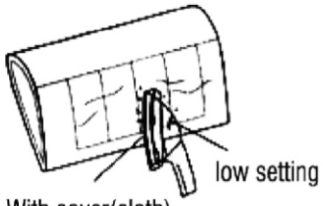
3D 70 SERIES

SBACH342/YAK55M/MXS-R

ASSEMBLY MANUAL

BERORE YOU BEGIN

1, Before the assembly please the careful reading instruction booklet, he can give you the full detail instruction If you are the first contact airplane model public figure, should assemble under the experienced correct instruction!
2, Please inspect in the packing all components, if lacks perhaps the damage, please immediately with dealer relation
3, As a result of weather Temperature The moist change, the model outer covering possibly can appear the phenomenon which relaxes, you may use the package to have a cotton fabric the iron to burn again the outer covering smoothly, but must pay attention to the temperature not to have too to be high



With cover(cloth)

Features:

1,Latest structure
2,Light weight construction with high structural strength
3,Super quality
4,Excellent aerobatics and 3D performance
5,Easy installation
6,Two pieces removable wings fitted nylon bolts
7,High performance hardware includes:
2mm Ball linkage control system
Fiberglass long servo arms
Servo extension safety connector clips Advanced rubber wheels
8,Low wing loading makes it easy to fly
9,One piece C.F. landing gear
10,Carbon fiber tail wheel assembly
11,Carbon fiber wing tube
12,Aerofoil tail wings
13,Canopy quick release system

Specification:

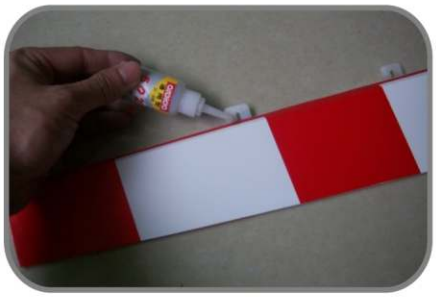
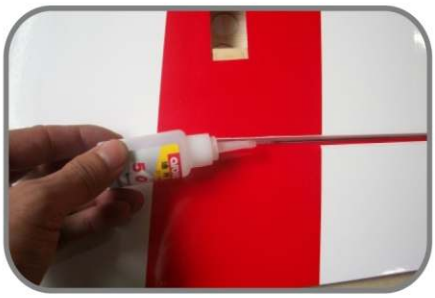
SBACH342 70
WING SPAN:60"(1520mm)
LENGTH: 58"(1470mm)
WING AREA: 738sq.in.(47.6sq.dm.)
FLYING WEIGHT:5-5.5lbs(2300-2500g) Electric:Brushless outrunner 8Oz.
PROP: APC16x10E-17x8E LI-POLY 5-6S 3800-5000mAh
Glow:.46-.52 2C .52-.82 4C
RADIO:4CH/5S or 4s 1ESC（70A）

YAK55M 70
WING SPAN:60"(1520mm)
LENGTH: 58"(1470mm)
WING AREA: 716sq.in.(46.2sq.dm.)
FLYING WEIGHT:5-5.5lbs(2300-2500g) Electric:Brushless outrunner 8Oz.
PROP: APC16x10E-17x8E LI-POLY 5-6S 3800-5000mAh
Glow:.46-.52 2C .52-.82 4C
RADIO:4CH/5S or 4s 1ESC（70A）

MXS-R 70
WING SPAN:60. 3"(1530mm)
LENGTH: 58"(1470mm)
WING AREA: 740sq.in.(47.8sq.dm.)
FLYING WEIGHT:5-5.5lbs(2300-2500g) Electric:Brushless outrunner 8Oz.
PROP: APC16x10E-17x8E LI-POLY 5-6S 3800-5000mAh
Glow:.46-.52 2C .52-.82 4C
RADIO:4CH/5S or 4s 1ESC（70A）

Wing Assembly

Aileron installation


1. Insert the nonwovens hinges to the wings and aileron. Glue them together with the thick CA glue.

Aileron servo



2. Use the provided safety clips to secure the servo and servo extension leads.Run the extension lead through the servo hole to the wing root.


