

BlitzRCWorks L-39 105mm EDF

1/6.6th Scale

Length 72 inches (1828 mm)

Wing Span 56 inches (1433 mm)

Weight RTF 16lbs with 12S 6000man

Suggested EDF JP 105mm, Suggested ESC 150a and higher



CG 115 mm (4.5 inches) from leading edge at root of wing to fuselage.

Aileron Travel 12mm (15/32)

Elevator Travel 12mm (15/32)

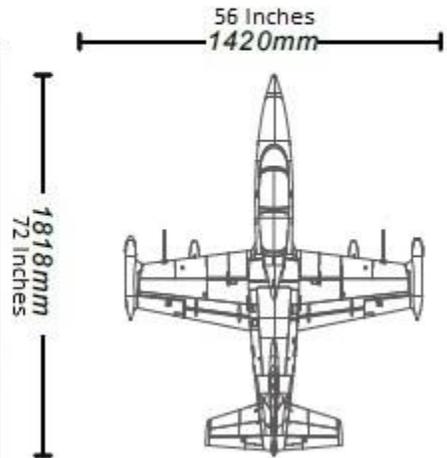
Rudder Travel 25 mm (1 inch)

Flaps: Take off 15-20 Degrees Landing 35 - 45 Degrees

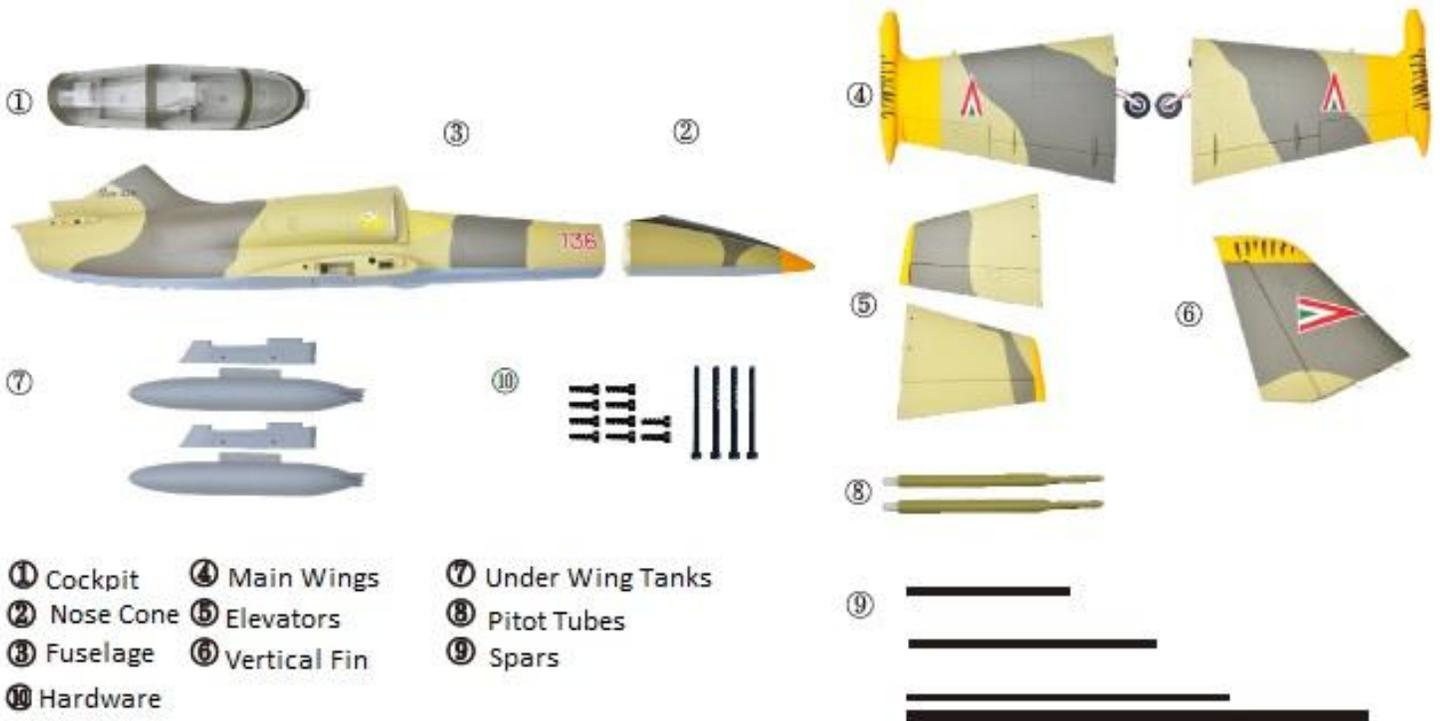
Speed Brakes Landings 60 - 75 Degrees (do not operate at high Speed)

