



Assembly Manual For

Dolphine Jet



www.pilot-rc.com



Thank you for purchasing our Dolphin Jet. we strive to achieve the real Quick Built and ARF aircraft .

It just requires the least amount of assembly of any kit that almost finished in factory.

To obtain the perfect performance, both the design and manufacturing have been taken care with the highest quality from any hardware, covering ,wood and glue in the construction as well. By optimal weight and reliable construction, you will find this plane is really ideal for relaxing.

So we hope every effort and service we offer will make you feel easy and have a wonderful time in the pleasure of flying.

More information on website

www.pilot-rc.com

- All Pilot-RC products are guaranteed against defects for 30 days of receiving your airplane. This warranty is limited to construction or production defects in both material and workmanship, doesn't cover any component parts damaged by use or modification.

- The manufacturer can't supervise the assembly, operation and maintenance, and can't ensure your radio system is in good condition. **Therefore, we are not responsible for any damage occurring during the use of a radio controlled model.** It is impossible to determine for certain whether crash damage was the result of a radio system failure or pilot error even improper installation of our products. Model airplane owner is using it on his own responsibility.

- Pilot-RC will not be liable for any costs, unless agreed and proved beyond doubt the failure was due to faulty materials or fabrication. Any agreed cost will not exceed the cost of the airframe and not include engine, radio equipment or third party claims.

- No matter what reason you wish to return this airplane, all shipping cost will be paid by customer. If some parts require replacement from us, the original parts' return is at customer's expense.

- **You should not regard this plane as toy!**
- To ensure safety, please read the instruction manual thoroughly before assembly .
- Building and operating model plane require diligent practicing and correct guidance. Any neglect, carelessness and missing experience can cause serious bodily harm and property damage.
- Seek the assistant of a experienced person or airplane model clubs in assembly ,operation and maintenance to ensure quick and successful learning
- **Fly only in proven model airfield** that AMA (Academy of Model Aeronautics) approved

Pilot-RC has the right to change to this plane ,instruction and limited warranty without notice. If you have any problems and questions ,please contact pilot –RC

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Address: No.34, Chengnan Er Road , Zhongshan city, 528400, Guangdong Province, China

1. Install the servo to the nose landing gear.



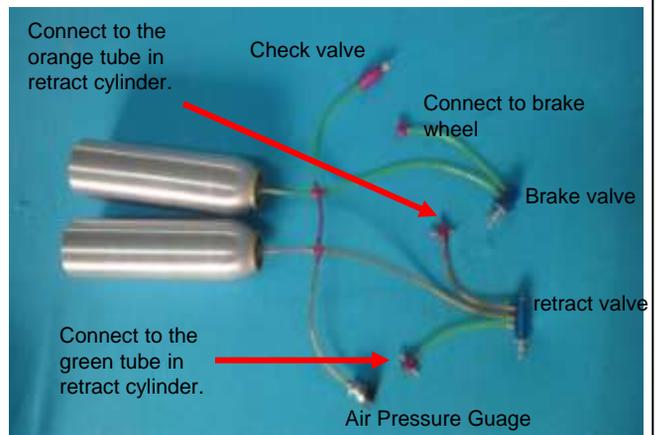
2. Install the servo arm and push rod. Adjust to make the plane can go straight approx. You still can adjust by radio after install it.



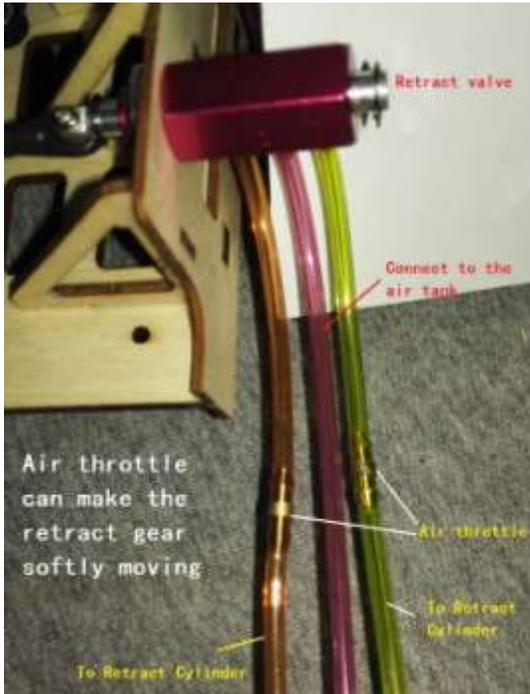
3. Connect the air tube to the retract gear as the photo shows. Note to use the different color tube. Red for brake, green and orange for the retract gear.



