



## Assembly Instructions

### Tools

Scissors, glue, ruler, tweezers, pencil



**[Caution]** Glue, scissors and other tools may be dangerous to young children so be sure to keep them out of the reach of young children.



**Mountain fold (dotted line)**  
Make a mountain fold.



**Valley fold (dashed and dotted line)**  
Make a valley fold.



**Scissors line (solid line)**  
Cut along the line.



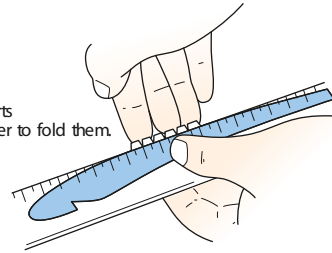
**Cut in line (solid line)**  
Cut along the line.

## Points to note when making the glider

1. Try to avoid bending the parts when you cut them out.

2.

Align the parts against a ruler to fold them.

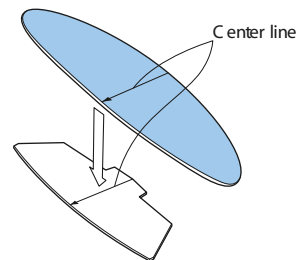


If any of the cut out parts are bent, this will seriously affect the glider's performance. Therefore, be sure to keep all parts perfectly flat till you join them up. For the wings, stabilizer and other parts, use a ruler to give you a proper straight edge to make your folds.

3. When assembling the parts, follow the assembly instructions and use the parts in the order given.

4. When sticking surfaces together, spread the glue evenly and stick the parts together quickly and line up the edges cleanly. While the glue is drying, put the fuselage inside a sheet of paper and then press it down with a book or similar in order to get a nice, straight finish.

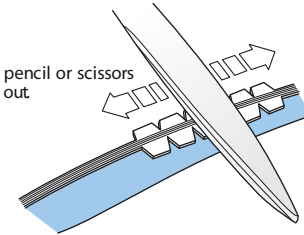
5.



When sticking the right and left wings together, make sure that the center line is not off center.

6.

Rub with pencil or scissors to flatten out



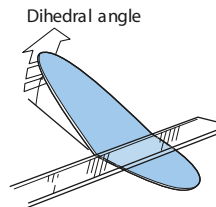
Flatten the uneven surface.



Cross section of the fuselage

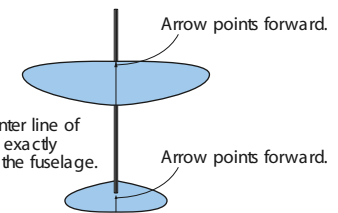
To glue the wings flush onto the fuselage, use a pencil or scissors to flatten out the part where the wings attach to the fuselage.

7.



To give the wings an angle, bend along a straight ruler. (Refer to the assembly instructions for details on what degree of angle to use.)

8.



Make sure that the center line of the wings matches up exactly with the center line of the fuselage.

Also attach the horizontal stabilizer firmly.

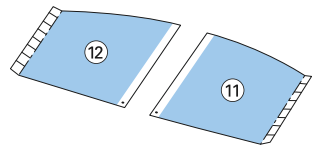
Attach the wings and horizontal stabilizer carefully so that their center lines match up exactly with the center line of the fuselage.

## GLUING INSTRUCTIONS

Glue the parts together in the order indicated.

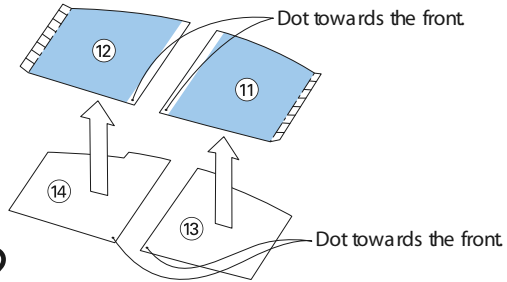
### 3-1

Placing a ruler along the fold lines, bend the cut strips slightly upward.



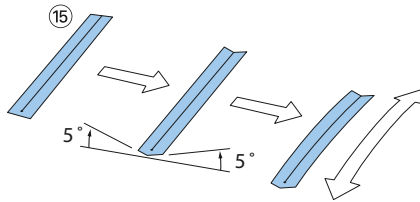
### 3-2

Glue parts 13 and 14 to the underside of parts 11 and 12 respectively.



