Piper J3

Assembly Manual

Color Y

Color W

Color R

Caution!

You should not regard this plane as a toy!

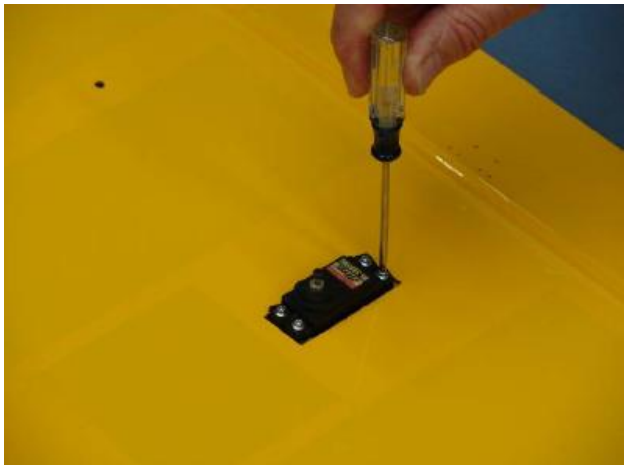
To ensure safety, please read this instruction manual thoroughly before assembly.

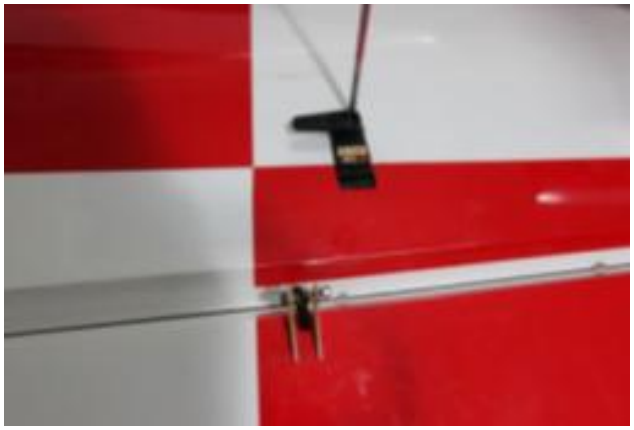
Building and operating a model plane requires diligent practice and correct guidance. An inexperienced flyer can cause serious injury and property damage.

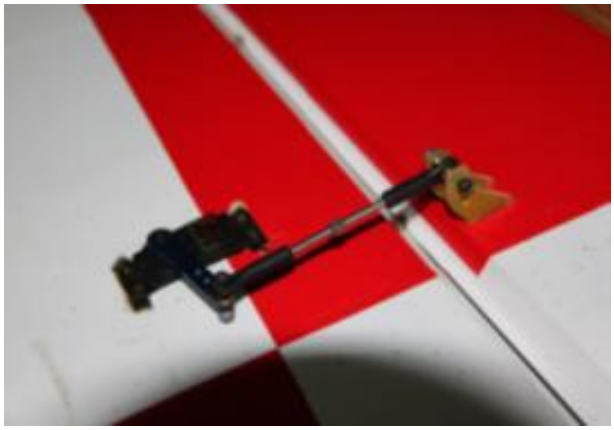
Seek the assistance of an experienced RC pilot or model airplane club for help with assembly, operation and maintenance to ensure your flying experience is both enjoyable and safe.

Fly only in AMA (Academy of Model Aeronautics) approved areas. Approved areas or areas approved by the Model Association of your country.