3. Drill 1mm holes and install servo with M2*10mm screws.Glue the horns with the epoxy glue.Adjust the pushrod length so that the servo and aileron are both in the neuttal position and install it with M2*10mm screw and lock nut.

Elevator Assembly

Stab installation





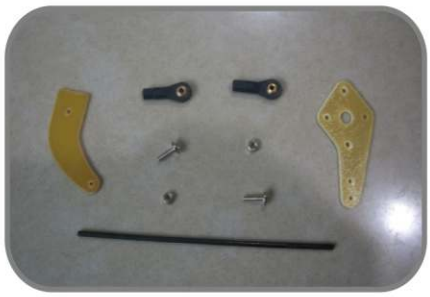
1. Mark the stab with a pen when the stab is symmerical.Trace around the fuselage with a knife and remove the covering below to expose the board.Put into the ″U″steel wire before glue the stab.

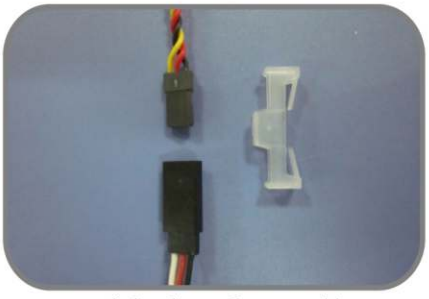
Elevator installation



2. Install the elevator to the stab with the "U”steel wire,nonwovens hinges and thick CA glue.

Elevator servo



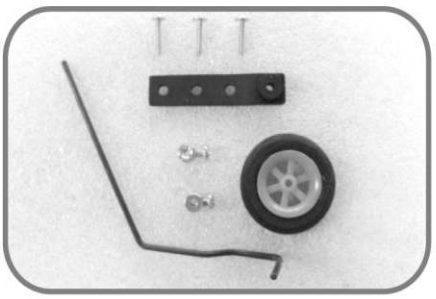


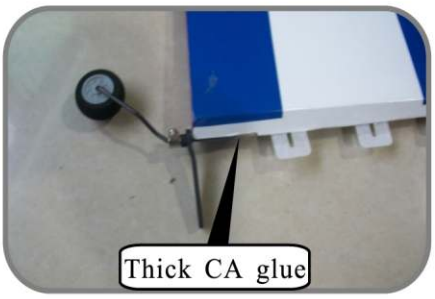
3. Remove the cover with the solder iron. . Use the provided safety clips to secure the servo and servo extension leads.Run the extension lead through the servo hole to the receiver.

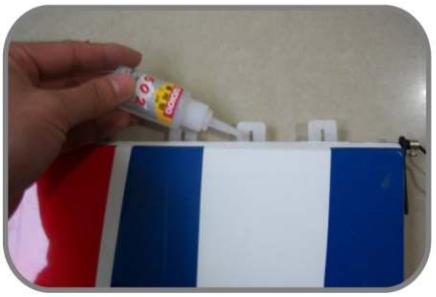


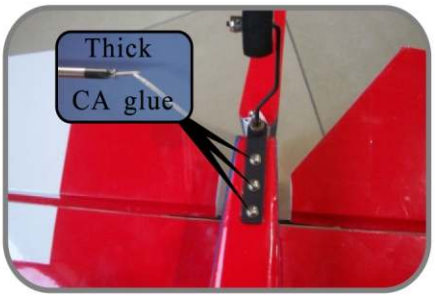
4. Repeat all the previous "Aileron servo steps" for the elevator servo installation.

Tail wheel installation









1. Bend the tail wheel wire in the proper position and install the wheel with the 2mm wheel collar. Insert the wire into the rudder. Glue the rudder and fuselage with the thick CA glue. Finally install the tail wheel bracket with three M2*12mm screws.

