

PRESTIGE 2^{PK}

Congratulations for choosing the right model! Your new Prestige 2PK.
The model is a handmade product, carefully packed for your convenience.
Please check that all items ordered are included and not damaged during transportation.

A basic model includes:

- 3 wing sections (including GFK horns if no IDS is ordered)
- 1 fuselage with nose cone
- 1 rudder
- 1 Elevator
- 2 carbon joiner 6 degrees
- 2 pcs clevis couplers
- Wire harness fuse with plastic holders for tip connection
- 4 plastic servo covers
- 2+2 screws for Elevator and Wing
- Wing and fuse bag

Additionally you can order:

- ballast set
- 8 degree joiners (6 degree standard)
- The model can be ordered fully assembled or partly

Now are available IDS for
IDS Typ MKS 6110 Foam Mono
IDS Typ KST 08 Foam Mono (KST X08 H)
IDS Typ MKS 75K Foam
IDS Typ KST X10 Mini Foam
IDS Typ MKS 6130 Mini Foam
IDS Typ JRDS 181, JRDS 189 Foam

To complete a model you will need:

- 2 pcs +/-20g metal geared servos for the flaps.
- 4 pcs 9-12g metal geared servos for fuse and tips.
- IDS from Servorahmen.de or alternately 8 clevises and 2mm threaded rods for the wings
- Motor, regulator and battery
- Spinner and propeller in 30mm or 32mm according to your order
- a high quality receiver
- epoxy to glue in the servos and thin cyano (CA) to secure clevises
- strong clear tape (8-12mm wide) to join the wings and rudder to the fuselage

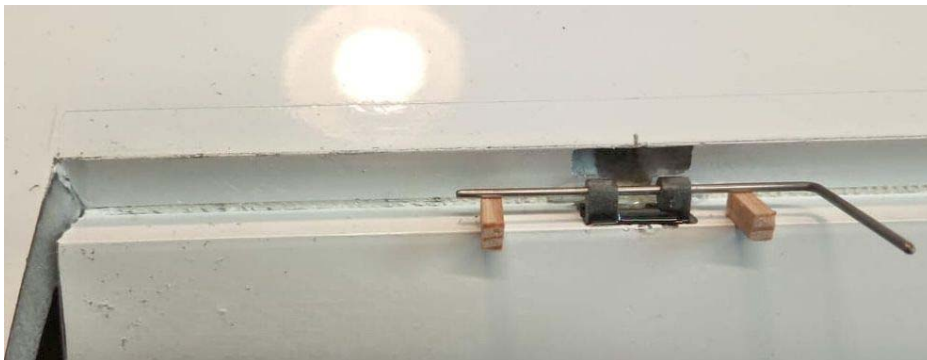
Assembling the wing:

- Sand the surface of the servos and the servo trays where the servos will be glued
- Connect the servos and the fuse harness to the respective channels on the receiver. Check that the aileron servo arms are set 90 degrees on the servo and that the transmitter also is set to neutral. Check that the flap servo arms are set identically to approximately 20 degrees (measured from the 90°-angle) towards the flap. The transmitter should later be set to an offset so that the flap servo arms are 90 degrees on the servos. With full butterfly the servo arms on the flaps are almost straight towards the flap. This ensures full deflection of the flaps for butterfly brake
- **Ensure that the flap does not move more than 85 degrees. Be careful on powerup that the servo does not move past 85 degrees. If more than 90 degrees deflection is done there will be damage to hingeline. The same can happen when flaps touch ground on landing.**

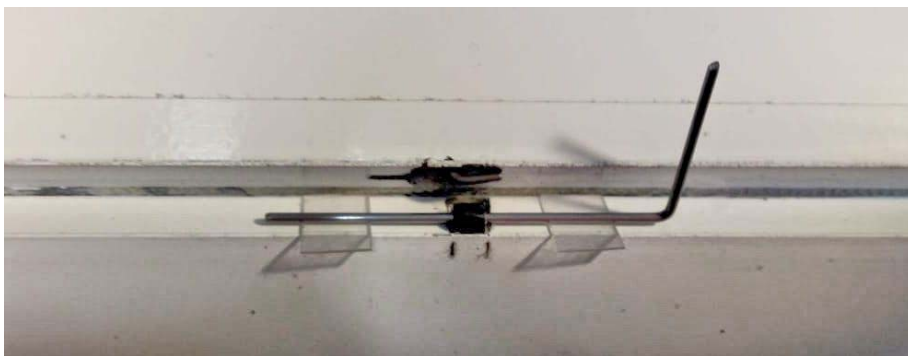


Damage to hingeline after too much movement (above 90 degrees) or flaps touching ground on landing

