

RADIO CONTROL MODEL
ASSEMBLY INSTRUCTIONS

Wasp

TRAINER ———
Almost ready-to-fly

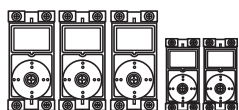
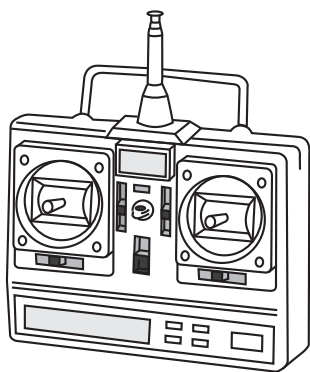


Wingspan 1520mm
Fuselage length 1105mm
Engine: 40 - 46 2T / 52 - 60 4T
Electric Motor: 600-700W
Radio: 5 channel / 4-5 servo
RC Functions: Rudder - Elevator - Aileron - Throttle



WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if you are unexperienced.

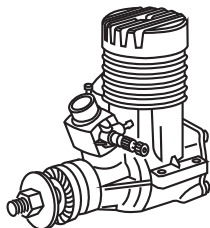
REQUIRED FOR OPERATION (Purchase separately)



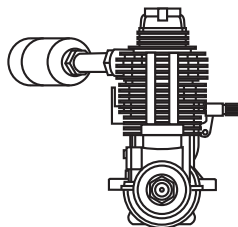
Radio a 5 channel (min)
4 servo (Motorx1, Rudderx1
Elevatorx1, Aileronx2: mini
or standard servo.



10.5x6 for .40 - 2 cycle engine
11x6 for .46 - 2 cycle engine
11x7 for .52 - 4 cycle engine
12x7 ~13x6 - Electric motor



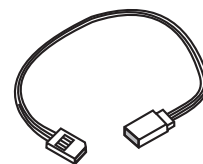
.40 - .46 - 2T



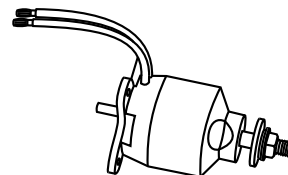
.52 - .70 4T



Silicone tube



Extension for aileron servo.



Brushless Motor
600-720W
or equivalent.
LiPo 4500 mAh (5-6)S

GLUE (Purchase)



Silicon sealer

Cyanoacrylate
Glue



Epoxy glue (5 minute type)
Epoxy glue (30 minute type)

TOOL REQUIRED

Hobby knife



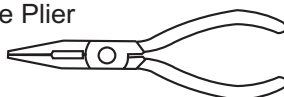
Phillip screw driver



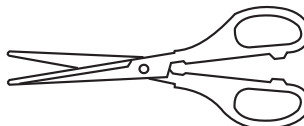
Hex Wrench



Needle nose Plier



Scissor



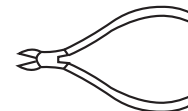
Awl



Sander

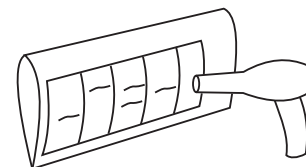


Wire Cutters



Masking tape - Straight Edged Ruler - Drill and Assorted Drill Bits

If exposed to direct sunlight and / or heat, wrinkles can appear. Storing the model in a cool place will let the wrinkles disappear. Otherwise, remove wrinkles in covering film with a hair-dryer, starting with low temperature. You can fix the corners by using a hot iron.



Drill holes using the stated
size of drill
(in this case 1.5 mm Ø)



Take particular care here



Hatched-in areas:
remove covering
film carefully



Check during assembly that these
parts move freely, without binding



Use epoxy glue



Apply cyano glue



Assemble left and right
sides the same way.



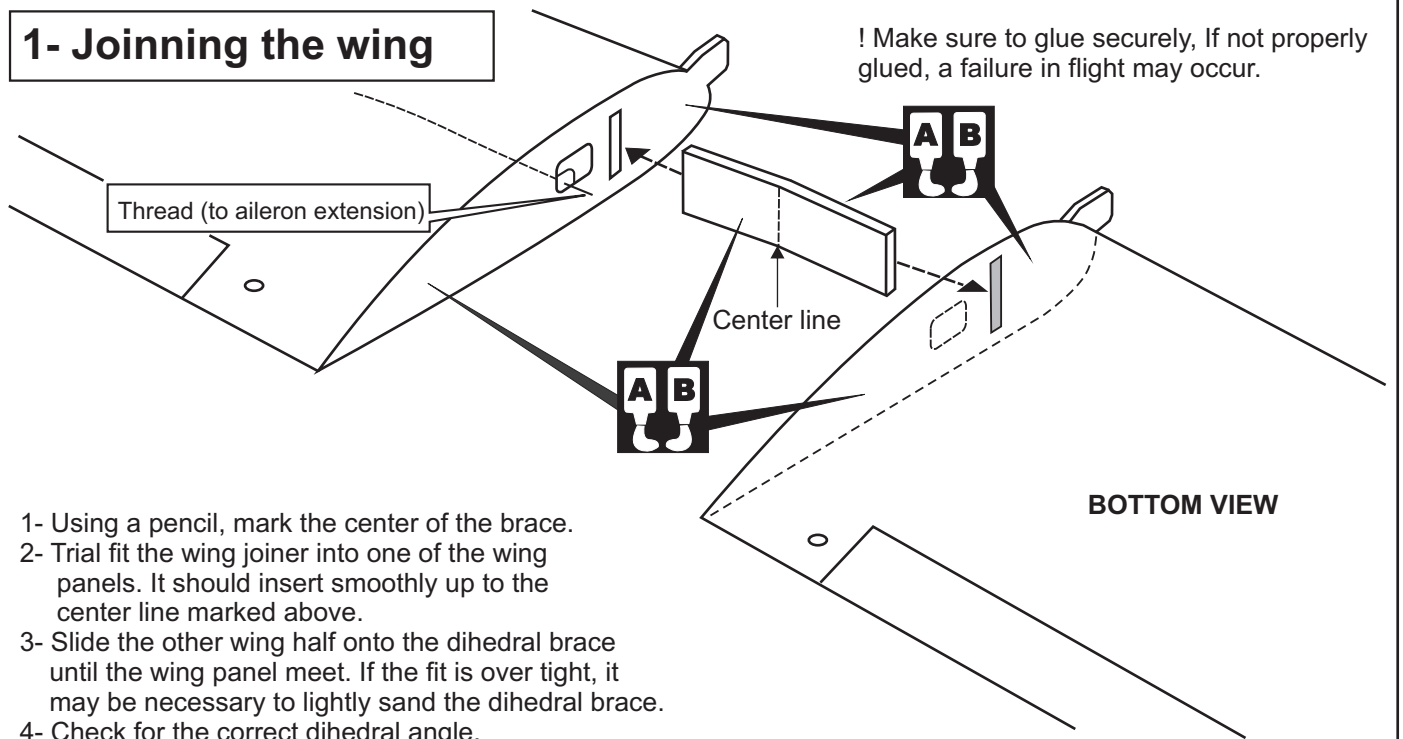
Not included.
These parts must be
purchased separately

