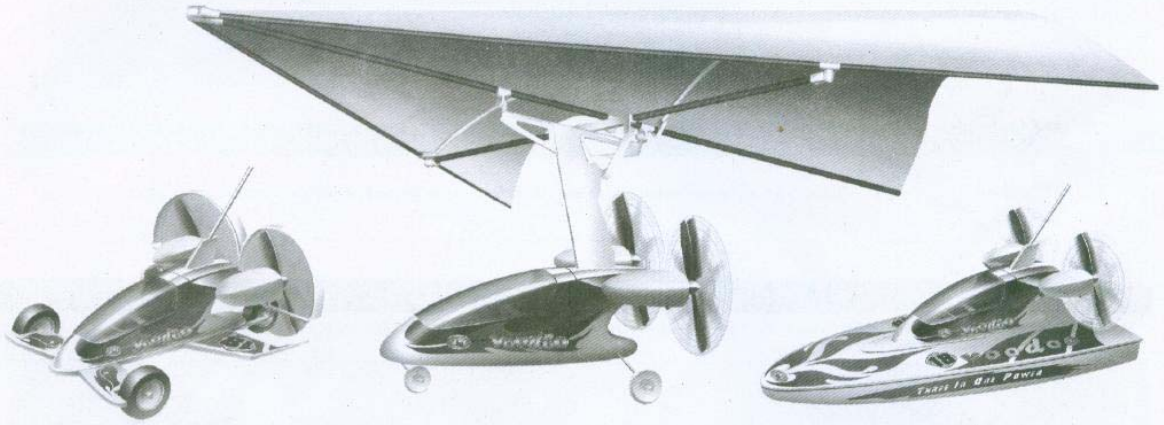
Please read through this operation manual before use!

RADIO CONTROL MULTIPURPOSE MODEL

CAR & PLANE& BOAT



EASY TO FLY!

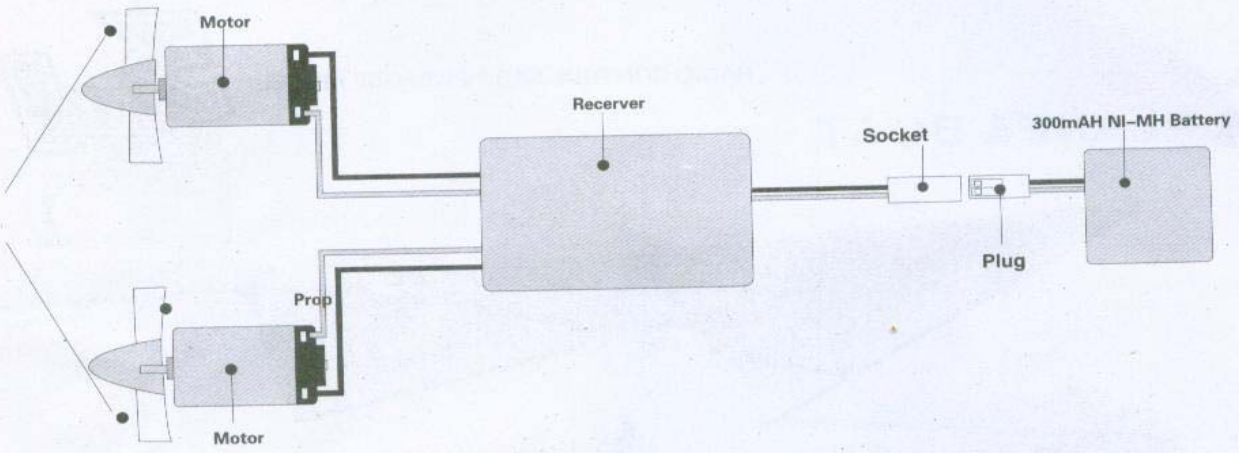
Features

- An interesting set with unlimited fun of multipurpose model.
- Advanced design for quick change between the 3 modes.

  Solid and durable structure of full plastic and compound materials.
- Guard rings for safe performance.
- Only a small place is enough for playing in any mode.
- This set includes 2 groups of power batteries, one AC charger and all necessary tools.

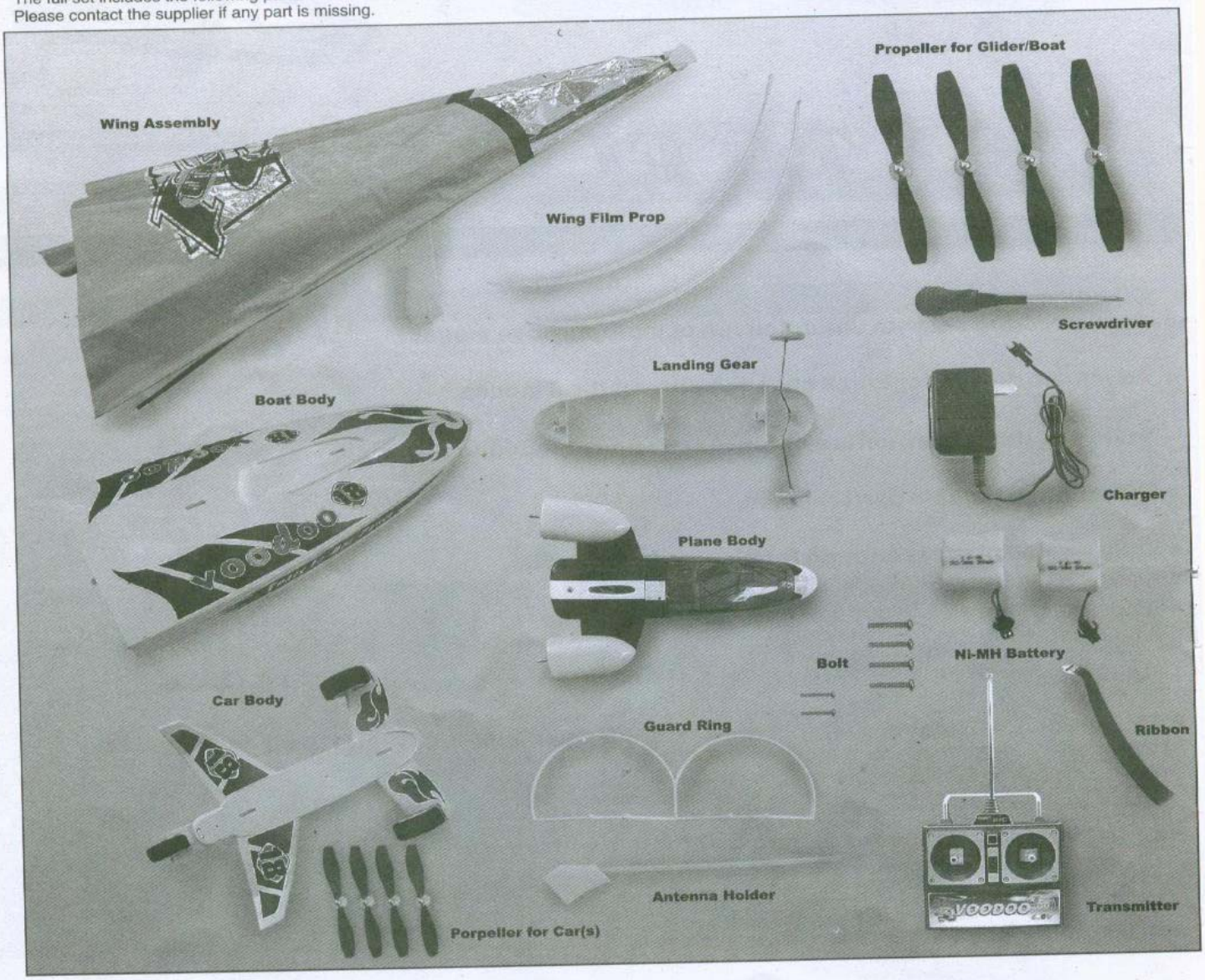
  (The user shall only prepare 8 pieces of AA batteries as power for the transmitter.)
- Of the 3 modes, boat operations are easier than car operations, and the plane requires the most skills.
- So beginners shall first have enough practice with boat or car before starting to operate the plane.