Specifications

	105mm EDF or Equivalent	
 Digital, Metal Gear 4.8v.- 7.4v	12g x 6pcs 6.0V MAX <i>(Control-Cover/Turn)</i> 25g x 7pcs <i>(Control-Main wing/Vertical tail/Horizontal tail)</i>	Installed
	Speed Controller / ESC 150A +	
	3S 2200 mah for Radio 12S 5000mah or greater for EDF	
	7.3kg / 16 lbs Ready to fly	PNP



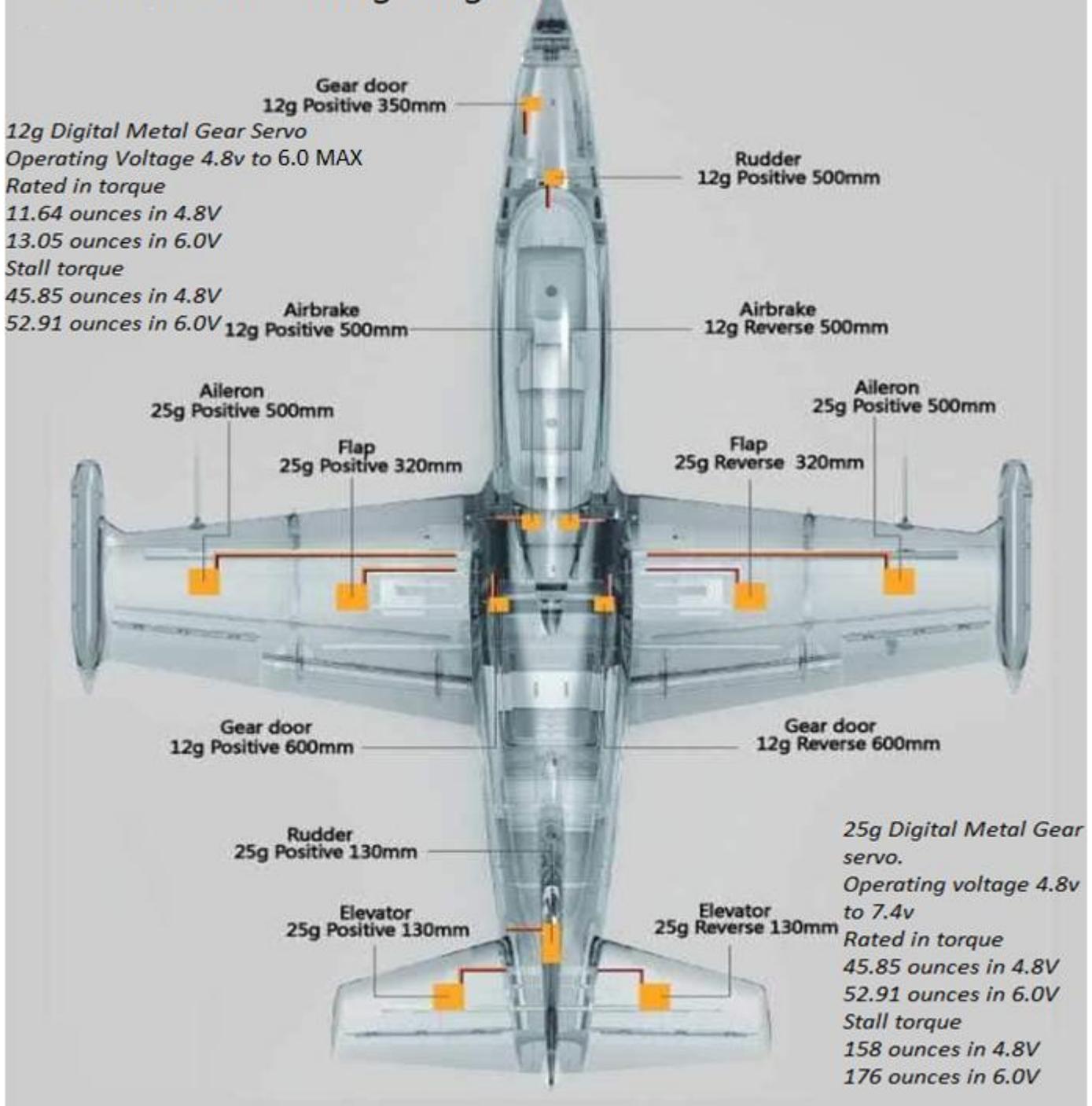
Box Contents

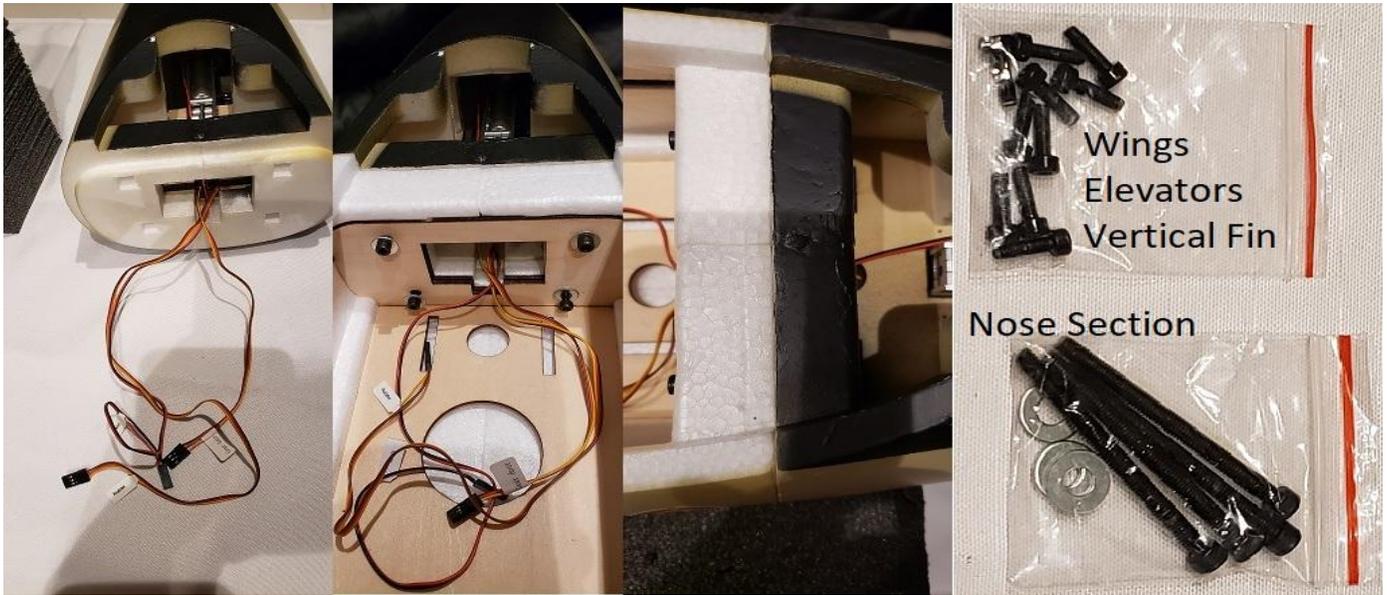


The L-39 comes with Seven 12g Servos and Seven 25g Servos. Use 6.0v MAX

CAUTION: When setting up and connecting the servos on your L-39 for the first time, be careful not to have the Speed Brakes and the Flaps Binding one example is to have the model resting on a table and connecting power to the servos and have the Flap or Speed Brakes in the down position. You will burn out the servos.

