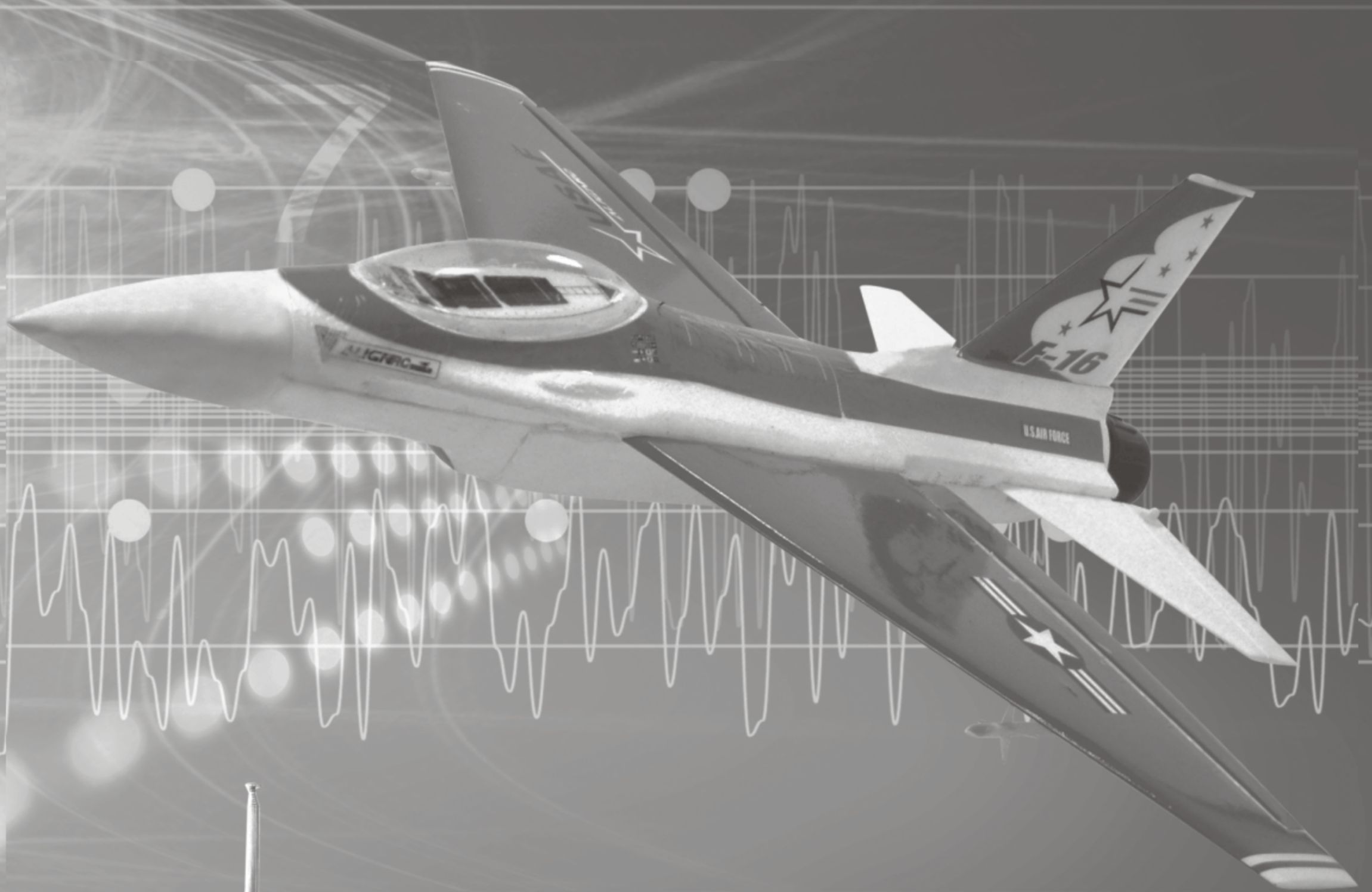


INSTRUCTION MANUAL FOR F-16 AIRPLANE



Thank you for buying products of **ALIGN RC WORLD!**

The manual is to describe and illustrate the details for parts assembling of F-16 RC REALISTIC AIRPLANE. Following the procedures step by step, the assembling will be easy and quick!

HOW TO USE THIS MANUAL

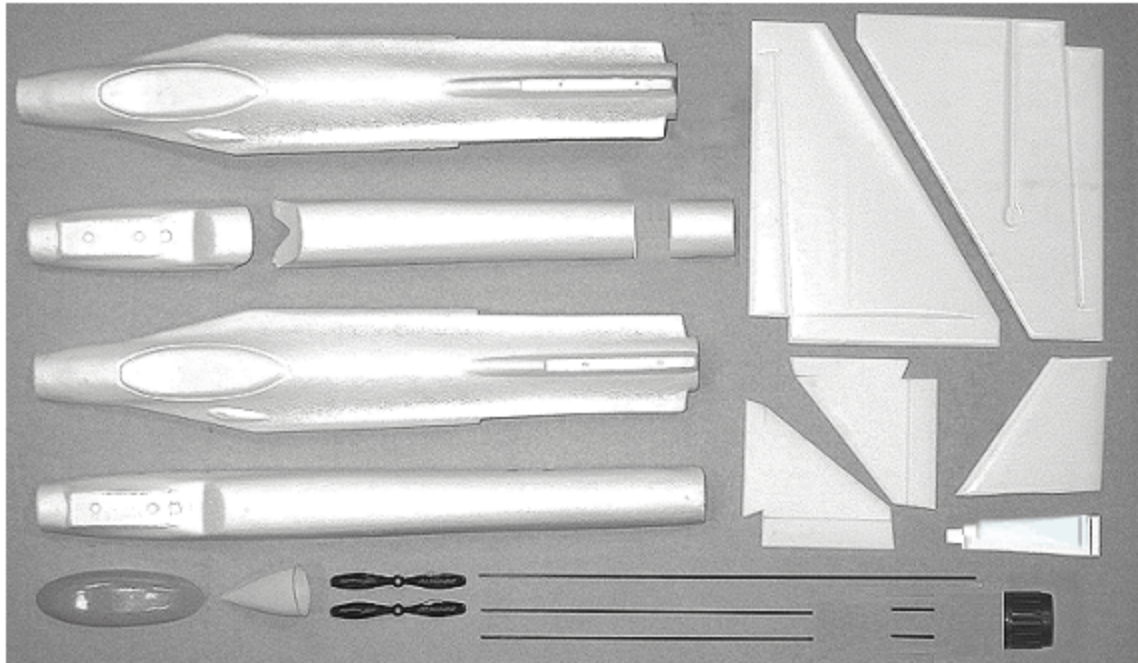
1. The manual is based on the airplane without electronic parts. Except the motor, all the electronic parts are optional items.

PREPARATION

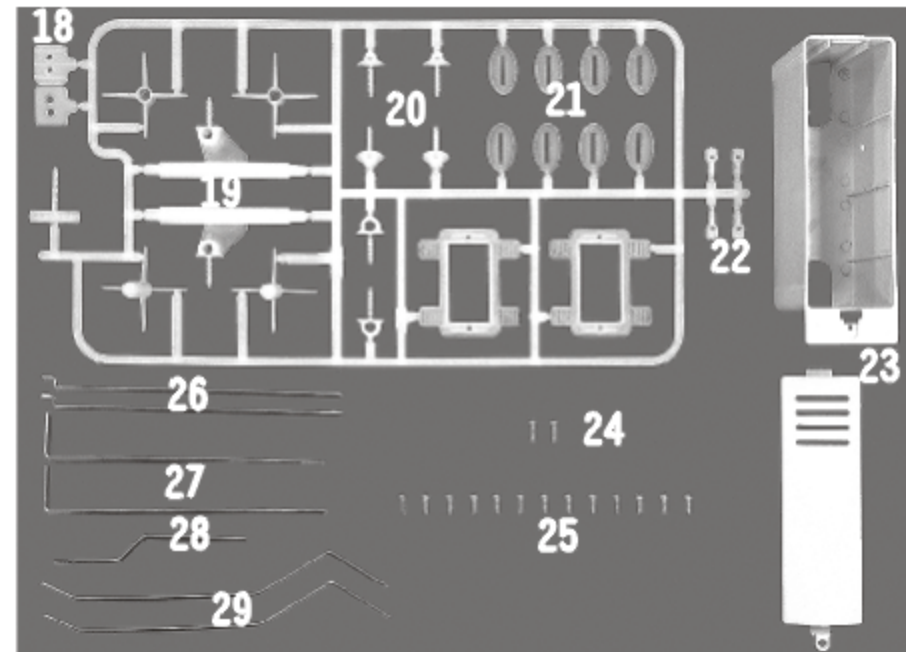
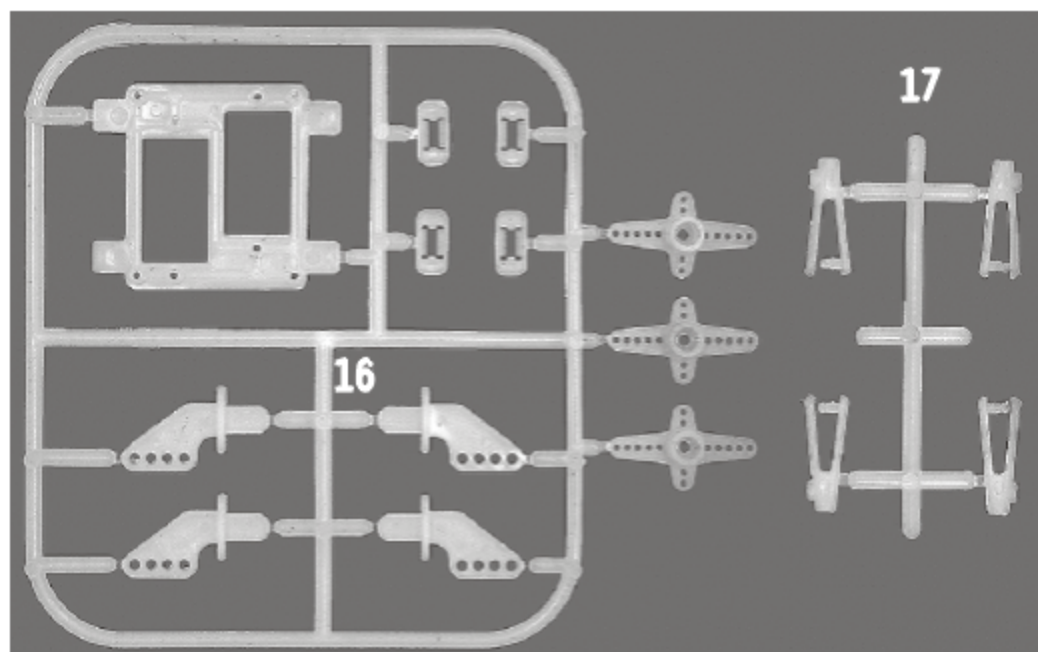
1. Ensure all the parts in the list coming with the manual.
2. An extra remote control device at least 3-channel is needed if it is a plane without electronic parts.
3. Some basic tools are needed to help assemble.