WIRING DIAGRAM



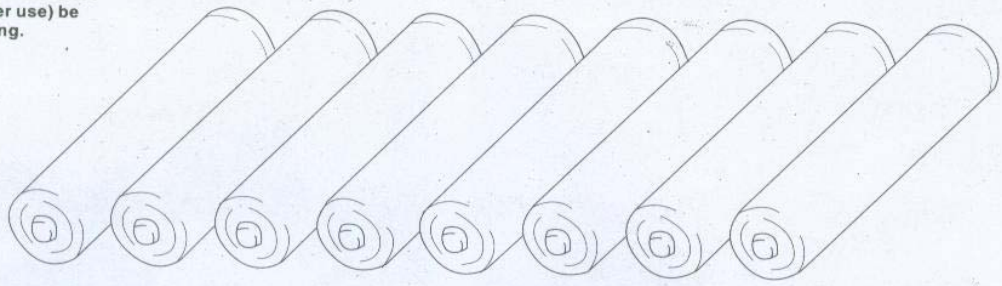
SET CONTENTS

The full set includes the following parts. Please count and check before use.
Please contact the supplier if any part is missing.



OTHER THINGS TO PREPARE

Please buy 8 AA batteries (for transmitter use) be fore assembling.



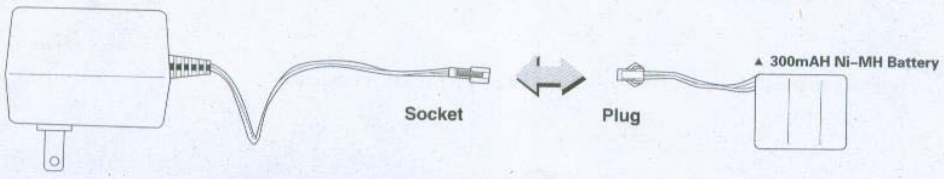
WARNING

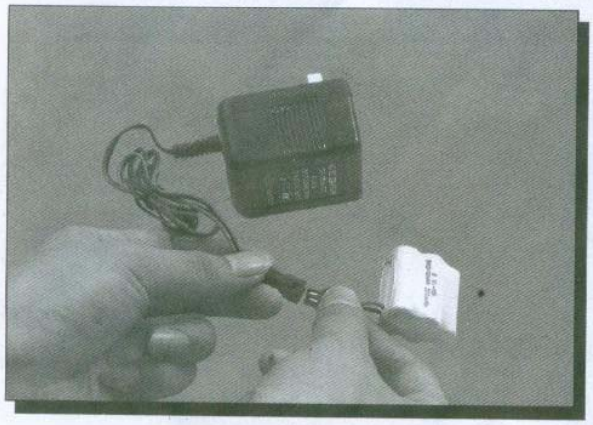
- ▲ Keep the glider away from crowd when gliding to avoid accidents.
- ▲ Do not try to modify the Ni-MH battery to avoid accidents.
- ▲ Do not try to repair a broken propeller. Please replace it with a new one.
- ▲ Do not go away when charging battery. Overcharge may lead to battery damage or even accidents.
- ▲ Never throw the Ni-MH battery into fire as it may explode in high temperature.

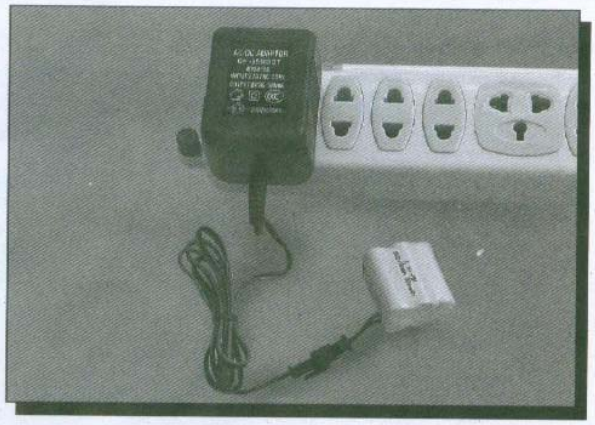
CHARGER

▲ 220V/8V 160mA

220V/8V 160mA Charger







Connect the charger with the battery. Then plug the charger to 220V power socket to start charging the battery.

Charging Time:
If the battery power has been used up, it needs 2 hours to fully charge the battery. If there is still power in the battery, charging time can be shortened accordingly. (When the battery surface becomes a little hot, it means it's already fully charged.)

⚠ WARNING

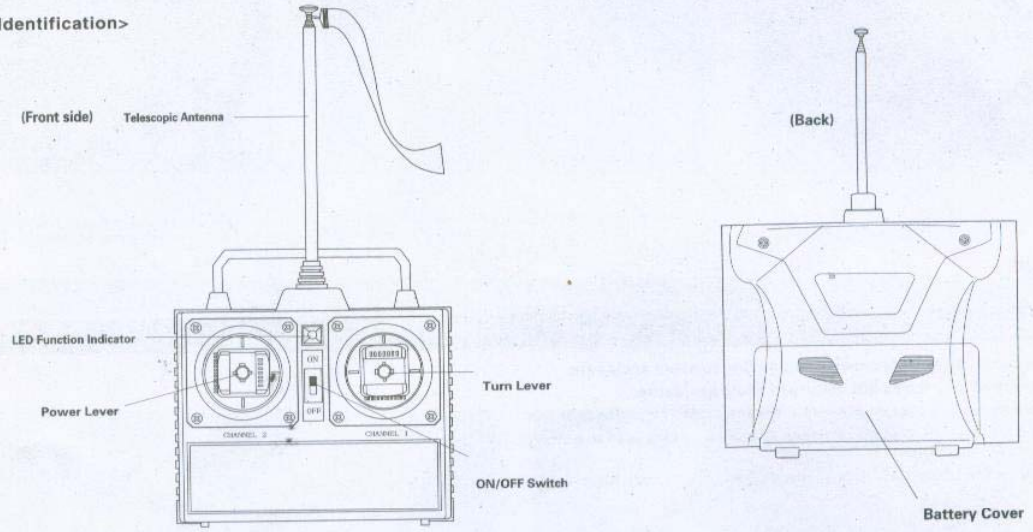
Warning The charger is designed to use 220V power only. Do not plug it to other powers or use outdoors to avoid accidents.

Attention:

1. After 10 times of charging, please fully discharge the battery before the next charging so as to prolong the battery's useful life.
2. If the battery surface becomes a little hot, it means it's already fully charged.
3. Overcharge may lead to battery damage or leak. Do not charge the battery for too long.
4. Do not charge the battery when it's just been used. Please wait for it to cool down before charging.

TRANSMITTER

<Parts Identification>

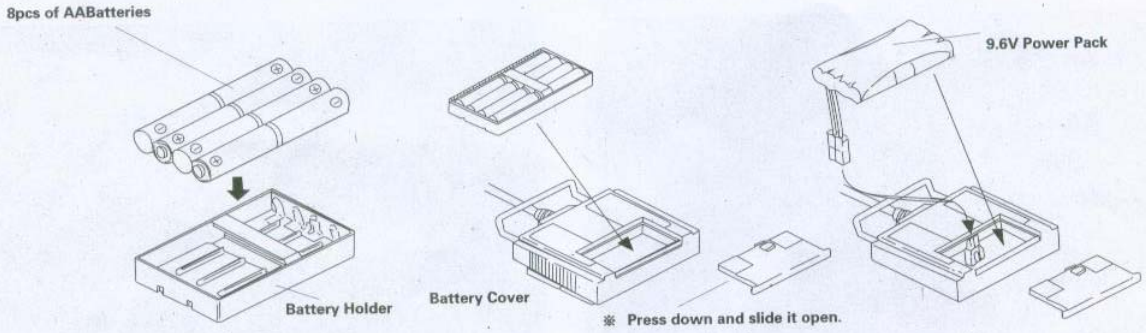


<Battery Installation>

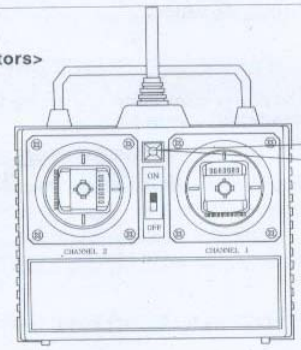
WARNING

Note polarity when installing the batteries. Do not mix the use of new and old

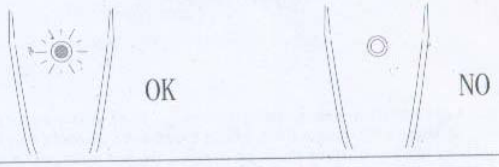
This controller uses 8 AA batteries (Ni-Cd or other types) or 9.6V power pack (not included)



