



J-3 Cub BL

Instruction Manual

PLUG-N-PLAY



PKZ4517



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Champaign, IL 61822
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Charge-and-Fly™ Park Flyer

Wingspan: 37.25 in (946mm) Servos: Two 3-wire servos
Overall Length: 26.75 in (680mm)
Weight: 15 oz (425 g)
Motor: PKZ370 Outrunner brushless motor, 1500Kv
ESC: E-flite® 10A pro Brushless ESC (EFLA1010)

J-3 Cub BL PNP Instruction Manual

Congratulations on your purchase of the ParkZone® J-3 Cub BL PNP®. You will need to attach the wing and landing gear. To complete the airplane assembly in addition to supplying your own radio system and battery.

We at ParkZone are committed to giving you the most enjoyable flight experience possible. In order to have a safe and successful flight, we ask that you do not fly until you have read these instructions thoroughly.

Your J-3 Cub BL PNP already has the 3-wire servos, a ParkZone 370 outrunner brushless motor, and an E-flite®Pro 10A brushless ESC installed. The decals have been applied as well. You will only need to add your own battery (a 2S 800mAh Li-Po is recommended), as well as a receiver and transmitter.

In as little as an hour, you can be ready for your first flight with the J-3 Cub BL PNP. This means you can spend your time refining your flying skills, not your building skills.

Warning

Although your ParkZone J-3 Cub BL PNP comes almost ready to fly, this aircraft is for experienced RC pilots only and is not a toy! Misuse of the plane can cause serious bodily harm and damage to property. Therefore, only an experienced RC pilot should fly it.

Step 1

Charging Your Flight Battery

We recommend that you choose the 800mAh 2S Li-Po (PKZ1032) to power your J-3 Cub BL PNP. The Li-Po battery must be charged with a charger that is specifically designed to handle Li-Po batteries, such as the ParkZone 2- to 3-cell Li-Po Charger (PKZ1040). Regardless of the battery you choose, always follow the charger and battery instructions to avoid any damage to the battery, charger, property or yourself.

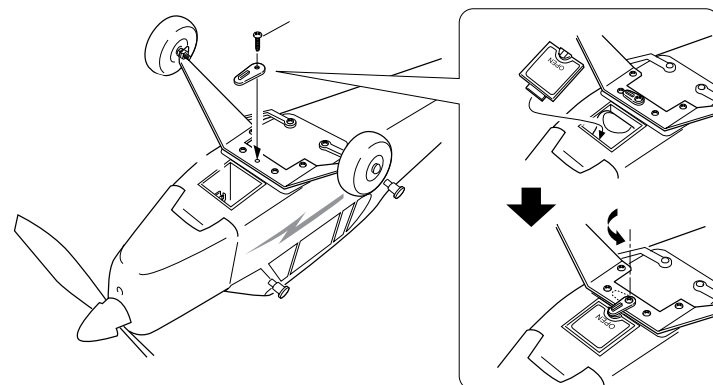
Warning

Failure to use the proper charger for a Li-Po battery can result in serious damage, and if left charging long enough, will cause a fire. ALWAYS use caution when charging Li-Po batteries. Never leave a battery charger unattended while charging.

Step 2

Installation of Landing Gear

1. Locate the landing gear and the included screws from within the packaging.
2. Using a Phillips screwdriver, attach the landing gear to the fuselage as shown.



Step 3

Installing the Receiver

You should place your receiver in the compartment that is directly aft of the battery holder box. This is right at the point of CG. Carefully plug the servo leads into the corresponding channels of the receiver you have chosen. The servo plugs may have to be trimmed carefully with a hobby knife (if you are using a Spektrum™, JR® or HiTec radio system) in order to fit correctly into the receiver.

