

L-39 EDF

1/6th SCALE:

Length: 72 inches (1828 mm)

Wingspan: 56 inches (1433 mm)

Weight (Ready-To-Fly): 16 lbs with 12S 6000mAh battery

Recommended EDF: JP 105mm to 110mm

Recommended ESC: 150A or higher



CG:

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

CONTROL SURFACE TRAVELS:

Aileron Travel: 12 mm (15/32 inches)

Elevator Travel: 12 mm (15/32 inches)

Rudder Travel: 25 mm (1 inch)

FLAP SETTINGS:





Takeoff: 15–45 degrees

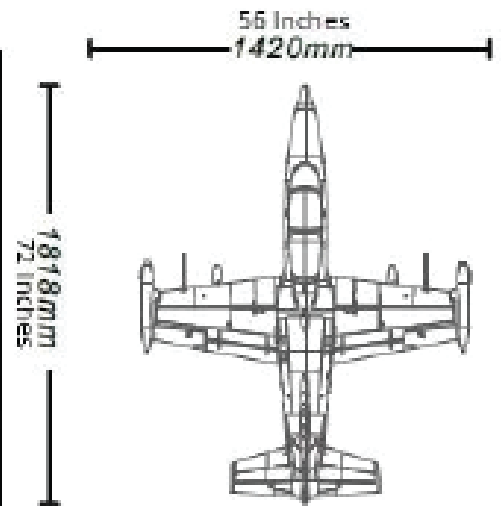
Landing: 35–45 degrees

SPEED BRAKES:

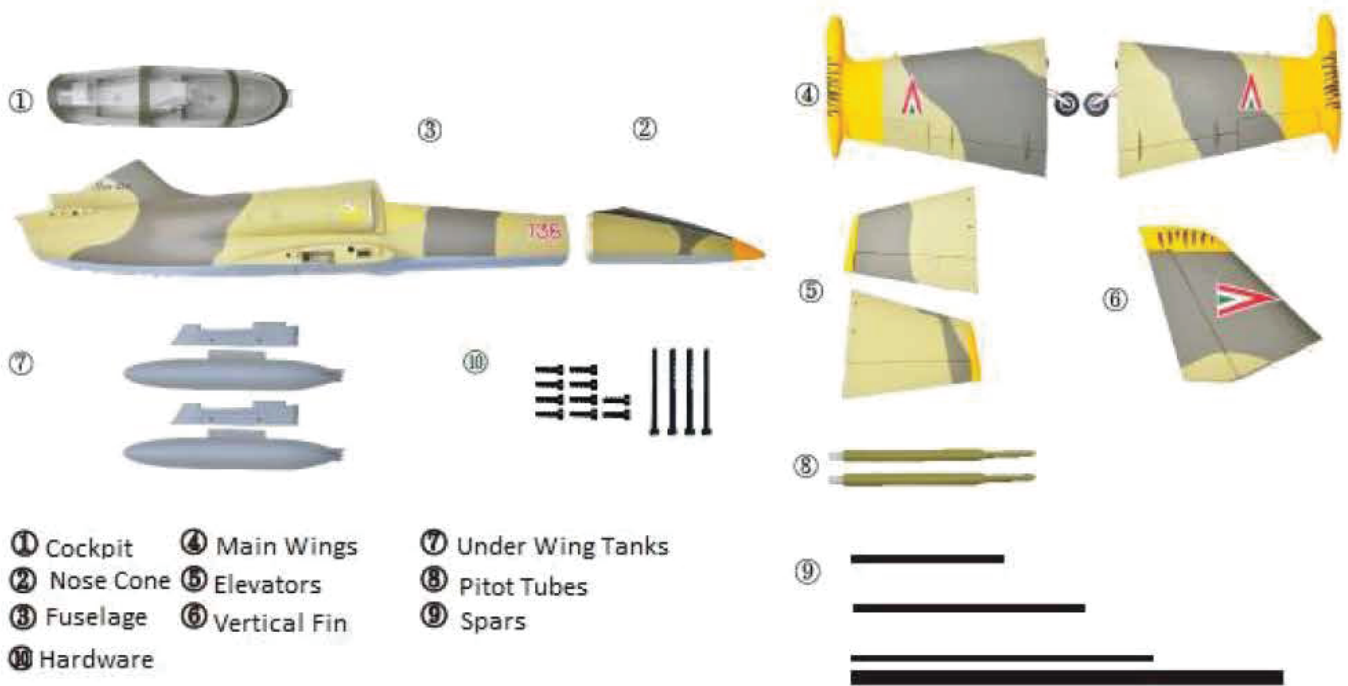
Landing: 60–75 degrees (**Do not operate at high speeds**)

