

Problem	Cause	Solution
Electric Motor does not run or power is low.	<ul style="list-style-type: none"><li>Power switch is set to "Off".</li><li>Battery in the airplane not charged.</li><li>Batteries are installed with the wrong polarity.</li><li>Batteries are drained.</li><li>Debris stuck behind propeller.</li><li>A crash has damaged internal components.</li></ul>	<ul style="list-style-type: none"><li>Turn both the transmitter and the plane to the "On" position.</li><li>Fully charge the airplane.</li><li>Make sure that the batteries are inserted properly.</li><li>Replace the batteries in the charger and/or transmitter.</li><li>Carefully remove any obstructions.</li><li>See Crash Warranty pg. 4.</li></ul>
Plane won't charge.	<ul style="list-style-type: none"><li>Charger batteries are drained.</li><li>Plane is already charged.</li></ul>	<ul style="list-style-type: none"><li>Replace batteries in charger.</li><li>Z-Plane is ready to fly.</li></ul>

**Crashing and Repairs**

Any landing that doesn't damage the plane is a good one. This airplane is durable and lightweight and should withstand rough landings. However, you may damage it while learning to fly.

The foam materials used to build the airplane can be repaired easily at home. You can be flying again quickly by repairing the model with household tape and glue. Clear packing tape works best for most repairs; however, you may need to glue pieces back together. Use household white glue to make repairs.

**Main Wing**

**Tail Sections**

**Replaceable parts**

Parts List	Quantity
Main Fuselage w/ internal parts	1
Main Wing w/ Rubberbands	2
Tail Section (Horiz. and Vert. stabilizers)	3
Rear Propeller	5
Canopy	6
Landing Gear	7
Controller Antenna	8

**IMPORTANT NOTE:** It is extremely important that you do not use solvents or Cyanoacrylate glue, as they will damage the foam. If any of these chemicals comes into contact with the foam, it will turn into mush. Use only epoxy or white glue to repair damaged parts.

**STOP!** Please Do Not Return this product to the retailer For Questions or Concerns with this product. Please Call Our Technical Support at (866) 286-9711 or email [technicalsupport@atomic toys.com](mailto:technicalsupport@atomic toys.com)

To contact customer service, send email to [customerservice@atomic toys.com](mailto:customerservice@atomic toys.com), Or, call Toll Free (866) 286-9711

Do not mix old and new batteries.

Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries.

Atomic Toys Customer Service

attn: Z-Plane Crash Warranty

7886 Convoy Ct

San Diego, CA 92111

Attention: DO NOT RETURN THE TRANSMITTER, CHARGER OR BATTERIES. It will only add to the cost of the return shipping. The new model you will receive will work with your current controller.

CE

Do not use solvents or cyanoacrylate glue.

FC

TESTED TO COMPLY WITH FCC STANDARDS FOR HOME OR OFFICE USE.

**Z-PLANES**

Featuring Revolutionary Cross-Rail Control

Thank you for purchasing this exciting product. For best results, please read these instructions carefully.

**Airplane Storage**

- Store the airplane in its original package.
- The protective inserts supplied with the package will help to prevent damage to the wings, motor, propeller and tail sections.
- Failure to keep airplane safe can result in warped, cracked or broken wings, damaged propellers, or most critically, damage to the tail section.

**General Warning**

- Do not fly this airplane if another airplane is on the same frequency. The frequency number is printed on the box and on the bottom of the airplane.
- Never fly this airplane at night or in the street.
- Always fly in an open area free of obstructions.
- Do not fly near people or animals, streets, houses, trees, or power lines.
- Do not fly in adverse weather conditions like rain or snow.
- When flying, make sure that spectators are behind you.
- Always be conscious of spinning propellers. Be careful not to allow clothing or hair to be drawn into the propellers.
- It is very important to always use fresh and/or fully charged batteries.
- Never allow the batteries to run low, or the airplane could become out of control.
- Do not attempt to dismantle the airplane's components, especially the transmitter or battery.
- Do not allow any components to get wet, because damage to the electrical components can occur.
- Complete a Range Check of your radio transmitter before each new day of flying or prior to the first flight of a repaired model.
- Do not use solvents to clean the airplane. Solvents will damage the foam.
- Use a dry cloth to clean dirt from the outside of the model.

**Battery Warnings**

- The plane contains a lithium-ion rechargeable battery.
- The rechargeable battery cannot be replaced.
- If fluid leaks from the plane, avoid contact with the skin and eyes and properly dispose of the plane.
- Do not short circuit the terminals of the charger.
- Do not charge the battery without ventilation.
- If the battery makes a "popping" noise or leaks liquid, DISCONNECT CHARGER IMMEDIATELY and dispose of plane.
- Never charge the plane longer than 30 minutes, as damage to the battery may occur.
- Never leave the plane unattended while charging.
- To prevent the plane from overheating during the charging process, allow the plane to completely cool before charging.
- Only use the charger supplied to charge the battery.
- Do not dispose of airplane by incineration.

**Attach Antenna and Insert Batteries**

Insert antenna into controller and turn clockwise to tighten. Use a screwdriver to open the battery covers. Insert 1 '9v' into the controller and 8 'AA' into the charger. Then, replace the covers and locking screws.