Tools for assembling: pliers · pincer pliers · screw driver, tweezers, a marker, a file, a cutter knife, quick-dry glue, clear tapes, fiber tapes, etc.

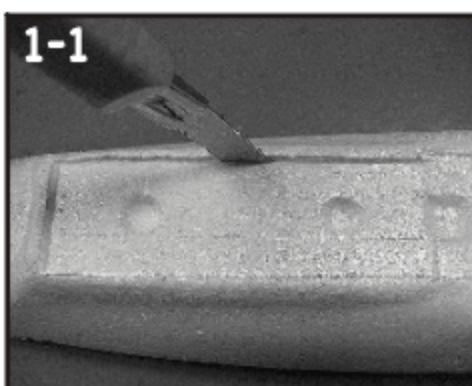


- | | | | |
|------------------------------------|-------------------------------------|------------------------------------|---|
| 1. Upper fuselage x 1 | 8. Cabin cover x 1 | 15. Styrofoam glue x 1 | 22. L-type joint for single rudder control wire x 2 |
| 2. Lower fuselage (cut) x 1 | 9. Spinner x 1 | 16. Rudder piece x 4 | 23. Battery box x 1 |
| 3. Upper fuselage (attachment) x 1 | 10. Propeller (4.2" x2) x 2 | 17. Adjustable wire clip x 4 | 24. Screw (M2 x6mm) x 2 |
| 4. Lower fuselage (attachment) x 1 | 11. Carbon fiber rod (3x395mm) x 1 | 18. Y-type control base x 1 | 25. Set screw (M2 x5mm) x 13 |
| 5. Main wing assembly x 1 | 12. Carbon fiber rod (2x265mm) x 2 | 19. Carbon fiber rod holder x 2 | 26. Aileron control wire A (1.2x93mm) x 2 |
| 6. Horizontal stabilizer x 1 | 13. Carbon fiber rod (3x35mm) x 2 | 20. Rubber control wire holder x 2 | 27. Aileron control wire B (1.3 x85mm) x 2 |
| 7. Vertical fin x 1 | 14. Motor jet base (with motor) x 1 | 21. Holding clip x 8 | 28. Elevator control wire A (1.2x57mm) x 1 |
| | | | 29. Elevator control wire B (1.2x105mm) x 2 |

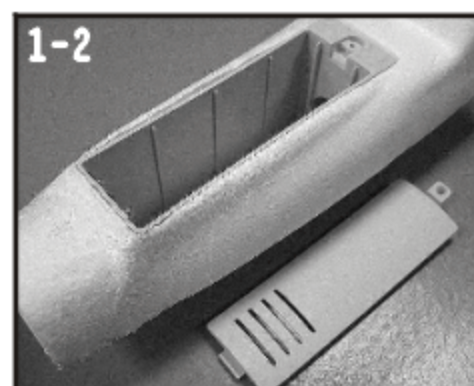


ASSEMBLING

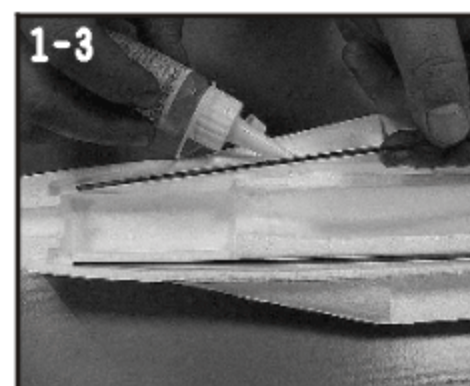
1. BATTERY BOX/MOTOR JET BASE



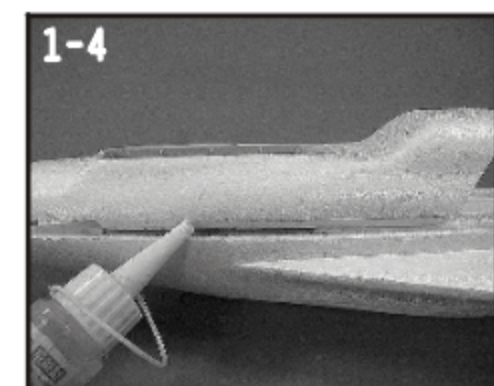
1-1 Cut battery box along the dotted line.



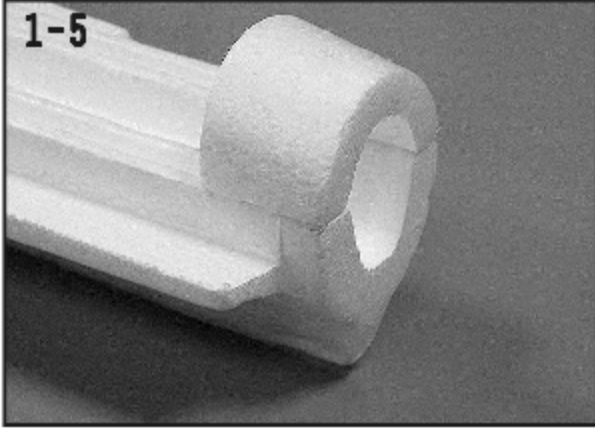
1-2 Remove battery box cover. Push battery box into the space.



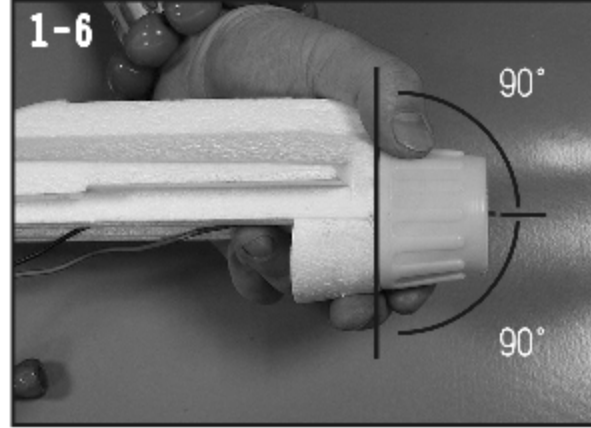
1-3 Paste Styrofoam glue on grooves in fuselage. Then stick 2x265mm carbon fiber rods in the grooves for reinforcement.



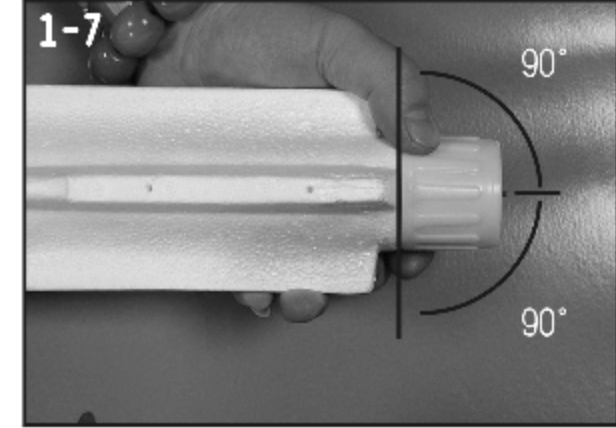
1-4 Paste Styrofoam glue on the edge of upper/lower fuselage to glue the two parts.



1-5
△ Cut the end of fuselage and fix it with Styrofoam glue. The edge should be flat.

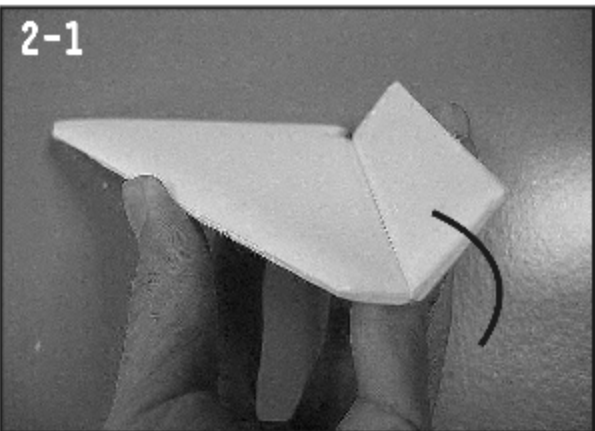


1-6
△ Fix motor and jet base with glue and be aware the angle of motor shaft must be right.

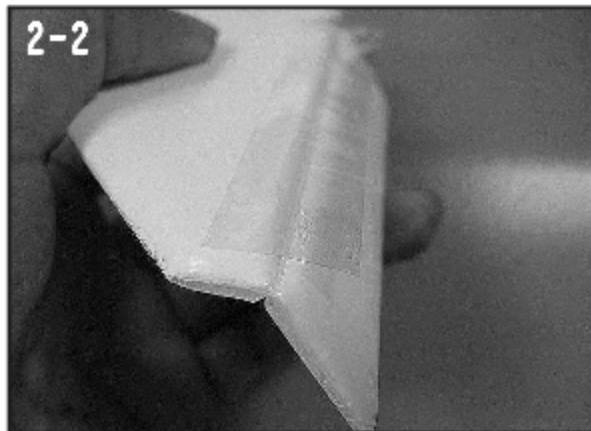


1-7
△ Ensure the motor shaft at right angle again.

