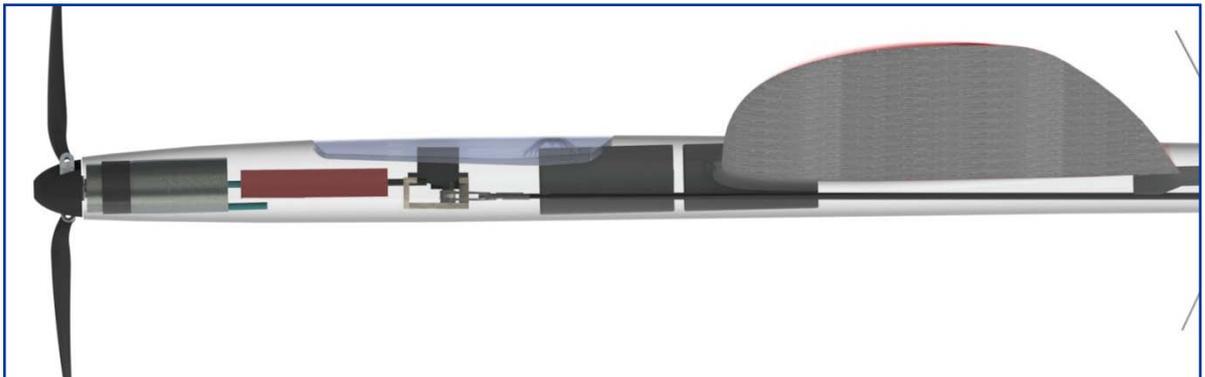


Advantages:

- The servo horns are screwed to the bearing on the frame. The neutral position of the horns and rod length are regulated separately from the servos. After that we just fasten servos to the frame. This method greatly simplifies the installation and adjustment because servos occupy the entire volume of the upper part of the fuselage.
- Inverted upside down servos allow for installation tail rods more inline and move the rods down to release the top of the space for the battery.
- The servo horn has additional bearing support. It is reducing the servo backlash and protects servo gear against shock loads.



The LDS kit content:



1. LDS servo frame with ball bearing – 1pc.
2. Nut for fixing the servo horn to the bearing – 2 pcs.
3. Countersunk head screws M2x4 - 2 pcs.

Shinto fuselage installation with LDS set

- 1) Prepare two mirrored servo horns with 8 mm arm. To do this, cut the servo horns from a kit (like in Pic1).



Pic.1



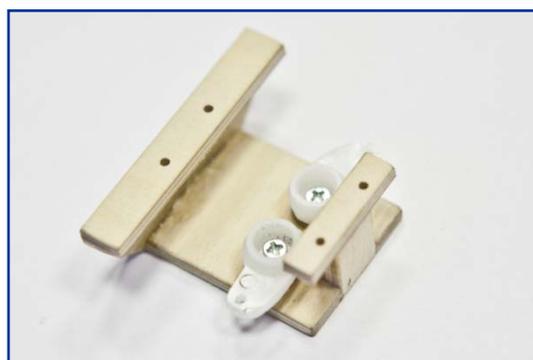
Pic.2

- 2) Screw the nut from the LDS kit to the outside of servo horn by M2 screw with countersunk head. The nut must be fixed by the diameter of the protrusion on the servo horn.



Pic.3

- 3) Insert the nuts with screwed servo horns to the bearings on the frame.



Pic.4

- 4) Sand the end of the carbon rod and prepare thread rod tip for a secure gluing: pipe.
- Sand the rod tip inside,
 - Bend the edge of the rod tip (pic 5) or make it slot (pic 6).

For reliable gluing fill the hole at the rod tip of medium viscosity superglue almost completely (not reaching the edge of 2-3mm), then apply the activator to the rod and insert the rod into the rod tip until it stops. Immediately wipe off the excess superglue.