Confirm that the servo leads/plugs are in the correct channel of the receiver. Do this by:

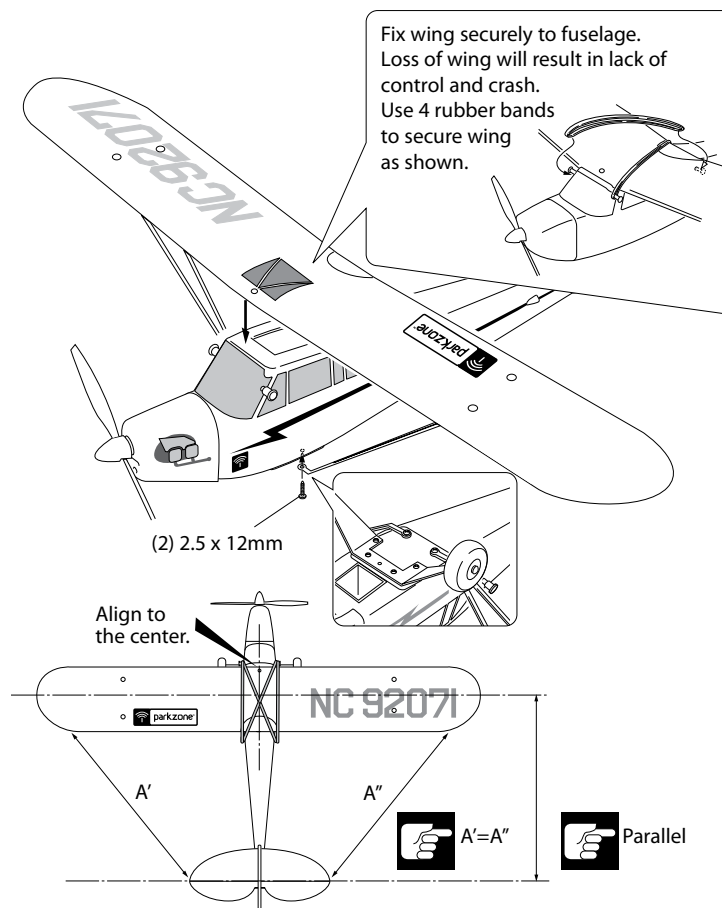
1. Turning on the transmitter, confirming that the throttle is in the "off" position.
2. Installing a charged flight battery.
3. Plug flight battery into ESC.

* Spektrum is used with permission of Bachmann Industries, Inc. Spektrum radios and accessories are exclusively available from Horizon Hobby, Inc.

Step 4

Attaching the Wing

1. Locate wing, wing struts and rubberbands.
2. Locate wing strut screws.
3. Place wing on top of fuselage so that it is centered.
4. Attach wing struts with the mounting screws as shown. There should be the same amount of slack in each strut once this is completed.
5. Once you are satisfied the wing is properly centered and the struts are properly attached, complete the attachment of the wing with the included rubber bands. Stretch two of the rubber bands from the front to the rear attach points. Stretch the next two diagonally across the middle. Confirm the wing is securely attached.
6. Make sure that prior to each flight the wing is properly centered onto the fuselage. If the wing is not centered properly, it is impossible to have correct flight.



Check all functions to ensure proper setup. Keep all body parts away from the propeller. You can also make any trim adjustments to the control surfaces at this time. Once you are satisfied that the channels are functioning correctly, you can unplug the flight battery and turn off the radio system.

Step 5

Motor Test

1. Make sure the throttle is in the "off" position.
2. Turn on the transmitter.
3. Remove the battery door from bottom of the fuselage. (See image B in Step 2 on page 2.)
4. Plug the flight battery into the red lead inside the fuselage.
5. Secure the battery inside the fuselage cavity and replace the battery door.
6. Your J-3 Cub BL PNP[®] has a built-in throttle-arming feature which needs to "see" the throttle in the Off position before it will spin the propeller. (CAUTION: Make sure that you, as well as loose clothing and hair, are away from propeller at all times!) Advance the throttle forward and the propeller should spin at a high speed. The throttle-arming feature will need to be activated each time the battery is plugged into the airplane.