Main wing assembly







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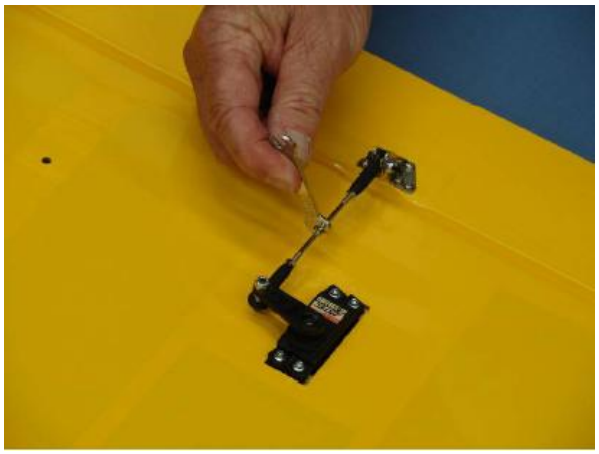
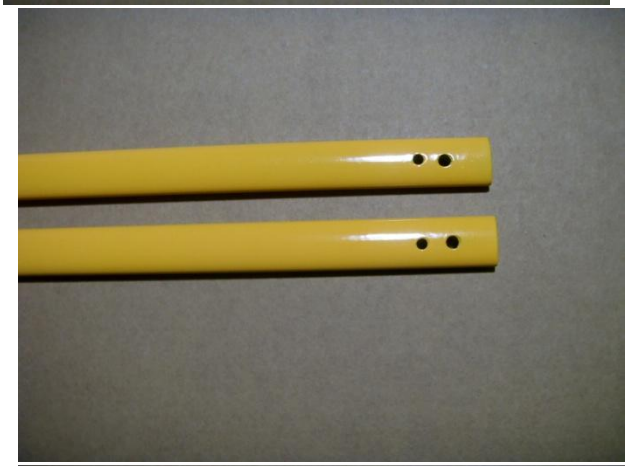
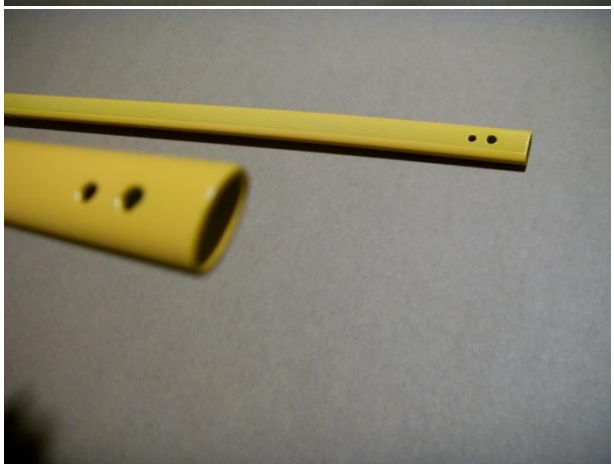
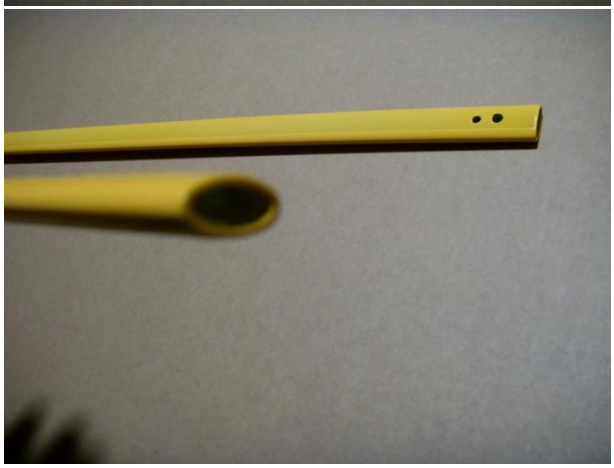


- **Put the servo into servo hole. Drill holes for servo mounting screws.**
- **Install servo with servo mounting screws. Repeat servo installation process for all aileron and flap servos.**
- **Install the control horn.**
- **Adjust the horn and servo arm. Fix the horn in place firmly. Install the ball link and push rod . Make sure it's firm and flexible. (we have the Turnbuckle wrench available separately. Please contact the distributor to get the quote.)** 
- **Repeat the previous steps for the other wing. Please install the wing tube and wing bolts in the final assembly.**
- **Do the same on the elevator and rudder**