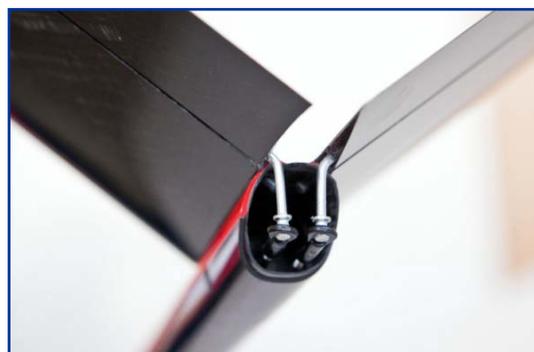


Pic.5



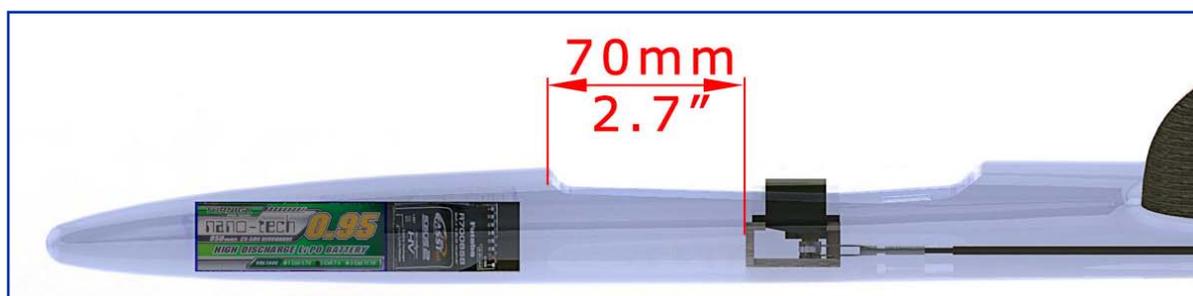
Pic.6

- 5) Screw plastic ball joints (that comes with Shinto kit) to the rod. Insert collected rods to bowden tube (already glued in the fuselage) from the tail side and attach to the tail horn.



Pic. 7

- 6) Taped V-tail elevators in neutral position.
7) We recommend placing a servo frame according to the size of the figures:

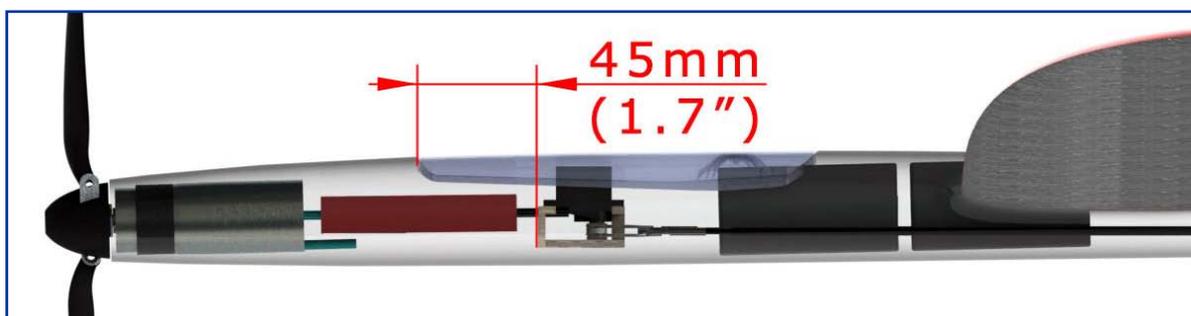


Pic.8a



Pic.8

The recommended servo frame location in glider fuselage will allow accommodate to 2S2P LiPo950 mAh battery and a receiver in the nose in front of the servos.



Pic.9

The recommended servo frame location in electro fuselage will allow you to install/remove the battery from behind the frame and install the motor without removing the servos.

8) Sand the frame gluing spot in the fuselage with sandpaper.

Set the servo frame horizontally inside the fuselage to the spot and glue the frame using thick superglue.