L-39 Servo and Wiring Diagram

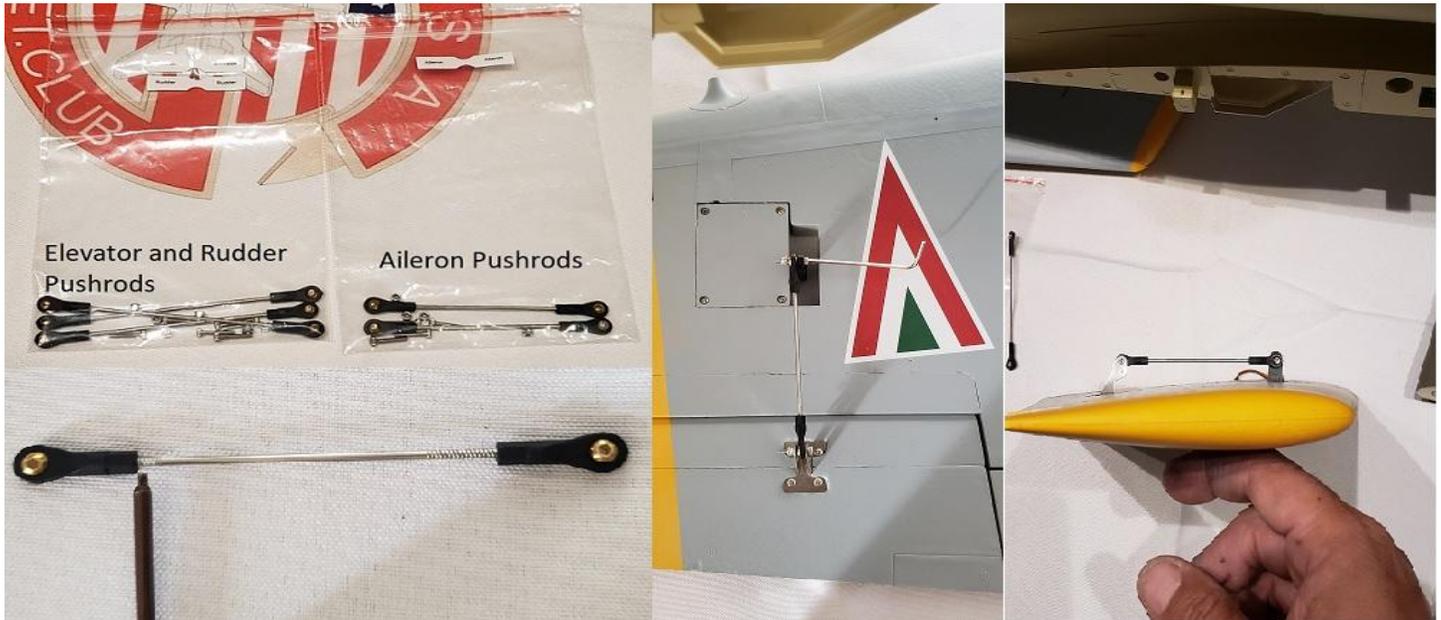




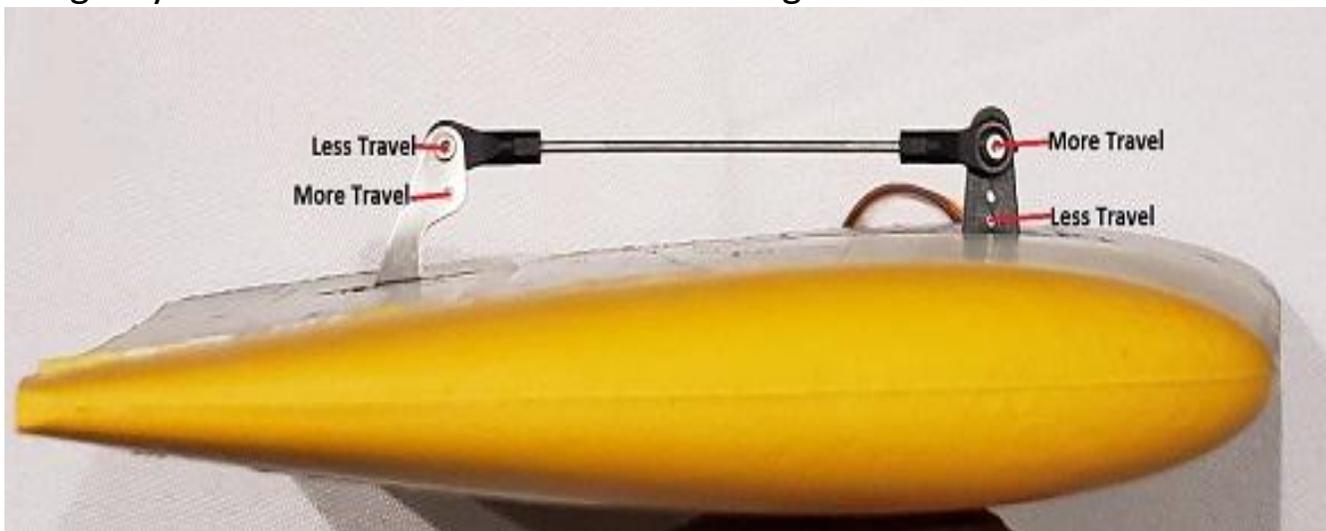
Nose section: There are three servo leads coming out of the nose section, make sure you pass them through to the fuselage. Find the 4 Metric 4x50 (two inches long) screws and washers. You will need to insert those through the main fuselage into the nose section. You only need to make they are snug enough until all the gap on the side of the fuselage is gone. Do not over tighten and crush the foam.