Rudder installation

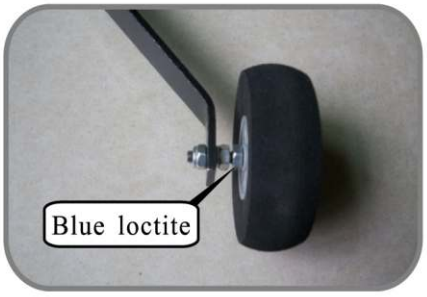


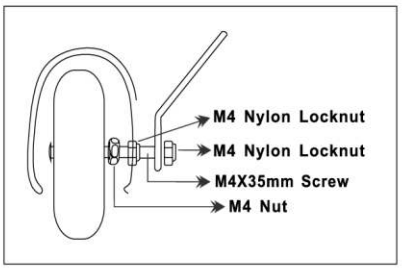
1. Insert the horn into the rudder pre-cut slot and glue it with epoxy glue. Install the pull-pull connector into the ball links. Mount the ball link to the horns with the M2*8mm screws.

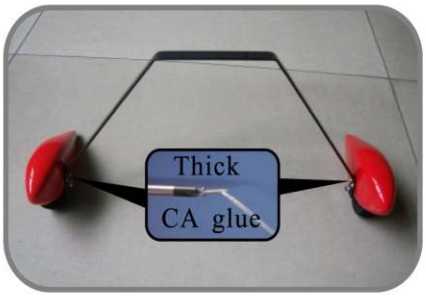


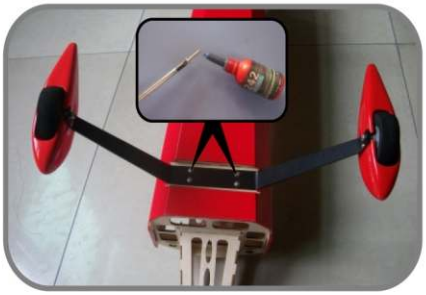
2. Drill 1mm holes and install the servo with four M2*12mm tapping screws. Mount the ball link to the horns with the M2*8mm screws. Remove any slack in the cables and crimp to secure.Crimp the brass swage tube with a crimping tool or pliers.Finall you can adjust the cable by loosening or tightening the cabel connectors.

