

SAAB Gripen Jet Model Assembly Instructions

We start building the model by reading the instructions and the construction plan (drawing) included in the set. The package includes a set of structural elements and accessories that allow you to build and launch your own jet plane model.

If you intend to use the model exclusively for rubber launcher launches, your age should not be less than 14 years.

However, if you plan to use the model to take off with the TSP L-1 model rocket engine, you should be at least 18 years of age or under the supervision of a person over 18 years of age. In addition, you must read the instructions for use and safety that come with the package with the TSP L-1 motors.

The package of the jet model kit should contain the following structural components for the model:

1. 3mm balsa hull - 1 piece
 2. Vertical stabilizer (direction) 1mm balsa - 1 piece
 3. Horizontal (high) stabilizer, right balsa 1.5mm - 1 piece
 4. Horizontal (high) stabilizer left balsa 1.5mm - 1 piece
 5. Right wing balsa 1.5mm - 1 piece
 6. Left balsa wing 1.5mm - 1 piece
 7. Container for the TSP L-1 engine - 1 piece
 8. Self-adhesive aluminum foil - 1 piece
 9. Starting hook - bamboo fi2mm - 1 piece
- And additional components:**
- A set of 2 colors of paints with a brush - 1 set
 - Stickers with jet markings / graphics - 1 set
 - Cyanoacrylate adhesive SuperGlue - 1 piece
 - Balance (plasticine) - 1 piece
 - Sandpaper - 1 piece
 - Modeling rubber for a slingshot / catapult 1x3x500mm - 1 piece

Once you have checked if all the above-mentioned items are included in the set, you can start building the model:

1. Attach the directional stabilizer (2) to the fuselage (1), be careful to stick it exactly vertically on the fuselage axis, in the place indicated on the drawing / plan.
2. Then, start the assembly of the wings - insert the right wing (5) into the oblong assembly hole (notch) on the right side of the fuselage. During this operation, make sure that the wing tongue only enters the half of the fuselage mounting notch, so that there is space for sticking the left wing (6).
Then set a 4-5mm rise on the tip of the wing and carefully glue the point where the wing meets the fuselage.
3. Glue the left wing in exactly the same way as the right wing (see point 2), providing it also with a 4-5mm rise at the end of the wing.
4. Glue both parts of the tailplane (3,4) - (right and left) in exactly the same way as the wings, into the mounting spot cut in the front part of the fuselage, but in this case the elevation at the ends of these wings is not necessary - be careful, that both its parts are glued at an angle of 90 degrees to the hull.
5. Install the starting hook (9) in the place indicated on the plan. However, first cut the bamboo stick in half. Then hammer the hook with a sharp point in the center of the hull axis, in the manner and place indicated on the plan, while taking care that the sharp end of the hook does not pierce the hull from any side. Finish the operation by gluing the hook using the glue included in the set.
6. **OPTIONALLY**, stick the hopper (7) on the TSP L-1 engine, for this purpose put the hopper turret with the mounting cutout on the hull in the marked place and manner on the plan.
Set the right angle of the turret in relation to the axis of the carrier blade - the exact angle can be found on the model construction plan.
7. **OPTIONALLY**, tape the model's hull behind the engine compartment with self-adhesive aluminum tape (8). 70 mm from the engine nozzle and about 10 mm wide.
8. Finally, you can add authenticity to your model by decorating it with the included graphics and paints with a brush. Paint the edges of the laser cut with the appropriate color (remember that the paint included in the package is acrylic, so you can wash it off with water before it dries), then stick the graphics / stickers in the places marked on the plan.

Your model is almost ready for its first flight. Before flying it, you need to properly balance your model, to do this check the center of gravity (CG) - to do this, support the model with two fingers (thumb and forefinger of one hand) under the wings in the place marked on the map as the center of gravity (CG). When properly balanced, the front of the model should be slightly tilted downwards. If the model tilts on the tail, stick a piece of balance (plasticine) included in the kit to the front of the model (bow), otherwise stick a piece of balance to the rear end of the fuselage (tail).

Remember that you must comply with the regulations regarding the take-off of model aircraft, the most important are:

1. The starting point must have a radius of at least 300 meters from any buildings, trees or electricity poles.
2. It is not possible to fly in high winds - above 8m / s.