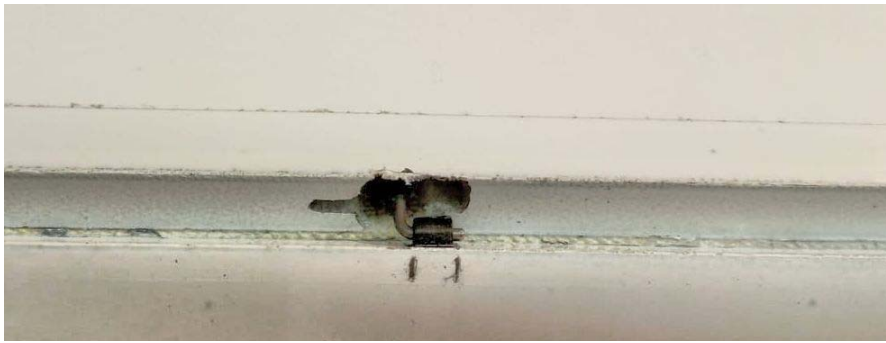
- Check again the servo settings and also set the offset of the flap servos. Check also that the servos move the right way
- Mark where the servos will be glued in place by a pencil in the servo trays. Use a Dremel tool with grinder to open up the pushrod hole and the aileron/flap horn. Ensure that the servo arm is aligned (straight line) to the line defined by the hole in the subspar and the aileron/flap horn