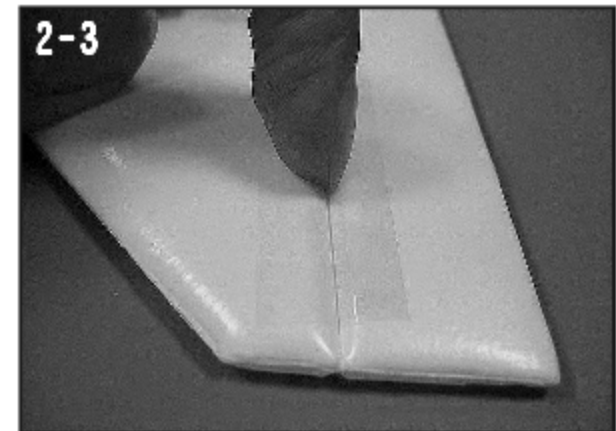
2. HORIZONTAL STABILIZER



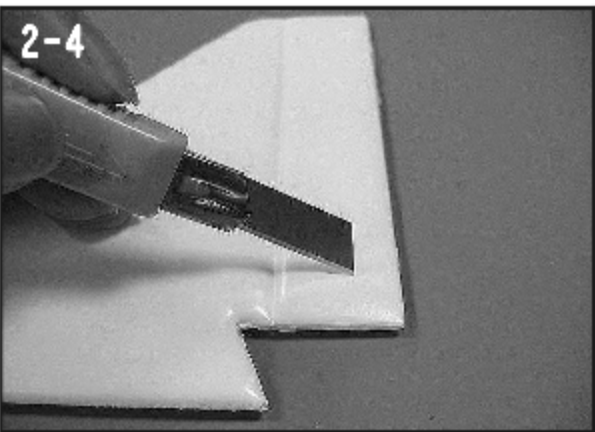
2-1
△ Fold the rudder for several times to make it move smoothly.



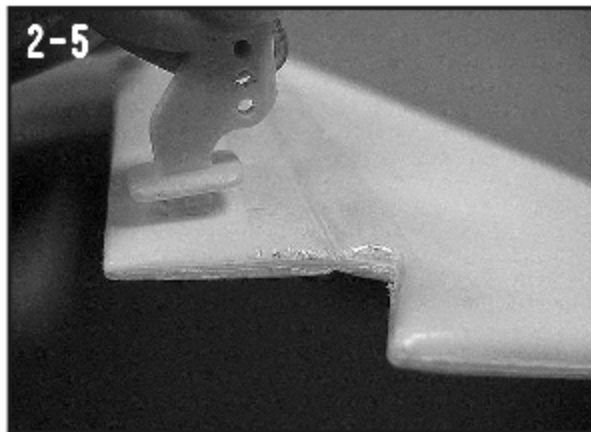
2-2
△ Fold the rudder down as above. Stick a clear tape half on the wing and half on the rudder.



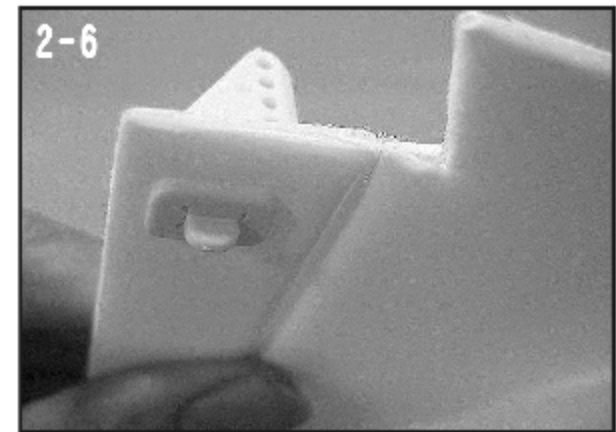
2-3
△ Use a finger to press the sticker in the groove.



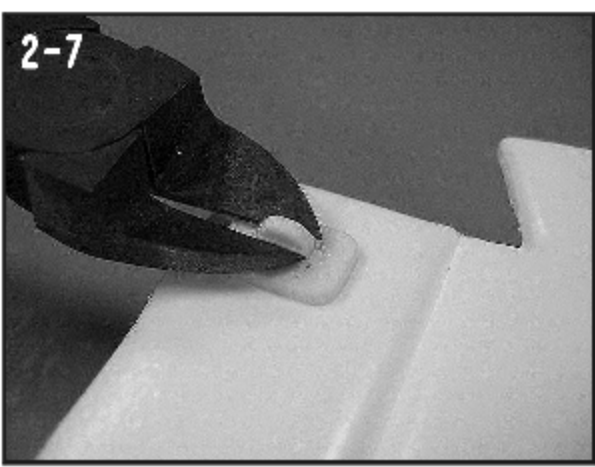
2-4
△ Cut the rudder through.



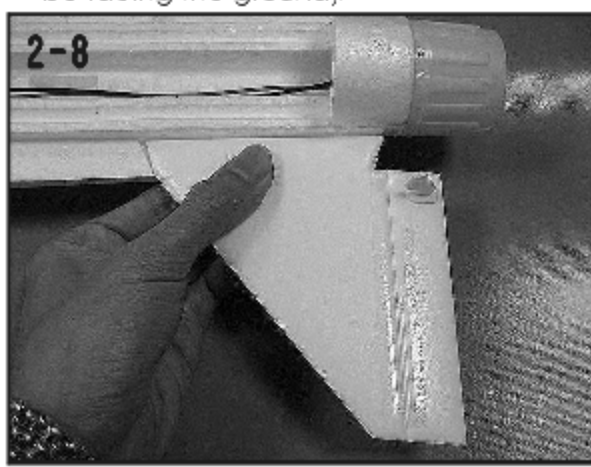
2-5
△ Set rudder piece through the rudder (be aware the direction of rudder piece must be facing the ground).



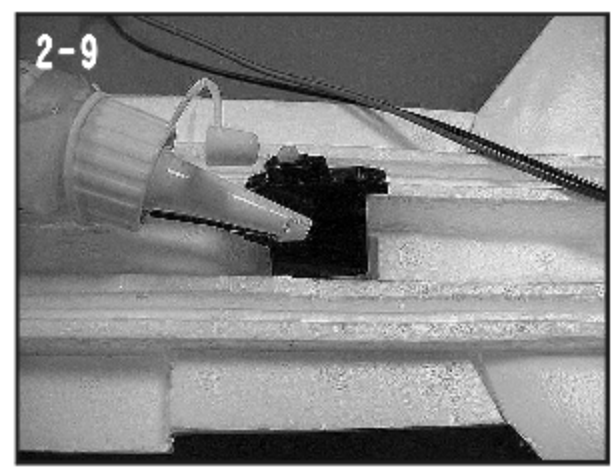
2-6
△ Press the clip and make it tightly connect with rudder piece.



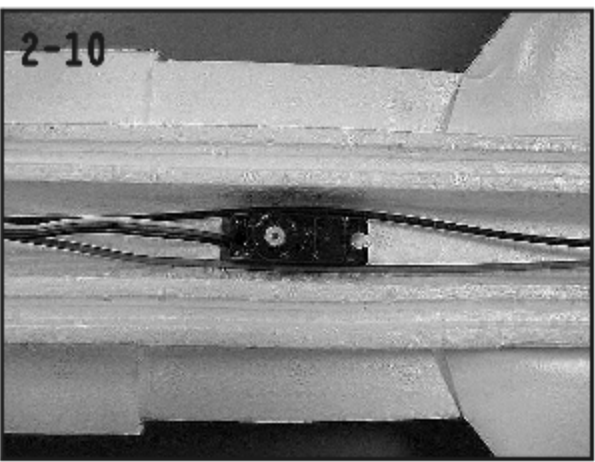
2-7
△ Cut off not necessary part of rudder piece.



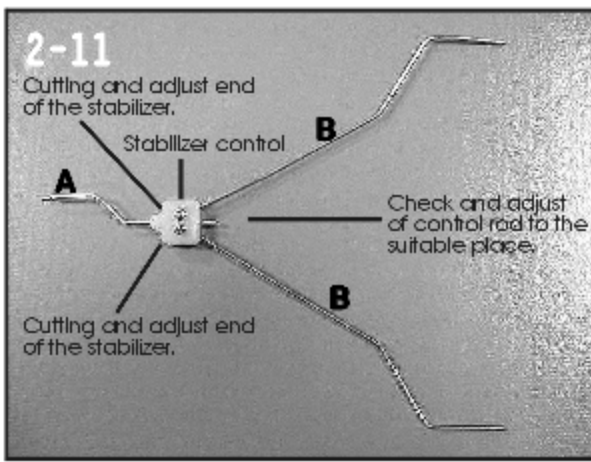
2-8
△ Stick right and left wings firmly on fuselage.



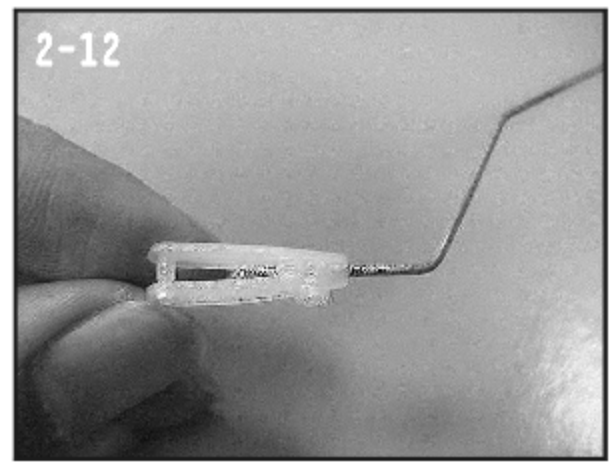
2-9
△ Paste glue beside 9g servo and press it into the holder.