SPECIFICATION:

| | | |
|---|---|-----------|
|  | 105mm EDF or Equivalent | |
|  Digital Motor Gear 4.8v - 7.4v | 12g x 6pcs 6.0V MAX <i>(Control-Cover/Turn)</i> 25g x 7pcs <i>(Control-Main wings/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 |



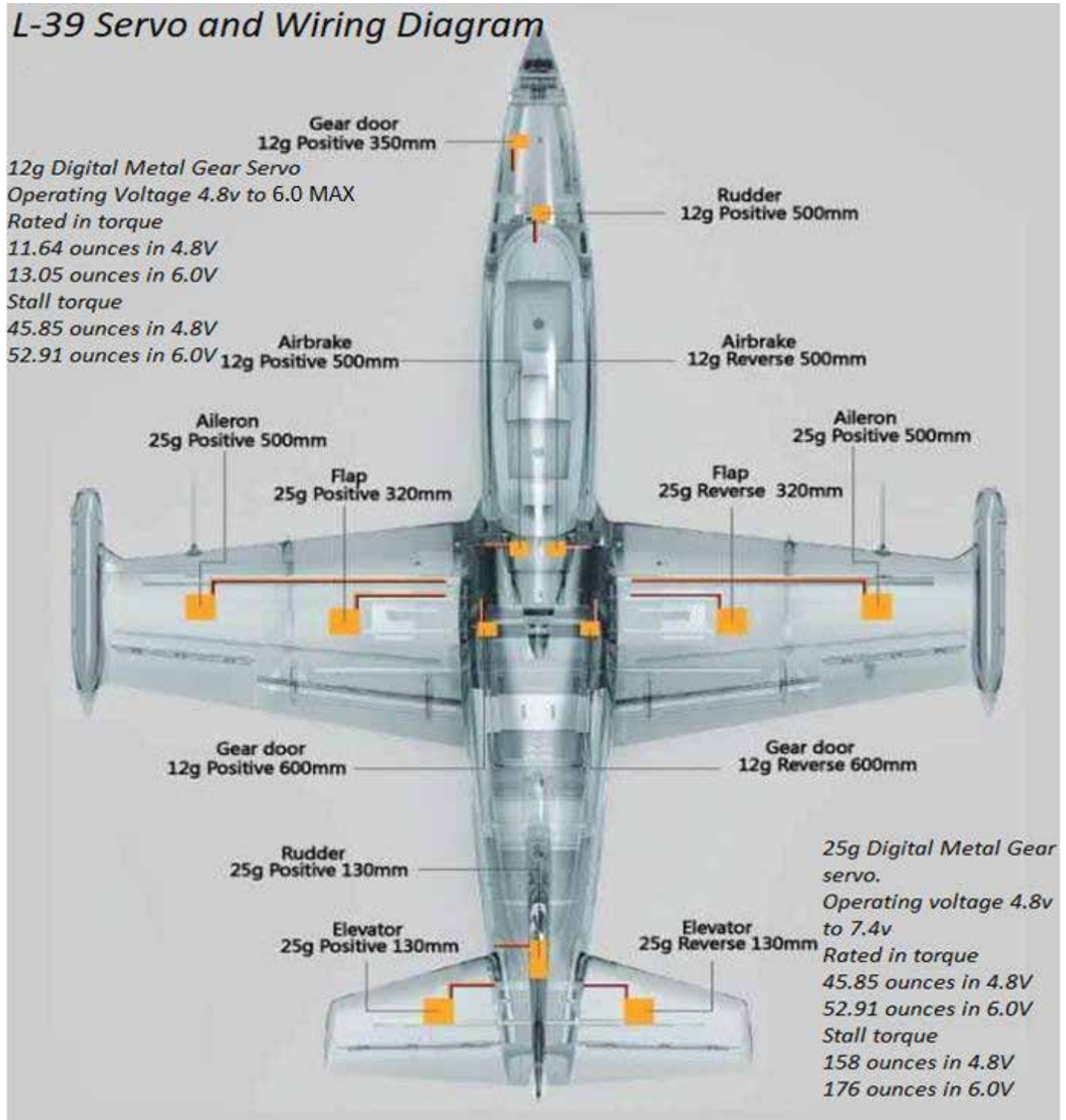
BOX CONTENT:



The L-39 comes equipped with seven 12g servos and seven 25g servos
 Maximum voltage: 6.0V

CAUTION:

(When setting up and connecting the servos on your L-39 for the first time, be careful to avoid binding between the speed brakes and the flaps. For example, if the model is resting on a table and power is connected to the servos with the flaps or speed brakes in the down position, this may cause the servos to burn out)





NOSE SECTION:

There are three servo leads coming out of the nose section. Ensure you pass them through to the fuselage. Locate the four metric screws (4x50, two inches long) and washers. Insert these screws through the main fuselage into the nose section. Tighten them just enough to close any gaps on the sides of the fuselage. Avoid over-tightening, as this could damage or crush the foam.



ELEVATORS:

All the pushrods are packed in separate bags. The hardware is very small, so take extra care not to lose any parts. Adjust both ends of the pushrod and ensure they are evenly spaced.

In the example below, the left side is significantly shorter than the other end. On the flying surface side there are two positions to adjust the travel. In this example, we used the top hole, and the same applies to the servo side.

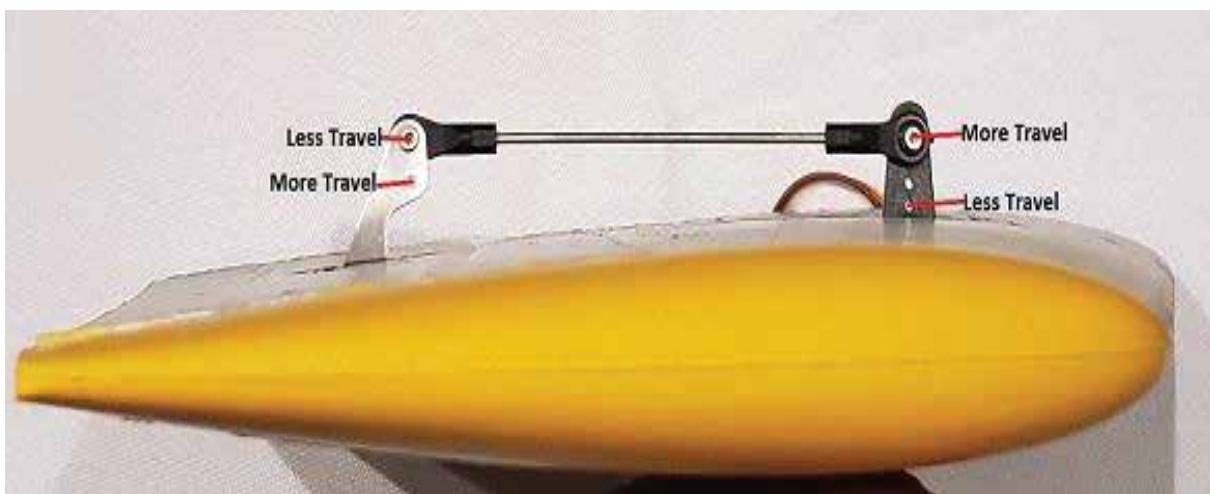
Since the L-39 requires minimal travel, use the lowest hole possible on the servo side and the top hole on the flying surface side.