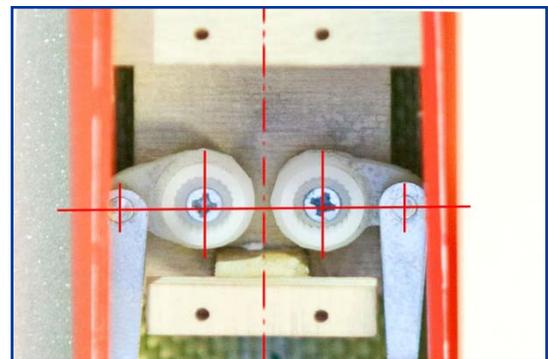
Pic.10

- 9) Trim the outer part of the clevises on 0,5-0,7mm to reduce its dimensions. Put the clevises on the prepared servo horns and screw the threaded rod tip. The rod tips should be screwed into the clevises to the middle of their operating range. This will allow adjust the neutral position more precisely after its gluing to the carbon rods.



Pic.11

- 10) Insert a servo horn nut into the servo frame and put the servo horns in a neutral position (perpendicular to the axis of the fuselage).



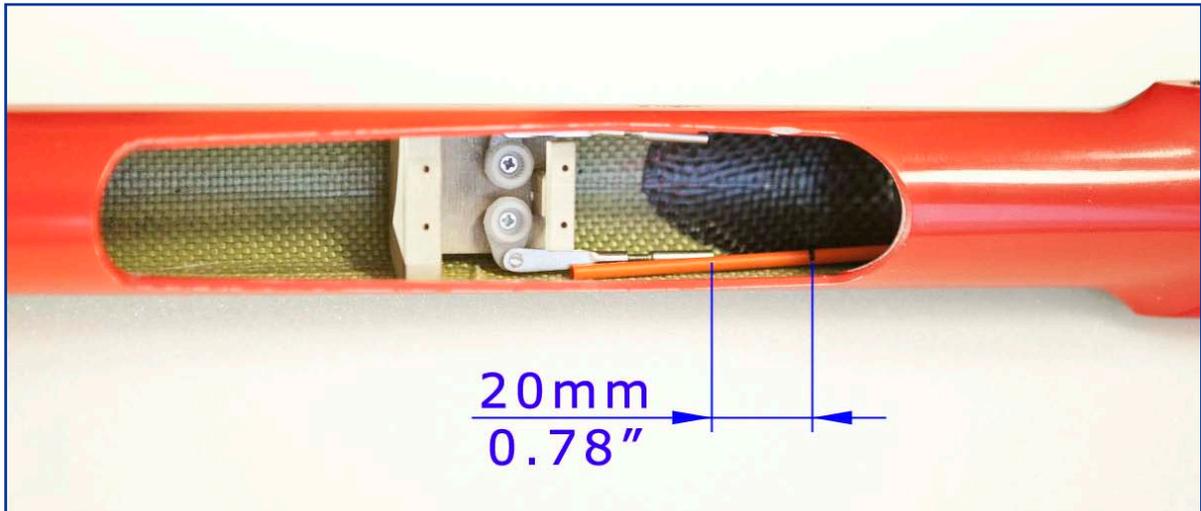
Pic.12



Pic.13

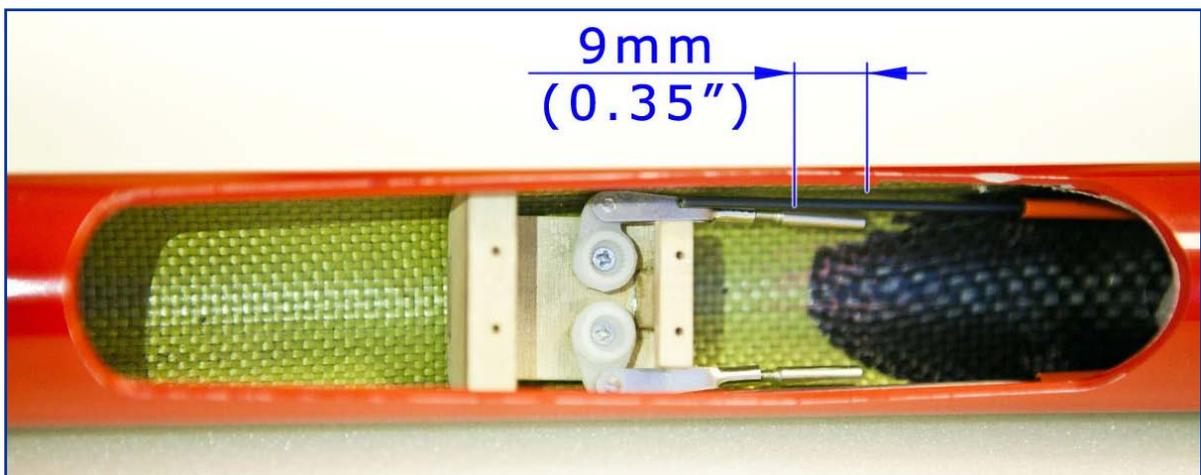
- 11) Cut bowden tube with a knife at a distance of 20mm from the edge of the thread rod tip.