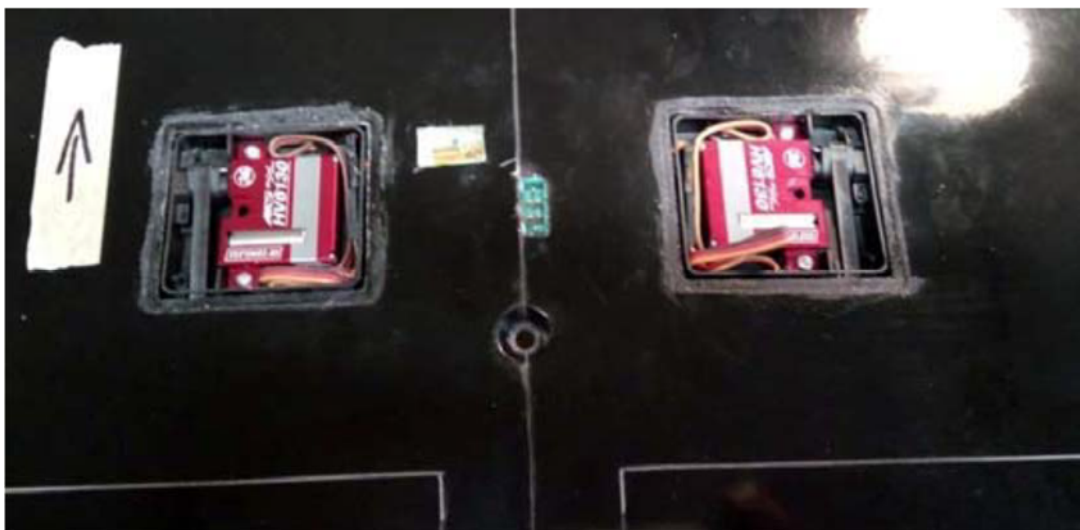
Distance flaps to pin is 3mm



Distance aileron to pin is 0,5mm

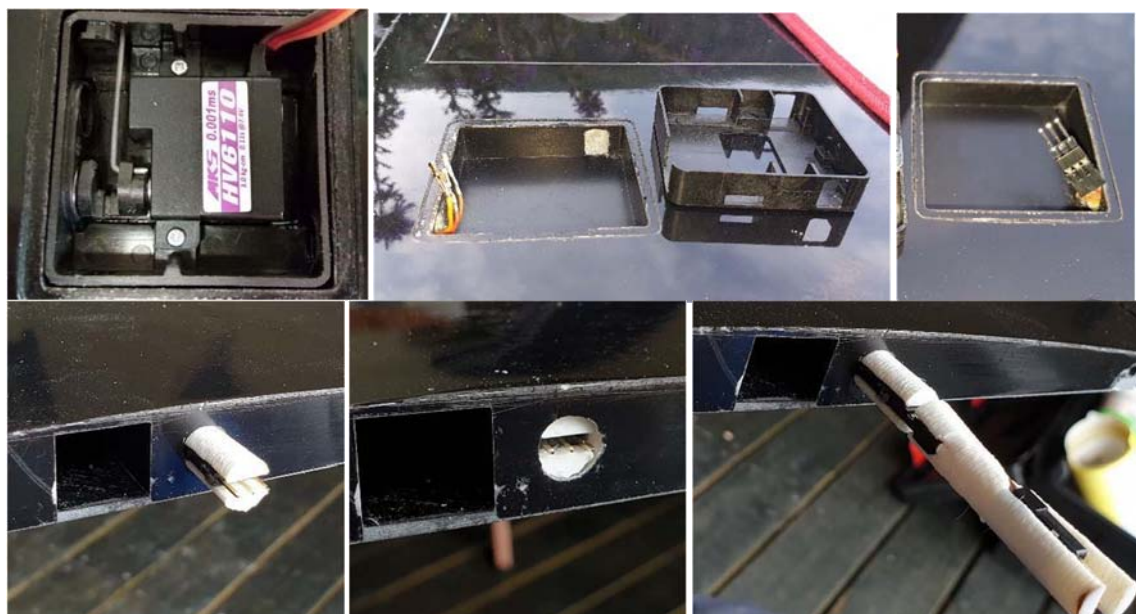


- Glue the aileron and flap horns. When using the IDS from servorahmen.de the horns will be glued flush with the upper surface for both aileron and flaps. Mount the pushrod to the horn to ensure easy positioning while glue is settling. When not ordering the IDS there is fiberglass horns provided in the set.
- Glue the servos/IDS frame in using epoxy. If the epoxy is thin it is possible to add some thixotropy agent. It is also possible to use Cyano glue in small amounts
- Install the threads and clevises whilst the servo arms are set 90 degrees on the servos and the ailerons / flaps are set in neutral position. When using thread/clevis secure the thread to the clevis with extra thin CA as this is a place with some slop. Check also thoroughly the clevis pins going into the horns and servo arms. There are clevises that can be poorly made in this special detail. Use the inner most hole on the servoarms possible to ensure full power of the servo yet providing full throw.
On ailerons it is possible to use a simple bent 1,5mm pushrod with the servorahmen setup.



- Install and glue with Cyano the connector holders in tips and midsection. It can also be glued with epoxy or polyurethane glue. We do not recommend heat glue. Start with one side and the other side as the tip are inserted. This ensures perfect fit and connection each time. There is a small wire connector supplied for each tip/servo bay. Be careful not getting Cyano into the connector metal parts.
- It is recommended to install clear tape on the ends of the wings. This will prevent the paint being ripped off when the tape is applied / removed every time you go flying
- Adjust the aileron throw according to the settings sheet below.
Measure the throws from neutral on the inner part of the surfaces
- Adjust the aileron throw on flaps
- Adjust the crow brake flaps to as much as possible (70-85 degrees is good)
- Adjust the crowbrake on ailerons to 1mm up (no bending while brakes applied)

- Camber for thermal is +1-5mm measured on flaps and equal along the whole trailing edge
Camber/reflex for distance/speed is -1 and -2 mm
- Snap flap (elevator – flap mix) can be used up to 5mm on full elevator throw
- Cut the servo covers so the fit and secure them with tape
- IDS installation on youtube
Part 1 <https://www.youtube.com/watch?v=f1HJjblv5uE>
Part 2 <https://www.youtube.com/watch?v=GtK9itGYJsM>
- Tip servo installation on youtube by Flightcomp: <https://youtu.be/j8pwiXLxQBM>
Midsection installation on youtube by Flightcomp: <https://youtu.be/-UN7GagaiYA>



Aileron and flap servo details – below: Contact holder arrangement glued in
Assembling the fuselage:

- After installation the nose cone back part can be shortened by up to 105mm to adjust the CG. All depending on motor/propeller/ESC/battery used.
- Use a Dremel tool to open the servo bay where the servo horn is coming down to the pushrod. Also make holes for servo wires and wing harness. Make the holes so that wires does not go into the bottom of the fuse. The bottom of the fuse needs the space for the ballast rod
- Install the “fuse to wing”-harness in the fuselage. Roughen the green connector and fuselage fitting before you glue it
- Install the receiver in the slot under the wing. Drill holes backwards so that the antenna comes out without making a sharp bend. The antennas (2.4) should come out behind the wing on each side (min 2-4cm behind). A range test will show that your installation is correct. A third (or the second) antenna can be under slightly under the wing and straight down but careful on ballast position. Be also very careful on not drilling into the pushrods.