Strut assembly and installation

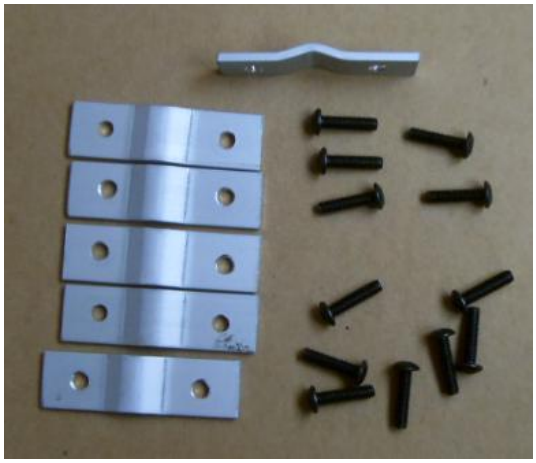


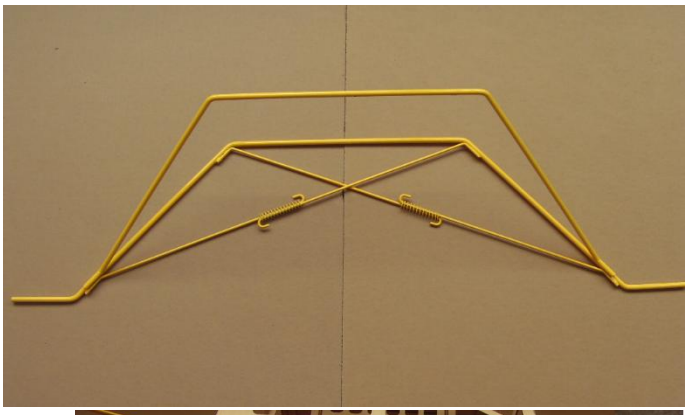


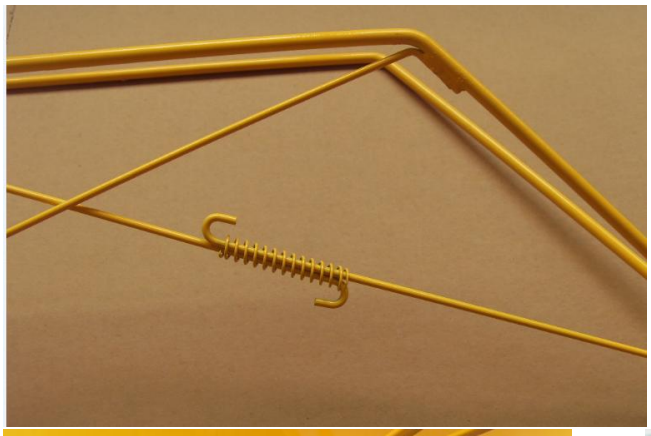


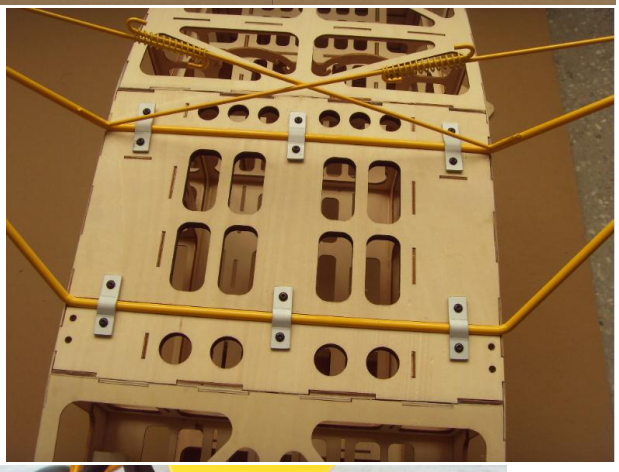
- **Find out the strut parts. Assemble them as shown.**
- **Lock the strut onto the wing with screws.**