CONTROL THROWS:

Use the lowest hole possible on the servo arm and the highest hole on the control surface to attach the pushrod. Since minimal travel is required for all flying surfaces except the rudder, this setup ensures optimal control resolution.

To get the best resolution and control from your radio, adjust the control surfaces according to your preferences. We recommend settings that provide greater control across the entire range of motion.



RUDDER:

On the elevators, rudder, and ailerons, first center the servos, then install the pushrod. Ensure that the servo arm and control horn are positioned at a 90-degree angle to the flying surface, as shown in the picture of the Elevator.

On the vertical fin, there is a scale baffle that you will need to glue to the top of the fin, right at the top of the rudder. Use your preferred glue. If you choose CyA, make sure to use a foam-safe version of your favorite brand. Alternatively, epoxy is also a good option.



FLAPS:

For the servo controlling the flaps, in the UP position, set the servo arm at approximately 45 degrees when in neutral. Adjust the pushrod as needed and install it.

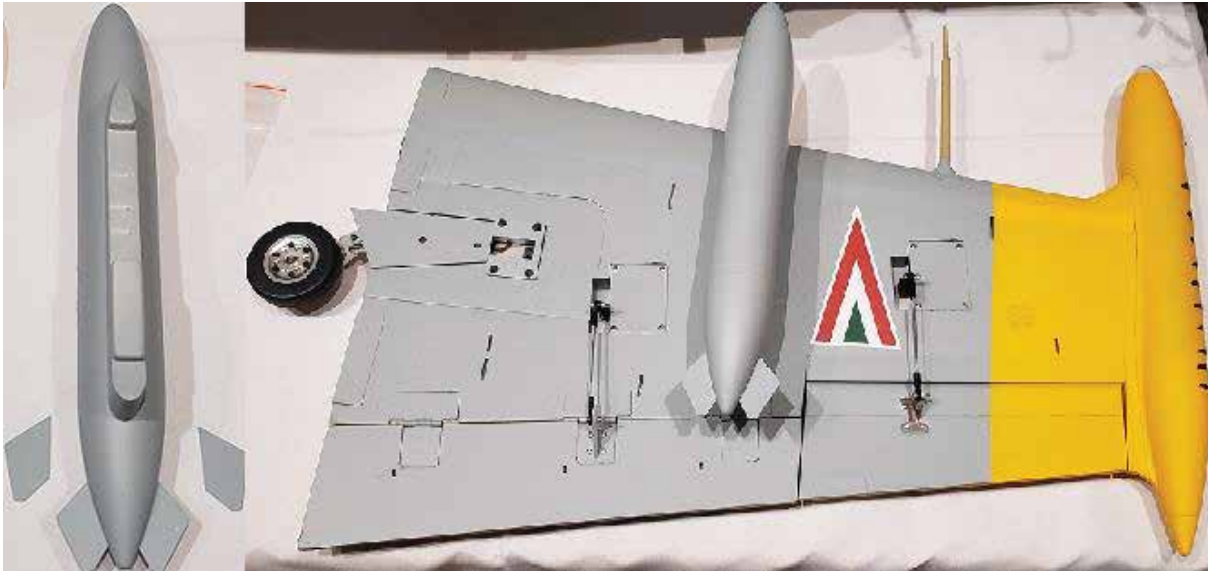
Use the hole in the servo arm that is closest to the servo and the top hole in the control horn of the flap. This configuration provides greater control over the entire range of motion, eliminating the need to limit travel in your flap channel later.