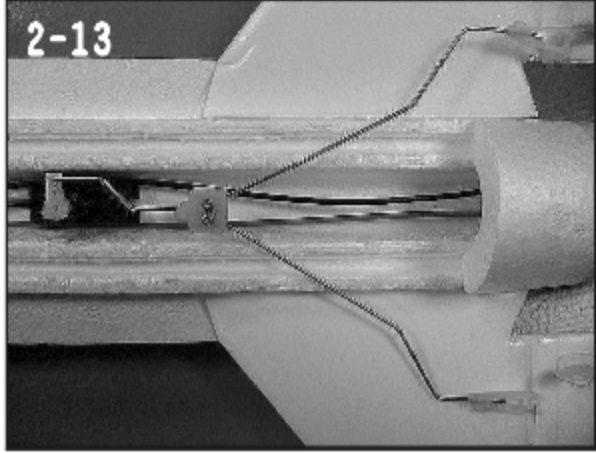
2-10
△ Wind motor circuit around the servo to prevent interference. Add some glue to



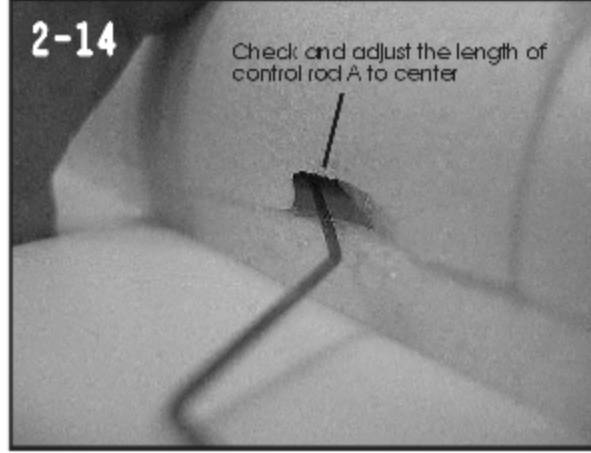
2-11
△ Assemble stabilizer control rod as above picture.



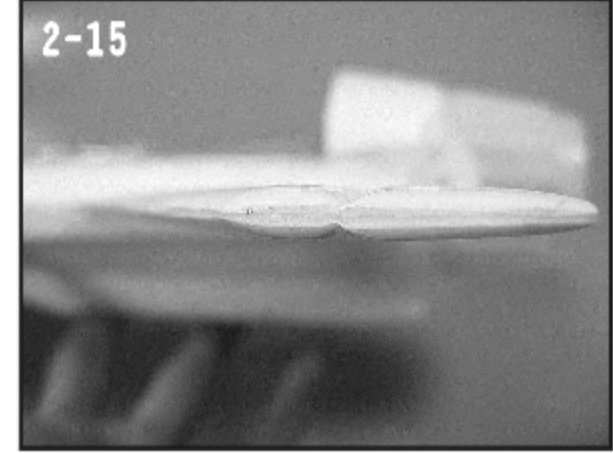
2-12
△ Set wire clip on the end of control rod.



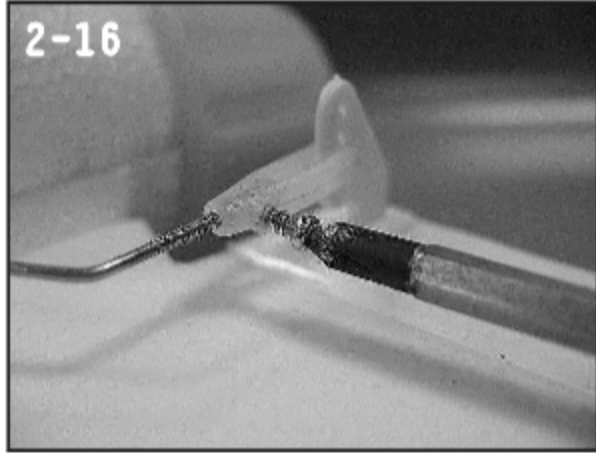
2-13
 △ Open the controller and set the power temporarily to get trim neutral. Cut servo swing in proper length (avoid interfering with fuselage). Fix one end of wires on servo.



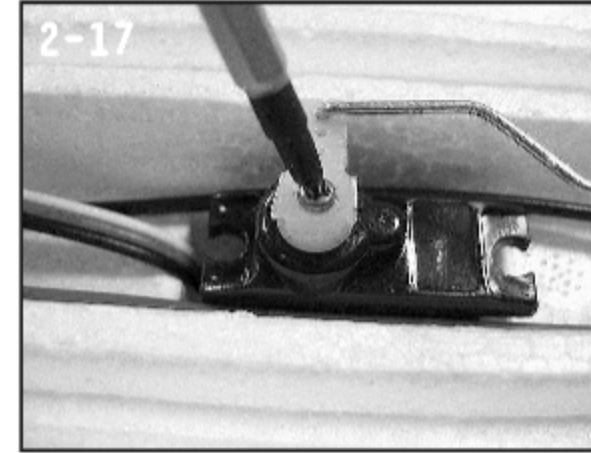
2-14
 △ Close the fuselage. Check and adjust the length of control rod A to make steel wire in the center of the hole.



2-15
 △ Adjust wire clip to set rudder and stabilizer on the same line.

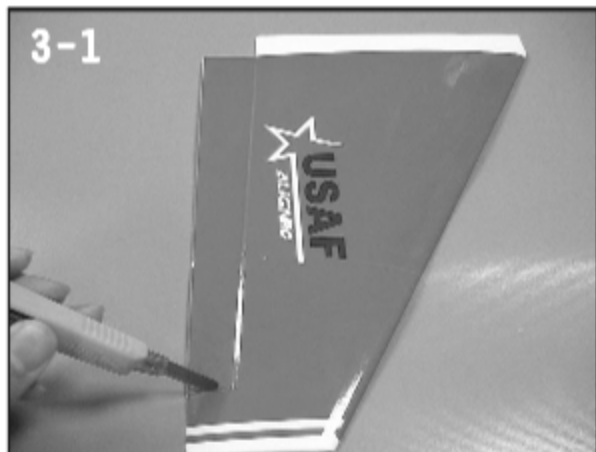


2-16
 △ Set screw on wire clip.

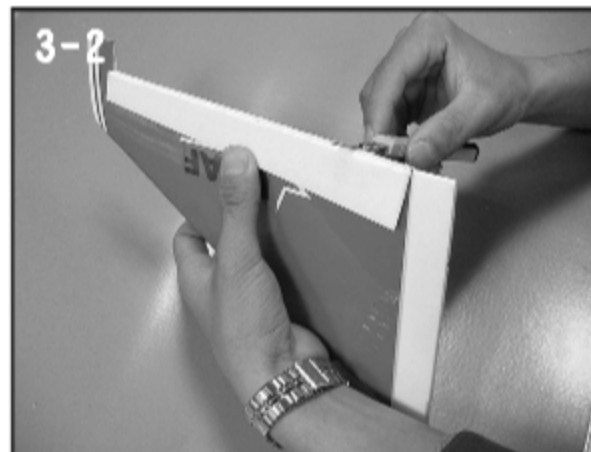


2-17
 △ Set screw on servo swing.

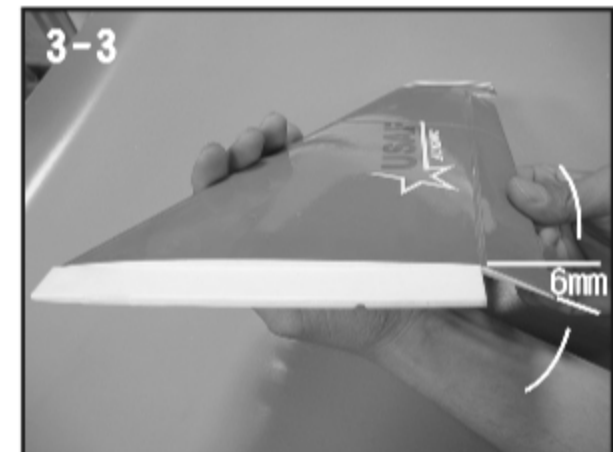
3. MAIN WING



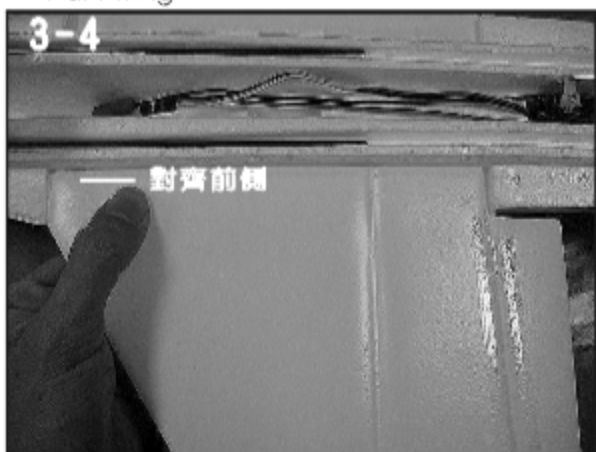
3-1
 △ Cut the sticker and put on the main wing. Cut it from the part connecting aileron and main wing.



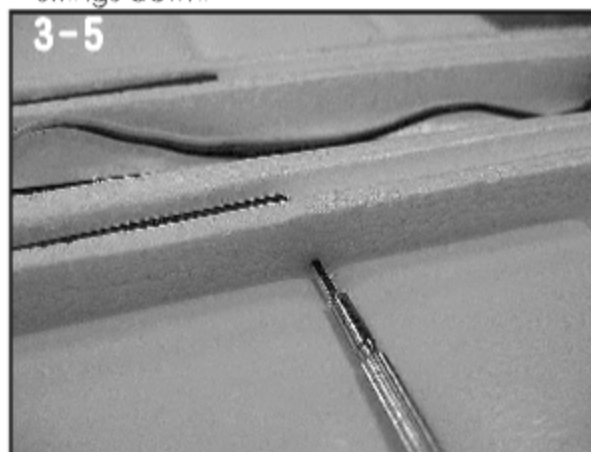
3-2
 △ Fold aileron up 180°, and cut for proper thickness to avoid interference when it swings down.



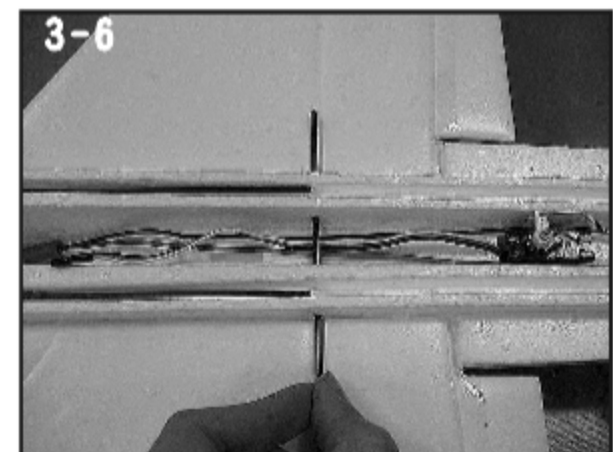
3-3
 △ Adjust to get 6mm distance from it swings down.