Read through the manual before you begin, so you will have an overall idea of what to do.

TABELLA DI CONVERSIONE

1.0mm = 3/64"	3.0mm = 1/8"	10mm = 13/32"	25mm = 1"
1.5mm = 1/16"	4.0mm = 5/32"	12mm = 15/32"	30mm = 1-3/16"
2.0mm = 5/64"	5.0mm = 13/64"	15mm = 19/32"	45mm = 1-51/64"
2.5mm = 3/32"	6.0mm = 15/64"	20mm = 51/64"	

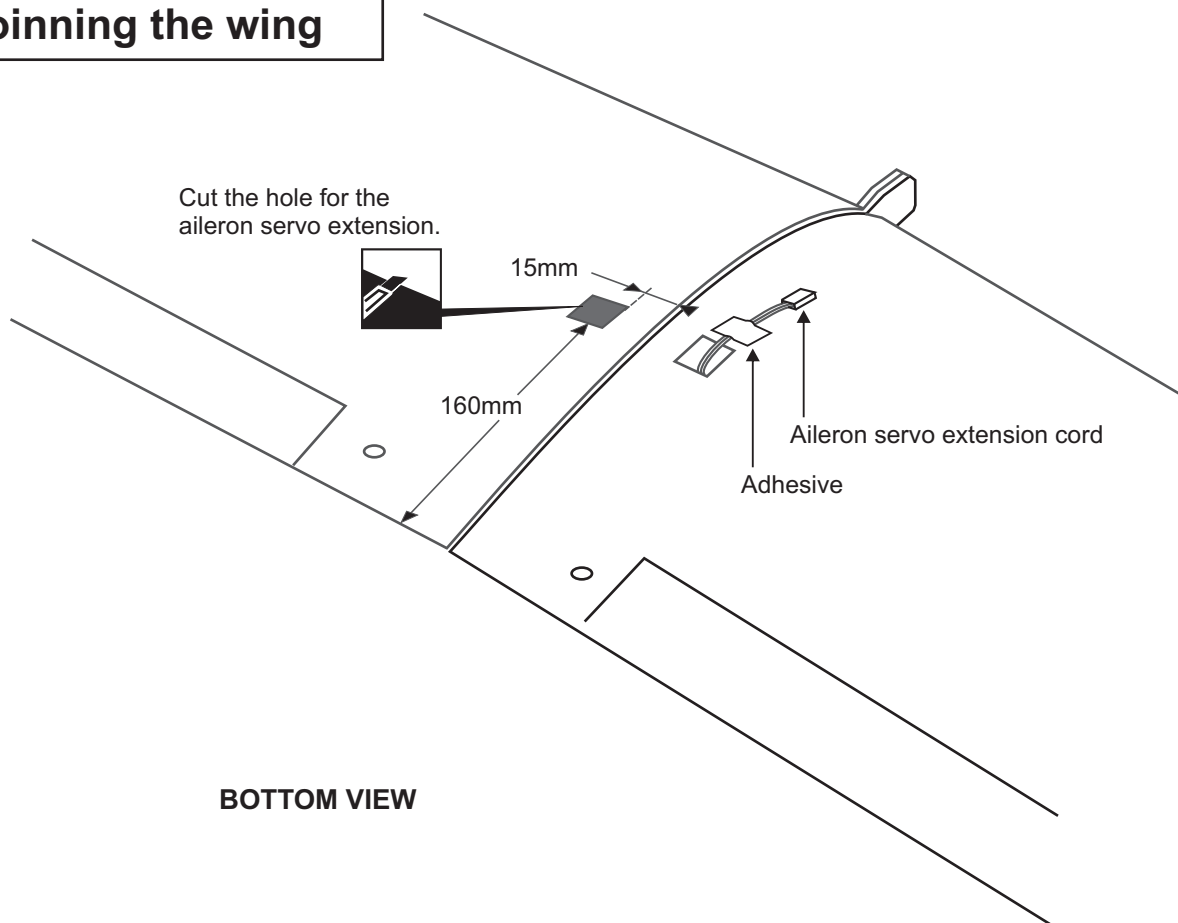
1- Joining the wing



- 1- Using a pencil, mark the center of the brace.
- 2- Trial fit the wing joiner into one of the wing panels. It should insert smoothly up to the center line marked above.
- 3- Slide the other wing half onto the dihedral brace until the wing panels meet. If the fit is over tight, it may be necessary to lightly sand the dihedral brace.
- 4- Check for the correct dihedral angle.
- 5- Mix approximately 30 minute epoxy and apply a generous amount of epoxy into the wing joiner cavity of one wing half.
- 6- Coat one half of the dihedral brace with epoxy up to the center line. Install the epoxy-coated side of the dihedral brace into the wing joiner cavity up to the center line, marking sure that the "V" of the dihedral brace is positioned correctly
- 7- Do the same way with the other wing half.
- 8- Carefully slide the wing halves together, ensuring that they are accurately aligned. Firmly press the two halves together, allowing the excess epoxy to run out. Clean off the excess epoxy.