Main Landing Gear



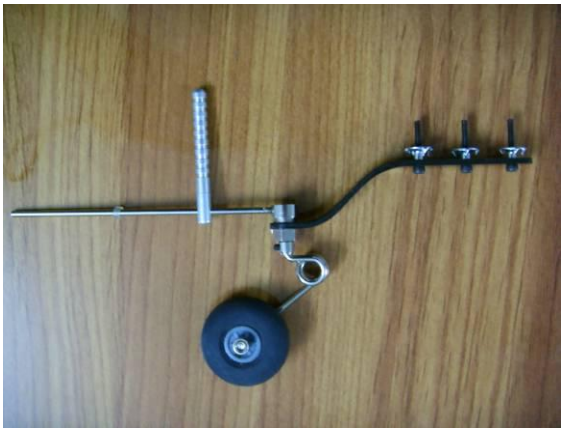


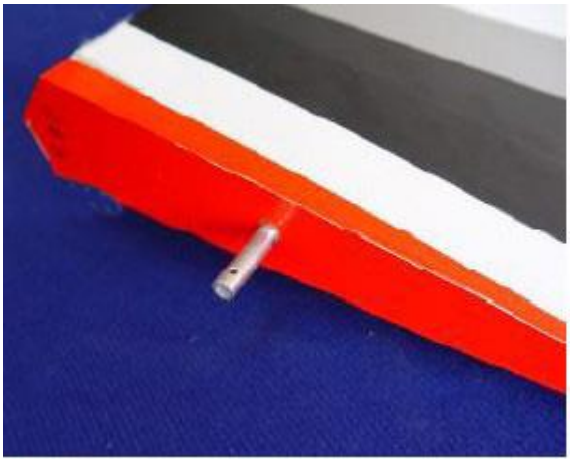




- **Find out the pressures for the landing gear install.**
- **Screw the landing gear onto the fuselage with pressers.**
- **Install the wheels between to wheel collars.**

Tail wheel Unit





- **Drill a hole and make it fit the steering tube. (Do not glue it into position untill the tail wheel installation step is completed.)**

- **Assembled photo for the tail wheel parts.**
- **Use the tail wheel bracket as a template and drill holes for the mounting bolts.**
- **Install the blind nuts through the openning in the rear of the fuselage.**
- **Attach the tail wheel bracket and secure the bolts with Blue Loctite.**
- **Insert the steering arm into the rudder steering tube and position the tube ready for gluing. Tighten the set nuts.**
- **Epoxy the steering tube in place as shown.**

Rudder Installation

Find out the slot pre-opened for rudder control horn, remove the film

Fit the control horn into the slot, measure the correct length for it

Cut the longer part. Glue the horns into the rudder of each side

Repeat the same method on the other side of the rudder.

Thread the cable connecter halfway into the ball link .

Connect the pull-pull wire and control horn with ball link

Drill holes for the mounting screws. Fit the servos as shown with the servo label facing the rudder. Harden the area around the holes with a

drop of thin CA.

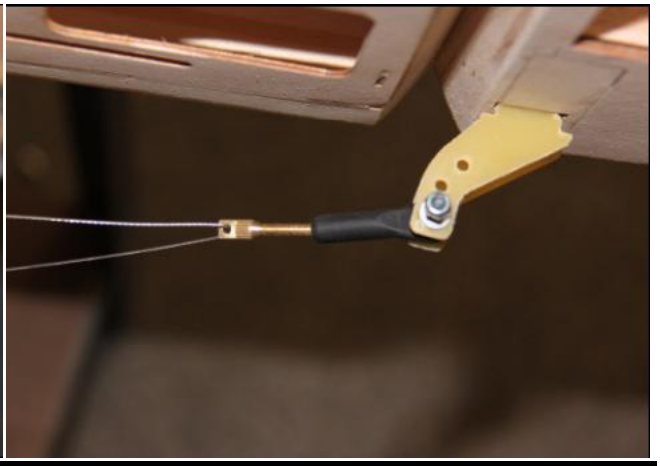
Use brass crimps on each cable and thread, the cable through the end of the pullpull connector.

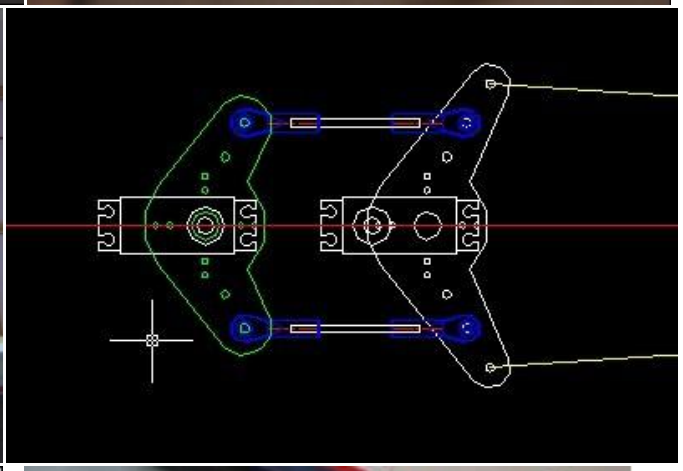
Crimp the brass tube with a crimping tool or pliers