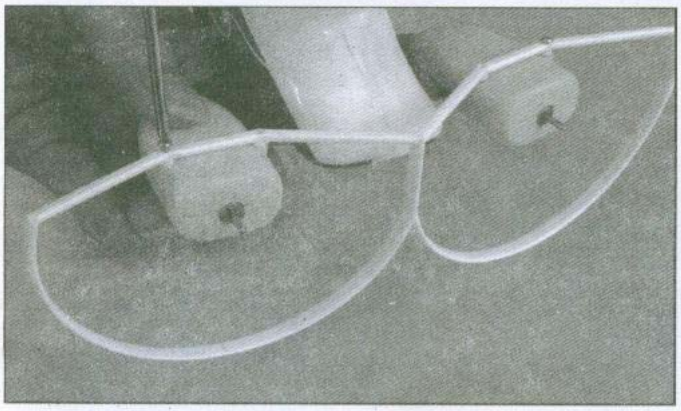
<Indicators>



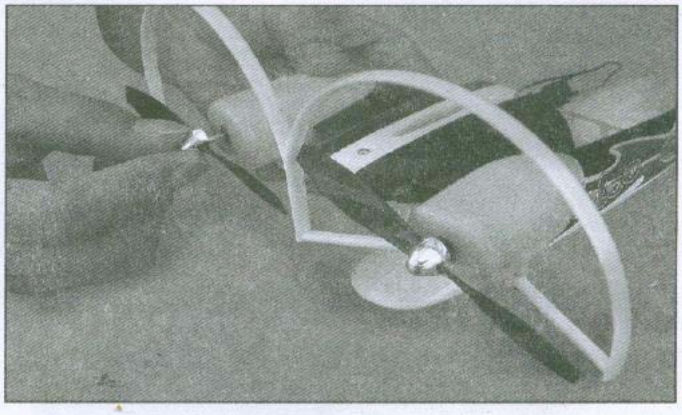
Normally the 2 indicators will light up at the same time after the transmitter is turned on. Otherwise, it means the batteries have not been correctly installed or the battery power has become insufficient. If only the green indicator remains off, it means the battery power has become insufficient and you need to replace the batteries.



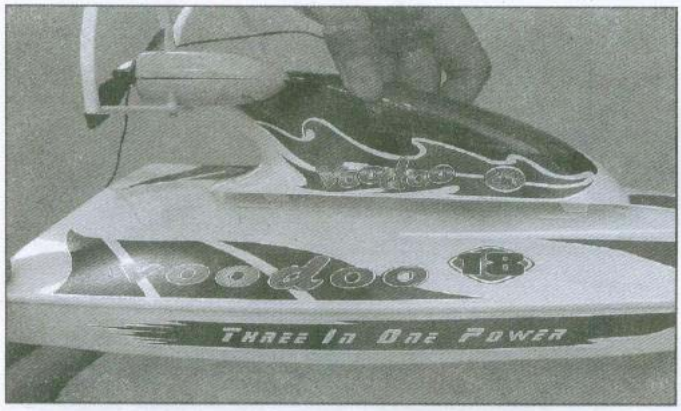
ASSEMBLE THE BOAT



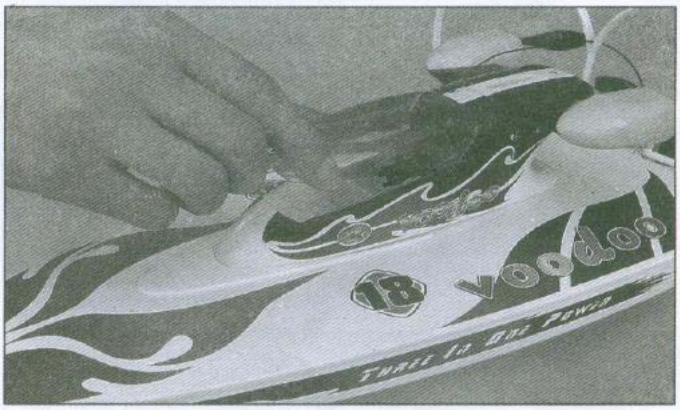
1. Take out the guard rings and four TP2X16B-Ni bolts from the packing bag. Install the guard rings onto the power assembly, as the figure shows. (Rip off the tape wrapping the motor covers first.)



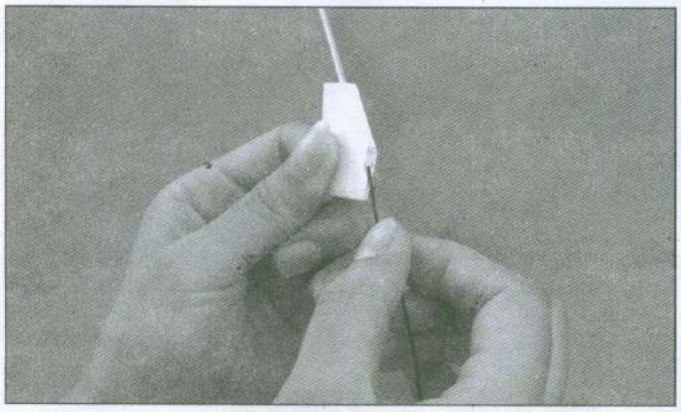
2. Install 2 propellers for glider/boat onto the power assembly. Attention: Please use the big propellers in the packing bag. Remember to leave a 1.5-2mm gap between the propeller blade and the motor cover.



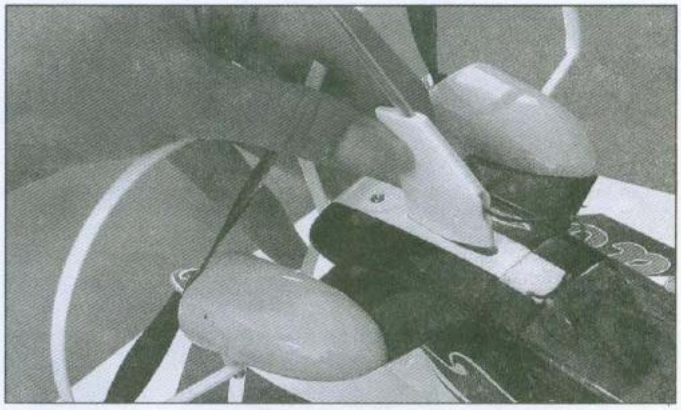
3. Install the power assembly into the square fixing hole on the body and push it forward to lock.



4. Detach the cabin cover from the power assembly.

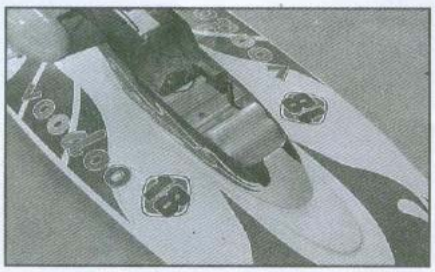


5. Pull out the antenna from the power assembly and insert it into the antenna holder.

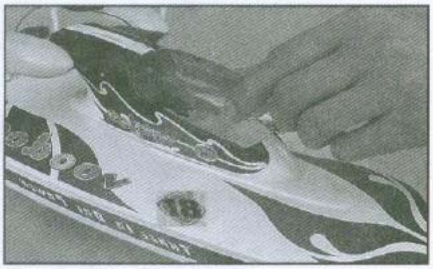


6. Insert the antenna holder into the fixing hole on top of the power assembly. The antenna shall point rearward after installation.

7. Fix the power assembly onto the body with TP2X6B-Ni bolt. (Attention: Only when the power assembly is pushed to its forward limit, can the bolt be fixed.)