7. When finished with the motor test, continue to Tail Control Test on the next page.

Note: It is important to always turn on the transmitter prior to plugging in the flight battery. Plugging in the flight battery first may cause undesired operation due to interference, potentially resulting in damage to the aircraft or personal injury.

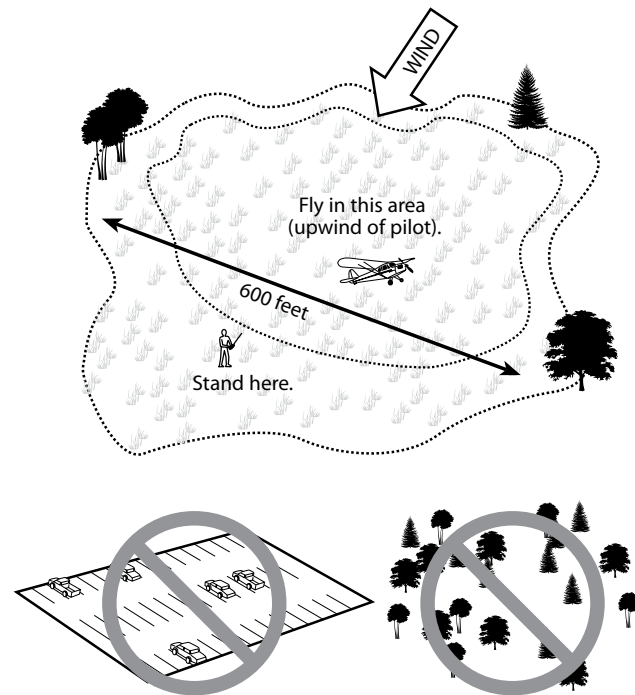
Adult Supervision Required

WARNING: Keep everything clear of the propeller and hold the plane securely. A moving propeller can cause severe injury.

Step 6

Choose a Large, Open Flying Site

- A large, open grassy field is required to fly your J-3 Cub BL PNP. The J-3 Cub BL PNP flies about 15–20 mph, so it covers ground fast. The bigger the field, the better.
- It is essential to have a minimum of 300 feet of clear space in all directions from the pilot. Ignoring this direction, could result in a fly-away plane.
- Make certain that you do not fly near trees, buildings, or other areas that can restrict your view or interfere with your flying.
- Always keep the plane upwind from you to avoid flyaways. This is essential!



Step 7

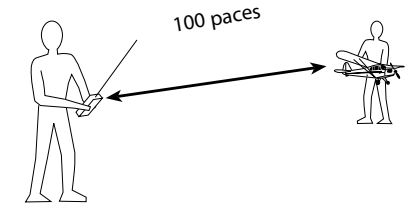
Range Test

You will need two people to perform the range test: one to hold the plane and the other to give the transmitter input.

Warning: The person holding the plane should hold it in a way so the propeller does not come into contact with anything loose on their clothing or body.

1. One person holds the transmitter, while the other person walks 100 paces away with the airplane.
2. Be sure the throttle is in the "Off" position.

3. Extend the transmitter antenna completely and turn the transmitter on.
4. Plug the airplane battery into the fuselage.
5. As soon as the throttle slider is advanced, the propeller should spin quickly.
6. As the first person moves the transmitter controls at the same time, the other person watches to be sure the airplane's motor and tail controls operate smoothly.



Step 8

Seek Assistance from an Experienced Radio Control Pilot

VERY IMPORTANT

The 3-channel control system is designed for the experienced radio control pilot and is not intended for the first-time flier. It is best to have HobbyZone[®] Zone 2 experience. First-time pilots of the ParkZone[®] J-3 Cub BL PNP should seek the assistance of an experienced RC flier until the additional third channel, pitch control, has been competently mastered. Crash damage is not covered under the warranty.