ELEVATORS: All the pushrods come in separate bags, the hardware is very tiny, take special precaution not to lose any. Adjust both ends of the Pushrod, make sure that both ends have an even spacing. In the example below, the left side is a lot shorter than the other end. On the flying surface side, there are two positions for you to adjust the travel, on this example we used the top hole and same on the Servo side. Since not much travel is required on the L-39, on the servo side, use the lowest hole possible and on the flying surface side use the top hole.



Control Throws: Use the lowest hole possible on the servo arm and the highest hole on the control surface. Since the required travel is very small on all, but the rudder on all of our flying surfaces, in order to get the best resolution / control from your radio, adjust the surfaces to your liking, we recommend settings that will give you more control over the entire range.



RUDDER: On the Elevators, Rudder and Ailerons, you want to center the servos and then install your pushrod so that the servo arm and the control horn are 90 degrees to the flying surface like in the picture of the Elevator. On the vertical fin there is a scale baffle the you will have to glue to the top of the Fin right on at the top of the rudder. Use your favorite glue, if you use CyA, try to use a Foam Safe type of your favorite brand. Alternative, you can use Epoxy.



FLAPS: The servo for the flaps, in the UP position, you will have the servo arm at about 45 Degrees at neutral. Adjust the pushrod as needed and install Again, use the hole in the servo arm that is closest to the servo and the top hole in the Control Horn in the Flap. This will give you more control in the entire range of motion instead of having to limit the amount of travel in your flap channel later.



CAUTION WHEN SETTING UP THE FLAPS:

WHEN YOU POWER UP THE L-39 FOR THE FIRST TIME, MAKE SURE THE FLAPS ARE NOT REVERSED. THEY ALREADY COME WITH A METAL GEAR SERVO ARM AND WILL BURN OUT THE SERVO IF THEY ARE SET UP ON REVERSE WHEN YOU POWER YOUR RADIO. THIS NEEDS TO BE THE FIRST THING YOU CHECK WHEN YOU FIRST APPLY POWER TO THE L-39



WING ASSEMBLY: Find the two Wing Spars, the bigger one is about 29.5 inches and the smaller, thinner wing spar is about 26.5 inches. Insert both through the fuselage and slide one wing into the spars. The first time you insert the wings, you will notice that the landing gear strut will probably touch the foam in the wheel well. This is normal, and will NOT interfere with the operation of the Landing Gear. Just push the wing into place and it will automatically connect the Landing Gear, Brakes, Servos and Lights for you. Install two Metric 3x10 screws on each wing



