

# Jas 39 Gripen

Dear customer, congratulations on the purchase of the **Jas 39 Gripen** model. Before you begin, please read carefully the building instructions and make sure that you understand the building process.

## Parts list:

Part name	pieces	Part name	pieces
Fuselage of EPP	1	Wing centre section	2
Elevator control rod	2	Canard surface ( elevator)	2
Wing of EPP	2	Aileron horns	2
Motor bulkhead	1	Instructions	1
Vertical tail of EPP	1	Self-adhesive decal set	1
Engine nacelle	1	Wing spars (carbon 330x1 mm)	2
		Fuselage central part of EPP	2

## You will need the following tools and materials:

CA glue, CA glue accelerator, a sharp (modelling) knife. To complete the model you will need: a receiver (MZK), servos (W-060), a controller (TMM 1210-3 or Jeti 12), a battery pack (3 LiPol cells of 640-1200 mAh), a motor (HCS-80/2E or similar of about 80 W output).

## Description of the model:

The model is completely made of EPP and has some carbon components. With its weight beginning at 250 grams, it is an ideal model for flying in any suitable spot (e.g. a school playground or in the street). It is intended not only for experienced pilots, but also for the advanced modellers. To power it you may use a motor from our production, e.g. the HCS-80/2E, and three Lithium Polymer cells. Thanks to a well thought-out design the construction would take only about 90 minutes.

## Building process:

Unless otherwise stated, all joints should be glued with the rapid CA glue. Start the building process by gluing the wing and the wing centre section (Fig. 1). Using the Fig. 2 as a guide, using a sharp modelling knife, cut a 1-2 mm deep slit into the wing from both upper and lower side. Press the carbon rod into the slit and glue there from both sides, using the thin CA glue. Glue front elevator into the top fuselage part (Fig. 3). Then glue the assembly into the fuselage (Fig. 4). Glue the wing and the vertical tail into fuselage (Fig. 5, 6). Glue the aileron horns in place (Fig. 7). Using the Fig. 8 as a guide, glue servos in place (using e.g. a hand-held hot-glue gun or CA glue). Install aileron control rods (Fig. 9).

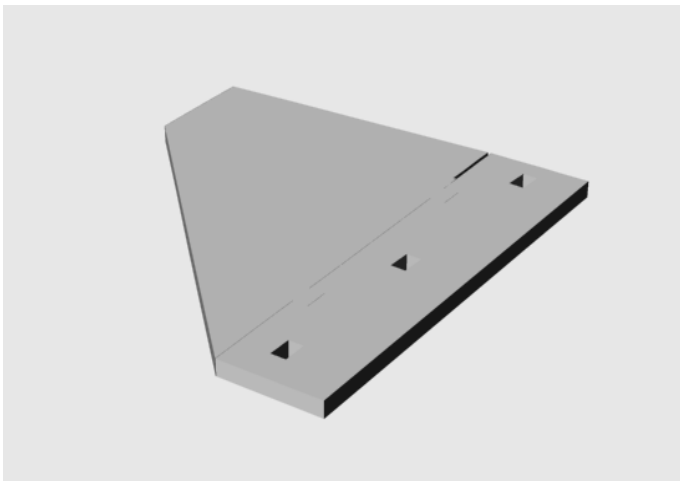
For the controller cut out the opening in the fuselage and put the controller inside (Fig. 10). Connect cable extensions to the power cables of the controller, or cut the original cables short and splice them with new cables of the same thickness, and of the necessary length. Glue the motor bulkhead, screw the motor bearers on and secure the motor in place (Fig. 11). The position of the receiver is shown on the (Fig. 12).

Glue the engine nacelle (Fig. 13) and join it with the fuselage (Fig. 14). The model is now ready for balancing. By shifting the propulsion batteries, set the position of the centre of gravity to some 340 +/- 8 mm from the motor bulkhead, so that the model balances well. Now cut, using a soldering gun, cut an opening for the battery pack according to the Fig. 15; the dimensions of the battery opening should be some 2 to 3 mm less than the outer dimensions of the battery pack, to ensure that the batteries would hold in place without any extra fixation.