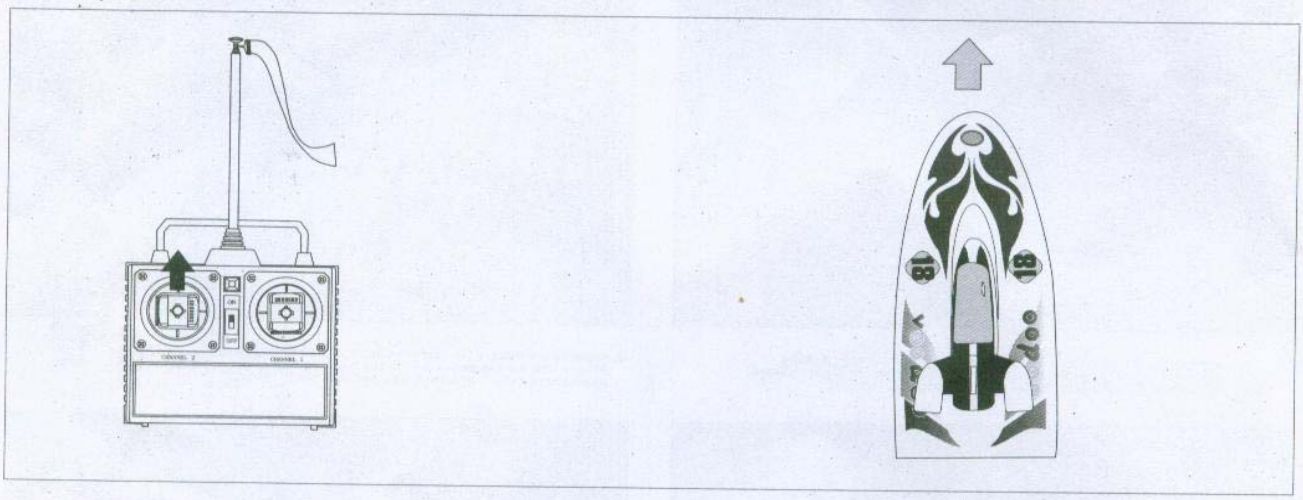
8. Properly connect the charged battery to the power assembly and set the battery into the front compartment in the cabin. (Attention: The power switch of the power assembly shall be set to OFF first.)



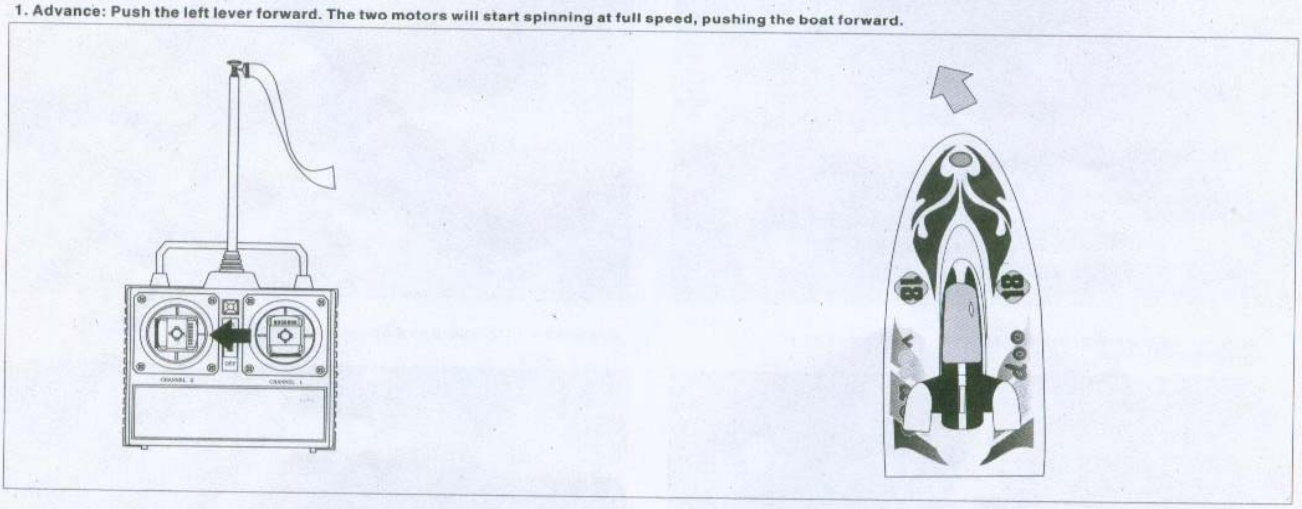
9. Replace the cabin cover. Insert the rear part into the power assembly and then press the front part down till a snap sound is heard.

OPERATE THE BOAT

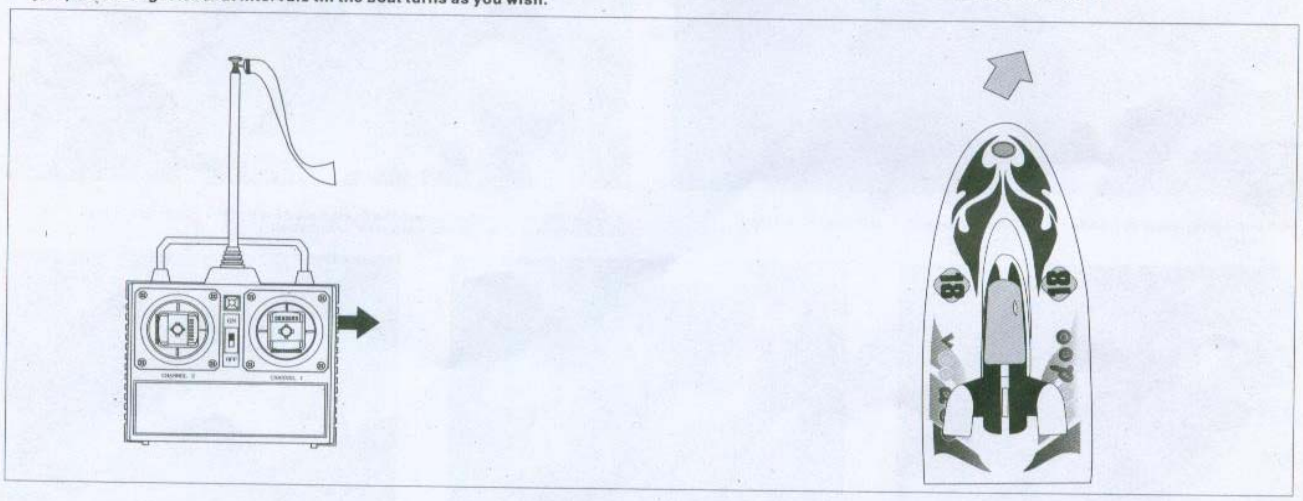
Attention: 1. The controlling distance of the boat is about 50m. Do not allow the boat to go beyond this distance to avoid losing its control.
2. If you find the boat slows down, please immediately control it to go back. Otherwise, you may lose its control due to insufficient power.



1. Advance: Push the left lever forward. The two motors will start spinning at full speed, pushing the boat forward.

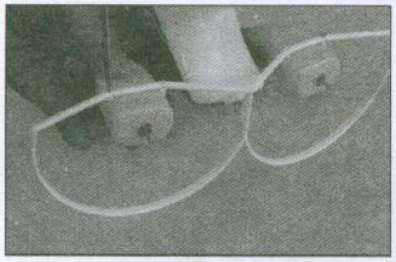


2. Left Turn: Push the right lever leftward and keep the left lever there. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the boat turns as you wish.

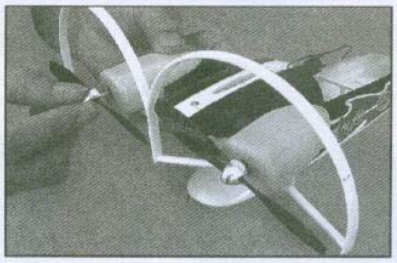


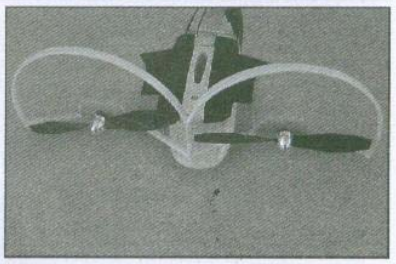
3. Right Turn: Push the right lever rightward and keep the left lever there. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the boat turns as you wish.