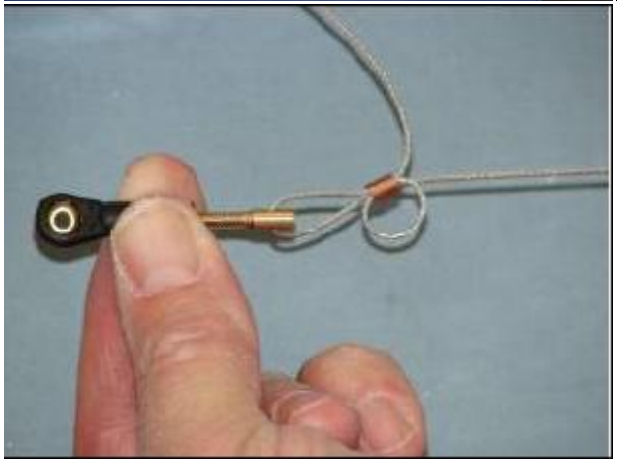
A drop of thin CA may be applied to the brass tube to help secure the cable Install the rudder ball links with bolts and locking nuts.

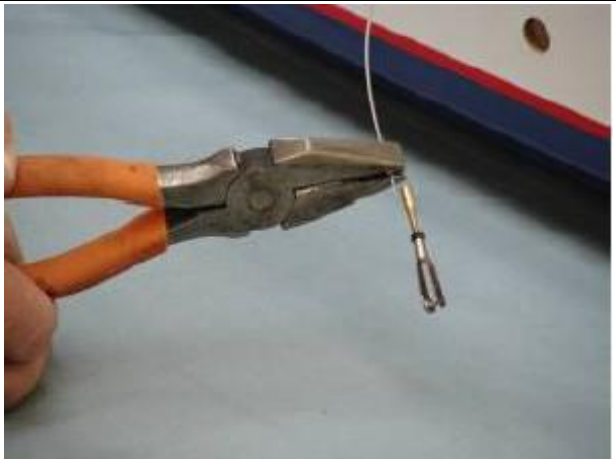
Check the pull-pull cables.

Rudder and the rudder servo should both be in the neutral position.