WARNING: Please do not clean off the excess epoxy on the wing with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

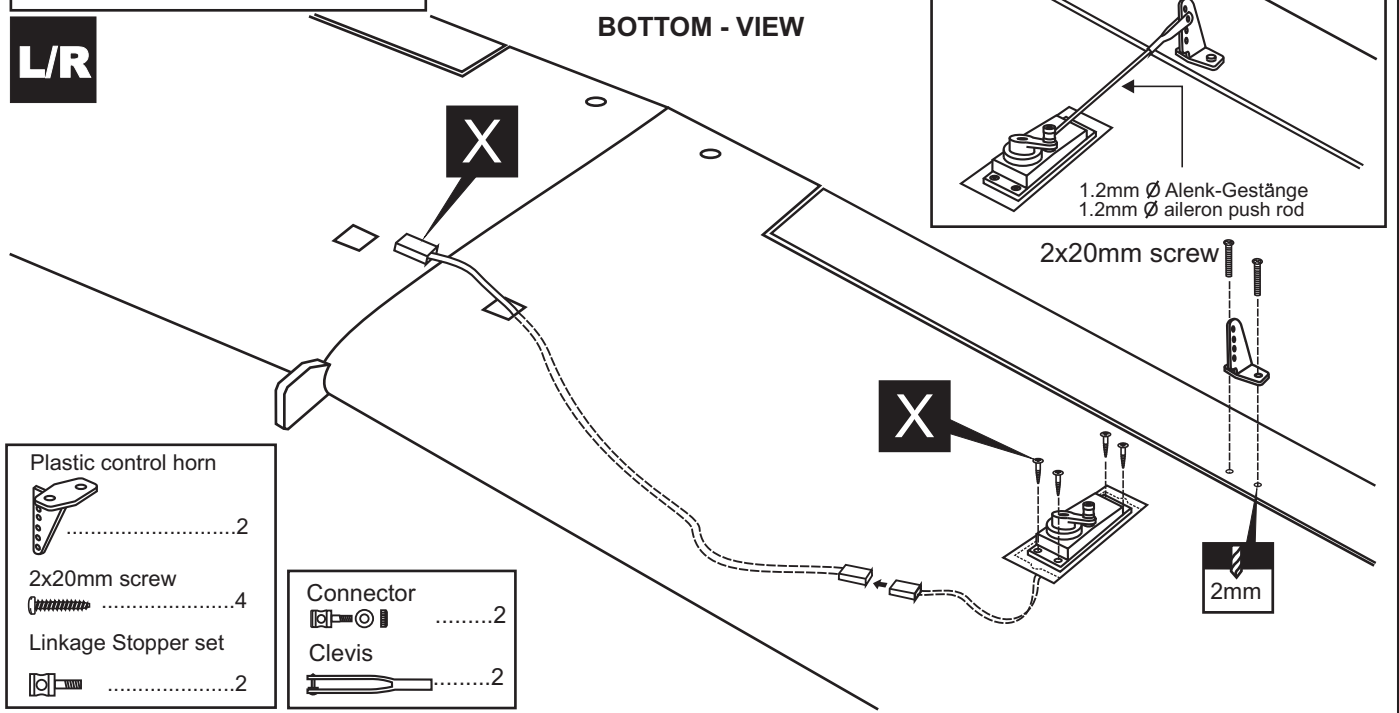
2- Joining the wing



3-Aileron servo

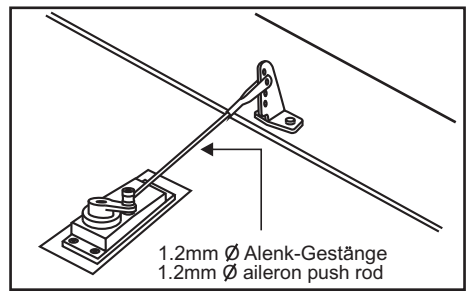
L/R

BOTTOM - VIEW



- Plastic control horn2
- 2x20mm screw4
- Linkage Stopper set2

- Connector2
- Clevis2



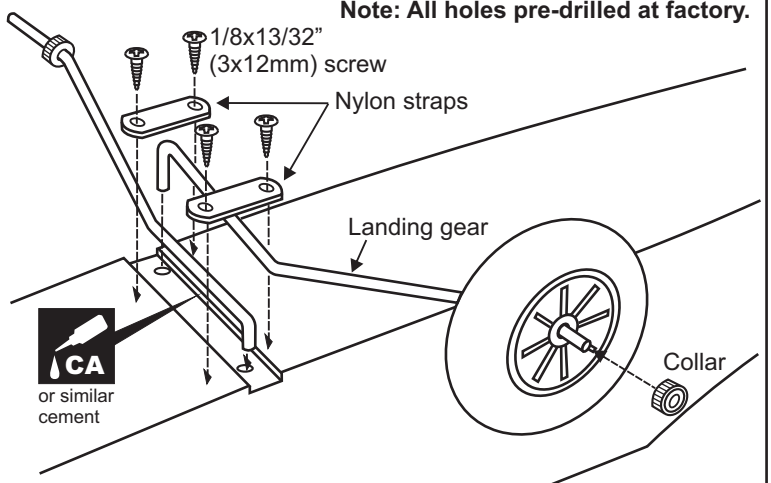
2x20mm screw

2mm

4-Main landing gear

- 5/32" (4mm) collar4
- 1/8x13/32" (3x12mm) screw8
- Nylon gear strap4

- 1- Locate the main landing gear struts and place them into the landing gear slot as show. Make sure that the ends of the struts are inserted into the holes in the landing gear channel.
- 2- Position the four nylon straps across the landing gear struts. Using the eight 3x12mm screws located in the hardware bag, fasten the landing gear to the bottom of the wing as show.
- 3- Slide one wheel onto each of the landing gear axles and secure them with the supplied wheel collars.