ASSEMBLE THE CAR

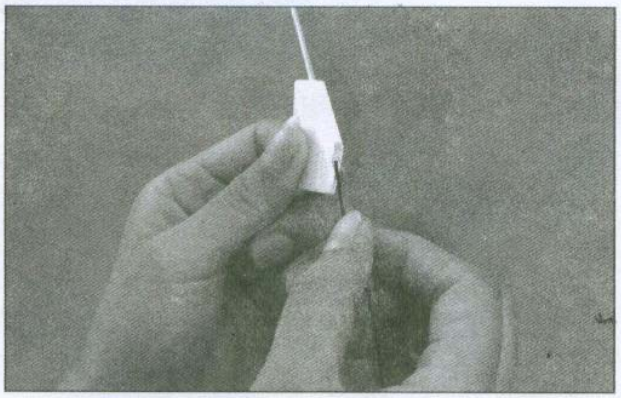


1. Take out the guard rings and four TP2X16B-Ni bolts from the packing bag. Install the guard rings onto the power assembly, as the figure shows.

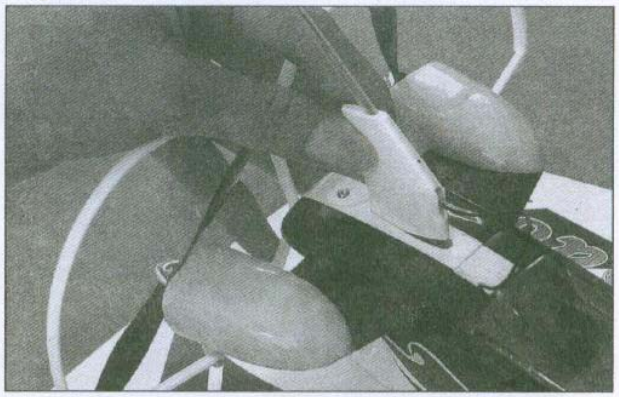




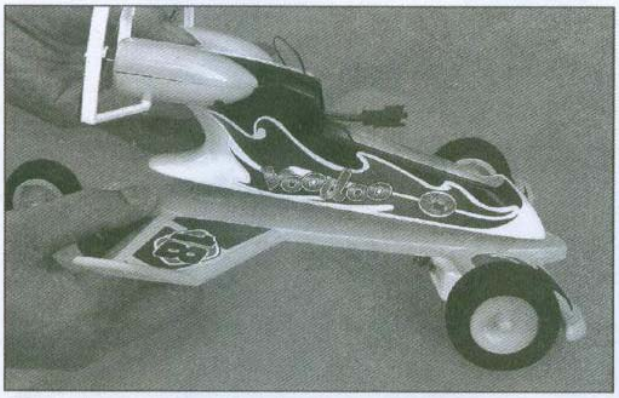
2. Install 2 propellers for car onto the power assembly. **Attention:** Please use the small propellers in the packing bag. Remember to leave a 1.5 2mm gap between the propeller blade and the motor cover.



4. Pull out the antenna from the power assembly and insert it into the antenna holder.

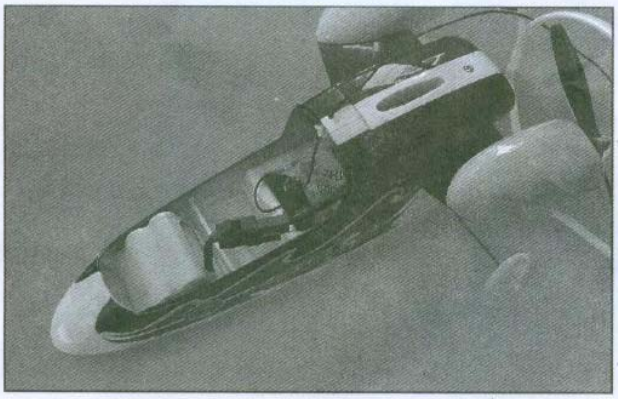


5. Insert the antenna holder into the fixing hole on top of the power assembly. The antenna shall point rearward after installation.

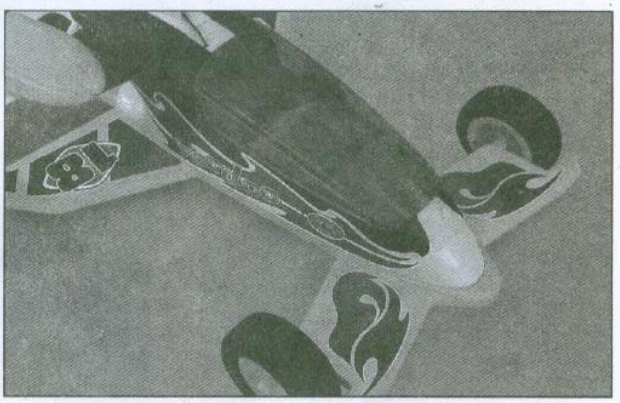


6. Install the power assembly into the square fixing hole on the body and push it forward to lock.

7. Detach the cabin cover from the power assembly, and fix the power assembly onto the body with TP2X6B-Ni bolt. (Attention: Only when the power assembly is pushed to its forward limit, can the bolt be fixed.).



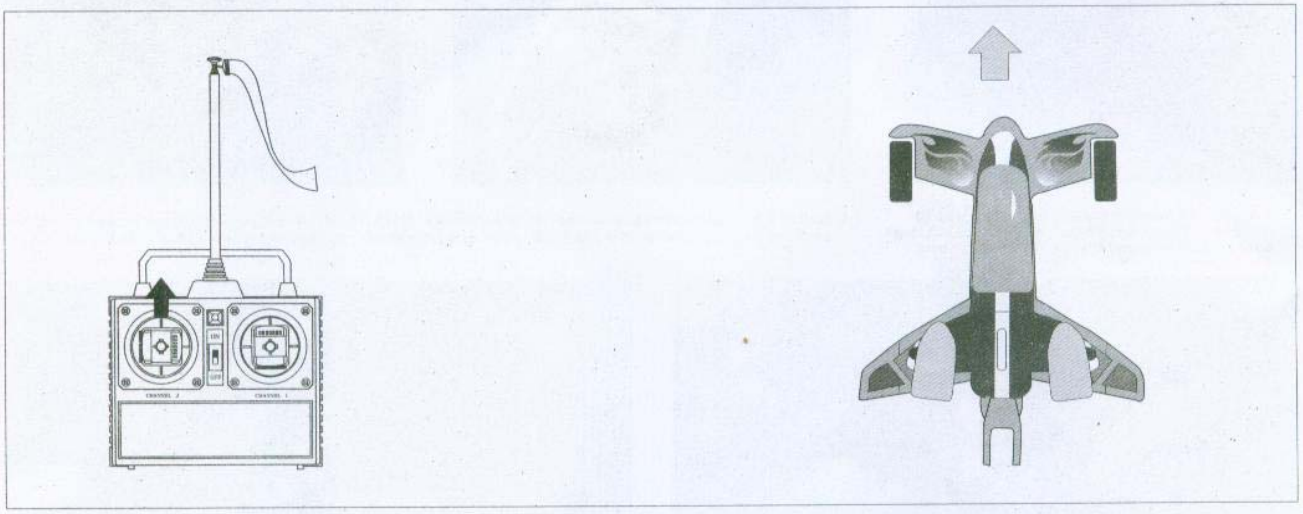
8. Properly connect the charged battery to the power assembly and set the battery into the front compartment in the cabin. (Attention: The power switch of the power assembly shall be set to OFF first.)