Warnings and Safety

1. Read and follow this manual completely, observing all instructions and safety directions. Otherwise, serious injury and damage can occur. Think safety first.
2. Keep propeller away from body parts, even when it isn't spinning, as it could be turned on by accident. Beware of hair becoming entangled in the propeller, especially while launching the J-3 Cub BL PNP.
3. Do not fly when it's too windy or you may lose control and crash, causing injury or damage. Never fly near people, vehicles, train tracks, buildings, power lines, water, hard surfaces or trees. Never allow any one to attempt to catch the airplane while it's in flight or serious injury can result.
4. Adult supervision is recommended for ages 14 and under.
5. Battery charging: Only use a battery charger intended for use with the flight battery. Never leave charger unattended while charging. This will help prevent overcharging. While charging, place the battery on a heat resistant surface. Do not lay it on carpet or upholstery while charging.
6. Never cut into the battery charger or airplane wires or serious injury can occur. Causing the battery to "short out" (crossing negative and positive bare wires) can cause fire, serious injury and damage.
7. Hold the plane securely, and keep all body parts away from the propeller when the flight battery is plugged in. When you finish flying the J-3 Cub BL PNP, always unplug the battery before you turn off the transmitter.
8. Never fly on the same frequency as another RC vehicle in your area. The frequency of the J-3 Cub BL PNP is shown on stickers on the back of the transmitter.

Programming the E-flite 10A Pro Brushless ESC

The E-flite® 10A Pro Brushless ESC controller has been designed for use in radio control aircraft and to support continuous currents of up to 10 amps when using 2- to 3- cell Li-Po battery packs and up to four submicro servos. Standard features include advance BEC and safe power arming along with programmable features such as low voltage cutoff, braking, timing, and throttle input range.

Features:

- Up to 10 amps continuous current with proper air flow
- Programmable motor braking
- Safe power-arm mode prevents accidental starts
- Programmable low voltage cutoff with settings for 2-cell Li-Po (6V), 3-cell Li-Po (9V) or 70% of battery starting voltage
- Programmable throttle input range (1.1ms–1.9ms or Auto Select)
- Soft start
- Auto motor shut down if signal is lost or there is interference
- Programmable timing—2 user selectable ranges for use with a large variety of brushless motors
- Pre-wired connectors—JST on battery input and 2mm female gold bullets on motor output leads

Specifications:

- Continuous Current: 10A
- Max Burst Current: 12A (15 sec)
- Length: 30mm (1.2 in)
- Width: 17.5mm (.7 in)
- Height: 10mm (.4 in)
- Weight: 10 g (.35 oz)
- Cells: 2-3S Li-Po or 6-10 Ni-MH/Ni-Cd
- Battery Input Leads: 20 AWG with JST Connector
- Motor Output Leads: 20 AWG with 2mm Female Gold Bullet Connectors

** Sub-Micro Servos tested 4 at a time include E-flite S-60, and S-75, JR 241, and ParkZone 3W servo. Some other brands of servos have significantly higher current draw. Digital sub-micro servos, micro, and mini-servos have higher current draw, use the 'standard servos' column. Always be sure to position the ESC for maximum airflow since cooling can significantly aid in the performance of the BEC.

Servo Ratings with BEC Enabled:

Cell	High Torque Servos	Standard Servos	Sub-Micro Servos
6 - 8 Ni-Cd/NiMH	3	4	4**
9 - 10 Ni-Cd/NiMH	2	3	4**
2 Li-Po	3	4	4**
3 Li-Po	2	3	4**

Chart A

Before first use, please refer to Chart A for BEC usage and input voltage/cell count guidelines. You must follow these guidelines for safe operation. If you are using four servos with higher current draw, or more than four servos for a quad flap option (for example), you will need to disable the BEC. If you wish to disable the BEC, you must remove the red receiver wire lead and connector from the receiver lead housing, and then insulate it properly to prevent shorting.

When operating with the BEC disabled, E-flite recommends the use of a separate, high power, external, BEC (like the Ultimate BEC), or receiver pack and switch using the following items to ensure trouble-free operation:

1. Expert 720mAh Ni-MH 4.8V receiver battery (EXRB100), or similar
2. Expert Standard Switch (EXRA050), or similar

PLEASE READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE USE

Before you connect your ESC and begin flying, take a moment to look it over. The input power side has a black (negative) and red (positive) wire along with a female JST Connector. The motor side has three, 2mm female gold bullet connectors.