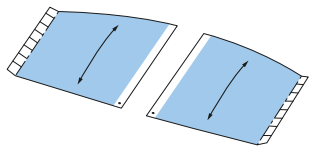
### 3-3

Using a ruler along the center line, fold part 15 from the center line to make 5° angle on both sides. Then curve it carefully with your fingers to fit the curved fuselage top where the main wings are to be attached.



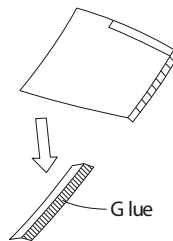
### 3-4

Curve the main wings, 11+13, 12+14 respectively in the same manner as 15. This curve is called camber.



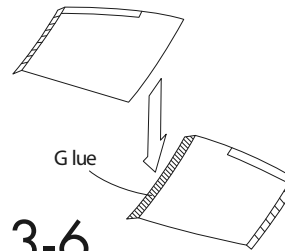
### 3-5

Apply glue on half of the underside of 15 and glue onto 12+14. (The dots on the parts should meet with each other.)



### 3-6

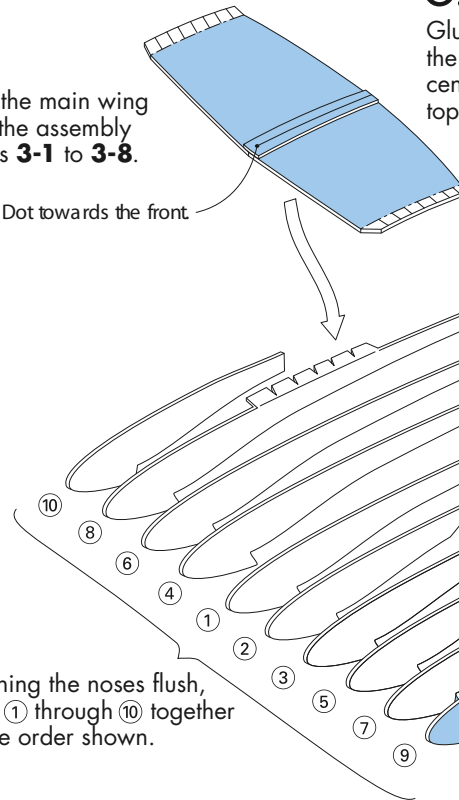
In the same manner, attach 11+13 to the other side of 15.



### 3.

Assemble the main wing following the assembly instructions 3-1 to 3-8.

Dot towards the front



### 2.

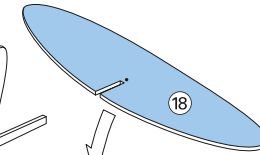
Aligning the noses flush, glue 1 through 10 together in the order shown.

### 5.

Glue the main wing firmly to the fuselage, aligning the center of the wing along the top of the fuselage.

### 4.

Glue the horizontal stabilizer 18 to the fuselage, making sure that the dots appearing in its center portion line up along the top of the fuselage.

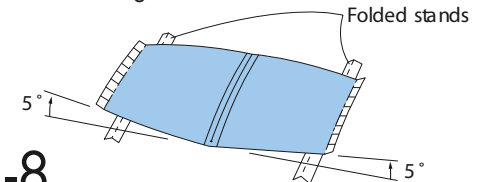


### 1.

Fold all tabs outward.