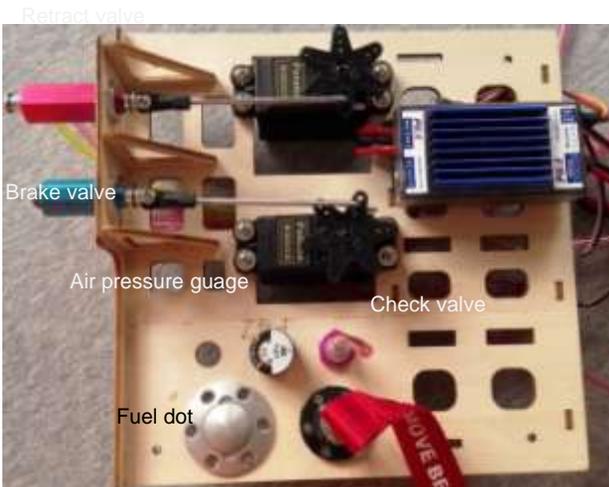
4. The other items connect as the photo shows. These items was put under the canopy. You need to check the tube length before you cut it. Please note the connection from the retract valve to the cylinder. Three cylinder orange tubes must connect to the orange tubes in the valve. Three cylinder green tubes must connect to the green tubes in the valve.



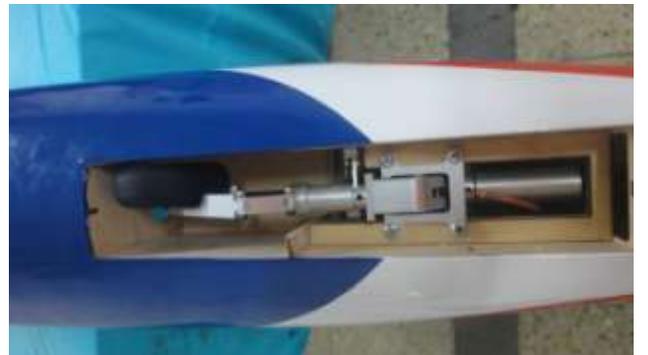
5. Install the air throttle as the photo shows.



6. Install the check valve, brake valve, retract valve, fuel dot, air pressure guage as the photo show. Install the servo for brake and retract valve.



7. Install the nose retract gear to the fuselage.



8. Find the hole between the flap servo bay and the retract gear bay.



9. Put the retract gear air tube from the flap servo bay to the root of the wing. There is a tunnel under the covering as the photo shows.

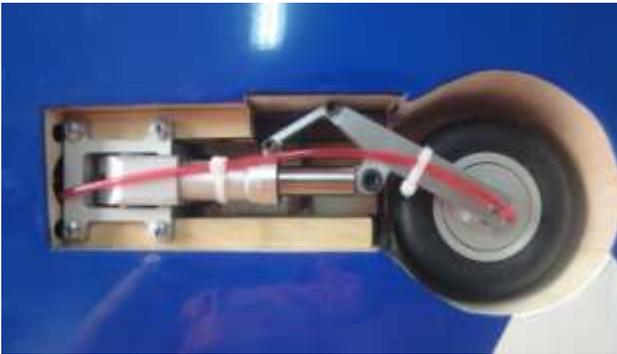


9. Put the retract gear air tube through the hole.

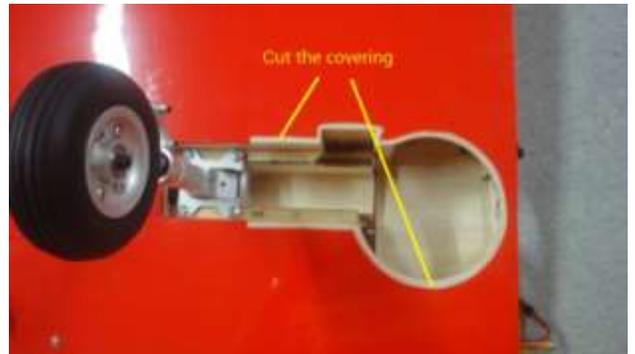
10. This photo shows how the air tube go through the wing.



11. Screw the retract gear to the retract gear bay in the wing. Fix the brake air tube as photos shows.



13. Cut the covering around the retract gear bay.



12. Get the plastic landing gear cover.

14. Apply the 30 minutes epoxy on the bottom of the retract gear bay.



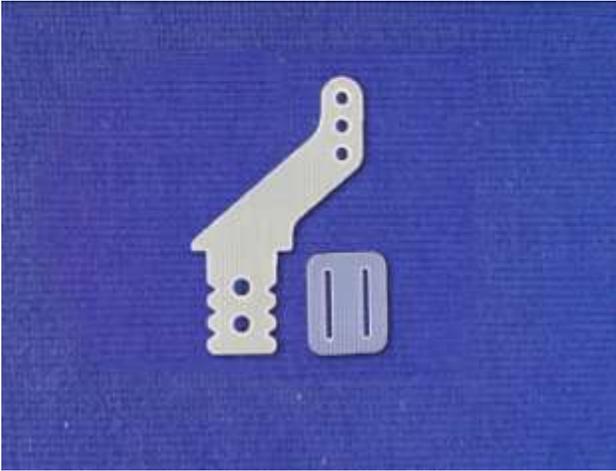
15. Put the retract gear plastic cover into the retract gear bay.