CAUTION WHEN SETTING UP THE FLAPS:

When powering up the L-39 for the first time, ensure that the flaps are not reversed.

The flaps are equipped with a metal gear servo arm, and if they are configured in reverse, the servo may burn out when you power on your radio. This should be the first thing you check when applying power to the L-39 for the first time.

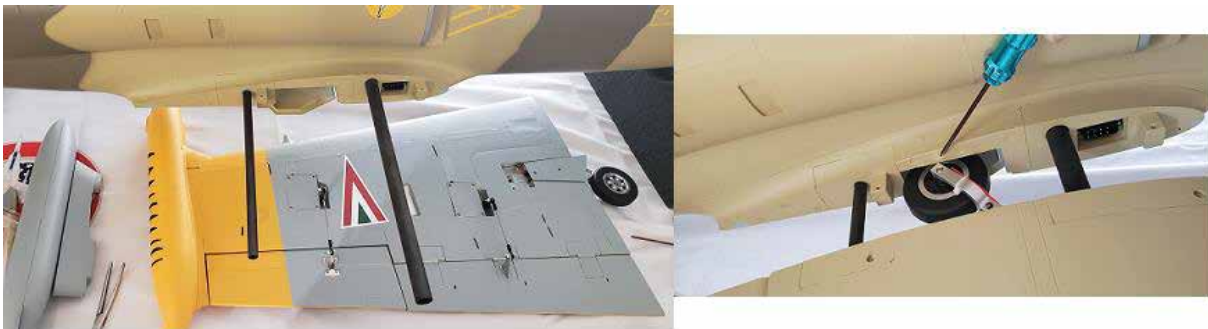


WING ASSEMBLY:

Locate the two wing spars: the larger one measures approximately 29.5 inches, while the smaller, thinner spar measures about 26.5 inches. Insert both spars through the fuselage and slide one wing onto each spar.

When inserting the wings for the first time, you may notice that the landing gear strut slightly touches the foam inside the wheel well. This is normal and does not interfere with the operation of the landing gear. Simply push the wing into place, and it will automatically connect the landing gear, brakes, servos, and lights.

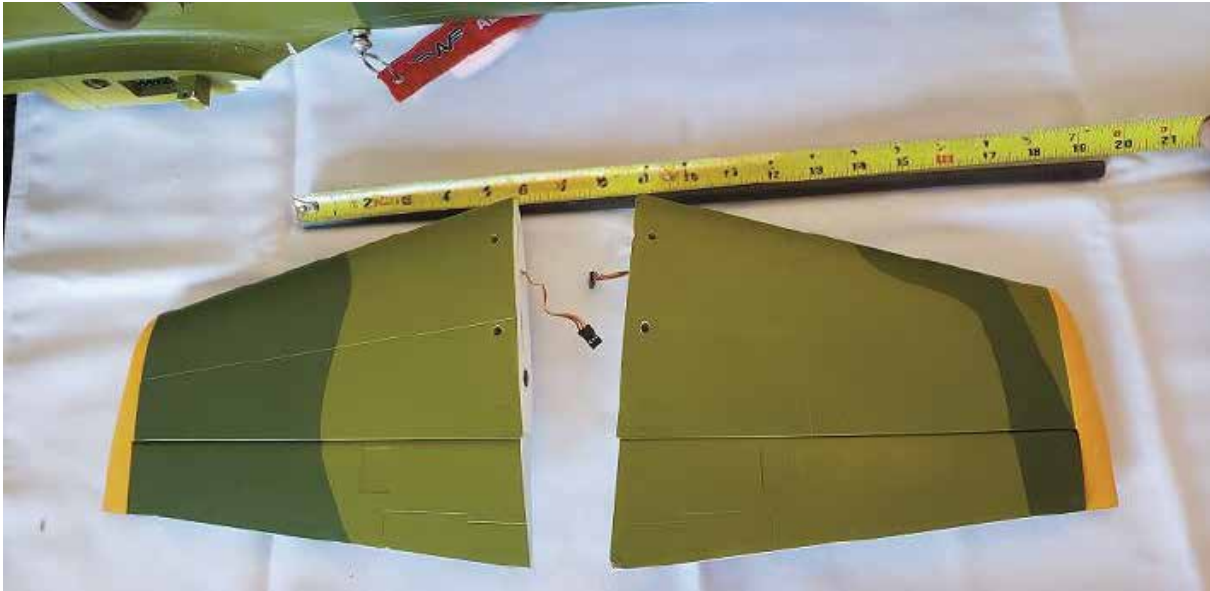
Secure each wing using two metric 3x10 screws.