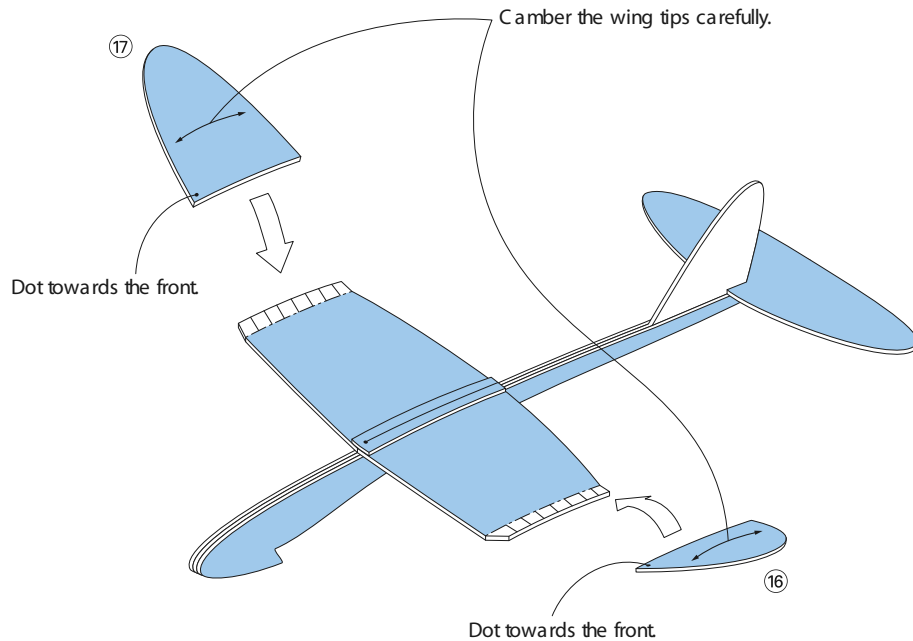
### 3-7

Placing the dihedral angle gauge on the main wing, check that the dihedral angle is 5°.



### 3-8

Putting folded stands under the main wing will be conducive to fast and thorough drying.



6.

Camber both wing tips ①6 and ①7 slightly. Fold tabs on both ends of the main wing to form a 30° dihedral angle using the gauge and then camber them as well.

7.

Apply glue to the top surface of the folded tabs of the main wing. Glue wing tips ①6 and ①7 onto them as shown. Once again, check that the dihedral angle at the tip of the wing is 30° using the gauge.

### FINISHING TOUCHES

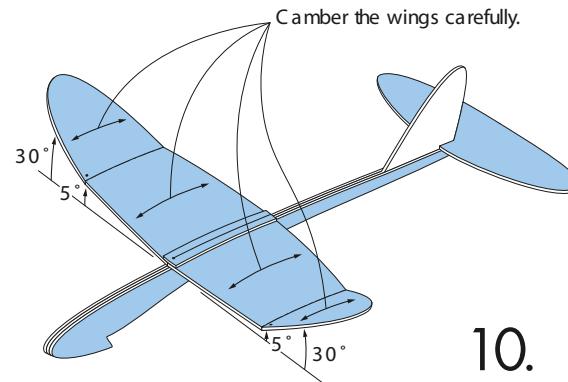
Give the finishing touches to the plane after it dries thoroughly.

8.

Level the camber on the main wings carefully with your fingers, checking the curve with the camber gauge.