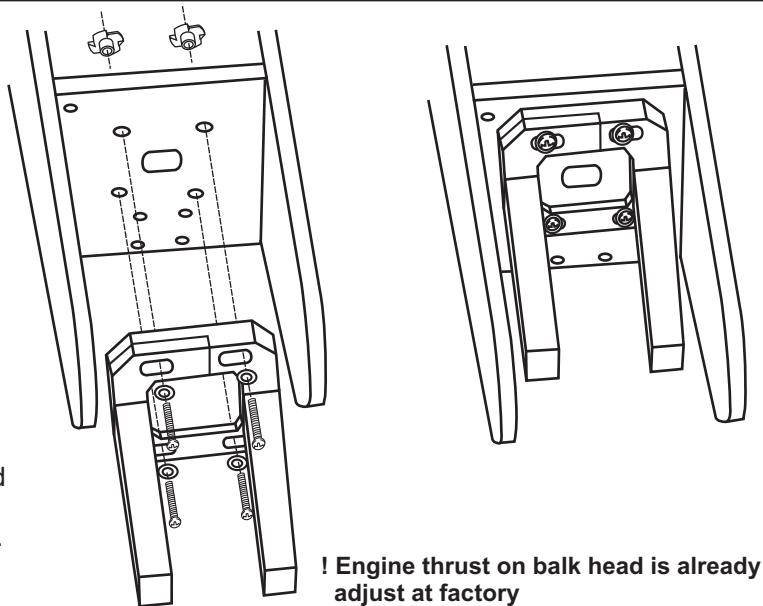
Note: All holes pre-drilled at factory.

*** WARNING:** When removing any covering from the airframe, please ensure that you secure the cut edge with CA or similar cement. This will ensure the covering remain tight.

5-Engine mount

- 5/32x51/64" screw4
- 4x20mm screw4
- Blind-nut4
- 5/32" (4mm) washer4

- 1-Attach the engine mount to the fire wall using the four 4x20mm screws located in the hardware bag.
- 2-Set the engine on the engine mounting beams. Adjust the pacing of the beams so they are centered in the relation to the mounting plate and so they are almost touching both sides of the engine crankcase.
- 3-Remove the engine and tighten the engine mount with four 4x20mm screws.



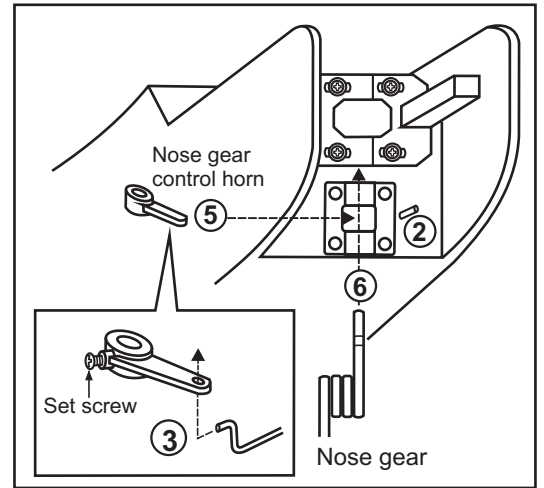
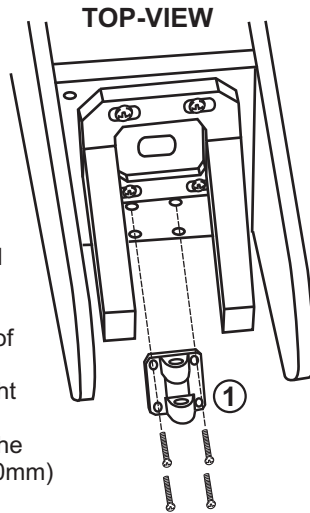
! Engine thrust on balk head is already adjust at factory

6-Nose gear

(1/8x19/32") 3x15mm screw

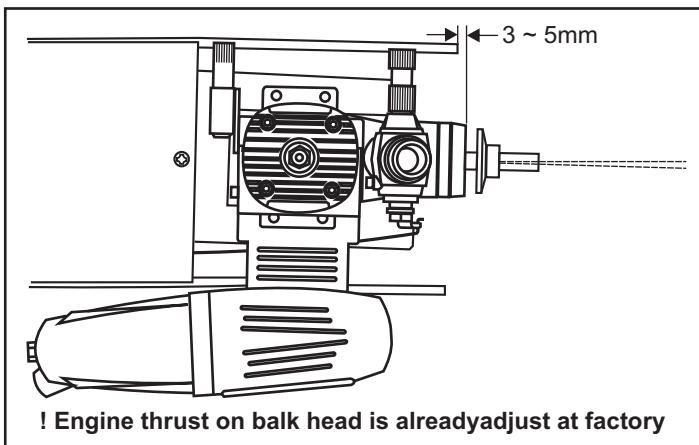


- 1-Securely attach the nose gear mount to the fire-wall using the four 3x15mm screws
- 2-Insert the white plastic tube into the fuselage, through the firewall.
- 3-Insert the Z-bend of the nose gear control pushrod into the hole on the nose gear control horn.
- 4-Insert the pushrod into the plastic tube
- 5-Position the nose gear control horn on the center of the nose gear mount.
- 6-With the screw hole facing forward, slide the straight end of the nose gear on to the nose gear mount.
- 7-When satisfied with the fit and alignment, secure the nose gear control horn in place with 1/8x13/32"(3x10mm) set screw.