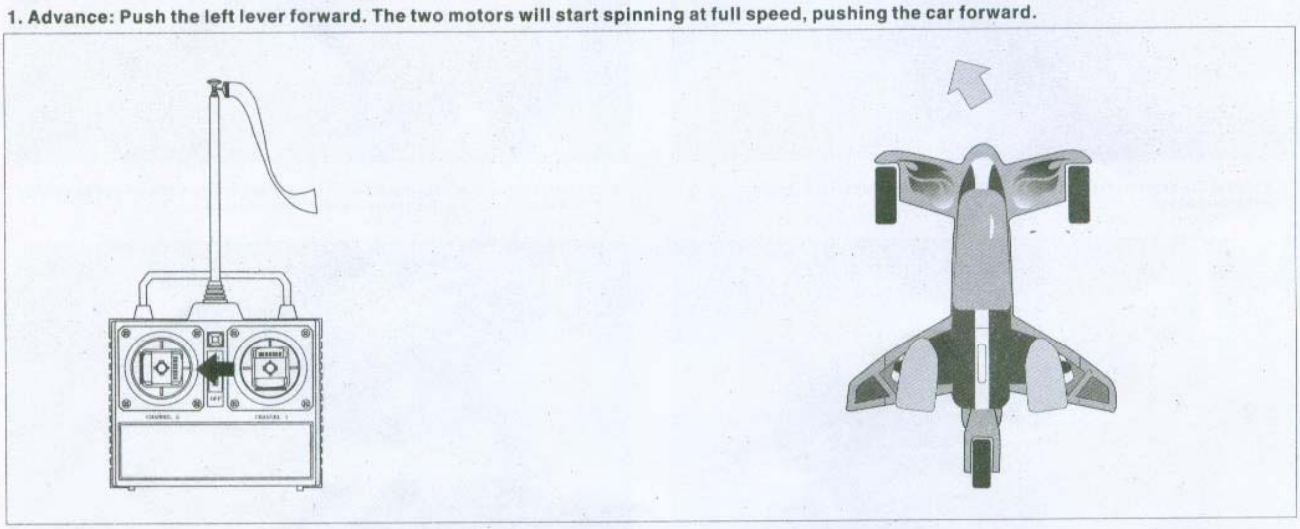
9. Replace the cabin cover. Insert the rear part into the power assembly and then press the front part down till a snap sound is heard.

OPERATE THE CAR

Attention: 1. This car is a high-speed model, and may turn over when running on uneven ground or turning at high speed. 2. This car requires a comparatively large turning diameter when turning. 3. To control the car effectively, you'd better keep its speed under control by using the left lever at intervals.



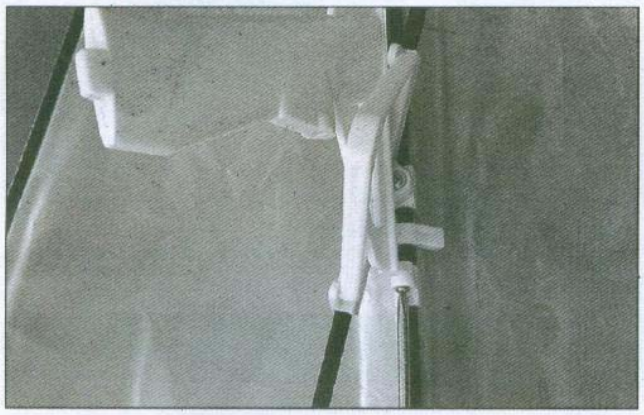
1. Advance: Push the left lever forward. The two motors will start spinning at full speed, pushing the car forward.



2. Left Turn: Push the right lever leftward and keep the left lever there. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the car turns as you wish.

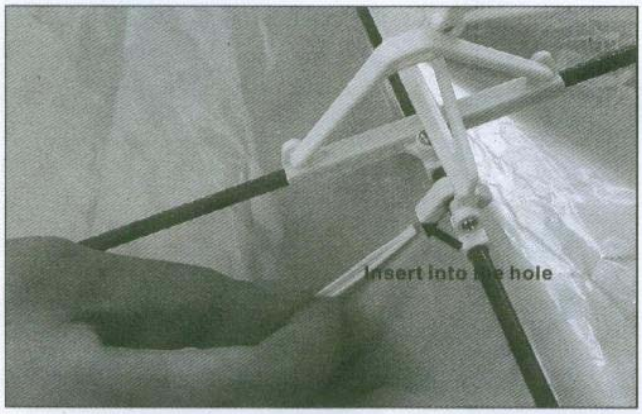
3. Right Turn: Push the right lever rightward and keep the left lever there. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the car turns as you wish.

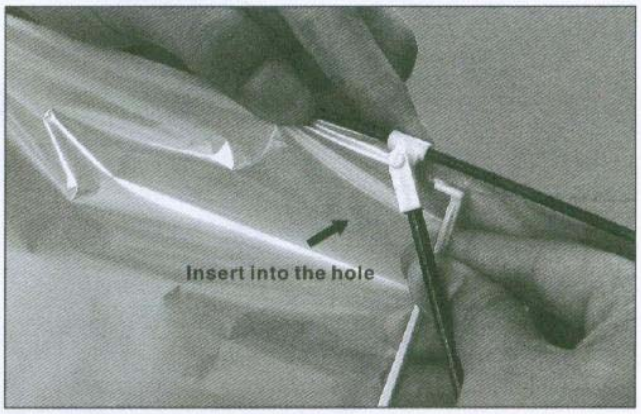
ASSEMBLE THE GLIDER



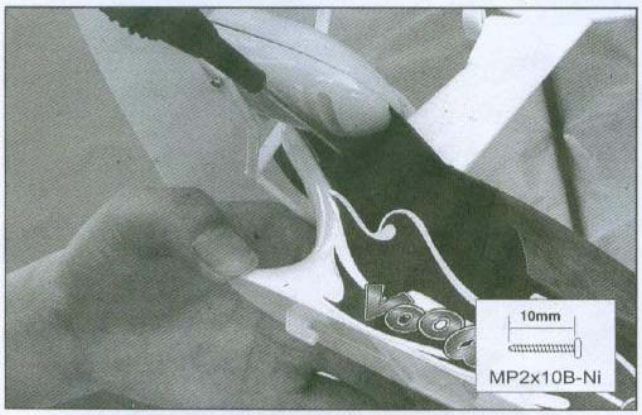
1. Remove the fixing screws from the wing, as the figure shows.

2. Set the fixing hooks on both ends of the cross bar to the side bars.

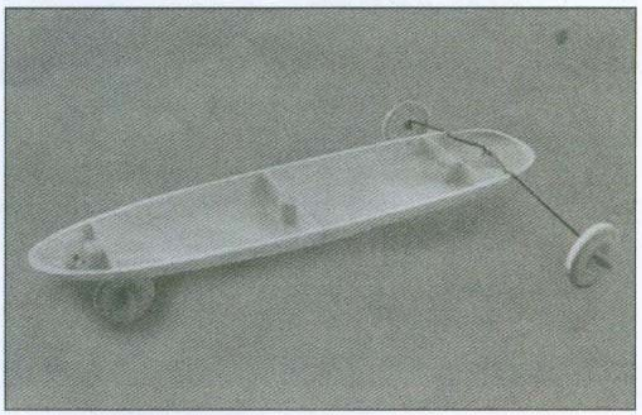




3. Take out the 2 wing props (one for left and one for right) from the packing bag. Insert one end into the plastic fixing piece on the longitudinal bar, and the other end into the plastic fixing piece on the side bar. Attention: 1. The wing film is removed in the figure for better illustration. 2. The 2 wing props are different from each other, one for left and one for right.

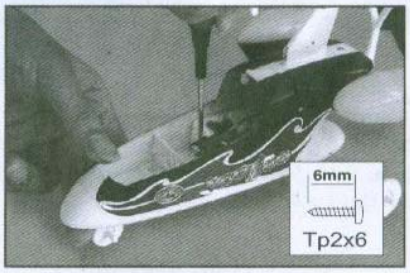


4. Insert the frame of the wing into the plane body, and fix with screw.

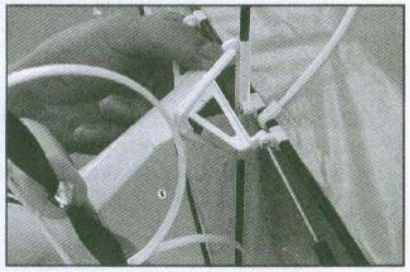


5. Prepare the landing gear of the glider.

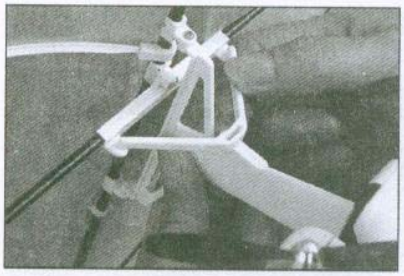
6. Install the power assembly into the square fixing hole on the body and push it forward to lock.