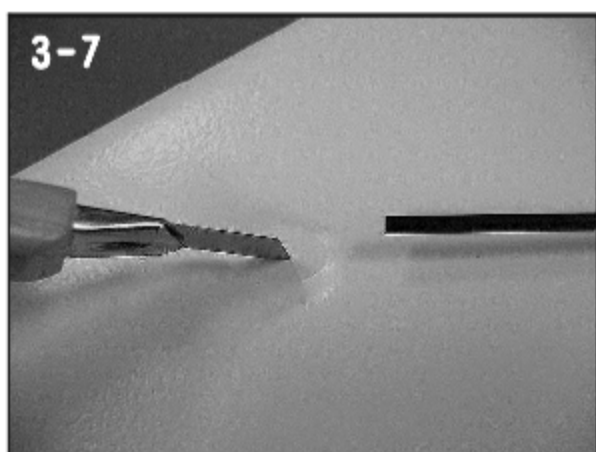
3-4
 △ Stick left and right wings on fuselage.



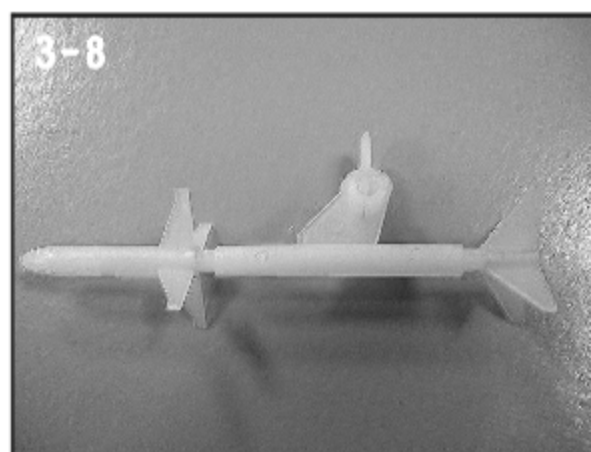
3-5
 △ Make a hole with a sharp tool before set the carbon fiber rod through.



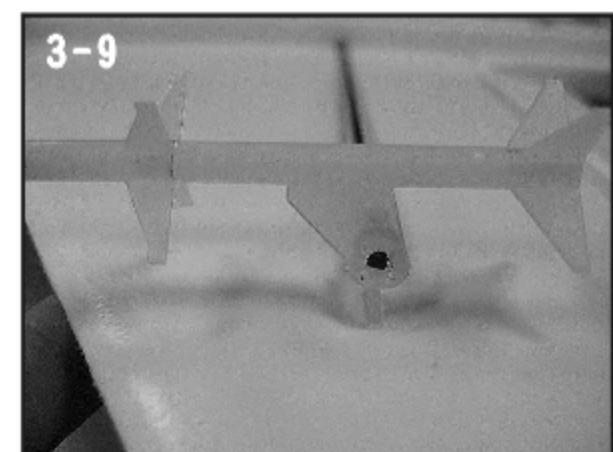
3-6
 △ Set 3x395 carbon fiber rod through.



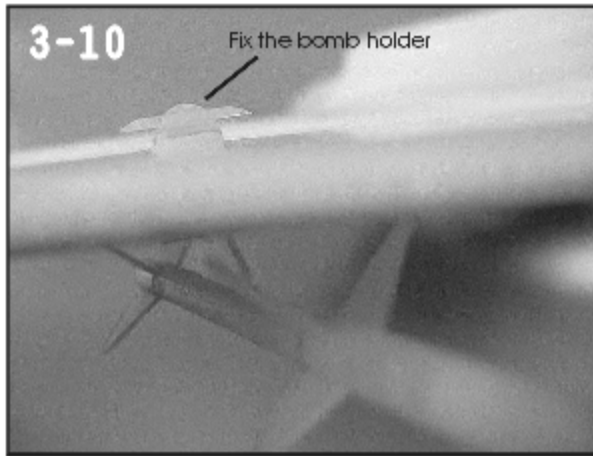
3-7
 △ Cut it through on the place of carbon fiber rod clip (bomb holder).



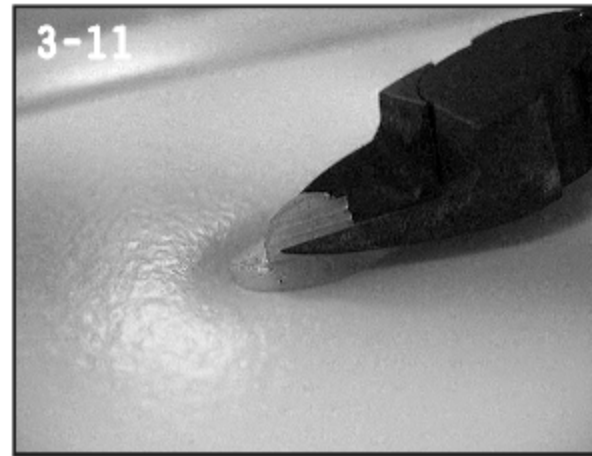
3-8
 △ Assemble the bomb, holder and bomb tail as above.



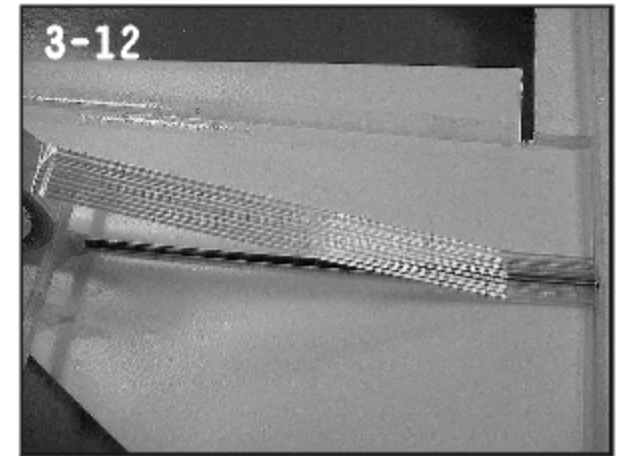
3-9
 △ Set carbon fiber rod in the holder and press it into main wing.



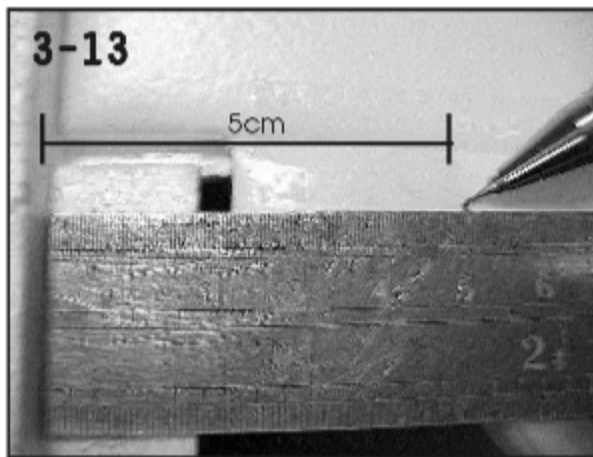
△ Fix the bomb holder firmly with a clip. (Be aware the direction of clip).



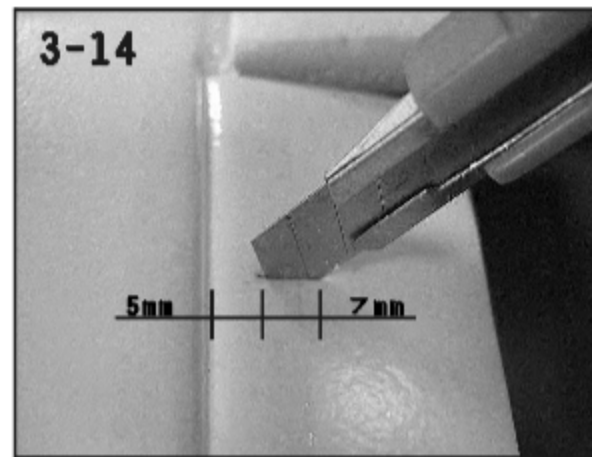
△ Cut the part not necessary.



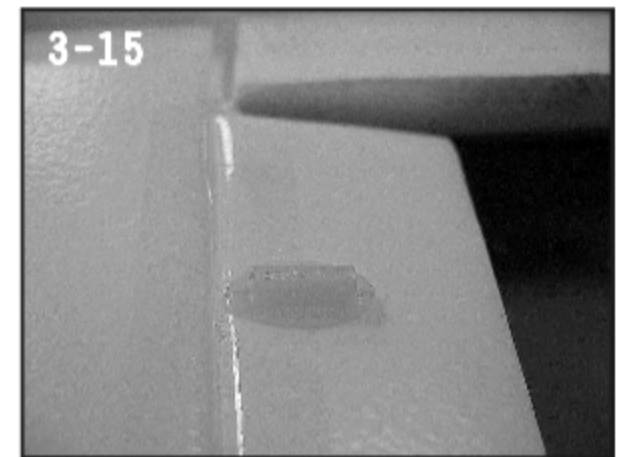
△ Stick carbon fiber rod firmly with tape.



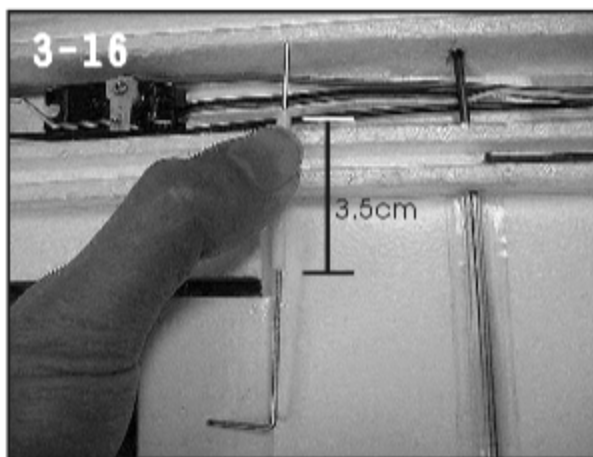
△ Make a mark in the distance from fuselage.