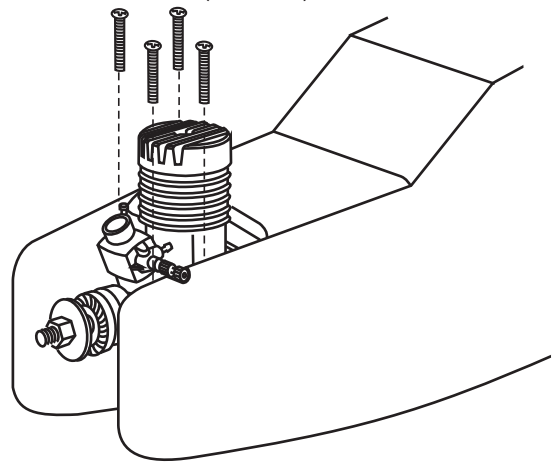


7-Engine

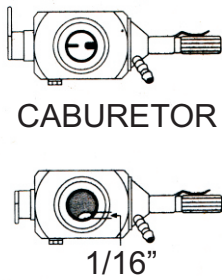
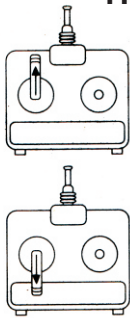
FUSELAGE - TOP VIEW



1/8x25/32"(3x20mm) screw



THROTTLE



1-Insert the Z-bend into the hole on the throttle lever of your engine. Note: It maybe easier to temporarily remove the carburetor from the engine to insert the Z-bend. It may also be necessary to slightly enlarge the hole to accept the Z-bend.

2-Set the engine on the engine mounting beams. Adjust the pacing of the beams so they are centered in the relation to the mounting plate and so they are almost touching both sides of the engine crankcase.

3-Position the engine on the engine mount beams so the distance from the prop hub to the fire wall is 5mm.

4-Using a pencil, mark the engine mounting plate where the four holes are to be drilled

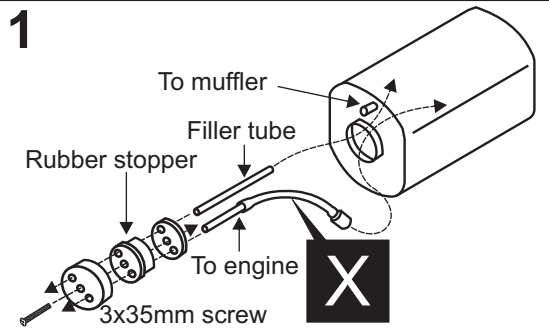
5-Remove the engine and drill a 9/64"(3.5mm) hole through the beam at each of the four marks made in step 4 above.

6-Reposition the engine on the mounting beam, aligning it with the holes. Secure it in place with the four 1/8x25/32"(3x20mm) screws.

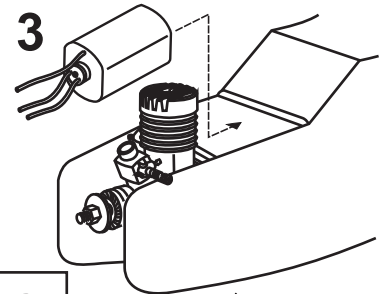
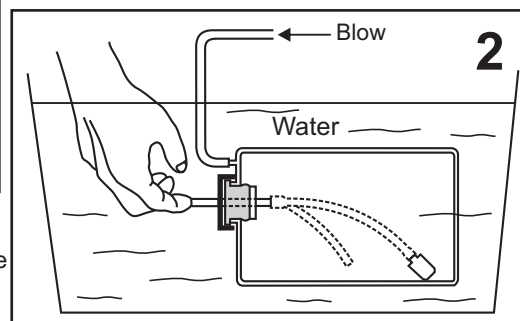
8-Fuel tank

After confirming the direction . Insert this assembly, clunk end first, into the fuel tank and tighten and screw the fuel tank cap on firmly.

Ensure that the fuel tank clunk does not touch the rear of the fuel tank.



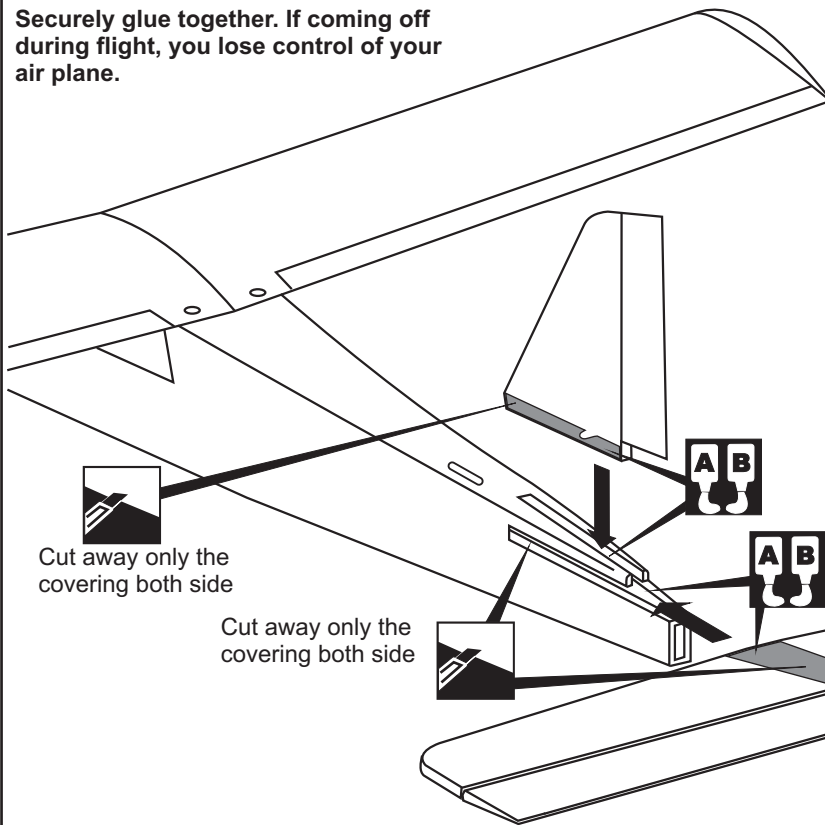
Checking for leaks - block the vents and blow into the feed - if in doubt submersing the tank in a blow of water will show up any problems.