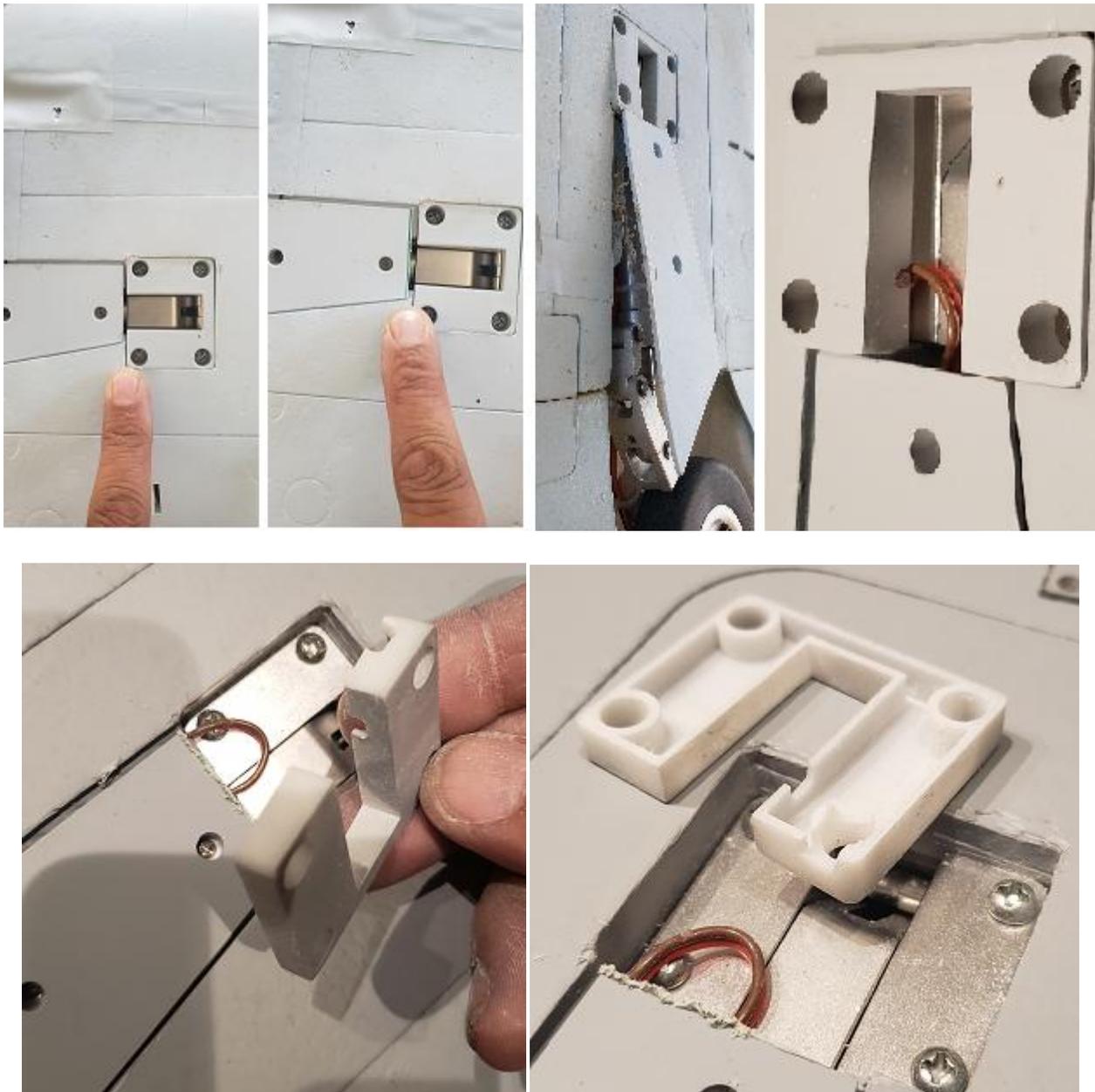
ELEVATORS: Find the elevator spar which is about 19.5 inches, feed the spar through the fuselage and then install each elevator half making sure to connect the servo extension on each side first, then use two Metric 3x10 screws to hold the elevator into the fuselage.



RUDDER / VERTICAL FIN: Find the spar that is about 12.5 inches long and insert into the fuselage. slide the vertical fin into the spar and connect the servo extension, as you slide the vertical fin down, make sure to slide all the servo cable into the slots in the base of the fin and into the vertical fin itself. Install the two metric 3x10 screws to hold in place.



The retract covers: look great if used but you have to take many precautions to make sure they are installed correctly. There must be sufficient gap between the landing gear door that is attached to the strut and the actual landing gear cover. It might be necessary for you to trim the landing gear door on the strut to make sure you have enough clearance. The first two photos show the stock gap and then the clearance I had to make. The third picture will show what can happen when the cover is loose or not glued properly. You will need to trim slots in the cover in order to have it seat properly. If you are not comfortable taking all these precautions, simply do not install the retract cover.