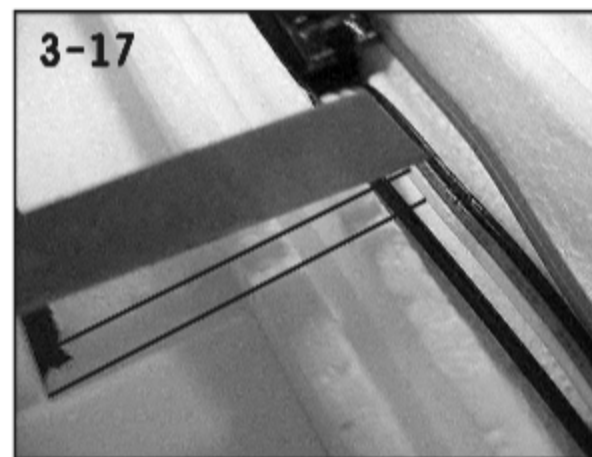
△ Cut aileron through as the marked distance.



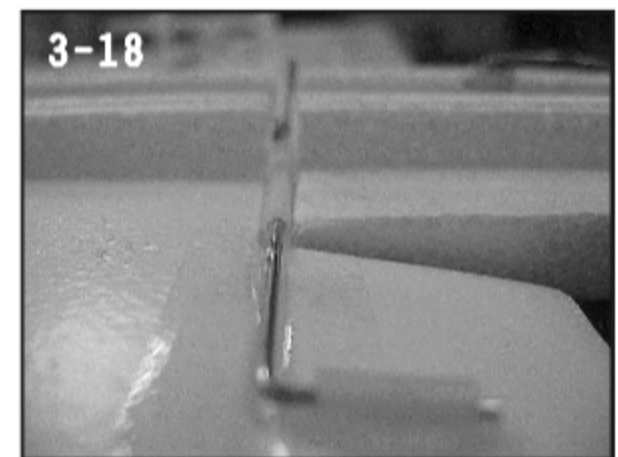
△ Insert wire holder of diameter 1.2mm and fix it with a clip.



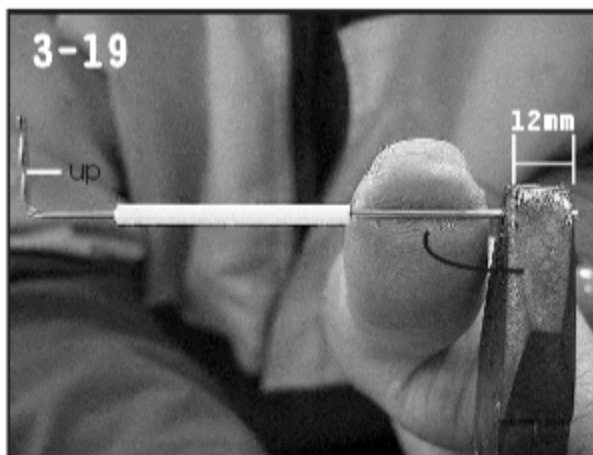
△ Take out aileron control rod. Cut a tube for 3.5cm and put on the rod.



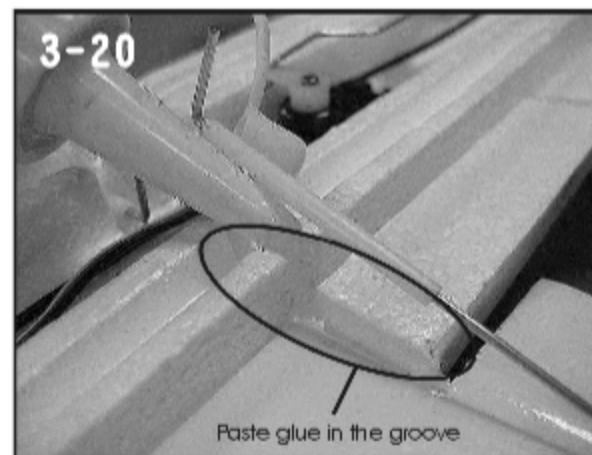
△ Cut for a groove along with fuselage and main wing, enable to insert control rod and tube.



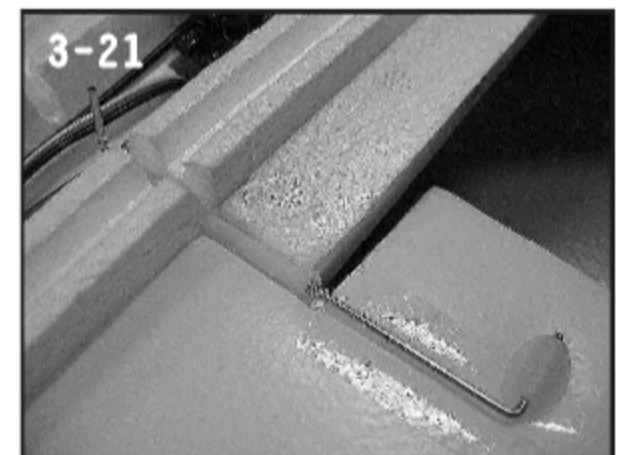
△ The groove to be cut.



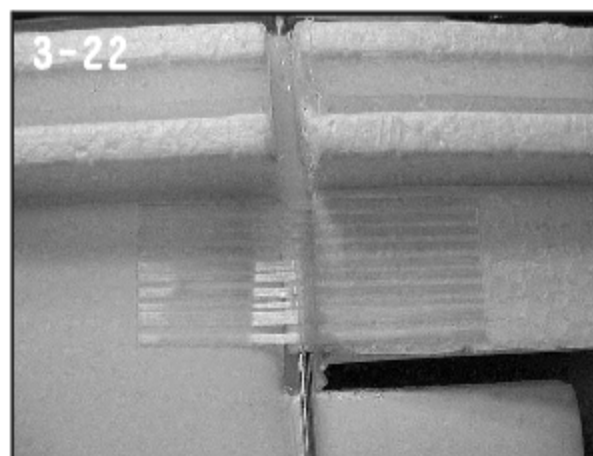
△ At the distance of 12mm, fold the wire to opposite direction.



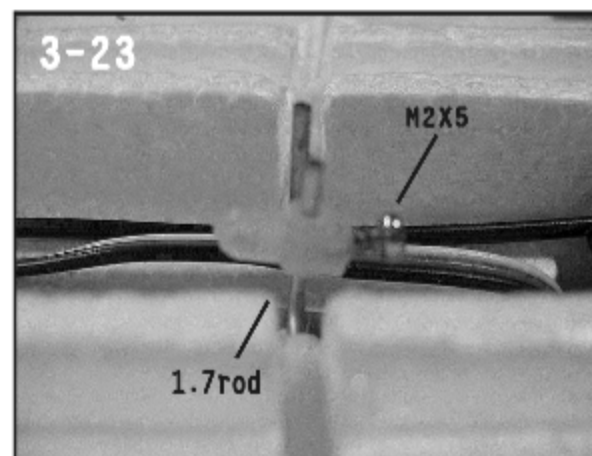
△ Paste glue in the groove to make tube fix on fuselage tightly.



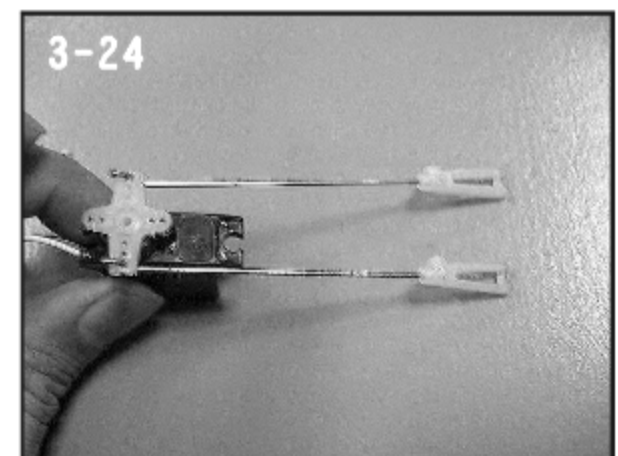
△ Press the tube into the groove (do not let make glue on wires).



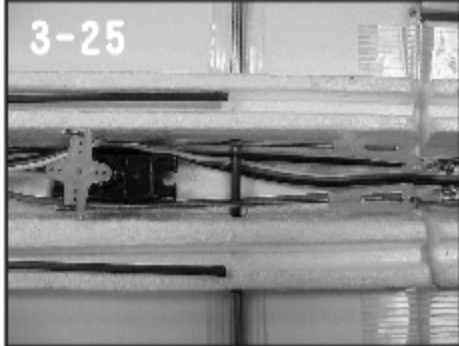
△ Cut for a piece of tape and stick on tube.



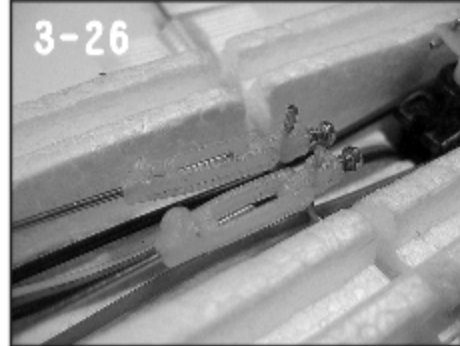
△ Lock control rod L-joint (diameter 1.7) on the rod. (Note: the height will affect the own need).



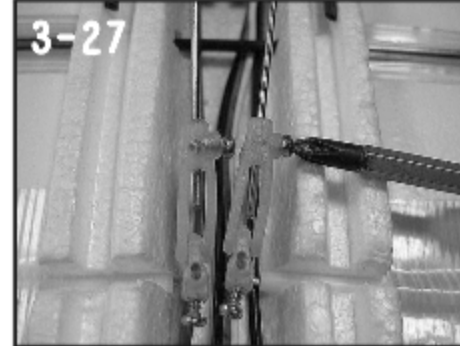
△ See above figure. Assemble the servo swing, 1.2mm control rod and wire clip. (Cut it down if the control is too long).



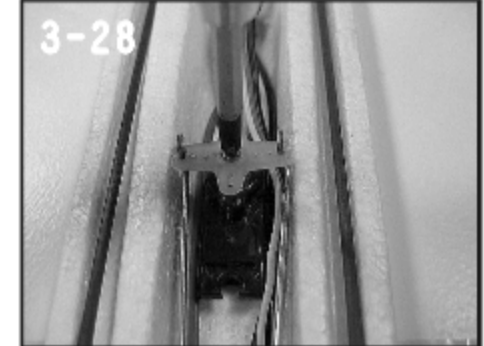
3-25
 △ Paste glue on both sides of servo and press it into the holder.