Antenna holes / guidance tubes



Cutting holes in fuse before assembly



Cut in fuse for receiver wires



Servos and receiver installed in fuse

- Mount elevator and rudder and secure in neutral with some tape. Shorten the rod for correct length by marking the total length to servo horn with a pen and then pull forward thru opening for cutting. The coupler can be glued to the carbon rod with Cyano and for safety pinch the coupler with a plier to ensure tight fit. Check the connection thoroughly

- Adjust the elevator so that it is in neutral checking top and bottom airfoil (trailing edge 24mm from fuse). Full throw is 15mm up and 17mm down. At full crow the elevator goes down to approximately 11mm depending on crow settings for wing. It is good to ensure more down throw (+6mm) possible after crow brake is set
- Adjust rudder throw to 30mm +/-
Using excess of 40mm might slow down the model instead of yaw motion
- Fuse installation on youtube by Flightcomp: https://youtu.be/xG_r3nwUsmw

Assembling the model:

- Attach the rudder to the fuse and insert the screw provided to secure the rudder. Secure with a tiny piece of tape round the front part. Carefully push the ball link in place and check that they move freely. Pinch the plastic with a plier to free them up if they are tight. The ball link can be removed by using a flat screwdriver clicking it off again.
- Screw on the elevator and be sure the pushrod pin is inserted before.
- Screw on midsection wing and plug in the tips with the included joiners inserted first in the tips completely inserted.
- Attach the tips with clear tape to secure at top and around leading edge.
- Check and adjust the CG (center of gravity). A suitable CG to start off is 110mm for all conditions and 112mm from leading edge in calm conditions
- Check range according to transmitter specifications.
If you can not get the necessary range you need to:
 - 1) Check antenna locations
 - 2) Try another transmitter
 - 3) Try another receiver

Settings:

- All the latest detailed settings can be found on www.F3J.com. These are settings from some of the world's best pilots. You will find these setting a very good starting point.

Wings cannot stay in the sun without wing covers. Covers prevent excessive heating of the model as there could appear some deformations of model parts when model is overheated, or the surface could get distortions. If the reflex painted parts are not protected against the sun, the reflex effect will fade much earlier even if there is used layer of paint with UV filter.

Prestige 2PK specifications are without any guarantee for structural stiffness. Sudden changes in the deflection of the controls at high speeds are also prohibited. The model is intended for F5J competition flying and not for aerobatics.

After harder landings it is necessary to check the joiner and look for cracks as it could cause failure of complete model in the next flights.

We hope you will be satisfied with your new model. If you have any questions be sure to look at our webpages www.f3j.com . Additional info about the setup and detailed pictures can be found there.

Important notice for pilots with Prestige 2PK F3J version

You need to stick the rudder to the fuselage with epoxy. Fixed connection. Roughen both glued surfaces before gluing. Care must be taken not to glue the rudder pushrod. Do not put any glue in the vicinity of the rod.
The Prestige 2PK is originally designed as an F5J model. The connection between the rudder and the fuselage is not strong enough for the F3J start.

Regards

Samba Model

Webpage: www.F3J.com / Email: samba@f3j.com

Prestige 2 PK - Settings Jo Grini 26.06.2020

Elevator measured from trailing edge to boom

	camber	Elevator neutral	Elevator	ail-flap mix up/down	Ailerons up/down	Rudder	Elev-camb mix
Cruise	0mm	24mm	-15/+15(17)	-8/+7mm	-19/+24mm	35/35mm	+3mm
Distance	-1mm	23mm	-15/+15(17)	-9/+9mm	-21/+21mm	35/35mm	+3mm
Speed	-2mm	23,5mm	-15/+15(17)	-10/+7mm	-20/+22mm	35/35mm	+3mm
Thermal L/D max	+1mm	24mm	-15/+15(17)	-7/+8mm	-20/+22mm	35/35mm	+3mm
Thermal 1	+3mm	24mm	-15/+15(17)	-6/+8mm	-22/+20mm	35/35mm	+3mm
Thermal 2	+5mm		-15/+15(17)			35/35mm	+1mm

Thermal 1 and 2 for circling

	50%	100%	
Brake flap	+38mm	+70mm	
Brake ail	no movement	no movement	
Brake elev	16,5mm	13mm	meassured from boom

CG 107-113mm (same CG with ballast or slightly forward). Personally I fly 110mm and sometimes 112 in morning

PRESTIGE 2^{PK}

*CUTTING EDGE FSJ-AIRCRAFT
DESIGNED BY PHILIP HOLB / PRODUCED BY Samba-MODEL*

Wingspan:	3900 mm
Wing area:	79,3 sqdm
Aspect ratio:	19,18
Surface area:	86,63 sqdm
FAI minimum weight:	1040 gr.
Ballast capacity:	up to additional 1400gr.
Wing-sections:	PK-1162f (7.4%) - PK-1168f (6%)