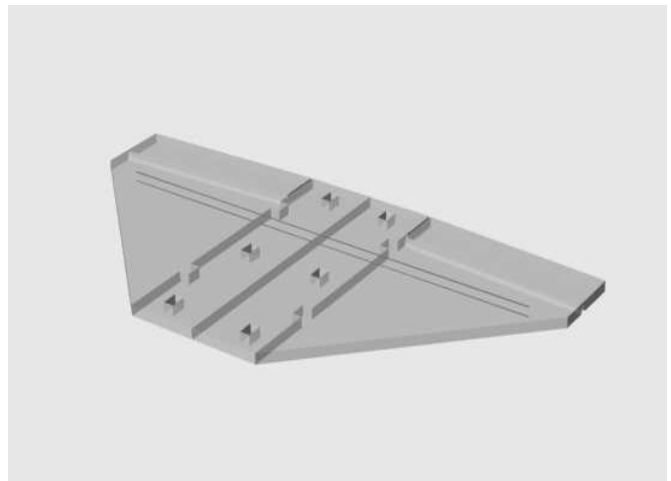
Now the model is complete. Its appearance could be enhanced by applying the decals. For the first flight, set the deflection of the controls to the half of their travel. As the model, thanks to the propeller torque, tends to roll to the left, set the trailing edge of the right half of the elevator some 4 mm up. The model has specific flight characteristics – thanks to its layout it can fly not only fast, but also very slow. Bear in mind that the propeller torque effect is much more pronounced during slow flight, especially after the launch, and the model rolls slightly to left.

This model is no toy – therefore avoid flying in crowded places or such areas where health or property not only of yourselves, but also of third persons could be jeopardised.

Lots of fun and many happy landings wishes FreeAir.