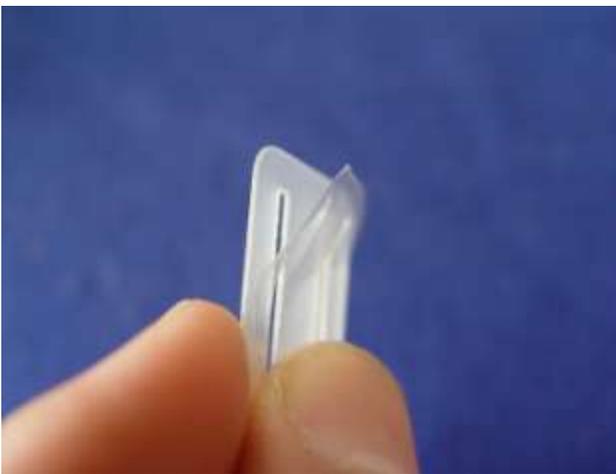
16. Apply the instant adhesive to glue the plastic cover to the wing.



Aileron/flaps Control Horns



1. Tear off the cover on the horns and locking plates



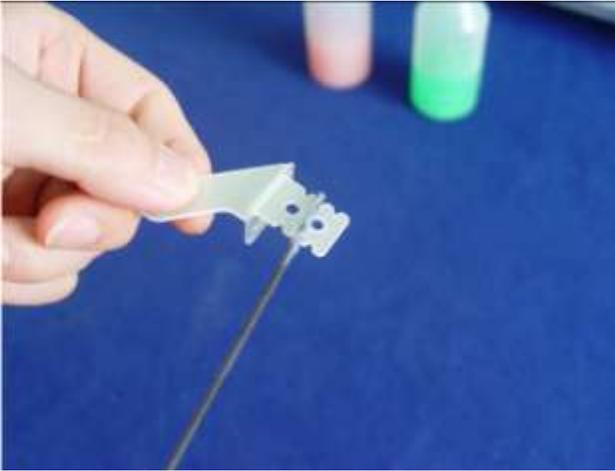
2. Trace around the locking plate with knife and cut off the cover below. Then the pre-cut slots appear



3. Scuff the horns with a piece of sand paper for good glue bond. Then clean up the surface



4. Apply the 30 minutes epoxy inside the pre-cut slot for horn, and coat the horn with epoxy as shown



5. Slide the horn into slot slightly and Mount the locking plate in place. Wipe away excess epoxy with rubbing alcohol



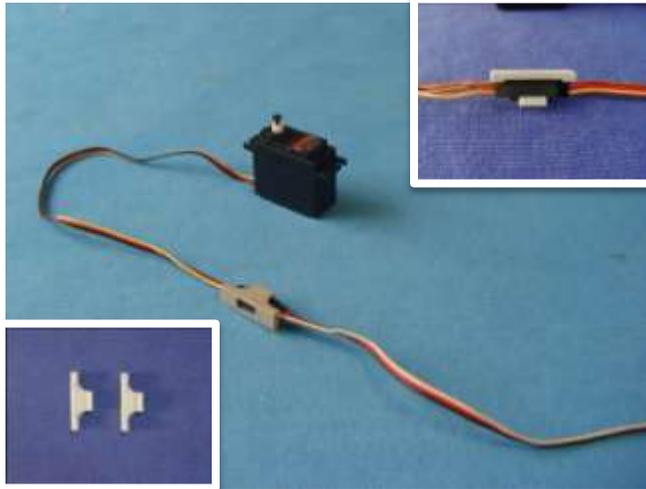
Servo Installation



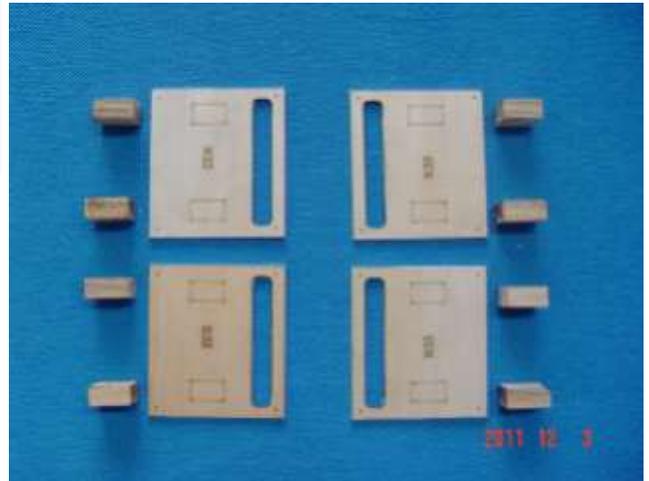
1. Cut out the cover for servo location carefully. Tape the lead to pull-string tightly. In order to ensure the servo wire can be pulled out without hanging up inside wing