3-26
 △ Connect servo to power to set for trim neutral temporarily. Adjust wire length until two ailerons to be at the same level.

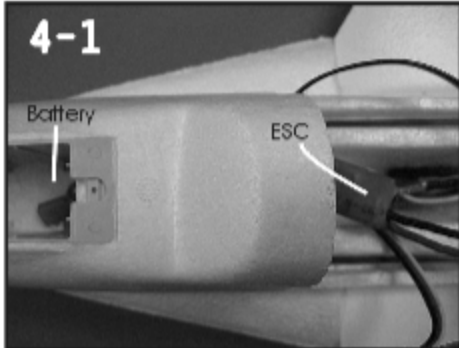


3-27
 △ Fix it with M2x5 set screw.

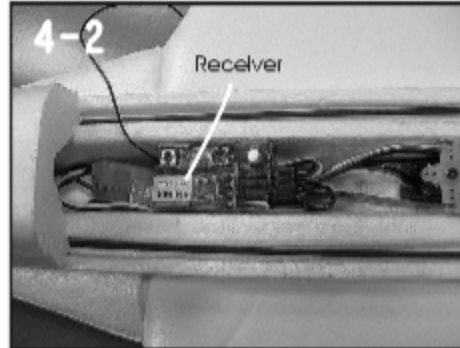


3-28
 △ Fix the servo swing with set screw.

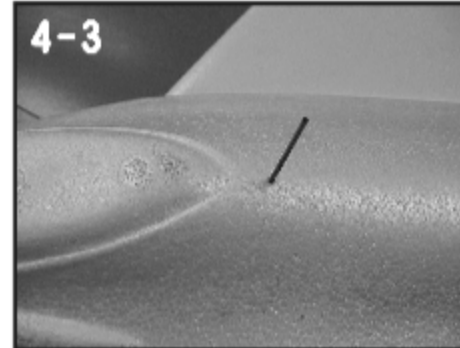
4. ELECTRONIC PARTS



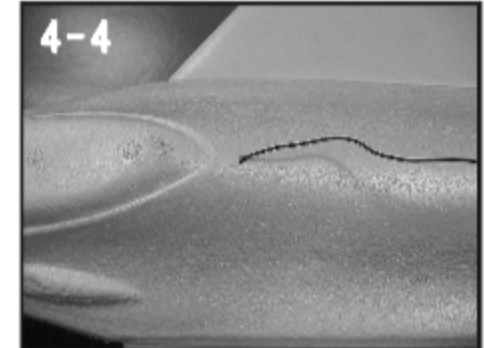
4-1
 △ Get battery adapter of speed controller through fuse age and battery box.



4-2
 △ After connecting speed controller, receiver and motor outlet circuit, fix the receiver on upper layer.

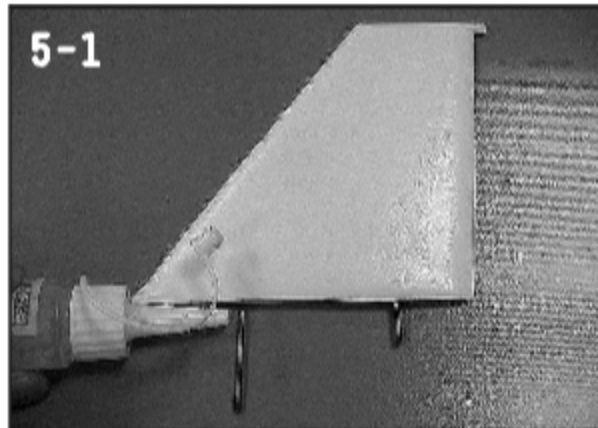


4-3
 △ For better locking and no interfered by other electronic equipments in a case, we suggest to pull out antenna from the back of cabin. Drill a hole for antenna with a tool.

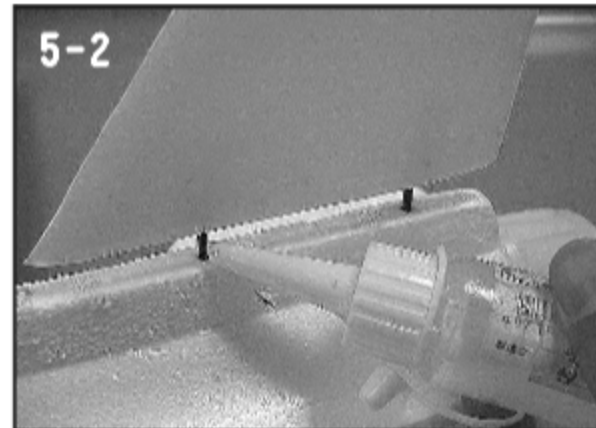


4-4
 △ Pull out antenna.

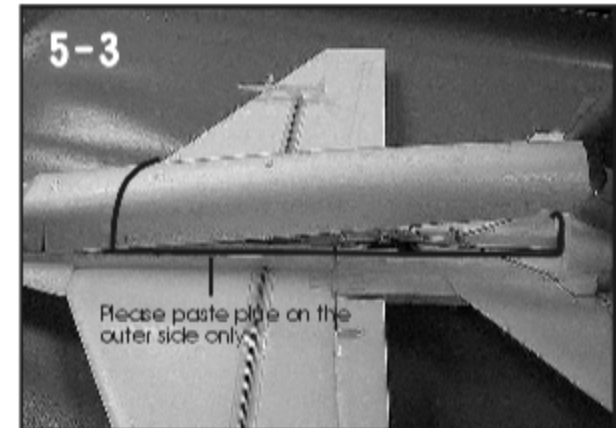
5. VERTICAL FIN AND FUSELAGE COMPONENTS



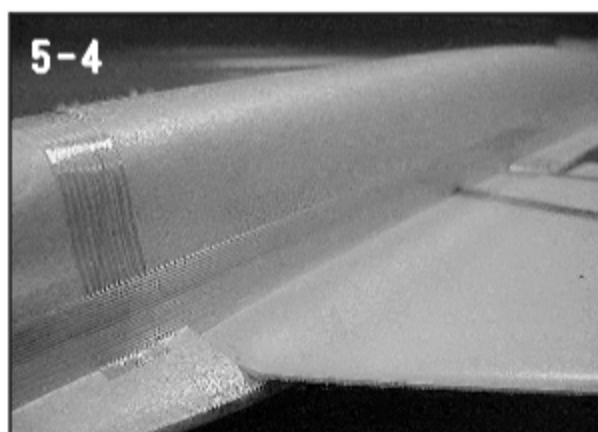
5-1
 △ Paste glue on carbon fiber rod 3x35mm, and press it into vertical fin to fix it.



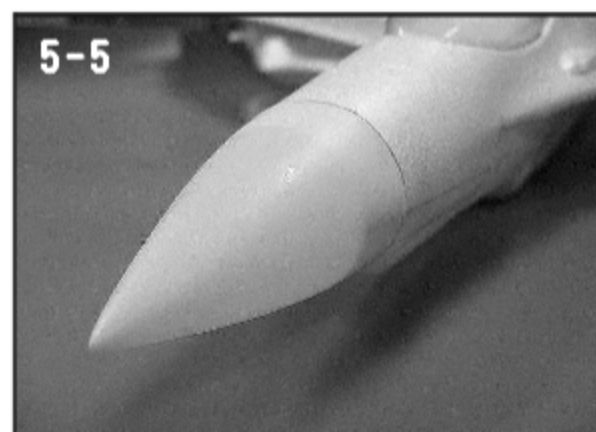
5-2
 △ Paste glue on vertical fin and fuselage to joint them.



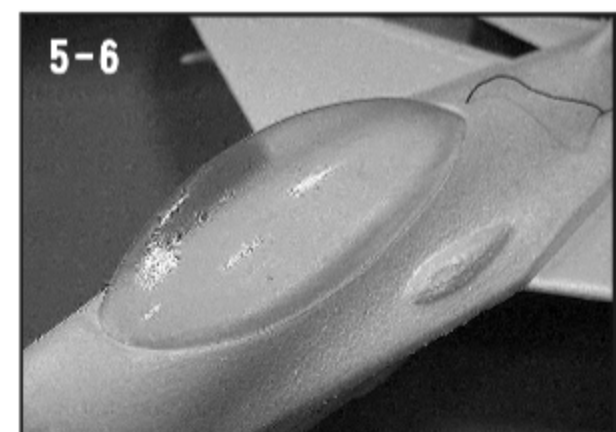
5-3
 △ Paste glue on the marked place. For fuselage flank please paste glue on outer side only. It is for the convenience of reparation and maintenance.



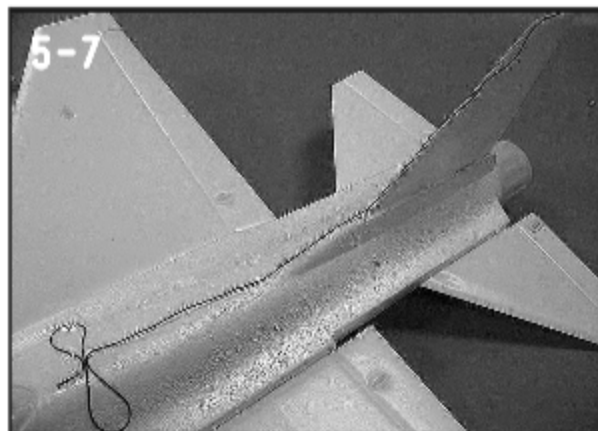
5-4
 △ Put tapes on connection points for reinforcement.



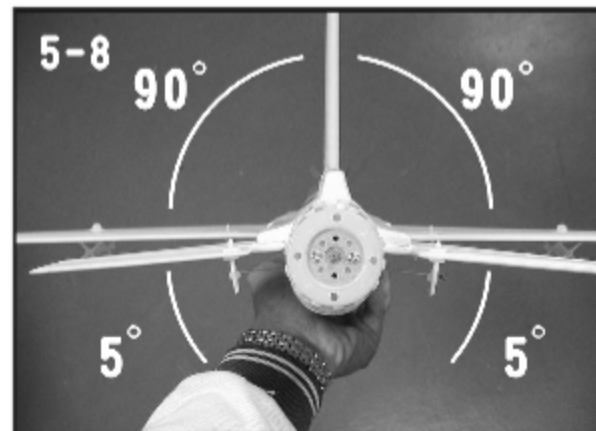
5-5
 △ Use glue and tape to connect fuselage spinner.