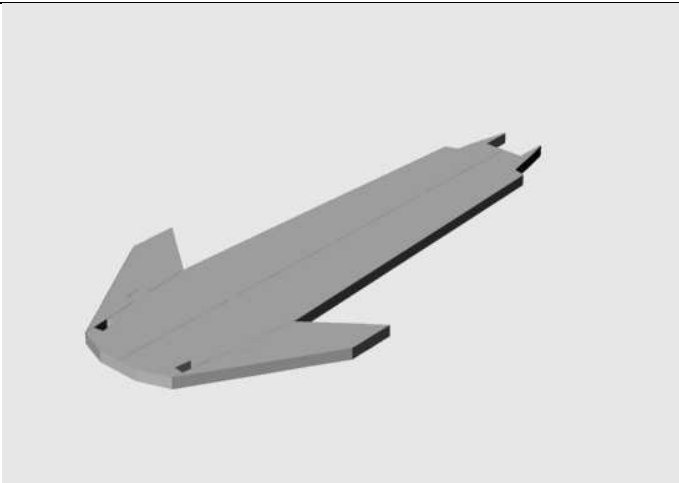


**Obr.1**

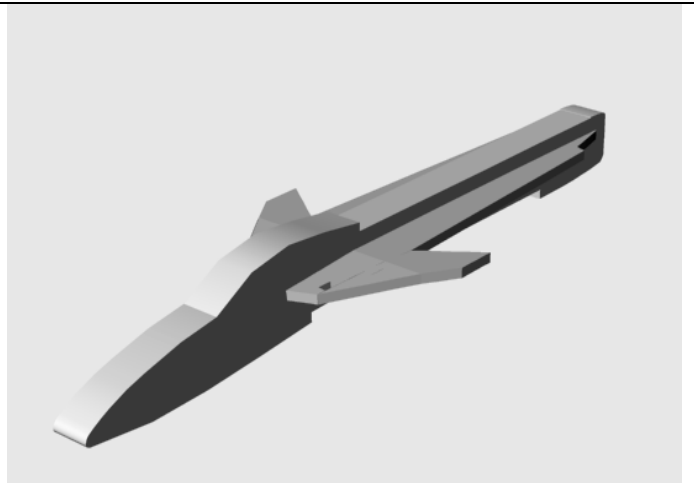


**Obr.2**

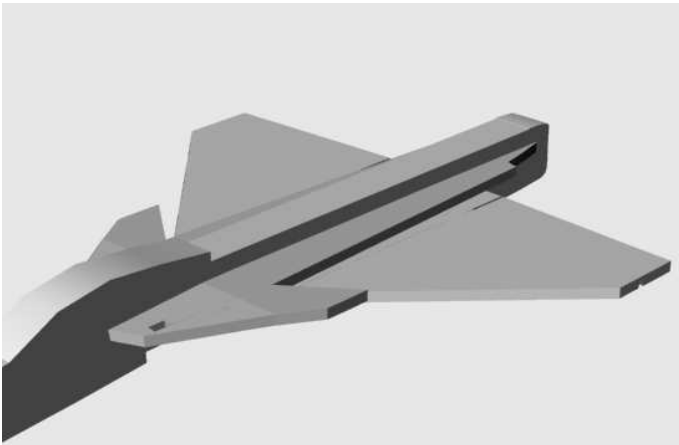
Picture



Obr.3



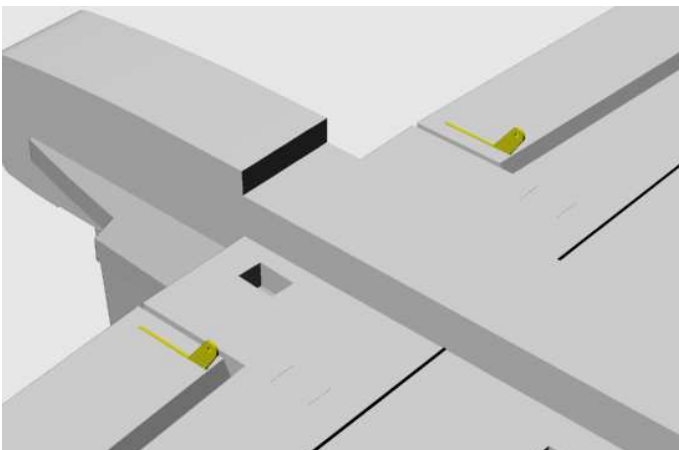
Obr.4