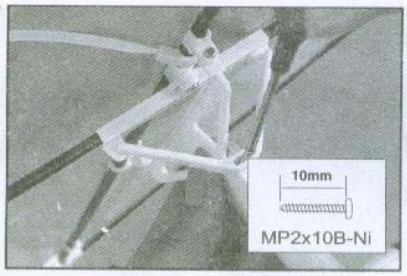
7. Fix the power assembly onto the body with TP2X6B-NI bolt. (Attention: Only when the power assembly is pushed to its forward limit, can the bolt be fixed.)



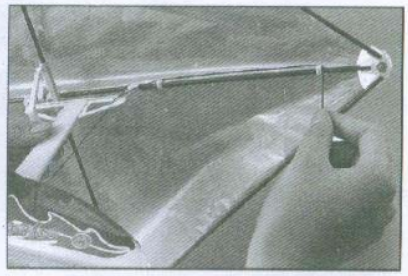
8. Reinstall the screws removed in Step 1.



9. Insert the 2 plastic pins of the trimmer into the 2 holes on the plastic pieces of the cross bar.



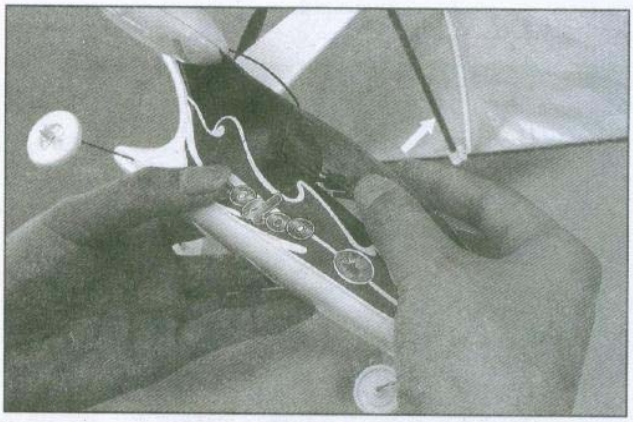
10. Install the screw for the trimmer to the center hole on the trimmer.



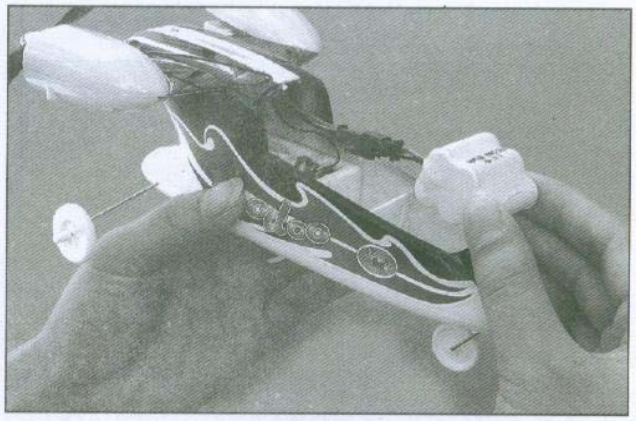
11. Guide the wire antenna through the wing fra me and fix to the locking position on the wing.

INSTALL THE BATTERY

Before installing the battery, please set the power switch to OFF position to avoid misoperation.

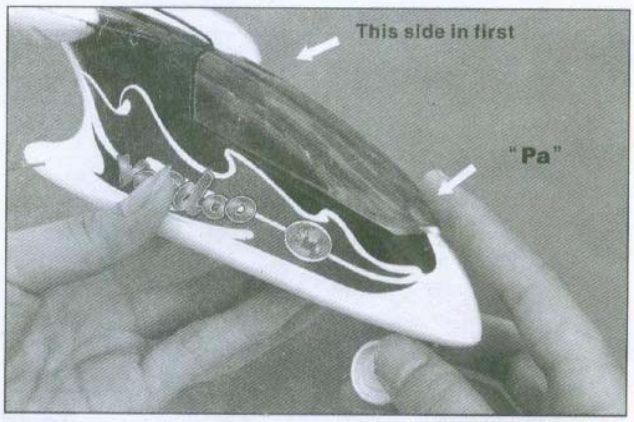


1. Remove the cabin cover.



2. Connect the charged battery with the receiver.

3. Set the battery in the front compartment of the cabin.



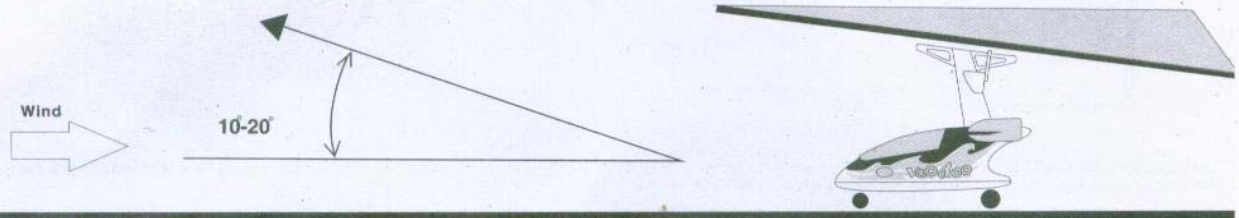
4. Replace the cabin cover. Insert the rear part into the power assembly and then press the front part down till a snap sound is heard.

FLYING SAFETY

Check to make sure no one else is using a model of the same frequency nearby. Do not fly if there is any.
Do not fly when the wind speed exceeds 3m/s. (A suitable wind speed is 0~3m/s.).
Choose a proper flying field: 1.A flat place. 2.No trees, buildings, power lines within a range of 200x200m.
3.The player shall stand in the center of the field when operating.

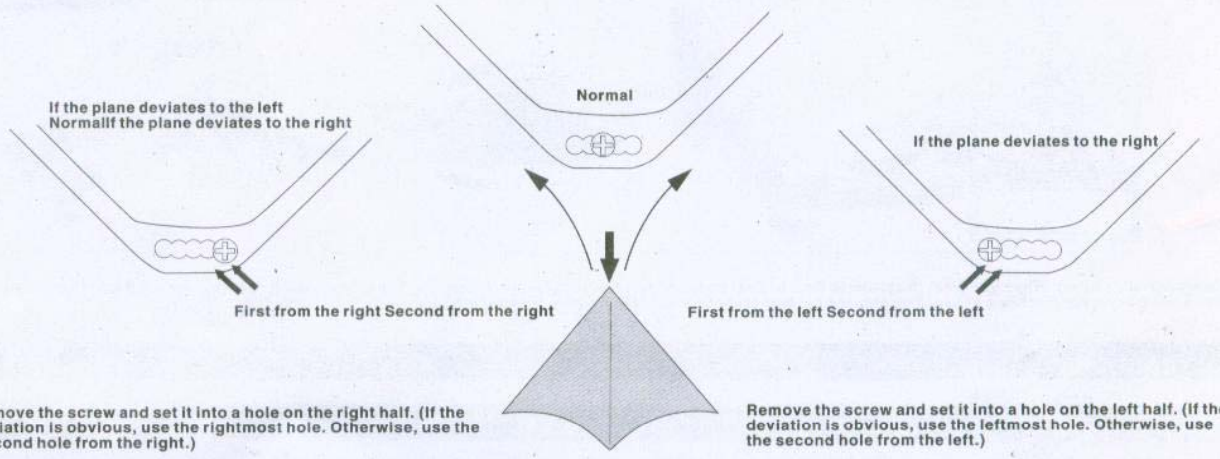
FLY THE PLANE

▲ To fly the plane, please stand facing the wind, hold the transmitter with left hand, and hold the plane with right hand. Use the left thumb to push the left lever forward for the motors to spin at full speed. Then throw the plane horizontally ahead.
▲ Attention: • Keep the plane horizontal when tossing it out. • Do not toss the plane down the wind to avoid damaging the plane.
▲ Normally, the plane will start climbing at an angle between 10°~20° If the plane deviates to the left or to the right now, please release power for the plane to freely glide down and land onto the ground. Then trim the plane in the following way.