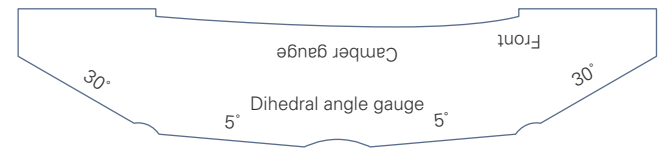
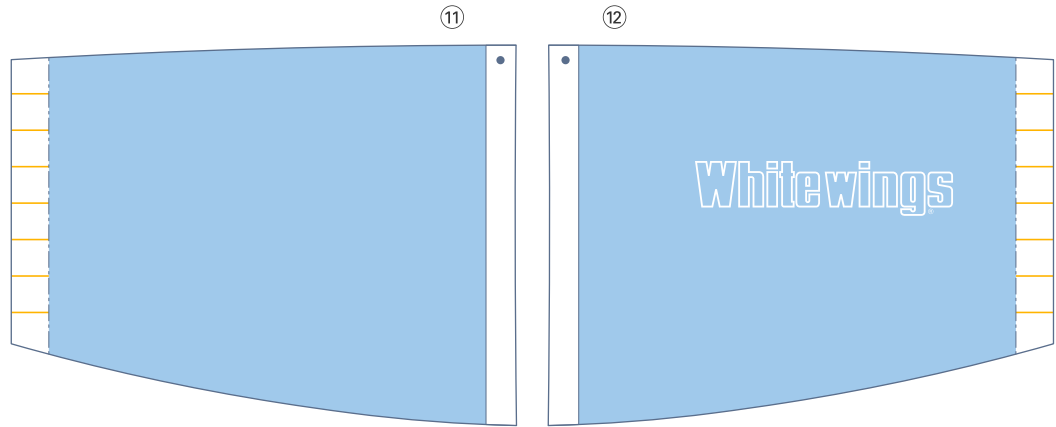
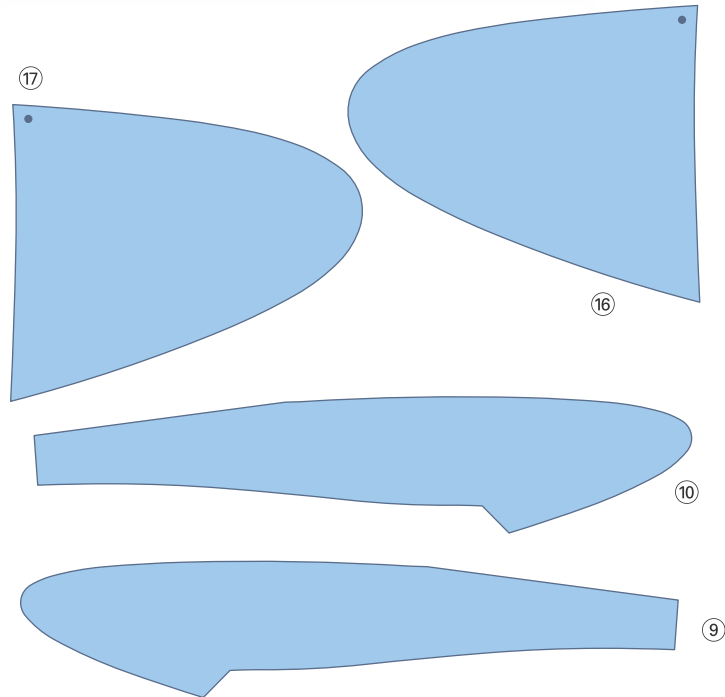
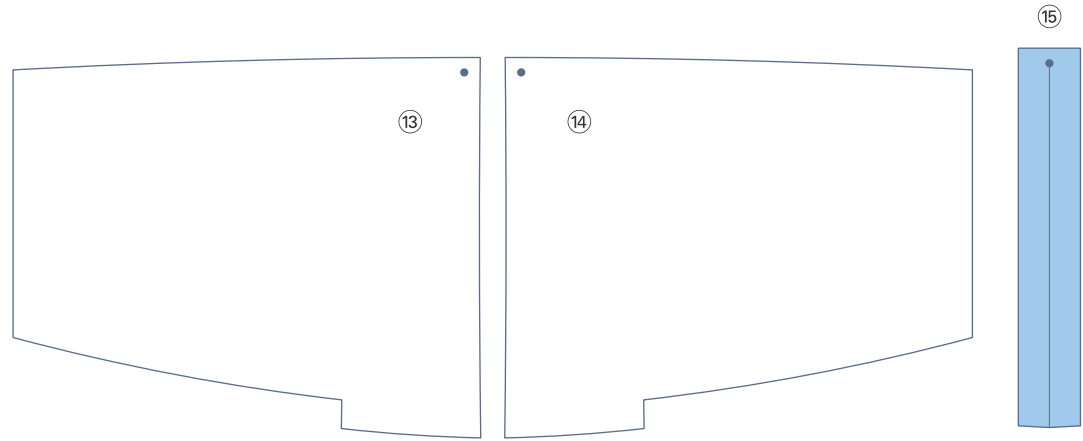
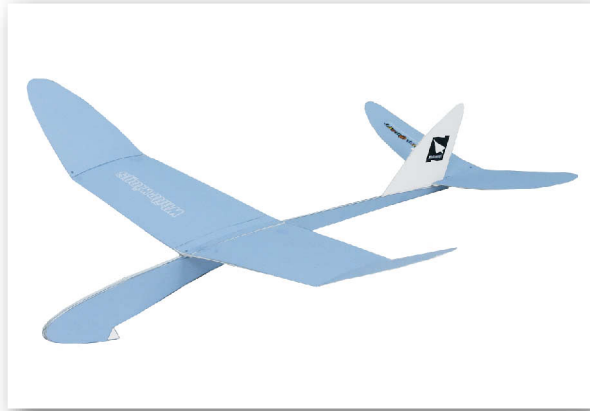
9.