2. Lock the connector with the provided safety clip against vibration and loosened tension as shown



5. Find four sets of servo mounting plate.

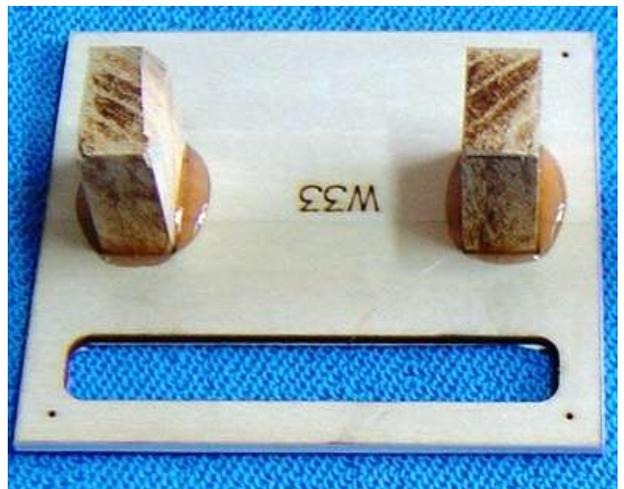


3 Then put the extention lead through the root of wing

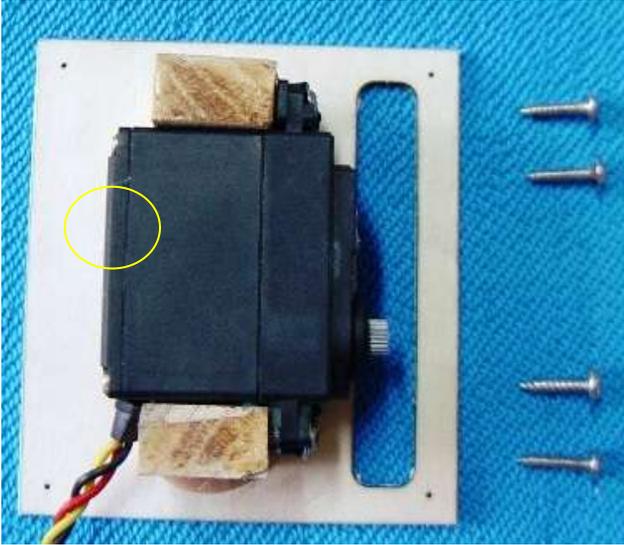


6. Glue two piece of wood to the servo mounting plate as shown

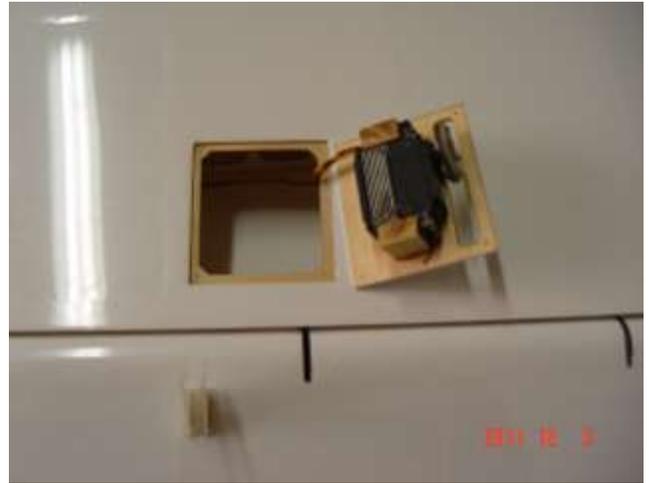
Note: Be sure to glue it strong enough.



7. Use 1mm bit to drill the mounting holes. Then screw four bolts to fix the servo to the servo mounting.



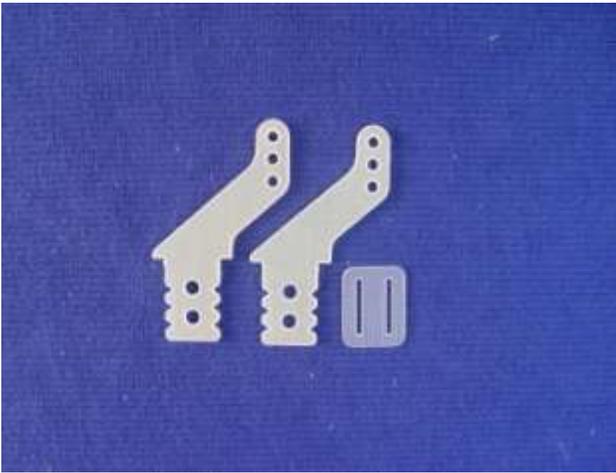
8. Install the servo arms facing toward the wing edge and adjust pushrod in proper length to keep the aileron panel on the neutral position



