



FUZE

Brushless Motors Instructions

Thank you for purchasing the Dynamite® Fuze™ Brushless Motor. Fuze brushless motors are high torque motors designed for direct-drive applications. The 1/18 versions feature the same diameter and mounting hole pattern as brushed 370 motors so they make excellent upgrades for this class of models. 1/10 and short course versions feature the same diameter and mounting pattern as brushed 540 motors. The DYN3734 Short Course motor was developed to mimic the speed of many RTR short course vehicles with more consistency and less maintenance (when used with the stock pinion).

Fuze 1/18 Brushless Motor Features

- Perfect upgrade for brushed 370 motors with same diameter and mounting hole pattern
- High torque
- Includes connectors
- High-quality construction with ball bearings and hardened steel 2mm shaft

1/18 Specifications

- Diameter: 22mm (.87 in)
- Case Length: 36mm (1.42 in)
- Weight: 53 g (1.87 oz)
- Shaft Diameter: 2mm (.08 in)
- Kv Rating: 7000Kv (DYN3730)
8300Kv (DYN3731)
9700Kv (DYN3732)
- Cells: 4–6 Ni-Cd/Ni-MH or 2S Li-Po
- Brushless ESC: Fuze 1/18 Brushless ESC (DYN3740) or equivalent

Fuze 1/10 and Short Course Motor Features

- Perfect upgrade for brushed 540 motors with same diameter and mounting hole pattern
- High torque
- Includes connectors
- High-quality construction with ball bearings and hardened steel 1/8-inch shaft

1/10 Specifications

- Diameter: 36mm (1.42 in)
- Case Length: 50mm (1.97 in)
- Weight: 200 g (7.05 oz)
- Shaft Diameter: 3.17mm (1/8 in)
- Kv Rating: 3300Kv (DYN3734)
5800Kv (DYN3736)
6800Kv (DYN3736)
- Cells: 6–10 Ni-Cd/Ni-MH or
2S–3S Li-Po
- Brushless ESC: Fuze 1/10 Brushless ESC (DYN3741) or equivalent

Accessories

See our website at www.dynamiterc.com or www.horizonhobby.com for our complete line of accessories.

Installation of Pinion Gear

It will be necessary to install the pinion on the motor shaft.

When installing motors into your vehicle, it is very important that the gear mesh is correct and the gear's mesh is smooth with no binding. The vehicle motor mounts usually feature adjustable slotted mounting holes so that you can ensure the gear mesh is correct. Remember, if the mesh is too loose or too tight, it may strip the gears. One suggestion may be to insert the polybag included with the motor or a small piece of paper in between the pinion and spur gear as you are installing them. Tighten and secure the screws to the motor mount. Always make sure the screws are long enough so they have properly seated into the motor. You can easily remove the polybag or paper by rotating the shaft until it comes out. Be certain to check the mesh at multiple points on the spur gear before finalizing the motor mounting position.

Operating Instructions

1. This brushless motor requires the use of a sensorless brushless speed control. Failure to use the correct speed control may result in damage to the motor and/or speed control.
2. When mounting the motor, be sure the correct screw length is used so no damage is done to the inside of the motor. We suggest you use the mounting hardware included with your original motor. The use of long screws will damage the motor and void any warranty.
3. You may connect the three motor wires directly to the controller with solder or use gold-plated bullet connectors supplied with each motor. The three motor wires can be connected in any order to the three output wires or output port on a sensorless brushless speed control. Be sure to use heat shrink tubing to properly insulate the wires so the wires will not short. Shorting may damage the motor and speed control.
4. If you use the supplied connectors and you no longer wish to use them, never cut the motor wires. Remove them by properly desoldering them. Shortening the motor wires is considered an improper modification of the motor and may cause the motor to fail.

5. When you connect the motor to the ESC, check the rotation direction of the motor. If you find the rotation is reversed, switching any two motor wires will reverse the direction so the motor rotates properly. Consult the instructions included with your sensorless electronic speed control for proper adjustments and timing.
6. Proper cooling of the motor is very important during operation. New technology has brought much higher capacity batteries with higher discharge rates, which can cause extreme motor temperatures during operation. It is the responsibility of the user to monitor the temperature and prevent overheating. Overheating of the motor is not covered under any warranty. Never let the motor get above 180 degrees Fahrenheit. If you cannot touch the motor for 2 seconds, it is too hot.
7. Once the battery is connected to the motor, please use extreme caution. Stay clear of the rotating shaft and pinion gear. This spinning shaft can be very dangerous as the motor produces high amounts of torque.
8. Never disassemble the motor. This will void any warranty.

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warrants that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

Limited Warranty

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of 1/2 hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. Please note: non-warranty repair is only available on electronics and model engines.

United States:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822
USA

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822
USA

Please call 877-504-0233 or e-mail us at productsupport@horizonhobby.com with any questions or concerns regarding this product or warranty.

United Kingdom:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Hobby UK
Units 1-4 Ployters Rd
Staple Tye
Harlow, Essex
CM18 7NS
United Kingdom

Please call +44 (0) 1279 641 097 or e-mail us at sales@horizonhobby.co.uk with any questions or concerns regarding this product or warranty.

Germany:

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Technischer Service
Hamburger Strasse 10
25335 Elmshorn
Germany

Please call +49 4121 46199 66 or e-mail us at service@horizonhobby.de with any questions or concerns regarding this product or warranty.

CE Compliance Information for the European Union

Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.



Declaration of Conformity

No. HH2009102202

Product(s): DYN Brushless Motor
Item Number(s): DYN3730-3737

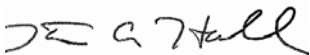
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European EMC Directive 2004/108/EC:

EN55022	Radio disturbance characteristics
EN55024 characteristics	Immunity
EN 61000-4-2	Electrostatic discharge immunity test

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Oct 22, 2009

Steven A. Hall



Vice President
International Operations and Risk Management
Horizon Hobby, Inc.

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