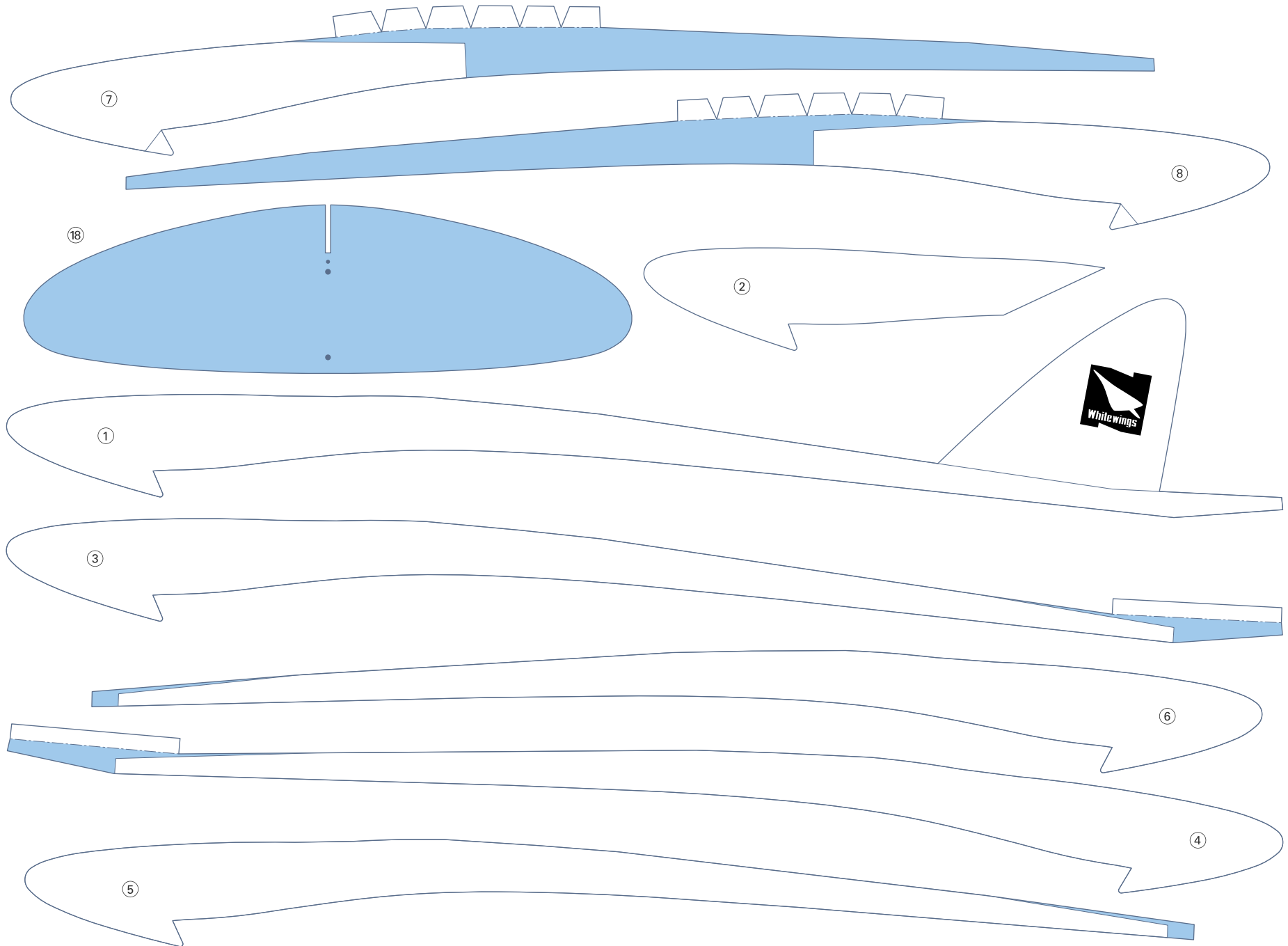
Using the dihedral angle gauge, make sure the dihedral angle for the main wing is 5° and for the wing tips is 30°.



10.

View the plane from both the front and the back and straighten any warps or bends in the fuselage and the wings.





## CAREFUL WITH THAT GLIDER!

Be sure to keep these points in mind before you launch your Papercraft glider!

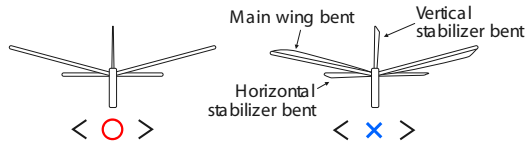
If you hit someone in the eye or on the head with your Papercraft glider, you could hurt them. Be sure to keep these points in mind before you launch your glider.