TRIM THE PLANE

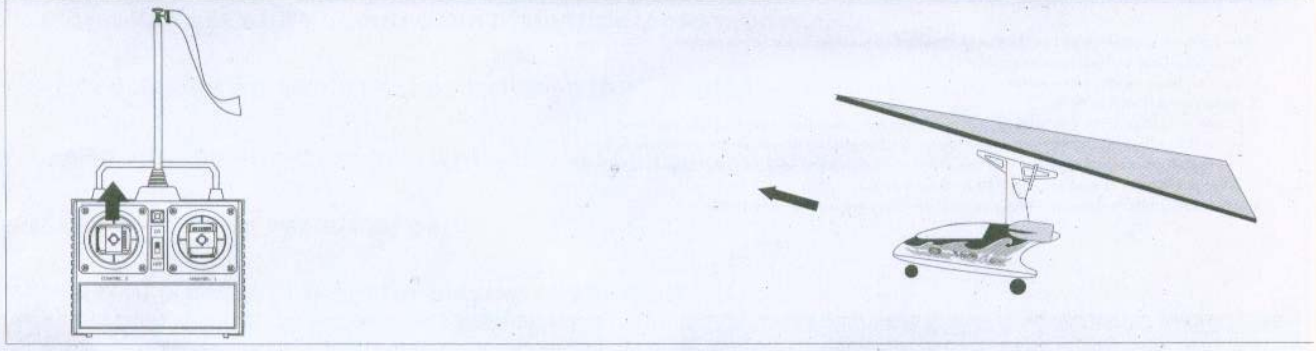
If the plane deviates to the side when flying in a calm day or against the wind and you are not operating it, please trim the plane accordingly:



Remove the screw and set it into a hole on the right half. (If the deviation is obvious, use the rightmost hole. Otherwise, use the second hole from the right.)

Remove the screw and set it into a hole on the left half. (If the deviation is obvious, use the leftmost hole. Otherwise, use the second hole from the left.)

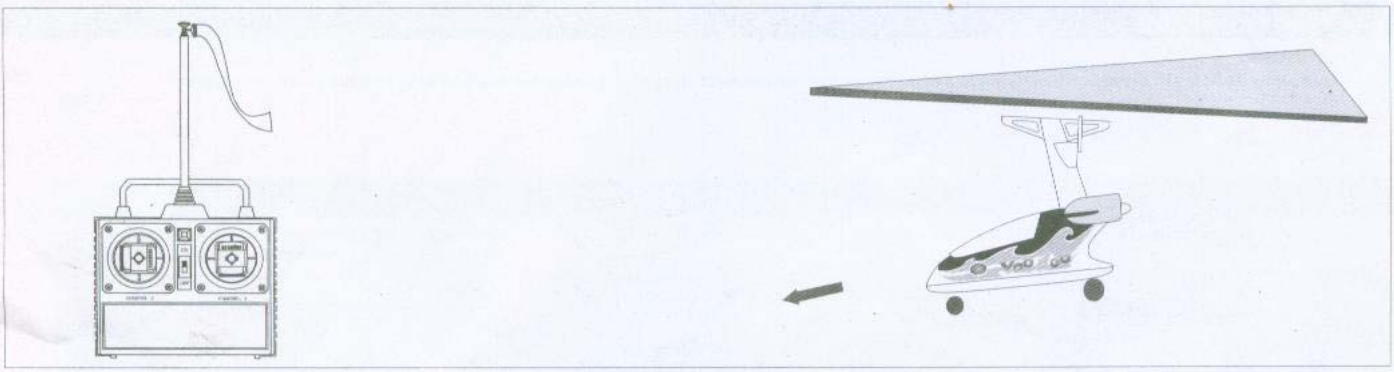
BASIC FLYING OPERATIONS



Takeoff (Climbing): Push the left lever forward. The two motors will start spinning at full speed, pushing the plane to take off and climb up.

Right Turn: Push the right lever rightward and keep the left lever there. The plane will then turn to the right. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the plane turns as you wish.

Left Turn: Push the right lever leftward and keep the left lever there. The plane will then turn to the left. Attention: Do not allow this operation to last for too long. We suggest you push the right lever at intervals till the plane turns as you wish.



Descending/Landing: When you want the plane to land or descend, just release both levers. Attention: The plane shall fly against the wind when landing, and there shall be no obstructions ahead. You can use the turn lever to adjust the plane's descending course.

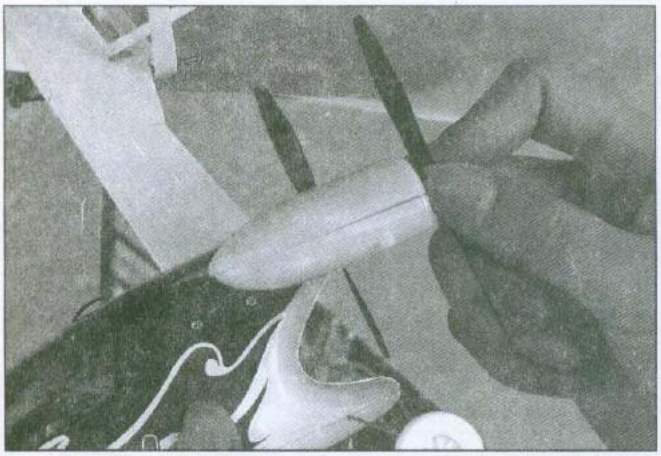
CAUTIONS

The controlling distance of the plane is 90m. Keep this distance in mind when flying the plane. If it accidentally flies out of this range, it may cut off motor power and land automatically. ? If the plane drops abruptly during flying due to misoperation, immediately release both levers and wait for the plane to restore normal flying position before resuming operation.

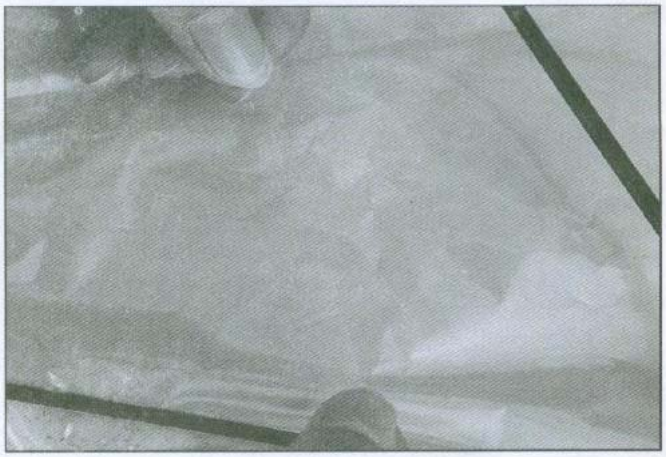
MAINTENANCE

After landing, please finish the following checks and maintenance on the plane:

1. Turn off power of the power assembly.
2. Turn off power of the transmitter.
3. Remove the Ni-MH battery.
4. Check the plane. If the plane body is damaged or any propeller is broken, please repair in the following way: A) To replace the propeller: Detach the propeller, as the figure shows, and install the spare propeller. B) If the wing film is damaged, use a scotch tape to repair, C) If the plane body is broken, use #502 glue to repair.
5. Use a soft cloth to clean up the plane body and prepare for the next flight.



A) Replace The Propeller



B) Repair The Body

Warning:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this unit not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment. Any change to the equipment will void FCC grant.

This equipment has been tested and found to comply with the limits for a Class B digital device,pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

--Consult the dealer or an experienced radio/TV technician for help.

The equipment compliance with FCC radiation exposure limit set forth for uncontrolled Environment