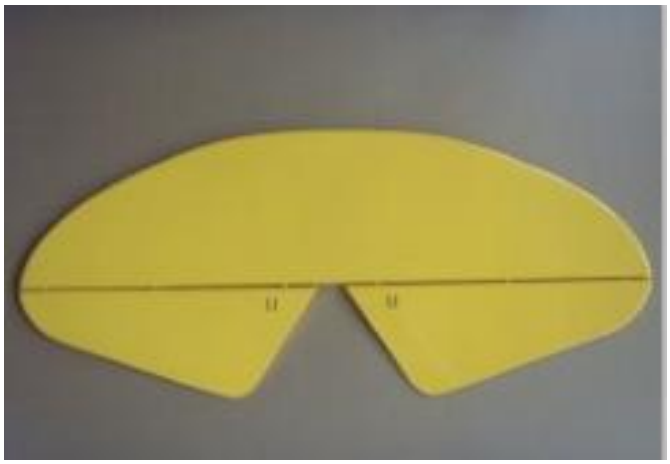


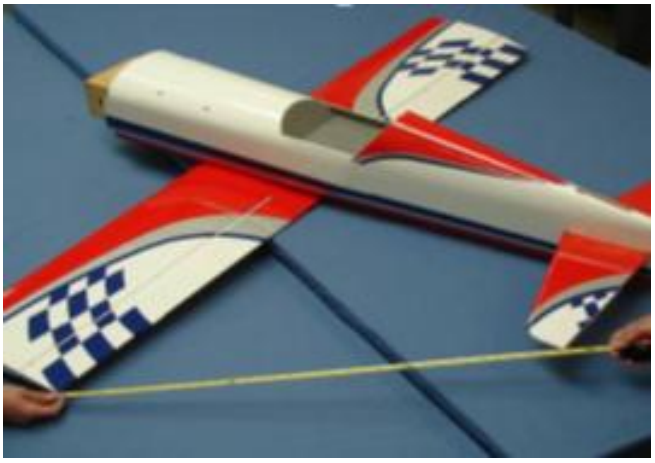


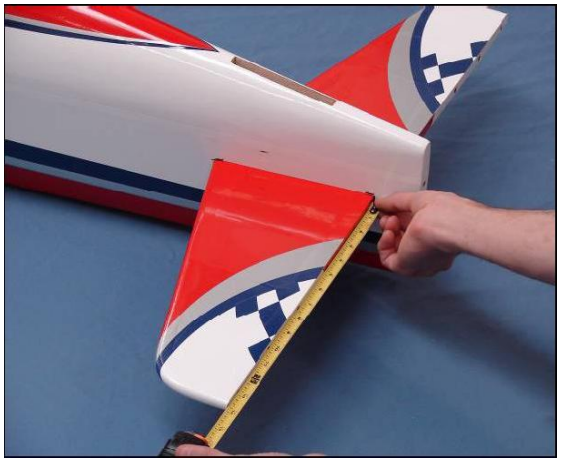




Stab and Elevator installation

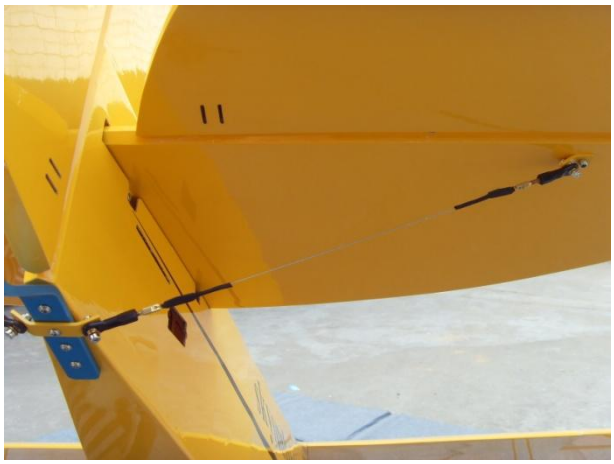


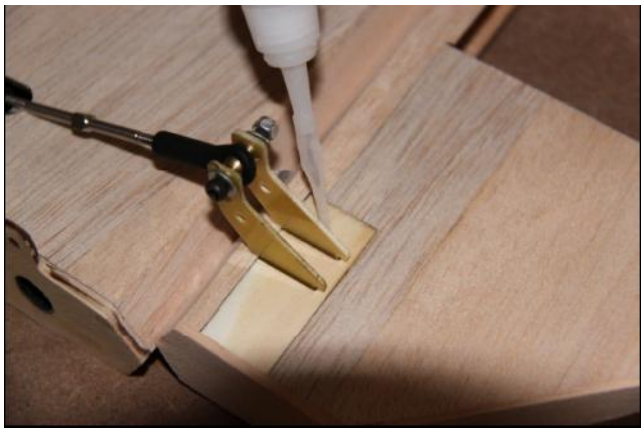




- **Cut out the holes on the elevator**
- **Mount bottom wing to fuselage. Slide the stab through the pre cut stab slot at the rear of the fuselage.**
- **Center stab in fuselage**
- **Align stab to wing. Ensure all dimensions are equal for both left and right sides.**
- **Make alignment marks on stab for easy realignment during the gluing process.**
- **Glue stab into fuselage. Be certain to put glue onto both the top and bottom sides of the stab.**
- **Double check all measurements are equal and stab is properly positioned before glue dries.**

Stab servo and Rudder servo Installation





- **Connect the control horn, pushrod, and ball links.**

- **Put the control horn into the slot, glue it to the stab on each side**
- **Cut out the servo holes in each side of the fuselage tail. Then fix them up as shown**

Engine Installation

Pre-marked holes for the engine, and also there is center line for you to measure if your engine is fit for the screw holes or not.

Insert the bolts through flat fender washers, the firewall and into the engine stand offs. Tighten firmly. Secure mounting bolts nuts with Blue Loctite.

Use a bit to drill a pushrod exit hole on the firewall in line with the engine carburetor throttle arm.

Attach the ball link to the throttle pushrod and secure to the carburetor throttle

arm with a bolt and nylon lock nut.

Insert the throttle servo into the servo mounting tray with an output arm forward. Insert the throttle pushrod into the servo arm easy link.

Mark a line for the throttle servo tray, then glue it to the fuselage.

Use a drill to drill the servo mounting holes. Install the servo with servo screws.