8. Install servo arm.



Elevator Control Horns



1. Tear off the cover on the horns and locking plates



2. Trace around the locking plate with knife and cut off the cover below. Then the pre-cut slots appear



3. Scuff the horns with a piece of sand paper for good glue bond. Then clean up the surface



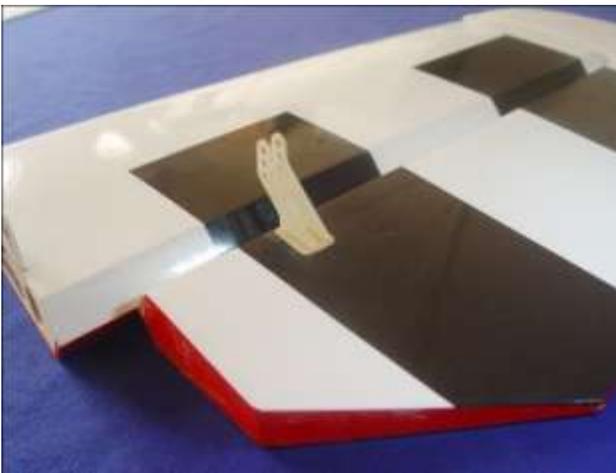
4. Apply the 30 minutes epoxy inside the pre-cut slots, and coat the horn with epoxy as shown



Servo Installation



5. Slide the horns into slots slightly and Mount the locking plate in place. **Align the right and left sides** before epoxy has cured. Wipe away excess epoxy with rubbing alcohol



1. Cut off the cover on the pre-cut slot



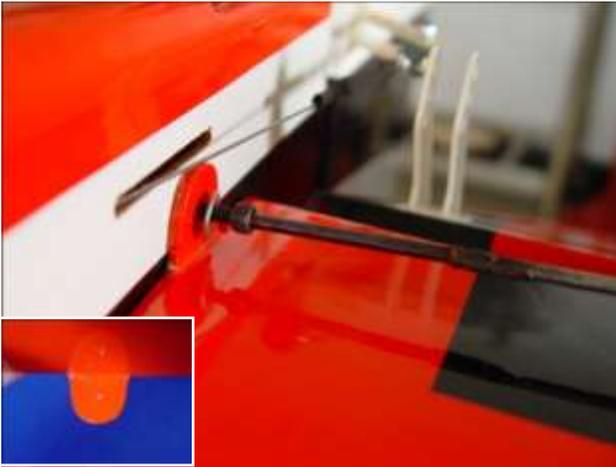
2. Install servos with mounting screws. Face the brand toward the rear of fuse.



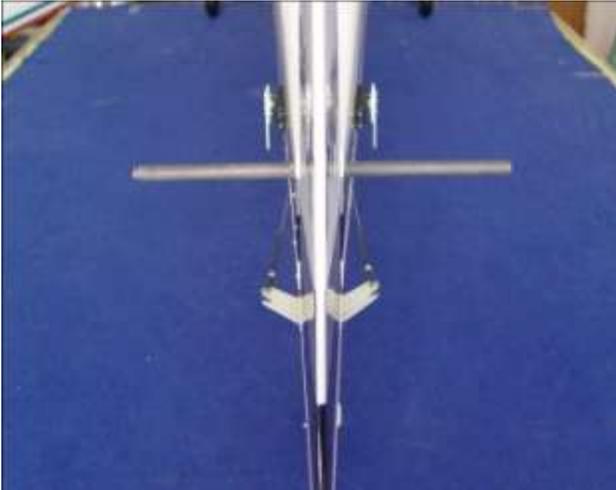
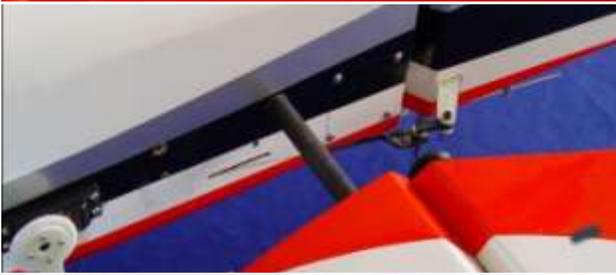
3. Install the servo arm with mounting screw and make it vertical with ground. Adjust pushrod in proper length to keep the aileron panel on the neutral position



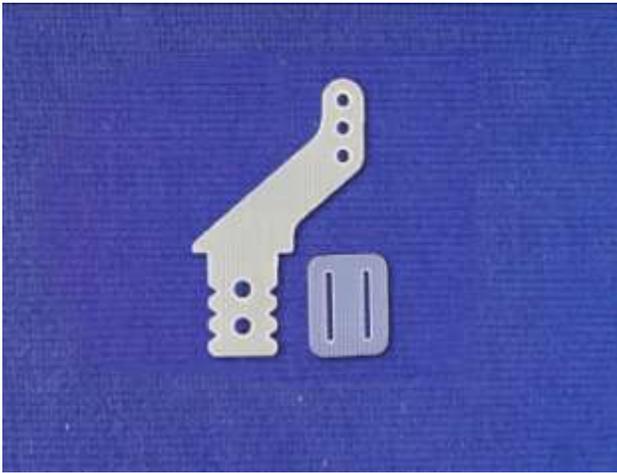
6. Install the stab with mounting bolts and washers