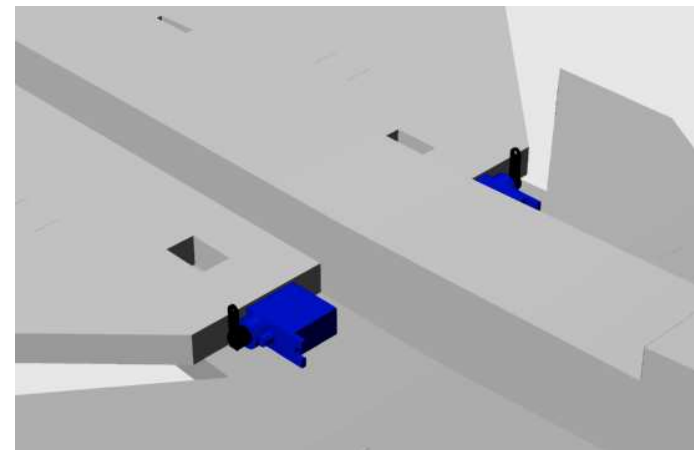
Obr.5



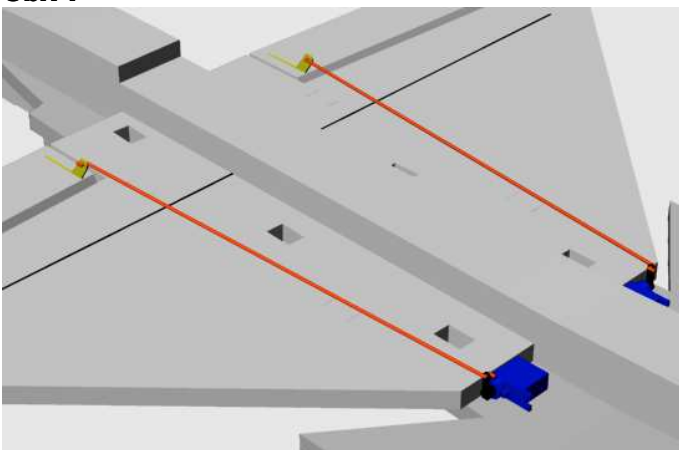
Obr. 6



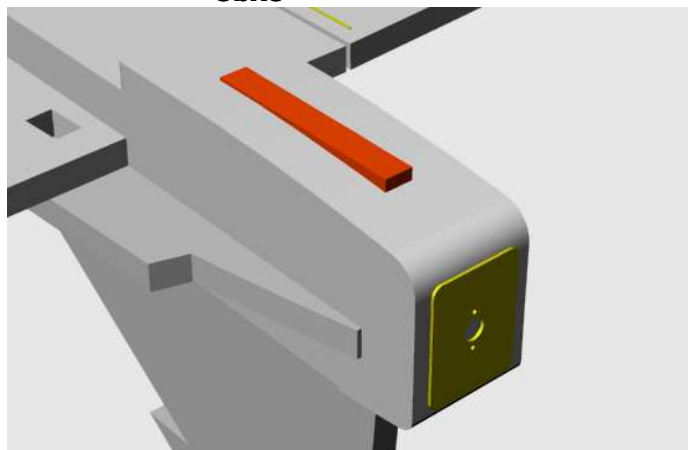
Obr. 7



Obr.8

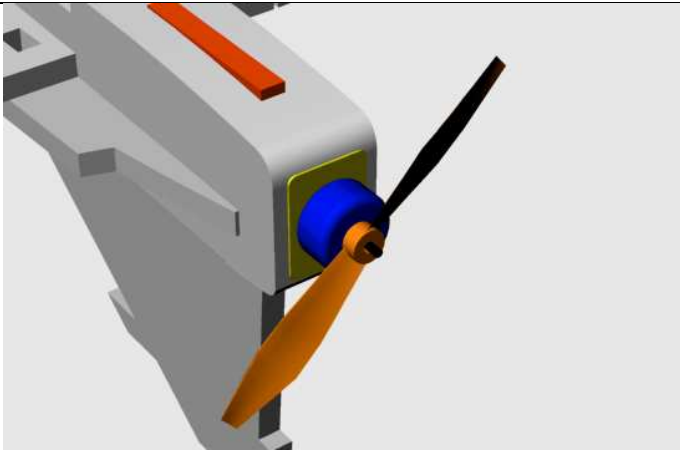


Obr.9

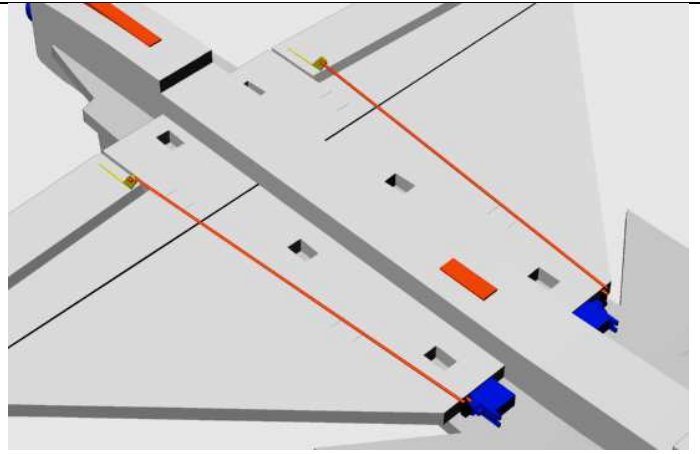


Obr.10