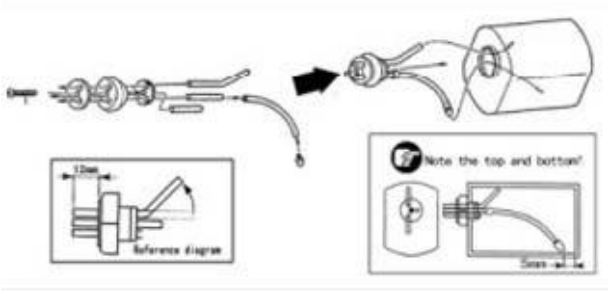
Insert the throttle pushrod into the servo easy link. Move the servo arm to the center position. So that carburetor is half open. Tighten the easy link set screw.

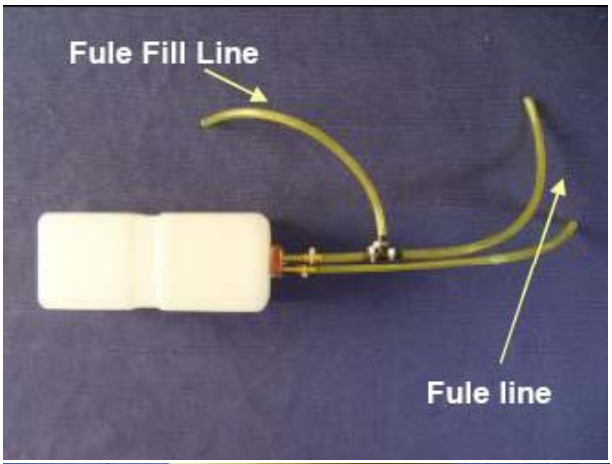
Fuel Tank

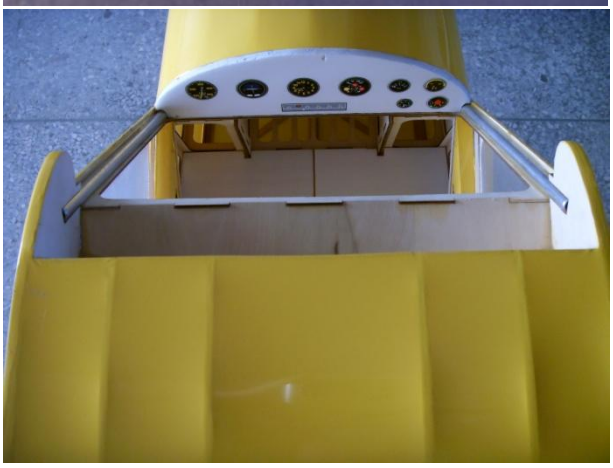
Install the inside parts of fuel tank as shown.

Assemble the outside fuel pipe as shown.

Tighten the velcro ties secure the fuel tank.



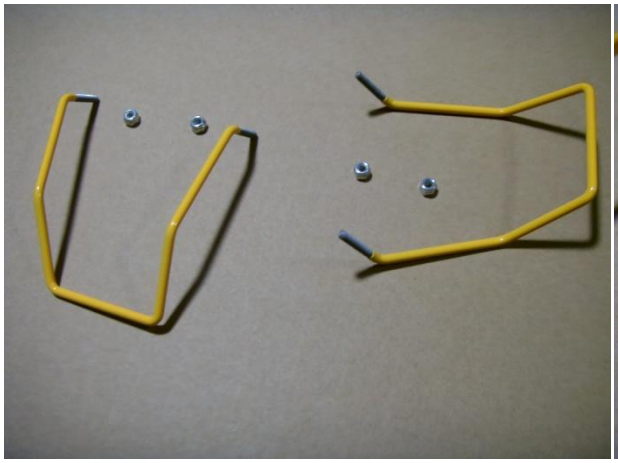


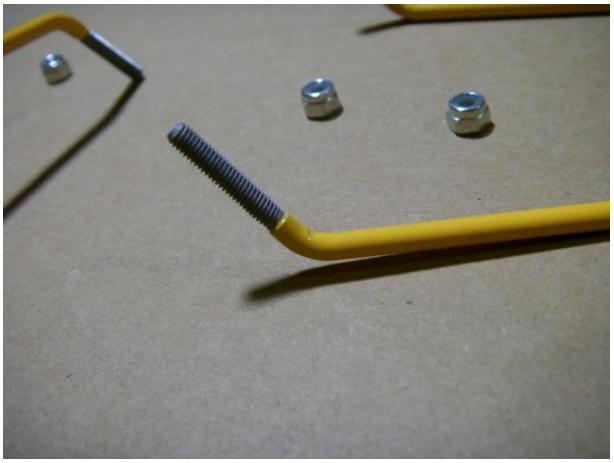


Stairs

Find out the stairs and the self-tapped screw.