Carefully install the fuel tank to ensure that they will not shift during flight (secure the fuel tank in place using foam padding).

9-Vertical / Horizontal Tail

Securely glue together. If coming off during flight, you lose control of your air plane.

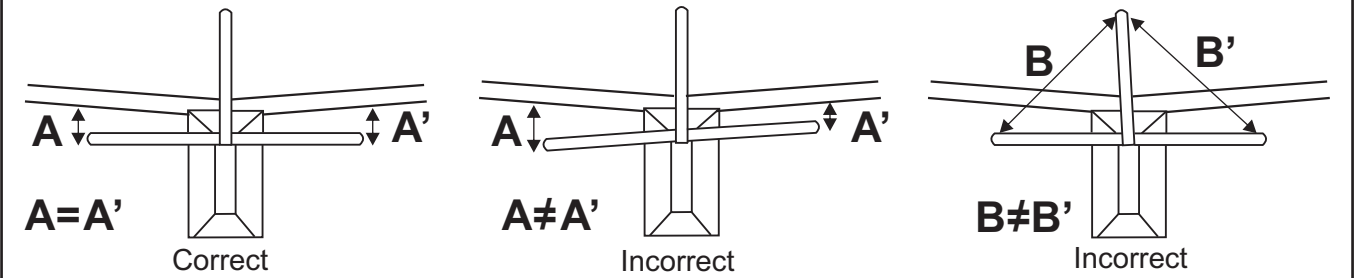


- 1-Trial fit the horizontal stabilizer in place . Check the alignment of the horizontal stabilizer. When you are satisfied with the alignment, use a pencil to trace around the top and bottom of the stabilizer where it meets the fuselage.
- 2-Remove the horizontal stabilizer from the fuselage. Using the sharp hobby knife, carefully cut away the covering inside the lines which were marked above.
- 3-Spread epoxy (30 minute) onto the top and bottom of the horizontal stabilizer along the area where the covering was removed and to the fuselage where the horizontal stabilizer mounts.
- 4-Install the horizontal stabilizer into the fuselage and adust the alignment as described in step 1. Allow the epoxy to cure before proceeding to next step.

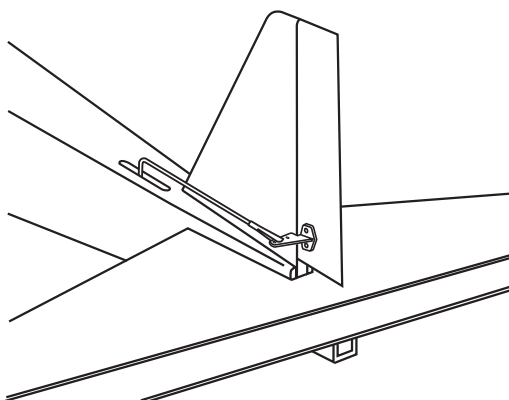
Do the same way with the vertical stabilizer.

*** WARNING: When removing any covering from the airframe, please ensure that you secure the cut edge with CA or similar cement. This will ensure the covering remain tight.**

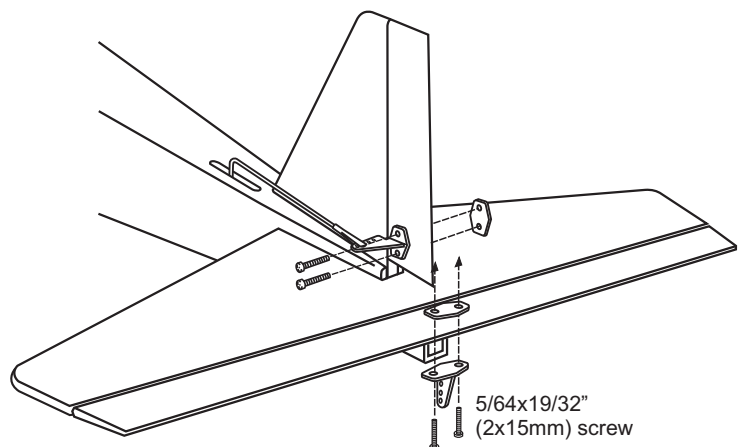
Attach the Vertical Stabilizer and the Horizontal Stabilizer



Check the alignment of the horizontal stabilizer by measuring from a fixed point along the center line of the fuselage to the leading edge on each side of the horizontal stabilizer. The distance must be equal on both sides. If not, adjust the stabilizer until the measurements are the same.



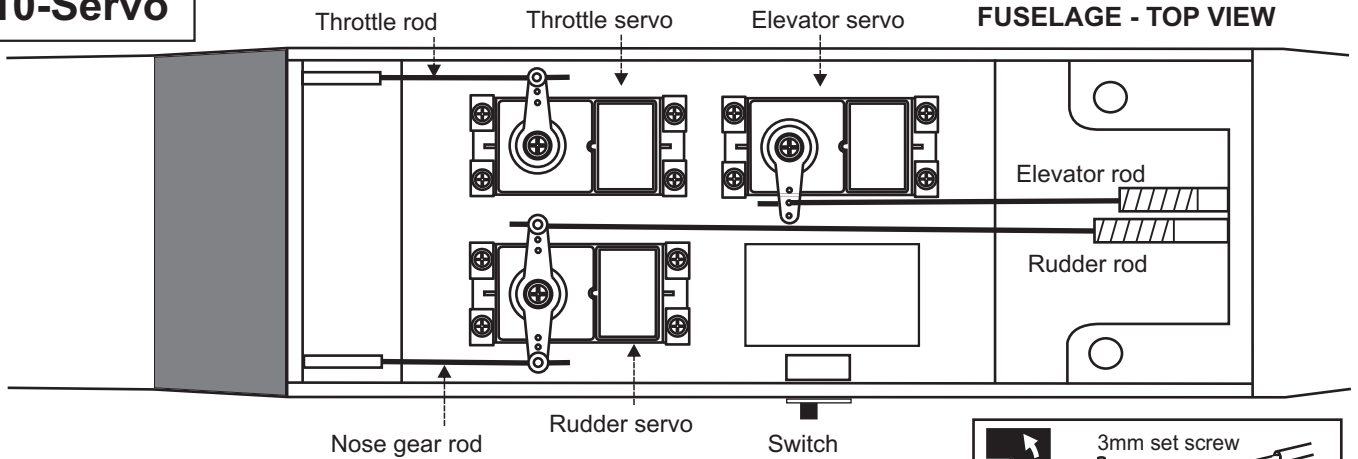
Insert the rudder pushrod, threaded end first, into the fuselage so the threaded rod exits the rudder pushrod slot on the top of the fuselage. Screw on clevis 12 ~ 15 complete turns. Fasten the clevis in the third hole from the inside of the rudder control horn. Mark the location of the control horn mounting hole positions when you are satisfied with the alignment. Remove the rudder control horn and drill these two mounting holes using 5/64" (2mm) drill bit.