Main Landing Gear Installation

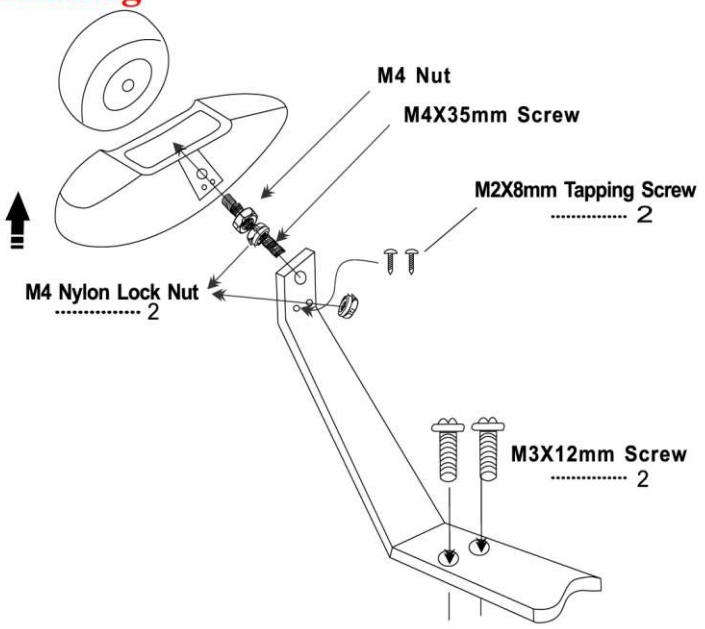





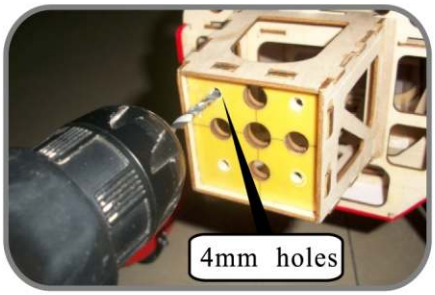


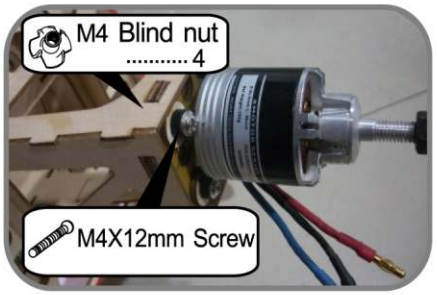


Note the correct edge in mounting

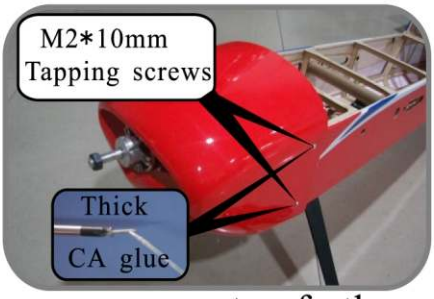



Motor Installation





1. Drill 4mm holes and install the motor with four M4 screws and claw nuts. Install the OPTO to the firewall board with the nylon tie. It is necessery to remove the tail cover for battery heat dissipation.

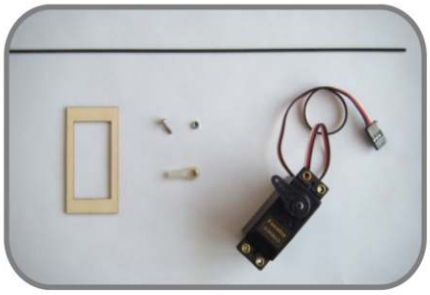


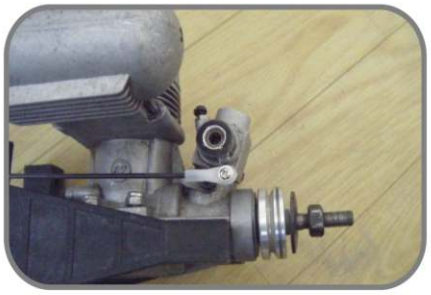
2. It is necessery to remove a part of the cowling for OPTO heat dissipation. Drill four 1mm holes and install the cowling with four M2*10mm screws. And then you can install the propeller and the spinner.

Engine Installation

70E series planes did not have this.

1. Drill four holes and install the engine on the engine mount with four M4 screws. And then install the mount to the firewall board with the screws and claw nuts. The Four screws should be secured with Blue Loctite.



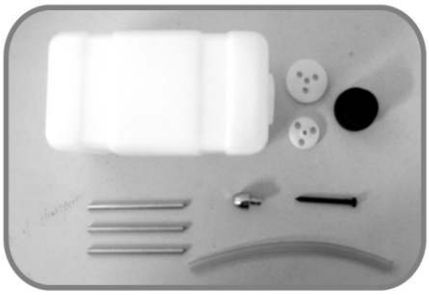


2Finally, install the throttle serve and the throttle pushrod.

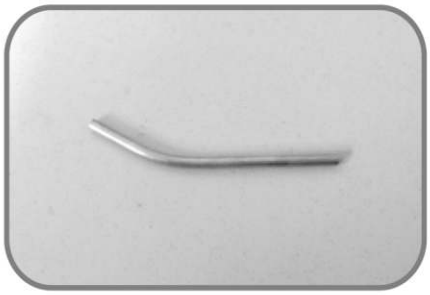
3. Use a rotary cutting tool and sanding drum to cut out the openings in the cowl. The shape and size of open pore depends on the type of the engine.Install the cowl and check that everything fits correctly and nothing rubs against cowl. If needed enlarge the cutouts and test fit again until everything fits correctly.