ELEVATORS:

Locate the elevator spar, which measures approximately 19.5 inches. Insert the spar through the fuselage

Install each elevator half, ensuring you connect the servo extension on each side first. Then, use two metric 3x10 screws to securely attach the elevator to the fuselage

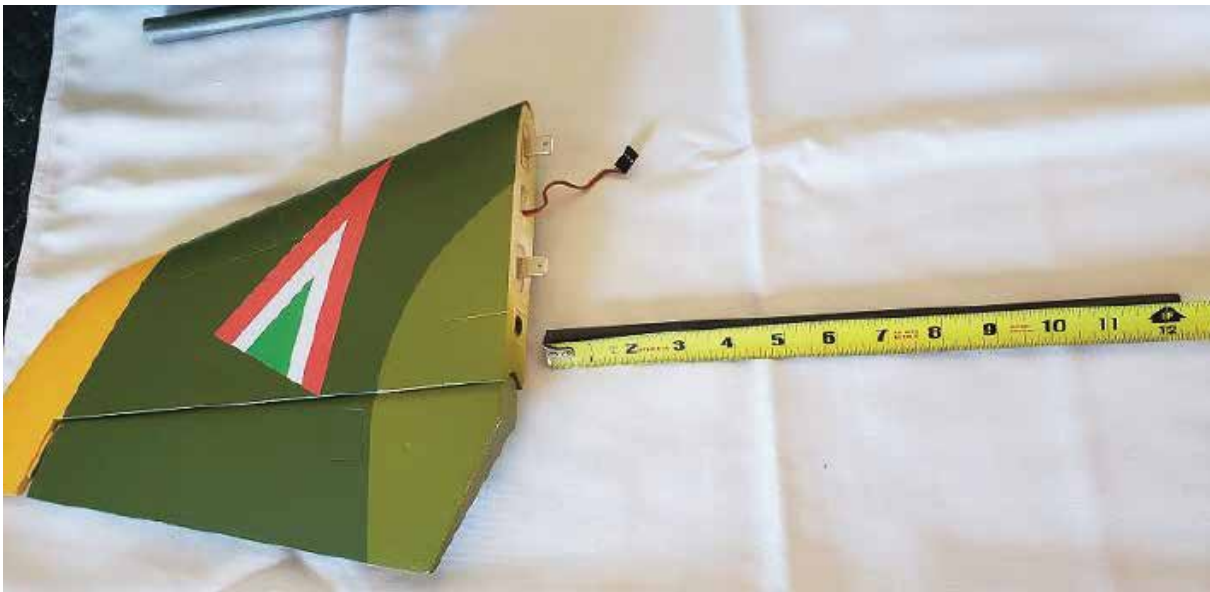


RUDDER / VERTICAL FIN:

Locate the spar, which is approximately 12.5 inches long, and insert it into the fuselage.

Slide the vertical fin onto the spar and connect the servo extension. As you lower the vertical fin, carefully guide all the servo cables into the slots at the base of the fin and inside the vertical fin itself.

Secure the vertical fin in place using two metric 3x10 screws.