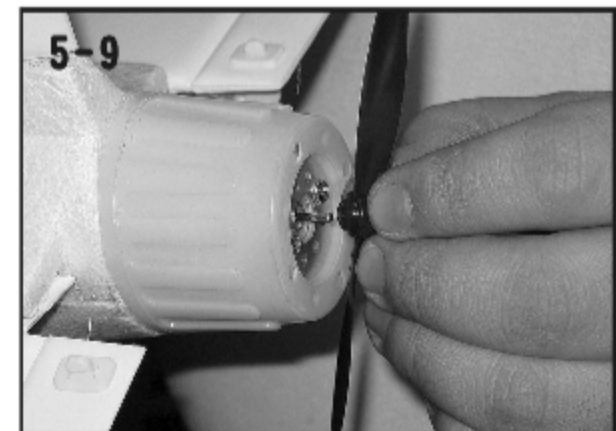
5-6
 △ Cut off the unnecessary part of cabin cover. Use glue to fix cabin cover and fuselage.



5-7
 △ If antenna circuit is too long as above picture, wind it on the back of cabin, and fix it along vertical fin with tape. (p.s. Do not cut antenna or it will affect its receiving distance.)



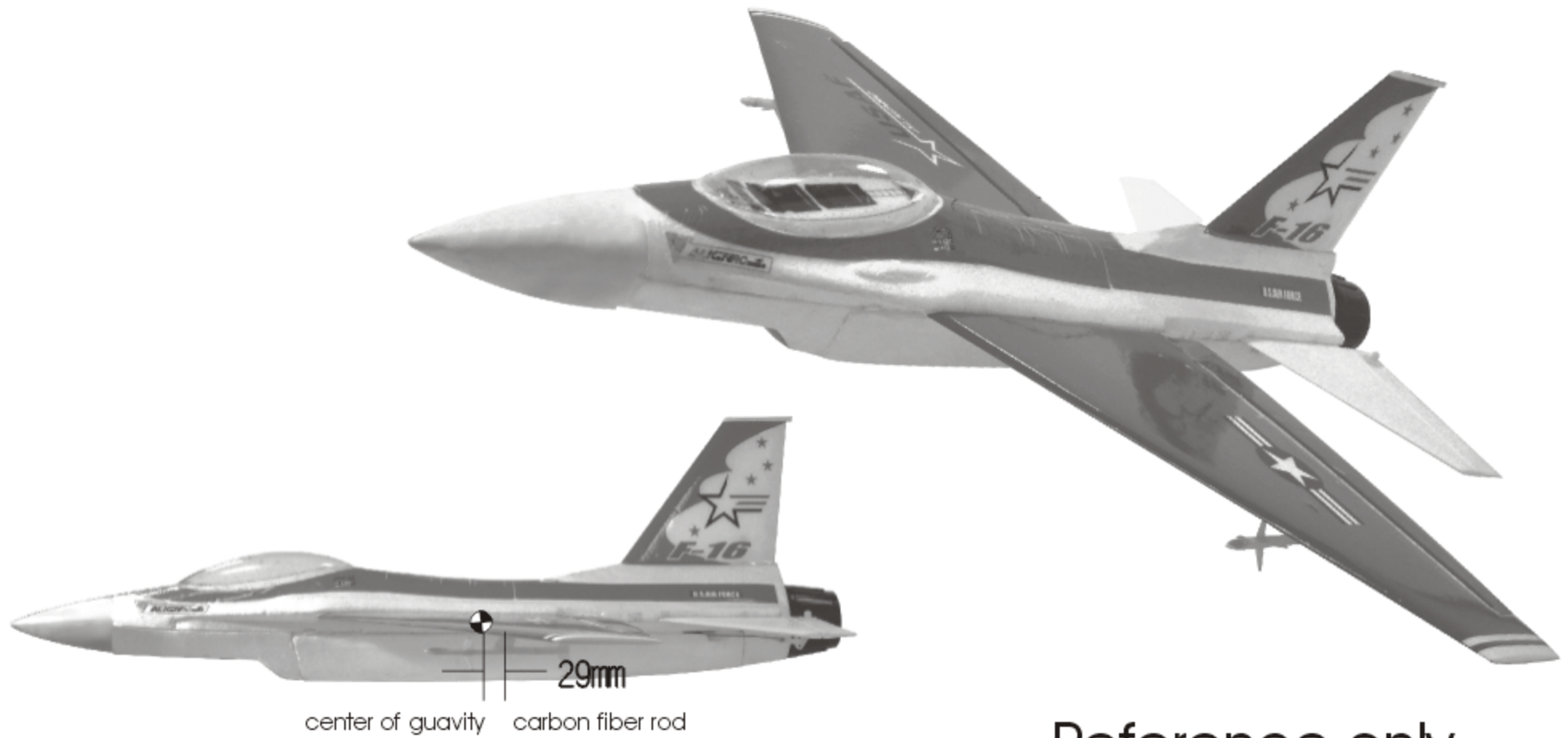
5-8
 △ Recheck if all the wings are at correct angle.



5-9
 △ Push the cone of propeller inside.

FINAL ARTISTIC WORK

Put on the stickers as you prefer and enjoy flying in the sky.



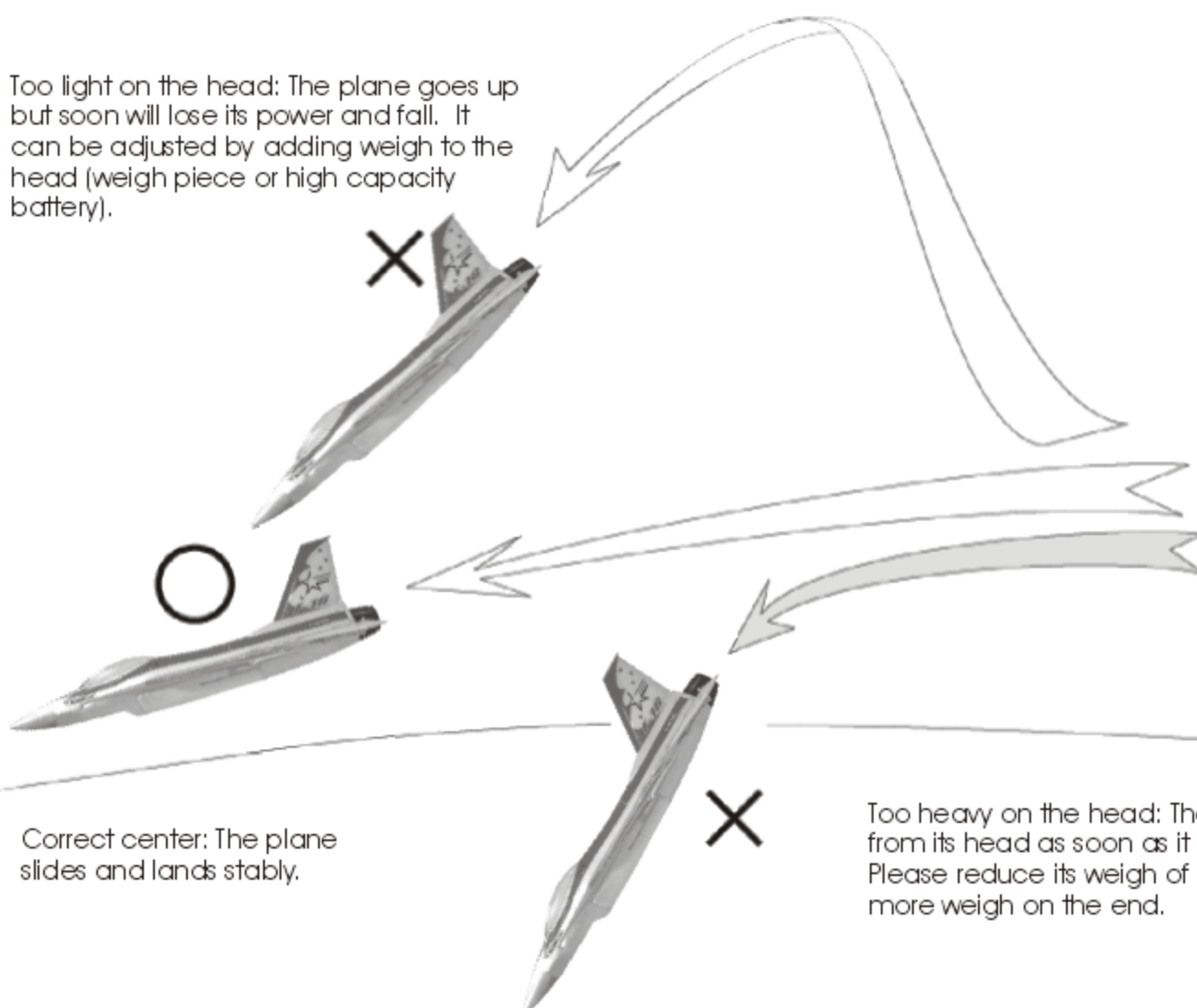
Reference only

Refer to the above picture for center of gravity. It is at 29mm in front of carbon fiber rod. If you use a Li-ion battery of 92g, the center will just get its balance. If you use a battery of 80g, it is necessary to put 12g more on the head...and so on.

CENTER OF GRAVITY

1. The center of gravity is the key point to the whole flight. The fast way to adjust it is to move the battery or choose a battery of different capacity to increase or reduce the weight.
2. Before flying the plane, throw it out horizontally to see if the center is correct.
3. Incorrect center will cause unstable flying, even fall of it. Please try to adjust the center of gravity until the plane can glide and land smoothly. So that the glider can fly well when the power is on.
4. Note: If windy, please put more weight on the head to make the plane fly more stably.
5. Stop flying when the weather is too windy.

Too light on the head: The plane goes up but soon will lose its power and fall. It can be adjusted by adding weight to the head (weight piece or high capacity battery).



Correct center: The plane slides and lands stably.

Too heavy on the head: The plane falls from its head as soon as it is thrown out. Please reduce its weight of its head or put more weight on the end.



Normally the gravity is set center at about 29mm in front of carbon fiber rod. However, when it is windy, the head should be heavier against the wind.



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