**Install Landing Gear**

Insert the landing gear (with legs swept back) into the slot at the front of the plane's control panel. Then carefully spread landing gear apart to secure.

**Radio System Warnings**

- Always turn on the transmitter before turning on the airplane.
- Always turn off the airplane before turning off the transmitter.
- When flying, make sure that the antenna is fully extended.
- Never attempt to disassemble any of the radio components.
- Do not cut or shorten the length of the transmitter or receiver antenna. This will significantly effect the radio system's range.

**Propeller Safety**

- Keep your face, fingers, clothing and all other objects away from the propeller at all times.
- Before each flight, ensure that the propeller is securely attached to the plane.
- After each flight, inspect the propeller for damage.
- Discard any propeller that is nicked, chipped, cracked or broken.
- Only use the propeller that is supplied with this airplane.
- Do not alter, modify or customize the propeller.

**Charge the Airplane**

**Quick charge** time is approx 5 min (less if charge is left).  
**Super Charge** time is approx 20 min (less if charge is left).

Turn on the charger and the green light will glow. Make sure that the plane switch is set to Charge (toward to propeller). Then insert the charging connector into the jack on the bottom of the plane as shown. Both red lights on the charger will glow. This means you're Quick Charging. After the battery has reached 4.0V the charger will go into Super Charge mode, one red light glowing. When the battery is fully charged (4.4V), the red light will turn off and the green light will glow again.

**NEVER LEAVE THE CHARGING AIRPLANE UNATTENDED.**

**Pre-Flight Checklist**

Make sure that all of these items are completed and check before takeoff.

- ☐ 1) Batteries Full
- ☐ 2) Plane Fully Charged
- ☐ 3) Plane Components Aligned
- ☐ 4) Radio Check
- ☐ 5) Wind Check
- ☐ 6) Area Clear

**Flight Area**

**Never fly with wind over 5 mph!**

Find an area at least the size of a football field. SOFT GRASSY AREAS ARE BEST FOR BEGINNERS! Never fly near obstacles.

**Radio Check**

Test the transmitter before each new day of flight. First test the main propeller, then the rear propeller in both directions. Then, place the airplane on the ground and move away at least 50 feet. Test that the airplane is receiving a good signal by taxiing a short distance. The plane's movement should be smooth and not stuttering.

Turn on controller in the rear.

**Wing Assembly**

The Main Wing is designed to give way during impact, thereby reducing damage to the plane. The wing rubberbands are critical to the airplane's durability.

The Main Wing should be secure. The following detail shows how to install the Main Wing, if it becomes dislodged or is removed for repair or replacement.

Secure the wing to the fuselage by fitting the rubberband over the rails on the canopy. Make sure that the rubberband tension is equal on both sides of the wing.

1. Stretch the rubberband over the plane and around the tail shaft.  
2. Center the wing and canopy over the top of the fuselage as shown.  
3. Stretch the rubberband over the entire Main Propeller.  
4. Seat the rubberband in the channels on the canopy and seat in front of the landing gear mounting.

Your assembled plane should look like this.

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**Landing**

When you are ready to land, or if the airplane is running low on power, make a short turn (into the wind, if possible), line up the airplane with the landing area and use bursts of the Power button to keep the airplane parallel with the ground. Use very slight directional control while landing, to maintain a straight line (do NOT overcontrol). When you are close to the ground, release the Power Button. Stand clear of the airplane until it comes to a complete stop.

**Ground Takeoff (Advanced Pilots Only)**

For more experience pilots, the airplane may be launched from the ground!  
**The airplane needs to have hard packed ground to launch.**

Make sure that there is a clear takeoff area. Place the airplane on the ground facing into the wind, (use the flag on the controller antenna)  
Stand behind the airplane and press the Power Button. The Main Propeller will spin and the airplane should start to move forward quickly. After about 15 feet the airplane should start to lift off of the ground. Maintain a straight line by holding the Power Button to climb to a reasonable maneuvering altitude (approximately 30-50 feet). If the airplane start to stall while climbing, quickly release the Power button to swoop and gain some speed. Then keep the Power button depressed to gain altitude. Make sure you have a decent amount of ground clearance.

**Tips and Tricks**

Beginners should always fly when there is no wind. Before Take-Off, make sure the wings and tail are parallel and aligned with the fuselage. If the plane is turning either right or left, use the clear tabs on the tail section to adjust the flight characteristics. The Z-plane flies best when the rechargeables batteries are fully charged.

Do not run the motor if the propeller is caught up. It may cause the motor to overheat.

**Maneuvers**

**360° circle**

**Turning**

Use short "bursts" when you press the directional control. They have a gradual effect on direction, so you will oversteer if you hold the button too long. Holding the power button too long will cause the plane to stall.

**Turning Left:** When the Left Button is pressed, the rear rotor on the airplane spins clockwise causing the airplane to turn left.

**Turning Right:** When the Right Button is pressed, the rear rotor on the airplane spins counter-clockwise causing the the airplane to turn right.

**When you have reach your desired direction, press the opposite direction to straighten out, then, continue moving forward.**

**IMPORTANT NOTE:** When the plane is coming toward you the controls will seem reversed. To help you compensate for this, simply imagine that you are inside the cockpit of the plane.

Also, it may help to push the directional button of the wing that it tipping lower than the other.

**Modifications not authorized by the manufacturer may void users authority to operate this device**