THE RETRACT COVERS:

The retract covers look great when used, but you must take several precautions to ensure they are installed correctly.

There must be enough clearance between the landing gear door, which is attached to the strut, and the landing gear cover. You may need to trim the landing gear door on the strut to provide sufficient space.

The first two photos show the original gap and the adjustments I made to create proper clearance. The third photo illustrates what can happen when the cover is loose or not glued properly.

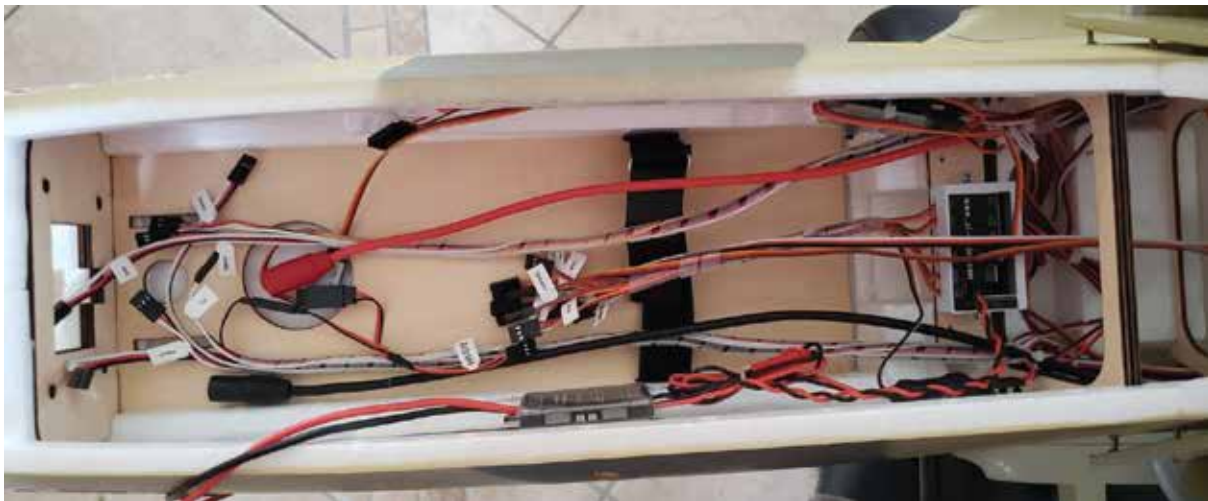
You will need to cut slots in the cover to ensure proper seating. If you are not comfortable with these adjustments, it is best to avoid installing the retract cover altogether.