Install the rudder control horn using the two 2x15mm screws and the back plate. Do the same way with the elevator control horn.

<p>Hinge Line/Control horn Alignment</p>	<p>Control horn2</p> <p>2x15mm screw4</p>
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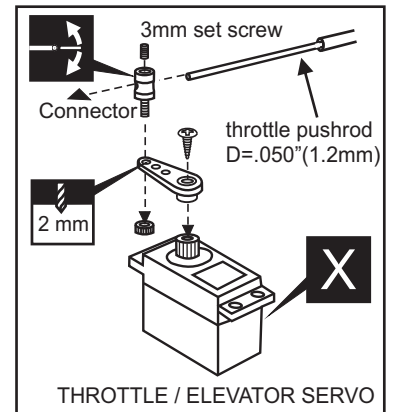
10-Servo



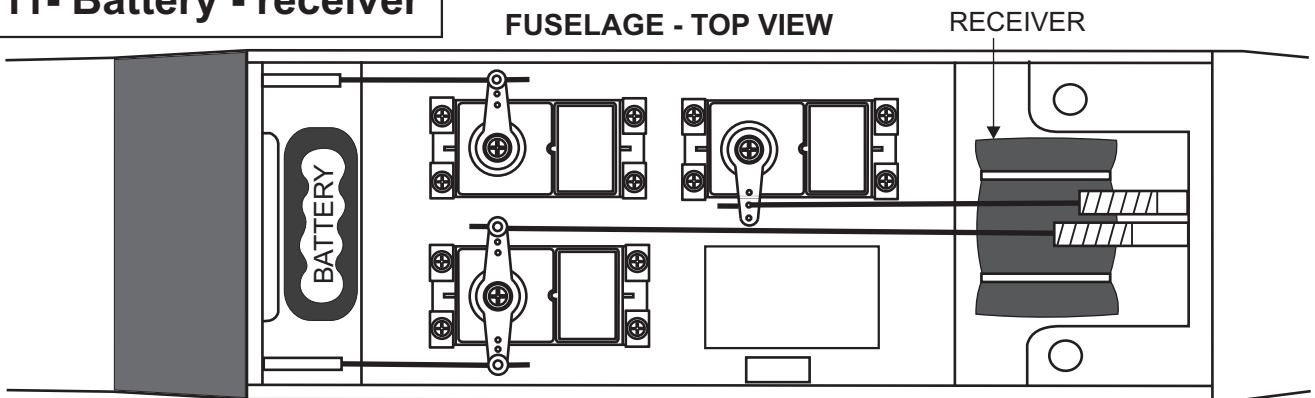
Connector



- Insert the connector into the servo arm. It may be necessary to enlarge the hole in the servo arm slightly to accept the connector
- Center the rudder servo and remove the servo arm.
- Insert the rudder pushrod into the hole of connector as show.
- Center the nose gear control arm, then insert the nose gear pushrod into the hole of connector as show.
- Again, insert the rudder servo arm into the rudder servo. Cut of the excess rod.
- Do the same way with the elevator and throttle.



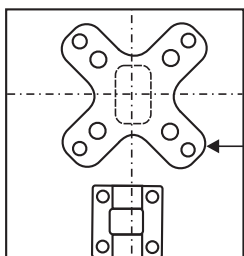
11- Battery - receiver



Secure foam padding with rubber bands or tape (must be purchased separately)

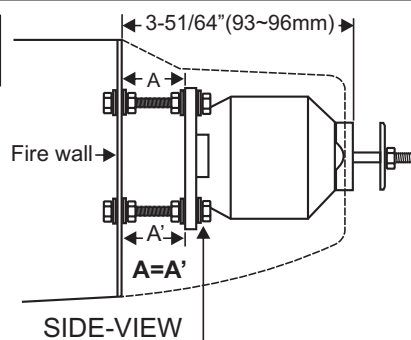
12- Electric Motor

Outrunner Brushless Motor

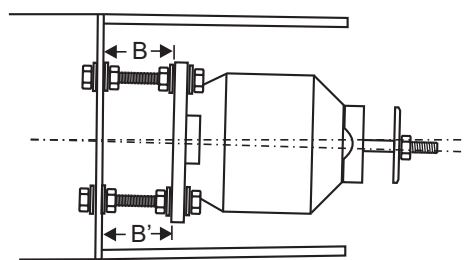


FRONT-VIEW

Aluminum mounting plate.



SIDE-VIEW
Aluminum Mounting plate.

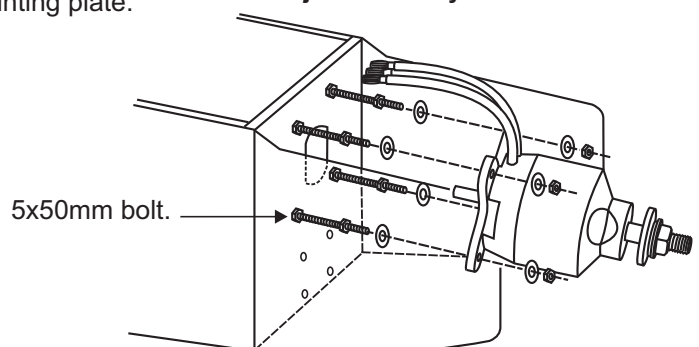


TOP-VIEW
! Engine thrust on balk head is already adjust at factory

- Using a aluminum motor mounting plate as a template, mark the Firewall where the four holes are to be drilled.

