

HOBBYWING EZRUN 1626SD-3500KV

HOBBYWING EZRUN 1626SD-3500KV Motor Instruction Manual

Model: EZRUN 1626SD-3500KV (Part Numbers: 30402653, 30402654, 30402655)

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your HOBBYWING EZRUN 1626SD-3500KV motor. Please read this manual thoroughly before use to ensure safe and efficient operation.

Safety Precautions

- Always ensure proper power device pairing with your car frame to prevent overload and motor damage. Refer to your car frame's manual for compatibility.
- Carefully wire all equipment components. Loose connections due to vibration can lead to loss of control of your RC model.
- Never apply full throttle without the pinion installed. Extremely high RPMs without load can damage the motor.
- Do not allow the motor case temperature to exceed 100 degrees Celsius (212 degrees Fahrenheit). High temperatures can demagnetize the motor's magnets, leading to permanent damage.

2. PRODUCT OVERVIEW

The HOBBYWING EZRUN 1626SD-3500KV motor is designed for high performance in RC applications, offering improved top speed, precise response, and high efficiency with cool operation. Its modular design facilitates easy cleaning and maintenance.



Image showing the HOBBYWING EZRUN 1626SD-3500KV motor, highlighting its compact design and connection points.

Key Features:

- Improved top speed and precision response.
- High efficiency with cool operating temperatures.
- Zero cogging, consistent torque, and excellent low-speed response for enhanced driveability.
- Modular detachable structure for convenient daily cleaning and maintenance.
- 2-pole design, compatible with 2S LiPo batteries.
- Weight: Approximately 18g.

What's in the Box:

- (1) HOBBYWING EZRUN 1626SD Motor

3. SETUP AND INSTALLATION

Proper installation is crucial for the motor's performance and longevity.

Mounting the Motor:

Securely mount the EZRUN 1626SD motor into your RC vehicle's motor mount. Ensure that the motor is

firmly attached to prevent movement during operation, which could lead to damage or performance issues.

Wiring Connections:

Connect the motor to a compatible Electronic Speed Controller (ESC), such as the HOBBYWING EzRun Mini28 ESC. Ensure all connections are secure and correctly polarized. Loose connections can cause intermittent power delivery or complete loss of function.

For optimal performance and to utilize features like timing advance, connect the sensor cable from the motor to the ESC, if applicable to your ESC model.

Pinion Gear Installation:

Install the appropriate pinion gear for your application. Ensure the gear mesh between the pinion and spur gear is correctly set to avoid excessive wear or binding. **Never operate the motor at full throttle without a pinion gear installed**, as this can cause severe damage due to extremely high RPMs without load.

4. OPERATING INSTRUCTIONS

The EZRUN 1626SD-3500KV motor is designed for smooth and powerful operation when paired with a suitable ESC.

Initial Power-Up:

After installation, perform a low-speed test to confirm all connections are correct and the motor operates smoothly. Gradually increase throttle to check for any unusual noises or vibrations.

Timing Advance (with EzRun Mini28 ESC):

When used with the HOBBYWING EzRun Mini28 ESC, the motor supports timing advance. This feature can be configured via the ESC settings to significantly increase top speeds. Refer to your EzRun Mini28 ESC manual for detailed instructions on adjusting timing advance.

Performance Characteristics:

- Experience zero cogging and consistent torque delivery across the RPM range.
- Benefit from excellent low-speed response, providing enhanced control and driveability.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your motor.

Cleaning:

The modular detachable structure of the EZRUN 1626SD motor allows for convenient daily cleaning. Regularly remove dust, dirt, and debris from the motor's exterior and cooling fins to maintain efficient heat dissipation.

Temperature Monitoring:

Continuously monitor the motor's operating temperature. The motor case should not exceed 100 degrees Celsius (212 degrees Fahrenheit). Prolonged operation above this temperature can cause irreversible damage to the motor's internal magnets.

If the motor consistently runs hot, consider checking your gearing, ESC settings, or vehicle setup for potential issues causing excessive load.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your EZRUN 1626SD motor.

Problem	Possible Cause	Solution
Motor not running or intermittent operation	Loose wiring connections; ESC not properly configured; Damaged motor or ESC.	Check all wiring for secure connections; Verify ESC settings and calibration; Inspect motor and ESC for visible damage.
Motor overheating (above 100°C / 212°F)	Incorrect gearing (too high); Excessive load on the motor; Insufficient cooling; ESC timing too aggressive.	Reduce pinion gear size or increase spur gear size; Reduce vehicle weight or resistance; Ensure adequate airflow to the motor; Adjust ESC timing settings.
Loss of control during operation	Loose power connections; Radio interference; ESC or receiver malfunction.	Inspect all power and signal connections; Check radio system for interference; Test ESC and receiver functionality.
Motor makes unusual noises or vibrates excessively	Improper gear mesh; Damaged motor bearings; Bent motor shaft; Debris inside motor.	Adjust gear mesh; Inspect bearings for wear and replace if necessary; Check motor shaft for straightness; Clean motor interior.

7. SPECIFICATIONS

Specification	Detail
Model Name	EZRUN 1626 Sensored Motor
KV Rating	3500KV
Poles	2-pole
LiPo Cells	2S LiPo
Item Weight	2.46 ounces (approximately 18g)
Product Dimensions	3.6 x 2.7 x 1.25 inches
Material	Alloy Steel
Manufacturer	Hobbywing Technology
Item Model Numbers	30402653 / 30402654 / 30402655
UPC	088718506243

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact HOBBYWING North America directly or visit their official website. Keep your purchase receipt as proof of purchase for any warranty claims.