The black and red wires with the female JST connector will connect to your power battery. The red wire connects to the red wire on your battery pack, the black wire to the black wire on your battery pack. If the wires are reversed, the ESC may be damaged. **YOU MUST ENSURE THAT YOU CONNECT THE BATTERY POLARITY PROPERLY TO PREVENT DAMAGE TO THE ESC.** Reversing polarity will void your warranty, so always double-check this connection. You may need to solder a male JST Connector (EFLA242) to the battery so it matches this speed control. The throttle lead connects to the throttle channel on your radio receiver. **WARNING: For your safety, when checking the startup function of the ESC or making programming changes, please remove the propeller to prevent any potential injury. You should always treat the motor and propeller as live and dangerous, remembering that it could start at any time, and keep any body parts, clothing and tools clear of the propeller arc. NEVER LEAVE THE BATTERY CONNECTED WHEN NOT FLYING THE AIRCRAFT AND ALWAYS REMOVE THE BATTERY FROM THE MODEL**

BEFORE CHARGING AND WHEN FINISHED FLYING.

When flying in hot weather, we recommend checking on the condition of the ESC, battery, and motor after each flight, and you may want to consider letting the electronic components cool to near ambient temperature between flights.

We also recommend throttle management when running near maximum levels of current draw. It is not recommended that you fly an entire flight at full throttle. If this is done, it is possible to cause permanent damage to your motor, battery, and ESC.

Using Your 10-Amp Pro Brushless Controller:

This controller is very simple to use, and for safety, will not arm the motor until the throttle stick has been held in the Idle/OFF position for more than 1 second. The controller will indicate the soft cutoff voltage setting every time you plug the battery in by first emitting a low, long tone, to show startup. You will then hear 2 (for 2-cell Li-Po) or 3 (for 3-cell Li-Po) medium length, mid tones to indicate the cell count (or 7 beeps if 70% Smart Cut is selected), helping you to confirm the setting before every flight.

Connecting the ESC to the Motor:

The three wires from your motor connect to the three female gold bullet connectors on the ESC. The order of connection to the motor is not important; you can plug any motor wire into any connector. If, when you test the system, the motor runs backwards you can simply unplug and switch any two of the motor wire plugs connected to the ESC.

Mounting the ESC:

Choose a location that has good airflow and offers good protection.

The plastic case area next to the small BEC heat sink is designed to accept Velcro or 2-sided tape. Do not cover the heat sinks as this will greatly reduce their effectiveness.

Mount the ESC with a combination of Velcro, 2-sided foam tape, and/or tie wraps.

Starting Your Power System:

1. Turn on your transmitter and ensure the position of the throttle stick is set to Idle/Off.

2. Plug in the flight pack to the controller and listen for the tones to indicate voltage cutoff.

3. After the controller has indicated the cell count, you will hear a series of 3 medium length rising tones to indicate the controller is ready to fly.

4. When you move the throttle stick upward, the motor will run. If you continue to move the throttle stick upward to full throttle (high position), the motor will run faster. If you lower the throttle stick below the start-up position, the motor will stop running.

5. Check servo motion as part of your preflight check. It is very important you make sure linkages are free-moving with no binding.

Entering the Programming Mode:

1. With the battery disconnected from the controller, and the transmitter turned on, first move the throttle stick to full throttle (>1.7ms) position. Leave it in this position and then connect the battery to the controller.

2. Wait for 5 seconds, and the ESC will give two sets of fast ringing tones to indicate you have successfully entered the programming mode.

3. Once you hear these tones, move the stick to center (between 1.4 and 1.6ms), and the controller will beep 1 time; this indicates menu item 1.

4. The controller will now wait 5 seconds for you to make your selection; your programming options are either full throttle (>1.7ms), or idle (<1.3ms).