7. Repeat all the step above for the other stabilizer



Rudder Control Horns



1. Tear off the cover on the horns and locking plates



2. Trace around the locking plate with knife and cut off the cover below. Then the pre-cut slots appear



3. Scuff the horns with a piece of sand paper for good glue bond. Then clean up the surface



4. Apply the 30 minutes epoxy inside the pre-cut slot for horn, and coat the horn with epoxy as shown



5. Slide the horn into slot slightly and Mount the locking plate in place. Wipe away excess epoxy with rubbing alcohol



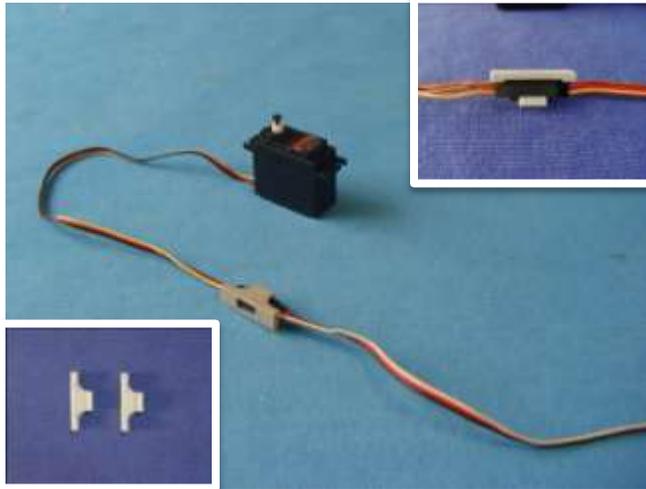
Servo Installation



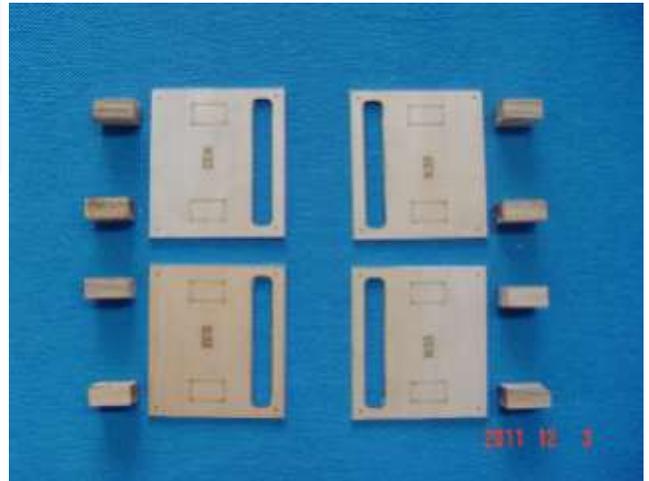
1. Cut out the cover for servo location carefully. Tape the lead to pull-string tightly. In order to ensure the servo wire can be pulled out without hanging up inside wing



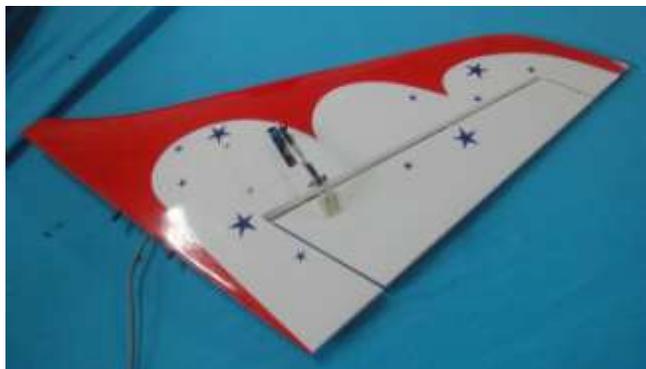
2. Lock the connector with the provided safety clip against vibration and loosened tension as shown