- Always be very careful not to hit any people or animals with your glider. Never launch your glider where there are a lot of people about.
- Never throw your glider onto the road.
- The catapult shooter launches your glider at a fast speed and should never be used near houses or where there are people about.
- If your Papercraft glider gets stuck up a tree or on a roof, don't climb up to get it! It's too dangerous!
- When the Papercraft glider is being used by small children, there should be an adult in attendance.

## 1. PRE-FLIGHT CHECK

### Model check!

Check the model carefully, from the front and from the side, before you launch it, to make sure that the fuselage and the wings are not bent or twisted.

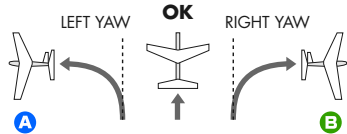


## 2. TEST FLIGHT

### Now, throw your Papercraft glider straight forward!

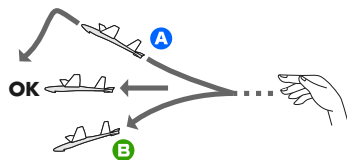
If your glider does not fly straight, refer to the diagrams below and adjust the glider as required. You may need to repeat the test flight and adjustments several times till the glider flies straight.

#### Check Point 1 / CORRECTING LEFT/RIGHT YAW



<p><b>TO CORRECT A</b></p> <p>Bend the flap of the right wing so that it is level or angled slightly upwards.</p>	<p><b>TO CORRECT B</b></p> <p>Bend the flap of the left wing so that it is level or angled slightly upwards.</p>
<p>Bend the flap of the left wing so that it is angled slightly downwards.</p>	<p>Bend the flap of the vertical stabilizer slightly to the right.</p>
<p>Bend the flap of the vertical stabilizer slightly to the left.</p>	<p>Bend the flap of the right wing so that it is angled slightly downwards.</p>

#### Check Point 2 / CORRECTING PITCH



<p><b>TO CORRECT A</b></p> <p>Bend the flaps of the horizontal stabilizer so that they are angled slightly downwards.</p>	<p><b>TO CORRECT B</b></p> <p>Bend the flaps of the horizontal stabilizer so that they are angled slightly upwards.</p>
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## 3. HOW TO FLY THE GLIDER

### Launch your glider high into the air!

Once you have done your test flights and adjustments, it's time to take the glider outside and fly it. Before you launch your glider, make very sure that there is no danger around. You can either launch your glider by hand or use the catapult.

Your Papercraft glider will fly best on days when there is no wind, or only a very gentle breeze.

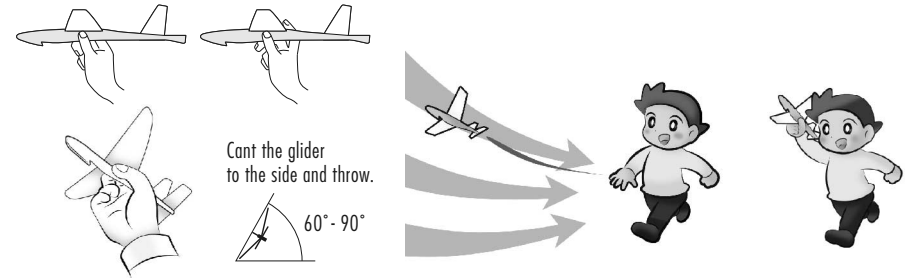
### ADJUSTMENTS

If your glider falls to earth too quickly, repeat the adjustments and test flights.

<p>● If the glider nosedives</p> <p>➔ Raise the flaps of the horizontal stabilizer.</p>	<p>● If the glider flies unevenly</p> <p>➔ Slightly lower the flaps of the horizontal stabilizer.</p>	<p>● If the glider loops</p> <p>➔ Lower the flaps of the horizontal stabilizer.</p> <p>➔ Launch the glider at right angles to the wind direction.</p>
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### HAND LAUNCH

To launch the glider by hand, grasp the fuselage below the wings with thumb, index finger and middle finger and throw it into the wind in order to make it fly higher. Place your index finger behind the wing and launch your glider with a flick of the wrist.



### CATAPULT SHOOTER

The catapult shooter allows you to fly your glider much higher than launching by hand. Use thumb and index finger to grasp below the wings, or the rearmost part of the fuselage, and launch.

● How to make the catapult shooter

➔ Cut a groove at one end of a stick.

➔ Fasten a length of rubber yarn firmly around the groove.

60° - 90°

Circle RIGHT

Circle LEFT

Hold the glider in the LEFT hand.

Hold the glider in the RIGHT hand.