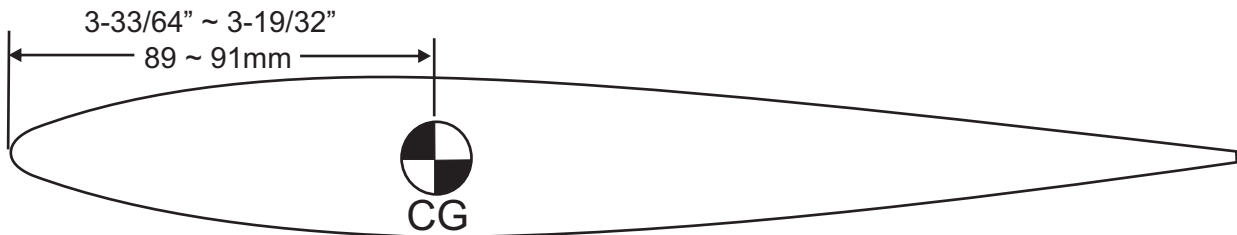
- Remove the aluminum motor mounting plate and drill a 1/8" (3mm) hole through the firewall at each of the four marks marked.

(Bolts, nuts and washer are not supplied)



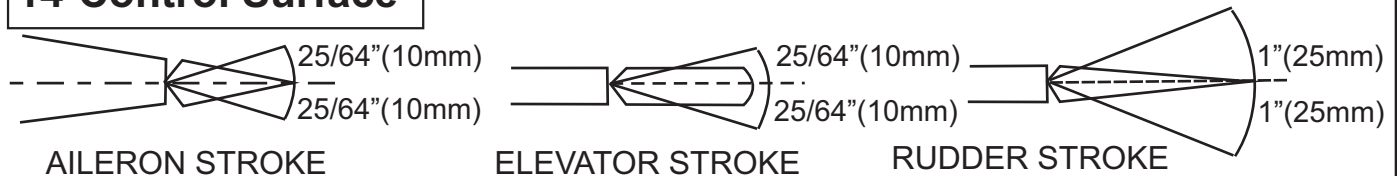
13- Balance

The recommended C.G (Center of Gravity) location for the Sirius is 89 ~ 91mm. Adjust the location of the battery pack as required to achieve this C.G location. If necessary, add weight to either the tail or nose until the correct balance is achieved.



WARNING! Securely install the receiver and power pack, ensuring they will not come loose or rattle during flight. Never fly before checking the Cg's required position.

14-Control Surface



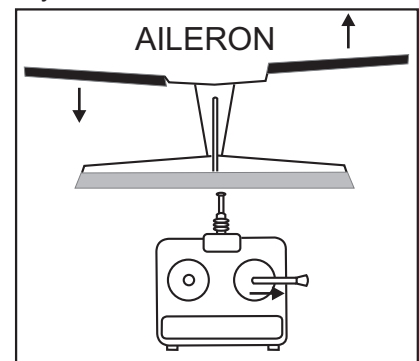
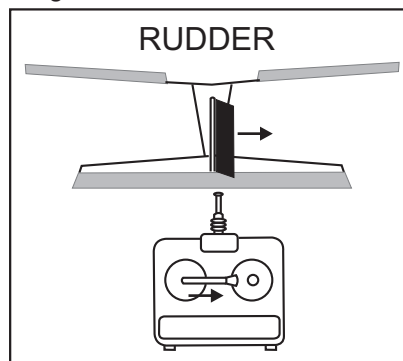
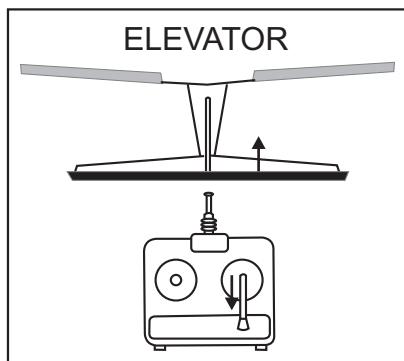
AILERON STROKE

ELEVATOR STROKE

RUDDER STROKE

15-Pre-Flight check

Check that each clevis is securely snapped into position.
Check that all servo horn screws are tight.
Charge the transmitter and receiver battery.



RANGE TEST YOUR RADIO

Turn on the radio in your plane. With your plane on the ground, you should be able to walk 30 paces away from your plane and still have complete control of all functions. If not, do NOT attempt to fly. Be sure that your batteries are fully charged per the instructions included with your radio.

FREQUENCY

If your airplane begins to operate by itself, there is another transmitter on your frequency. Immediately stop your airplane; otherwise you may lose control of it which will result in accidents.

BEFORE FLYING

- 1-Fully extend the transmitter antenna.
- 2-Switch ON the transmitter.
- 3-Switch ON the receiver.
- 4-By moving the control sticks, ensure all control surfaces moves as per your adjustments.
- 5-By moving the throttle control stick, ensure the carburetor opens and closes without effort.

FLYING

- 1-Take-off your airplane INTO THE WIND.
- 2-Do not fly your airplane above people standing around.

AFTER FLYING

- 1-Always land your airplane INTO THE WIND.
- 2-Switch OFF the receiver.
- 3-Switch OFF the transmitter.

CAUTIONS FOR SAFETY

- 1-Adjust the engine always from behind, but never from in front or the side as a rotating propeller may badly injure you!
- 2-Do not allow watching people to get too close to a rotating propeller.

WARNING: Please do not clean your model with pure alcohol, only use liquid soap with water or use class cleaner to clean on surface of your model to keep the colour not fade.