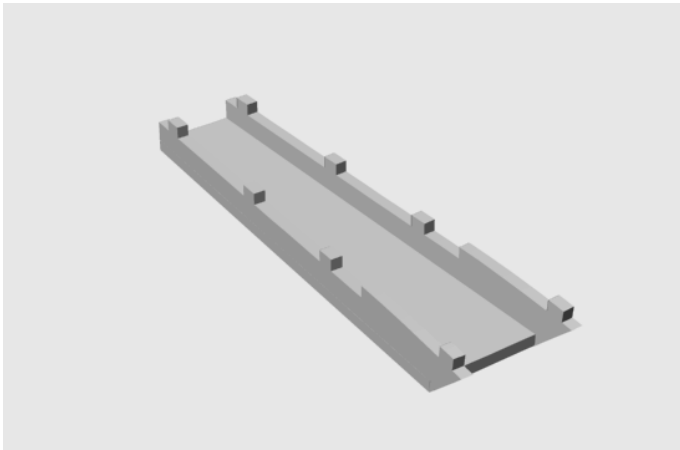
Picture



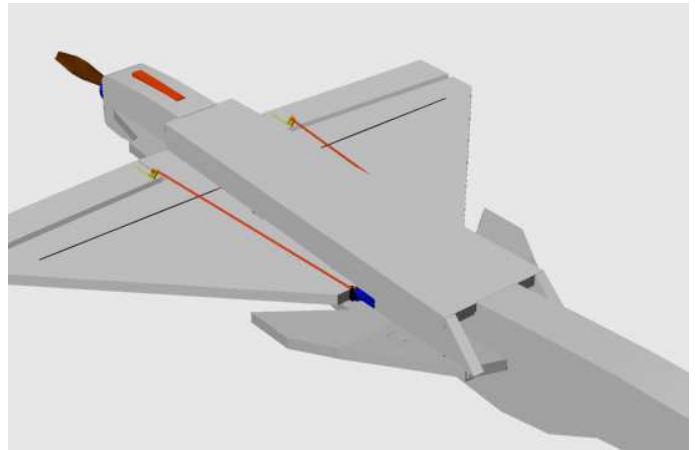
Obr. 11



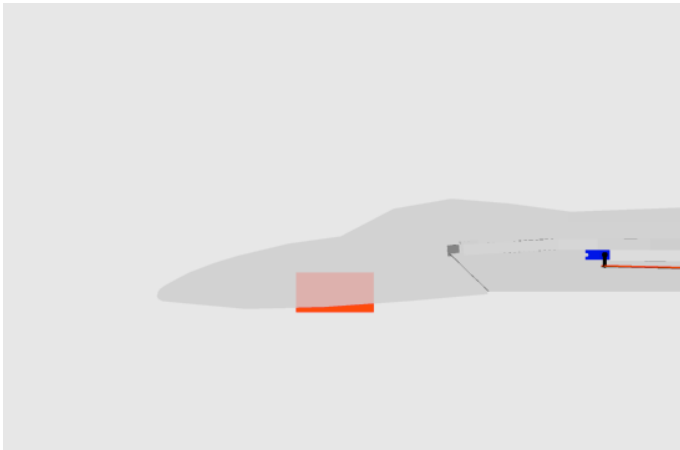
Obr.12



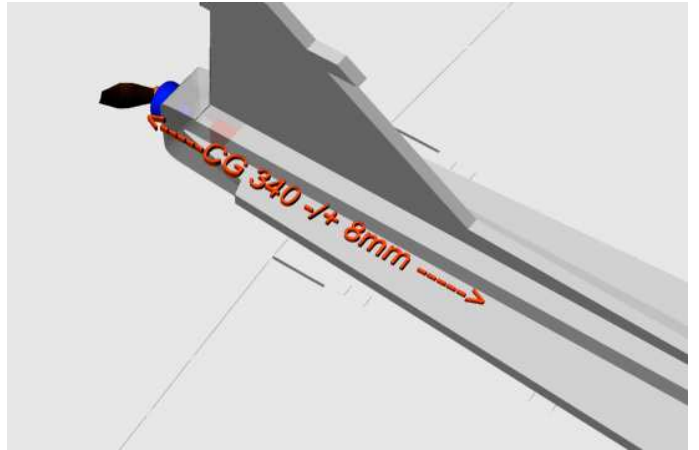
Obr. 13



Obr. 14



Obr. 15



Obr.16