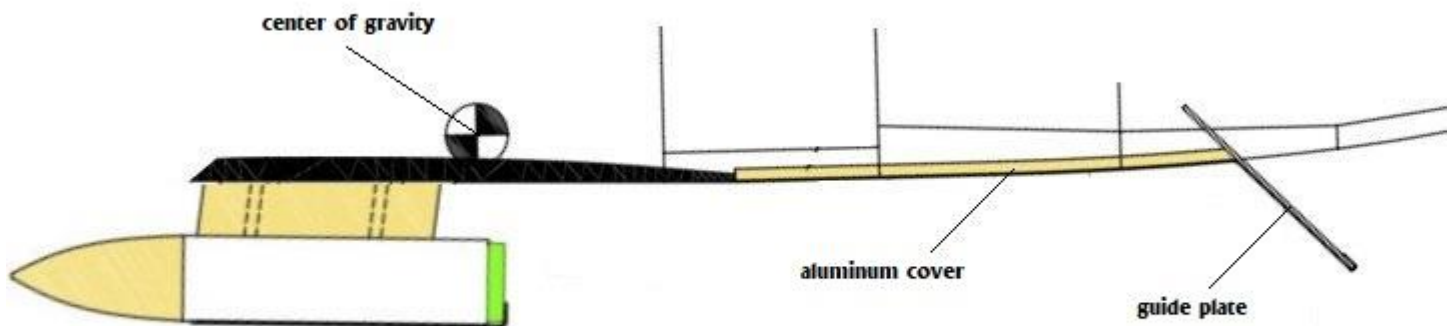
3. The model's flight path must be clear of any obstacles (people, trees, vehicles, buildings, tall grass or thickets, etc.).
4. It is not allowed to launch the model if there is no control over the absence of people in the flight area or in the danger zone.
5. Before taking off the model, make sure that no aircraft, hang glider, power hang glider, paraglider, model airplane or any other object with which a collision could occur is flying over the place of flight.
6. If you plan to fly with the model using the TSP L-1 model rocket engine, the take-off location must not be on a flammable surface, such as dry grass.

Start flying by regulating the gliding flight with or without an empty hopper - if you will not be using the TSP L-1 rocket engine.

When the weather is windless, the model, let go of your hand, should gently fly a few to several meters in a straight line. Then, cut the rudder in the directional stabilizer with dimensions of 5x15mm and deflect it to the left by about 2-3 degrees. If the model, after release, makes a slight circle to the left, seal the rudder permanently with the glue from the kit. Then prepare a rubber launcher by tying both ends of the modeling gum from the kit together. Now practice hooking the model's hook to the rubber launcher. Then you can start having fun flying with your new jet model!

In the case of using the TSP L-1 model rocket engine, the first step is to read the operating and safety instructions included in the package with TSP L-1 engines, once you have done it, you can start taking off - arm the TSP L-1 engine with a fuse, and then fix it in the model by inserting it into the tray. If the motor has a tendency to slip out of the hopper, cover it a little with paper tape with a minimum width of 20mm so that it fits into the hopper with slight resistance, preferably at the back of it. When taking off, be sure to tilt the model to the right by approximately 30-40% to avoid the tendency to dive in the left corner. After take-off from the rubber launcher, the model should ascend the right turn, and after the engine is fired, it should go to a left-hand ascending glide with the engine running. Once you have practiced hooking the model to the rubber launcher, fire the fuse and hook the model to the rubber launcher, then launch the model into the air, following the above-mentioned tips - be sure to do it before the engine starts working - this method allows you to maintain appropriate safety distances.

An additional possibility of adjusting the nose of the model during the flight on the TSP L-1 engine is to perform down thrust tab hawk, directing down the gases flowing out of the engine, you can make such a thrust tab from, for example, a plaque from the soda can, its width should be 10-15 mm and length about 15-20mm. Below is an example drawing showing the location of such a plate:



Additionally, I invite you to visit the website of our partner Jetex.org. On the forum of the site you will find a topic devoted to our kits and in it tips and hints on, among others, flying models. And a lot of information related to this fascinating branch of aviation modeling as well as a multitude of modeling plans..