Fuel Tank Installation

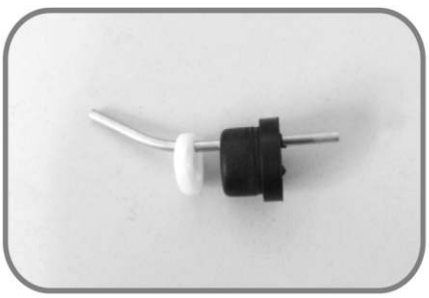
70E series planes did not have this.



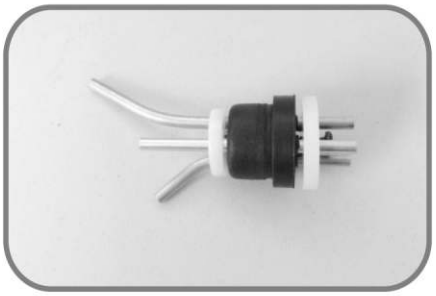
Note: The stopper provided with the model has three holes. The holes are for the fuel pickup, fill and vent lines. You can use two holes: One for the fuel pickup and one for the fuel vent. Only open the third hole if you are going to use a separate fill line.
Note for gas engines: The stopper is OK for both gas and glow, the inside fuel tubing supplied is for gas and glow. If a gasoline engine is used, you must choose the fuel tubing Tygon for all lines.



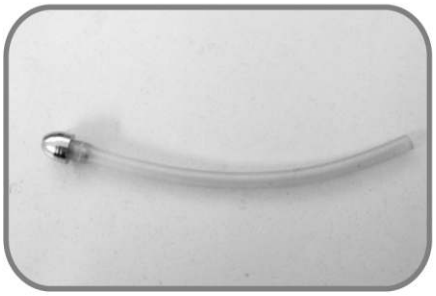
3. Bend two fuel tubes carefully to a 45-degree angle using your fingers. These will be the fuel tank fill and vent tubes. Use carefully not to kink the tube while bending.



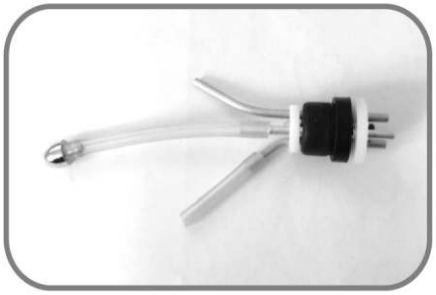
2. Locate the rubber stopper. Insert the three metal fuel tubes into the holes in the stopper so that an equal amount of tube extends from each side of the stopper. The straight tube will be the fuel tank pickup that provides fuel to the engine.



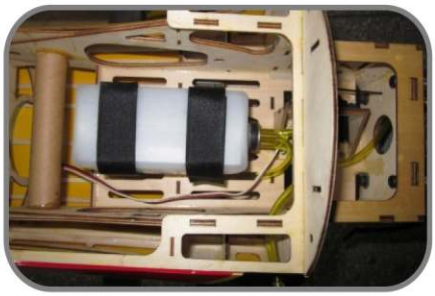
3. Slide the smaller cap over the tube on the smaller end of the rubber stopper. This end will be inserted into the fuel tank. The larger cap is placed on the side of the rubber stopper that makes the cap. Loosely install the M3 x 30 screws through the center of the stopper.



4. Locate the clear piece of Tygon or silicone fuel tubing and the fuel tank clunk. Cut the tubing to appropriate length. Install the clunk onto one end of the tygon or silicone tubing. Slide the tubing (end opposite the clunk) onto the fuel tank pickup tube (straight tube) in the stopper.