5. Find four sets of servo mounting plate.

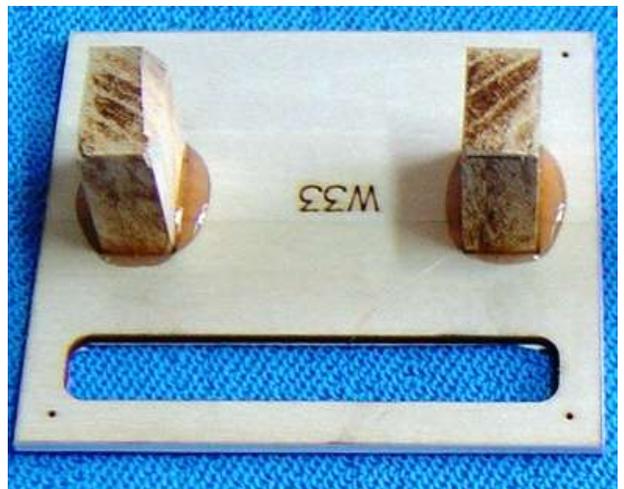


3 Then put the extension lead through the root of rudder

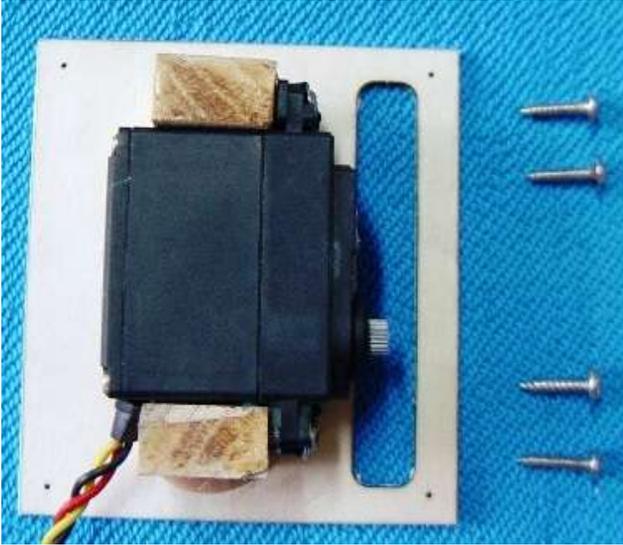


6. Glue two piece of wood to the servo mounting plate as shown

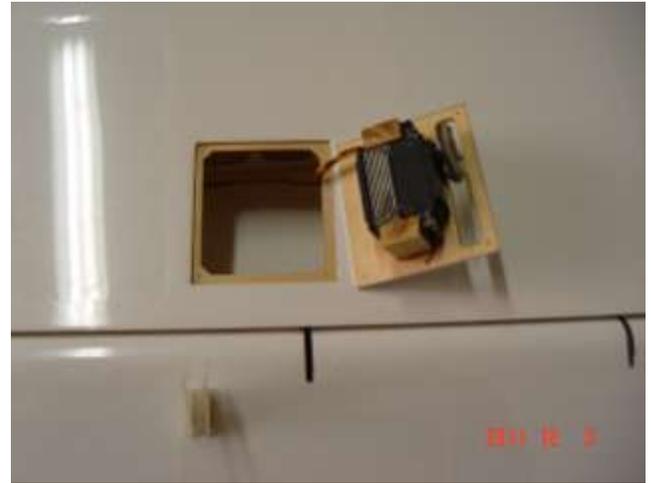
Note: Be sure to glue it strong enough.



7. Use 1mm bit to drill the mounting holes. Then screw four bolts to fix the servo to the servo mounting.



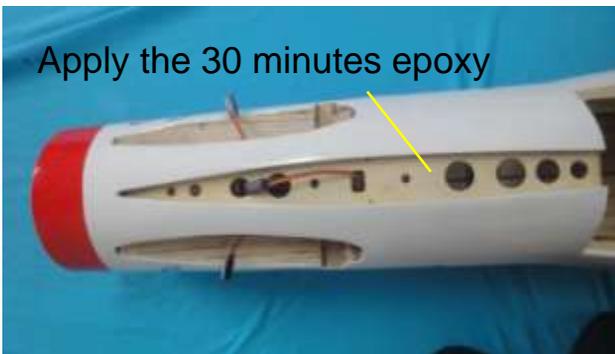
8. Install the servo arms facing toward the rudder edge and adjust pushrod in proper length to keep the aileron panel on the neutral position



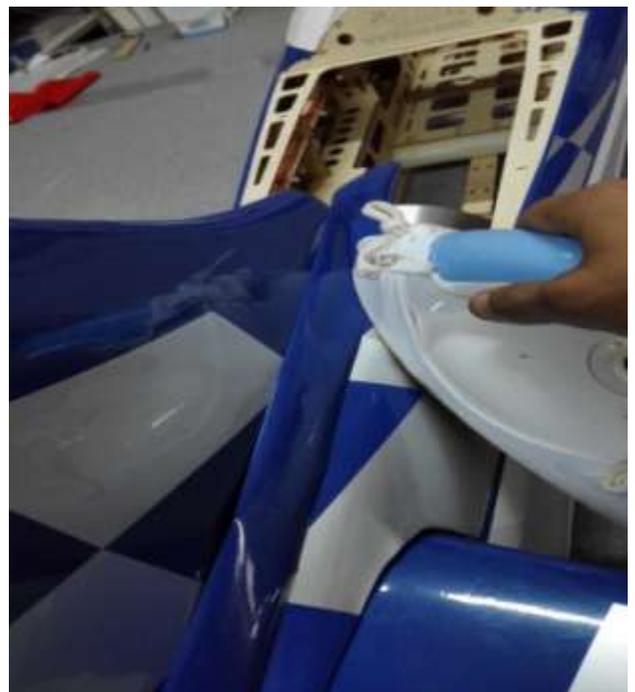
8. Install servo arm.



1, Glue the fin to the fuselage with the 30 minutes epoxy.



Note: Must be sure the fin is vertical with the stabilizer.



Tail pipe Installation

1, Find the tail pipe fixing wood.
Fix to the tail of the fuselage
by six bolt.