!!! It is necessary to exercise the utmost care for do not cut carbon rod.



Pic.14

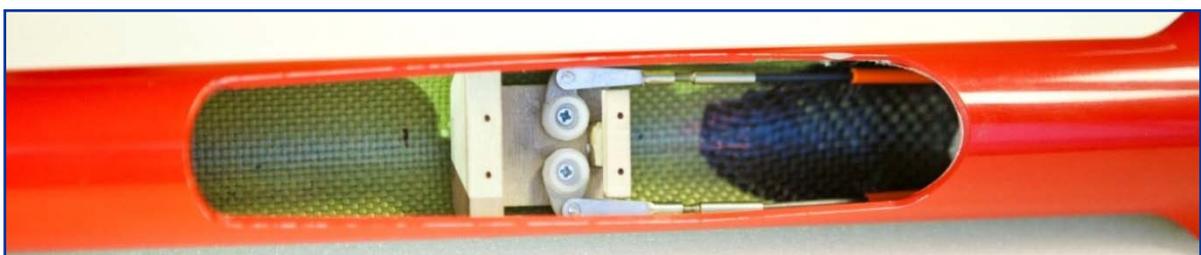
- 12) Once again, carefully check the installed neutral position of rudders and servo horns. Cut the carbon rods so, that they are inserted into the rod tips on the 8-9 mm. They are easy to trim with the help of needle files or Dremel.



Pic.15

- 13) Glue the rod tips to the carbon rods according to technology in pos. 4.

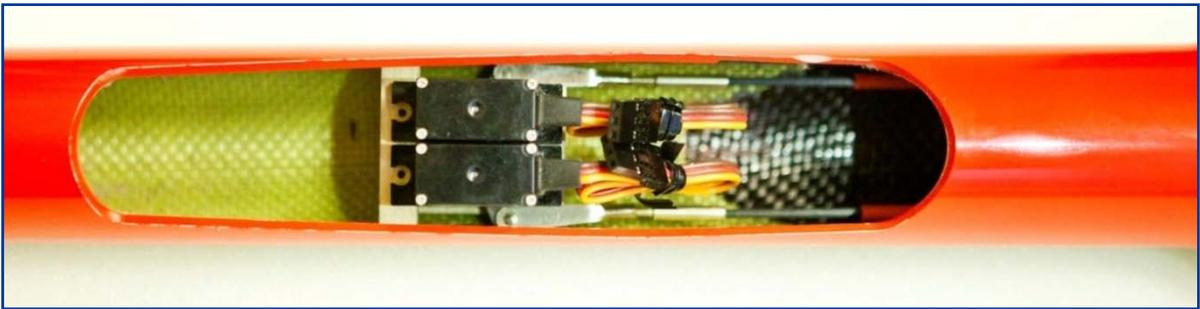
!!! Be careful when in set. To prevent glue leakage inside the bowden tubes keep the fuselage tail up.



Pic.16

- 14) Install the servos neutral position with the help of your transmitter or by servotester (value 1500ms).
- 15) Insert the servos into the frame. Make sure that the position of the horn was neutral as possible. Screw the servos to the frame.

Glue the bowdentubes to the fuselage by superglue so that rods were as possible straightforward. Keep the fuselage tail down to avoid glue leakage inside the tube. Adjust the length of the rod by thread. This is conveniently done by twisting the rod from stabilizer side. After the adjustment, lock the tread by superglue.



Pic.17