5. When you have made a valid selection the control will beep once with a lower tone, and you can move the stick back to center for the next menu item (2 beeps, 3 beeps and so on). If you do not make a selection within 5 seconds, the controller will move to the next menu item.

6. Please note that if you do not need to program every menu item, you can simply exit the programming mode after you have made the required selections. You can do this by

moving the throttle stick straight to Idle, after making your selection, or leaving it in the Idle position if you made a no selection (for approximately 8 seconds), until you hear one set of 3 medium length rising tones that indicate the controller has armed the motor, or by simply unplugging the battery.

Remember, when in the programming mode:

Full Throttle = Stick Up
Idle = Stick Down

The default settings (from the package) for your E-flite 10-Amp Pro ESC are as follows:

- 3S (9V) auto cutoff for Li-Po
- Brake Off
- 4-pole and greater timing (outrunner or 6-pole motors)
- Throttle input range set to Auto Select Mode (1.2ms–1.8ms)

Programming Menu 1 – Voltage Cutoff:

Use this option to set the voltage at which the controller will shut down the motor to prevent damage to your battery, when it reaches the cutoff voltage. You will know that your battery pack has reached auto cutoff when you hear the motor “pulse” repeatedly.

1. 3S Li-Po voltage cutoff – Full Throttle
2. 2S Li-Po or Ni-Cd/Ni-MH voltage cutoff – Idle
3. 70% Smart Cut soft cutoff (see below for Smart Cut information)

NOTE: To access the 70% Smart Cut option, leave the stick at full throttle for 7 seconds while in menu item 1, until 7 beeps are heard, then continue through the program normally. This option will activate the soft cutoff at 70% of startup voltage. For example, if your pack measures 10.0 volts at startup, then the soft cut will occur at 7.0 volts. The Smart Cut option will check the startup voltage every time you plug the battery into the controller, so beware of using partially charged packs, as the system cannot protect your Li-Po batteries if you are using Smart Cut and connect a partially charged pack.

You will know your battery pack has reached soft auto cutoff when you hear the motor “pulse” repeatedly. We recommend you land your model as soon as you hear the motor pulse (indicating the pack voltage has dropped to the cutoff voltage level) to prevent over-discharge of the Li-Po battery

pack, and to prevent sudden power loss.

Programming Menu 2 – Braking:

This option gives you the choice to have the ESC stop the propeller during flight (Brake on) or allow it to windmill (Brake off). Use the brake-on option for gliders.

1. Brake Off – Full Throttle (>1.7ms)
2. Brake On – Idle (<1.3ms)

Programming Menu 3 – Timing:

Please refer to your motor instructions and specifications for an indication of the number of poles.

1. 4-pole and greater motors timing mode – Full Throttle
2. 2-pole motors timing mode – Idle

Programming Menu 4 – Throttle Input Range:

This option is to allow for proper operation of the ESC with many different radios on the market. Most radios, and all the computer radios we have tested, work well with the auto-set option, but some radios have a wider output range, and may give a more linear response with the 1.1 to 1.9ms range. If you feel there is too much “dead” area in the stick movement near Full Throttle, try adjusting the end points in your radio, or change to the wider input range.

Be aware that if these settings are not correct, it may be impossible to arm the controller. If this happens, return the input range setting to the default auto

learning setting.

The auto setting option learns the minimum position of your throttle (between 1.1 and 1.3ms) and stores this value at each startup, and then adds a value of 0.6ms for the full throttle setting.

1. Throttle Range 1.1ms to 1.9ms – Full Throttle
2. Auto Select – Idle

Error Codes:

The controller will beep continuously if the input voltage is below the cut voltage (beep...beep...beep) when the battery is connected. Check the voltage of the battery pack to see if it is correct, or the programmed cutoff setting if the input voltage is set incorrectly for the voltage of the pack being used.