Equipment Installation: There are many ways to install your Receiver and batteries. The airplane will come with all the servo leads routed to the front of the jet. All the leads will be marked. There is plenty of Room for batteries and Radio equipment in the forward nose section.



While we used a JP 105mm EDF, should you choose to install one of your own, the max possible exhaust diameter is 3-3/4 inches or 95mm.



EDF Installation:

We flew our prototype with two 105mm EDF fans, the Changesun and the JP 105mm fan. Each has its own pros and cons. Make sure to test your set up on a test stand to make sure it produces the Rated thrust or the thrust you believe it will produce.

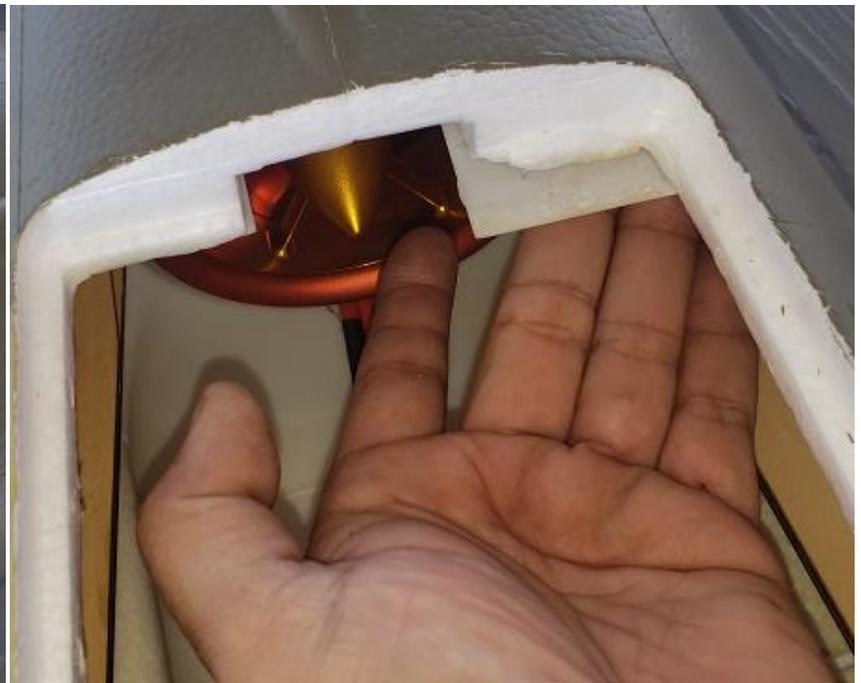
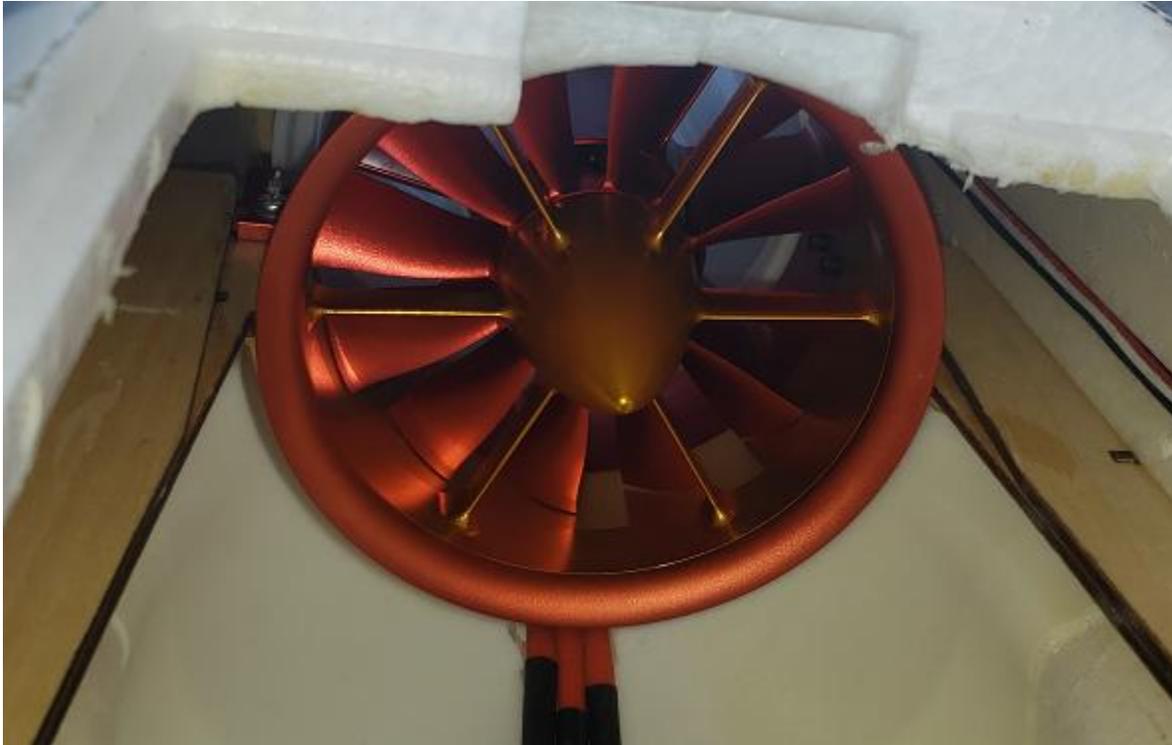