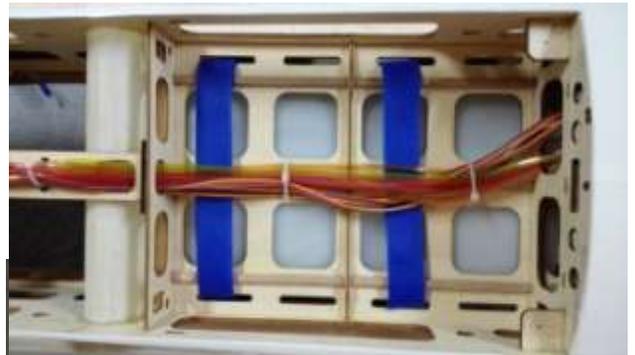
2, Fix the front of the tail pipe to
the fuselage by four bolt.



There are precut hole on the fuselage for all the wire . Show as the following photo.



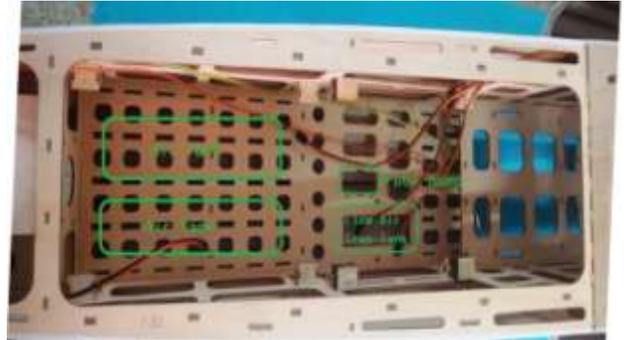
The wing servo wire and retract air tube go through the bottom of the fuel tank. Show and the photos.



Mount the turbine to the fuselage. Please note the gap should be 2cm as the photo shows.



Install the air tank, flow air trap tank, fuel pump on the first floor under the canopy as the photo show.



Screw two set of wood to the 2nd floor understand the canopy. Install the battery, receiver as the photo shows.



The Dolphin jet come with the cockpit . It does not preinstall in factory so you can put the pilot and instrument board in the cockpit.



Put the cockpit into the canopy. Apply the instant adhesive to glue it.



Note: Navigate Light sell separately,
Not come with the plane. You can
Email Tony (info@pilot-rc.com) to by
it.

Total 7 LED light as shown below



The LED light connect as shown.

Note:

- 1, the LED light only use 7.4V battery.
- 2, The LED light can work without radio control switch. It will power on once you connect the power to the LED light.
- 3, If you want to use the switch by radio control. You must power on the receiver at the first, then connect the LED light power. Or the switch can not control the LED light.

LED Light for Dolphin Jet Connecting Direction

Switch on or off, connect and control by radio channel

Must power on the receiver at the first, then connect the LED light power. Or the switch can not control the LED light.

Power supply
only for 2s 7.4-8.4V

red, no flash, for rudder

white, no flash, for front landing gear

white, no flash, for fuselage tail

red, flash for left wing

green, flash for right wing

red, flash, for top of the fuselage

red, flash, for bottom of the fuselage

Tail LED light :



Rudder LED light :



Nose landing gear LED light :



Fuselage bottom LED light :



Nose landing gear LED light :



Fuselage top LED light :



Center Of Gravity

The center of gravity is marked on the root of the wing. Near to the wing tube as shown.



Your balance at the CG will determine batteries final mounting location .

- After you set the given control throws up and have a few flights under you belt, you can change the amounts as well as moving the CG as you like.

The First Flight set up

Throttle: Adjust idle –full

Elevator: 25 Degrees on High rate
12 Degrees on Low rate

Aileron: 25 Degrees on High rate
12 Degrees on Low rate

Rudder: 40 Degrees on High rate
20 Degrees on Low rate

Take off flaps setting:

Flaps: 18 Degrees down

Elevator: 2 Degrees up

Landing flaps setting:

Flaps: 39 Degrees down

Elevator: 5 Degrees up

- We suggest you do not use the flaps to take off for the maiden flight. And check both high rate and low rate flaps setting in the sky before landing.

- Make sure you have the right model programmed into your transmitter
- Check the direction of each surface not and also right before you take off .
- Remember nothing wrong on the ground ever improves in the air
- Check the air plane with the engine running and do a range check with
 - your body between you and the plane at 150 feet.
- Check your battery voltage after each flight in case one servo is draining your battery
- Recheck all screws ,horns and linkages for slop after your maiden flight and check for damage if you made a bad landing you first time
- Have an experienced pilot fly it for you the first time if you have any doubts in your mind about the maiden flight
- Take a break after you first flight and let the adrenaline burned off by bragging to your fellow members how good it flies
- Fly low and at a medium speed on your first few flight
- Listen to your engine run and have an observer with you to remember what you talked about during the flight or if you get into trouble . Always balance your props, vibration is a killer.
- Remember nose heavy airplanes fly all the time, tail heavy airplanes fly only once. Be on the CG!
- Flying two mistakes: high in the beginning and not close to people, planes or runways. Being a center of the runway hog does not endear you to many modelers.