If you have trouble arming the controller (and the throttle trim has been set to minimum), enter the programming mode and try the auto setting in Programming Menu 4 to see if it helps correct your problem. If it is a computer radio, you may alternatively increase your high and low throttle ATV (endpoint) percentages.

Some systems including many Futaba* systems may require the throttle channel to be “reversed” for proper operation.

* Futaba is a registered trademark of Futaba Denshi Kogyo Kabushiki Kaisha Corporation of Japan.

Warranty

Warranty Period:

Exclusive Warranty- Horizon Hobby, Inc., (Horizon)

warranties 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 ½ 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.

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

Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822

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

Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822

Please call 877-504-0233 with any questions or concerns regarding this product or warranty.

Follow-up Procedures

If you are directed by our Product Support staff to return the airplane, please follow these instructions.

- | | |
|--|---|
| 1. Unplug the battery from the airplane. | writing it on the outer label/return address area. Include detailed information explaining the nature of the problem(s) encountered. |
| 2. Pack the complete ParkZone® J-3 Cub PNP® (all components in the original box) and put into a sturdy shipping carton for protection. | |
| 3. Include your complete name and address information inside the carton, as well as clearly | 4. Please date your correspondence and be sure your complete name, address and daytime phone number appear on this enclosure. Please include your original dated sales receipt. |

Mail to the address below:

Horizon Service Center
Attn: ParkZone Dept.
4105 Fieldstone Rd.
Champaign, IL 61822

Replacement Parts

Make sure that you keep your J-3 Cub PNP in the air. Replacement parts are available at your local hobby shop or from Horizon Hobby (www.horizonhobby.com). Please try your local retailer first. By supporting your local hobby store, they will have replacement parts in stock when you need them.

ITEM #	DESCRIPTION	RETAIL
PKZ4500	J-3 Cub BL RTF.....	199.99
PKZ1102	Decal Sheet: J-3, J-3 BL.....	4.99
PKZ1106	Landing Gear w/Tires: J-3, J-3 BL.....	5.99
PKZ1108	Wing Hold Down Rods w/Caps (2): J-3, J-3 BL....	1.49
PKZ1110	Yellow Rubber Bands (4): J-3, J-3 BL.....	.99
PKZ1112	Battery Door w/Latch: J-3, J-3 BL.....	1.79
PKZ4514	Firewall w/Screws: J-3 BL.....	1.79
PKZ4515	Instruction Manual: J-3 BL RTF.....	.99
PKZ4517	Instruction Manual: J-3 BL PNP.....	.99
PKZ4516	370 Brushless Outrunner Motor, 1500Kv.....	35.99
PKZ1120	Standard Wing: J-3, J-3 BL.....	19.99
PKZ1122	Wing Struts w/Screws: J-3, J-3 BL.....	1.99
PKZ1124	Complete Tail w/Accessories: J-3, J-3 BL.....	9.99
PKZ1126	Cowl: J-3, J-3 BL.....	1.99
PKZ1060	Mini Servo w/Arms.....	9.99
PKZ4567	Bare Fuselage: J-3.....	14.99
PKZ1013	Prop Adapter & Spinner Set: J-3 BL.....	5.99
PKZ1014	8.25 x 5.5 Propeller: J-3 BL.....	3.99
OPTIONAL PARTS:		
PKZ1032	7.4V 800mAh Li-Po Battery Pack.....	25.99
PKZ1040	2- to 3-cell DC Li-Po Balancing Charger.....	15.99
PKZ1771	Ch. 1 TX (ZX10).....	32.99
PKZ1772	Ch. 2 TX (ZX10).....	32.99
PKZ1773	Ch. 3 TX (ZX10).....	32.99
PKZ1774	Ch. 4 TX (ZX10).....	32.99
PKZ1775	Ch. 5 TX (ZX10).....	32.99
PKZ1776	Ch. 6 TX (ZX10).....	32.99
PKZ1751	Ch. 1 RX (ZX10).....	37.99
PKZ1752	Ch. 2 RX (ZX10).....	37.99
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