The EDF is partially supported by three plastic air diverters that route the air to the center of the airframe. If you purchased one with a fan already installed, you would need to carefully remove the top two diverters should you need to remove the fan for any reason.



The below installation shows a JP Fan with the two plastics diverters removed. The airframe only has two openings on the top of the fuselage, the plastic diverters hold the fan in place in the front section.



The two upper plastic air diverters on the upper part of the fuselage are only held on with minimal amount of glue, should you need to remove them, simply wedge a small flat blade screw driver between the fuselage and the plastic diverter, do not try to pry them off, work the screw driver around the edge of the diverter first or you risk breaking the plastic.

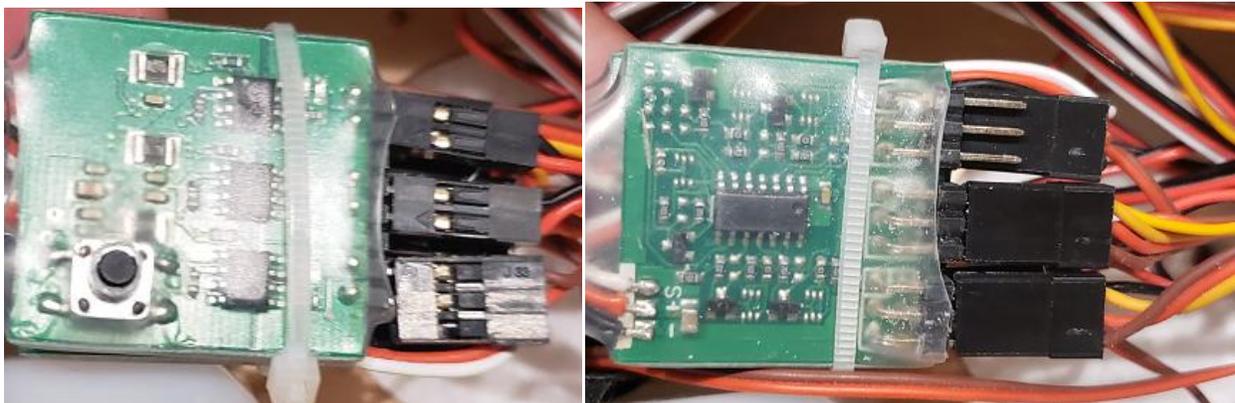


When installing or removing the fan, you will have to install the two screws from the top of the fuselage, you might have to look through the top to make sure to align your screwdriver with the screw deep in the fuselage. If you are removing a fan, it is best to first carefully remove the plastic air diverters from the front of the fan, thus allowing you to see the mounting screws better and provide a different angle to view the fan mounts.

CG: The CG of your L-39 is 110-115 MM $4\frac{1}{4}$ - $4\frac{1}{2}$ inches from the leading edge of the wing at the Fuselage. This is basically measured where the wing meets the fuselage.



The Retract and Brake controller continue to evolve, so we are not going to spend too much time on them One servo lead goes out to your Receiver for the retracts, the controller will do all the timing of the gear and doors



The BlitzRCWorks L-39 105mm EDF Jet is available from:



(626) 629-8552

<https://www.bananahobby.com>

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