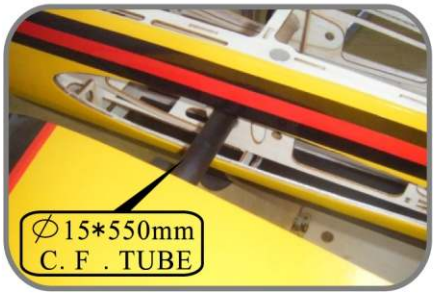


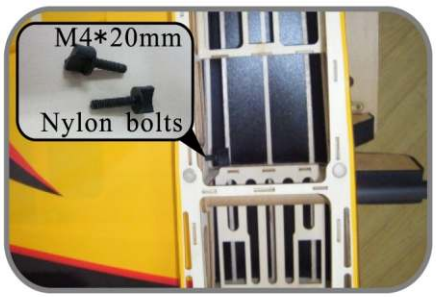
5. Slide a tubing onto the metal tube that has been bent.



6. Install the tank to the fuselage with the velcro.

Wing Tube Assembly





1. You can insert the wing tube into a wing and insert them together into fuselage first. Then install the M4*20mm nylon bolt. Finally install the another wing to the fuselage.


2. Stick the decals on the wings and fuselage after wing assembly.

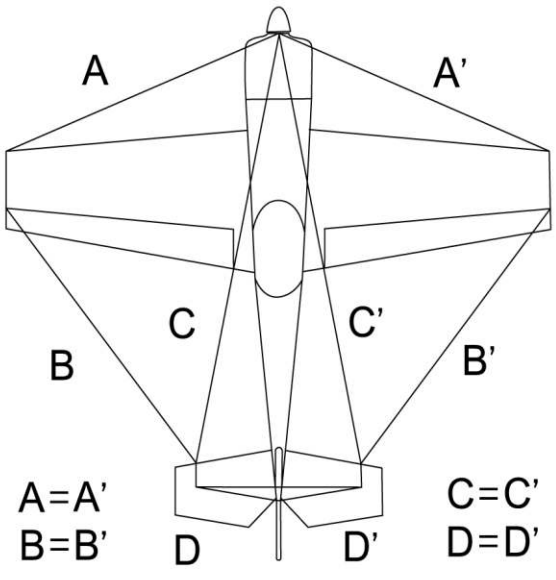
Radio Assembly


1. Install the battery and receiver after the step above.

Canopy Assembly

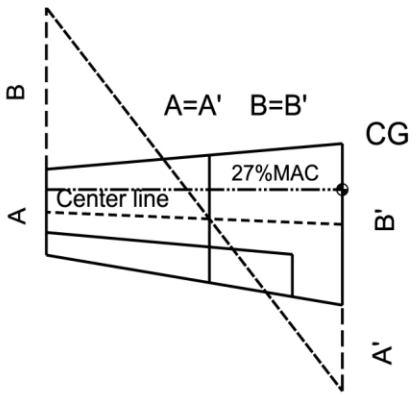

1. Nylon clasp is easy for canopy assembly.

Symmetric



Adjust the aircraft and make sure both of the sides symmetric. Like the diagram shown.

C. G Location



Measure the CG from the leading edge of wing against the fuselage, Adjust 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.

PLANE	SBACH342	MXS-R	YAK55M
27%MAC CG Location:	4-1/5″ 106mm	3-4/5″ 96.7mm	4-1/2″ 115mm

1. Check every angle and adjust them to correct position.
2. Check all parts and make sure the installation is firm and reliable.
3. Add some weight in either of wingtip to balance the left and right wings.

Power on to trim your plane.

1. Range check the radio (test whether the Engine/Motor is running or not).
2. Ensure that the servos and control surfaces move smoothly and are 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 your flying style.

Control Throw:

	Surface	Throws	Exp
Common flying	Aileron	20 degrees	25%
	Elevator	20 degrees	25%
	Rudder	30 degrees	30%
3D flying	Aileron	45 degrees	50%
	Elevator	45 degrees	50%
	Rudder	45 degrees	50%

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 seconds, check the Engine and make sure the temperature is below the prescription of manufacturer. Once everything is right… …