.

6. MAINTENANCE

To ensure the continued efficient operation of your power tool, it is recommended to periodically inspect the carbon brushes. The frequency of inspection depends on the tool's usage. Signs of worn brushes include:

- Excessive sparking from the motor.

- Reduced power or intermittent operation.
- Unusual noises from the motor.
- Complete failure of the tool to start.

Replace brushes when they are worn down to approximately one-quarter of their original length or if they appear chipped or damaged.

7. TROUBLESHOOTING

If your power tool experiences issues after brush replacement, consider the following:

- **Tool Not Starting:** Ensure the brushes are correctly seated and the brush caps are securely fastened. Check that the power cord is fully plugged in.
- **Excessive Sparking:** While some initial sparking is normal, persistent heavy sparking may indicate improper brush seating, a dirty commutator, or an issue with the motor itself. Re-check brush installation and commutator condition.
- **Reduced Power:** Verify that the brushes are making good contact with the commutator and are not stuck in their holders.

If problems persist, consult a qualified power tool repair technician.

8. SPECIFICATIONS

Feature	Specification
Model Number	E52
Dimensions (L x W x H)	19mm x 17mm x 7mm
Item Package Quantity	2 (one pair)
Nominal Voltage	230 Volts (AC)
Manufacturer	BARGAINWORLDDUK

9. WARRANTY AND SUPPORT

For information regarding warranty coverage or technical support for your BARGAINWORLDDUK carbon brushes, please contact the manufacturer directly through their official channels. Keep your purchase receipt as proof of purchase.