Lock the stairs onto the wings at back side.





Windows and doors





Find out the doors and windows

Install the hinges and the locks as shown

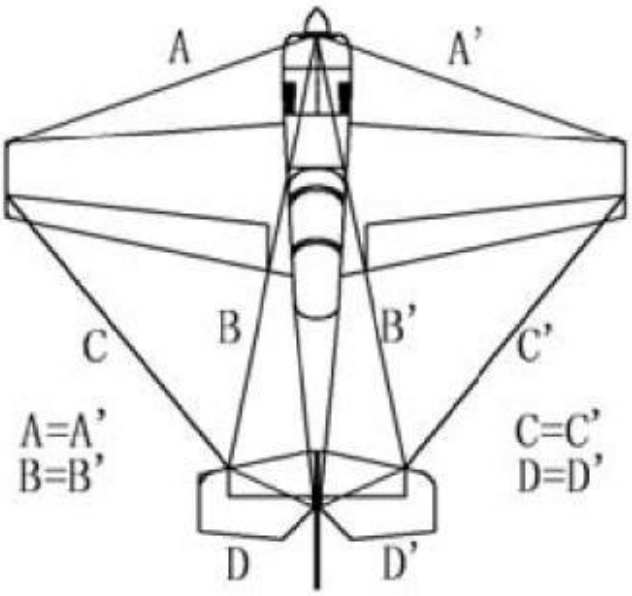


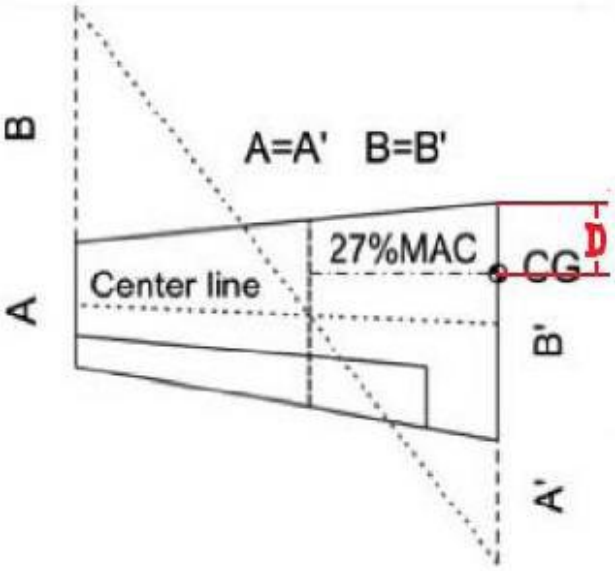

sky




Center of Gravity
The center of gravity is on the rear of the wings tube.

Your balance at the CG will determine the fin al mounting location for batteries. Mount batteries and secure with Nylon zip ties.





Measuer the CG from the leading edge of wing root rib. Adiust the battery pack location. For CG proper position should be at 27% MAC. This recommendation balance point is for your first flights. The CG can be moved around later to fit your personal taste.

Piper J3 100CC D = 180 mm

Piper J3 35CC D = 105mm

Power on to trim your plane.

1. Range check the radio (test whether the Engine/Motor is running or not).
2. Ensure that the serveos and control surfaces move smoothly and in the correct direction.
3. Adjust the servo throw. The chart below is the recommended throws for the first flight. You can adjust the servo arms and control horn length later to fit yout flying style.

Control Throw:

	Surface	Throws	Exp
Common flying	Ailcron	20 degrees	25%
	Elevator	20 degrees	25%
	Rudder	30 degrees	30%

3 D flying	Aileron	40 degrees	45%
	Elevator	40 degrees	45%
	Rudder	45 degrees	45%

Trail run the Engine to check its stability at high speed and low speed to ensure there are no problems with vibration on the model. Run the motor at high speed about 30 min, check the Engine and make sure the temperature is below the prescription of manufacturer.