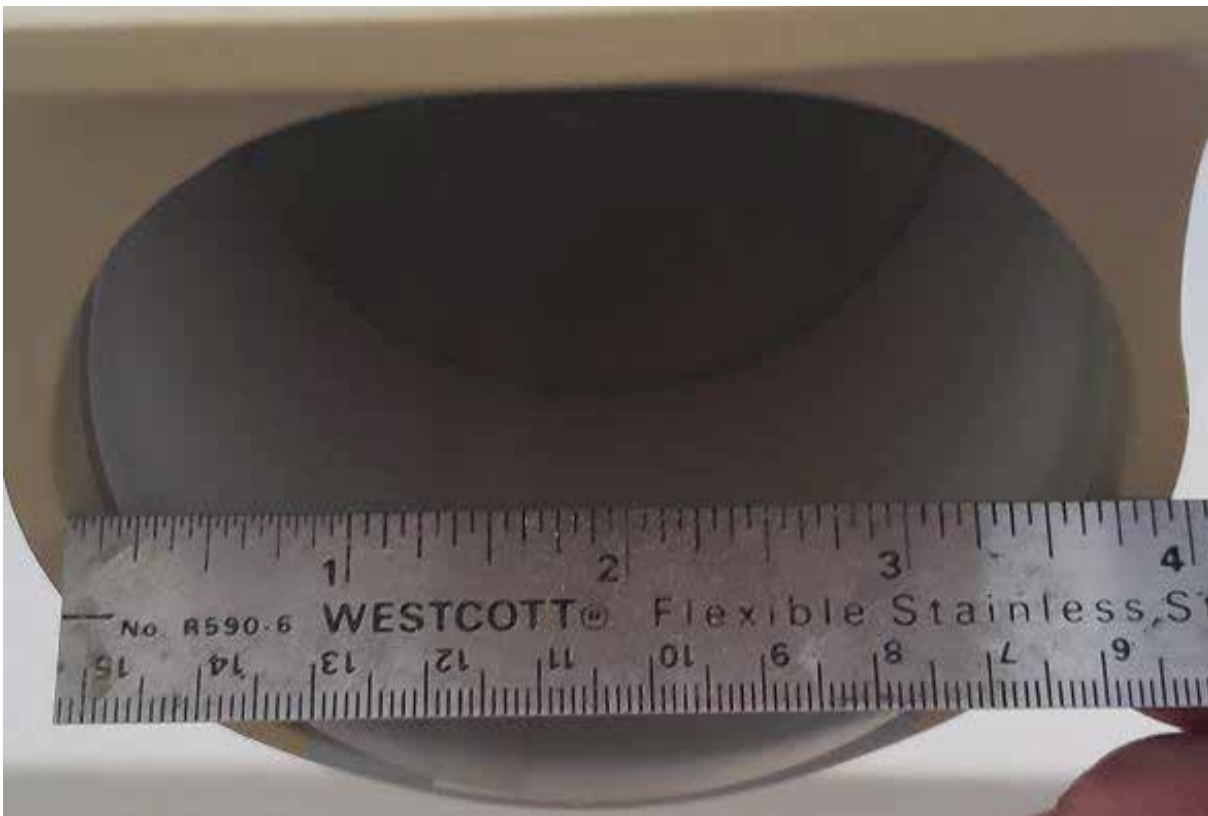
EQUIPMENT INSTALLATION:

There are various ways to install your receiver and batteries. The airplane includes all servo leads pre-routed to the front of the jet, and each lead is clearly marked.

There is ample space 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 tested our prototype with two 105mm EDF fans: the Changesun and the JP fan. Each option has its own pros and cons. Test your setup on a stand to ensure it produces the rated thrust or the expected thrust for optimal performance.

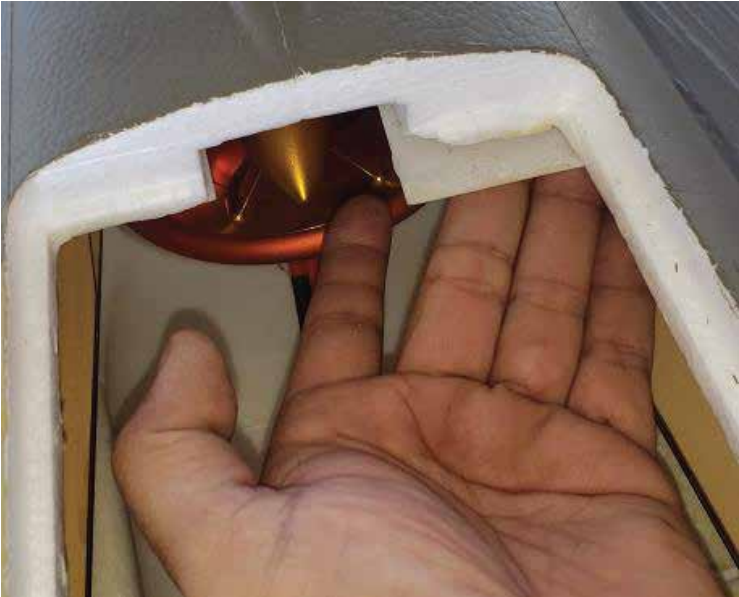
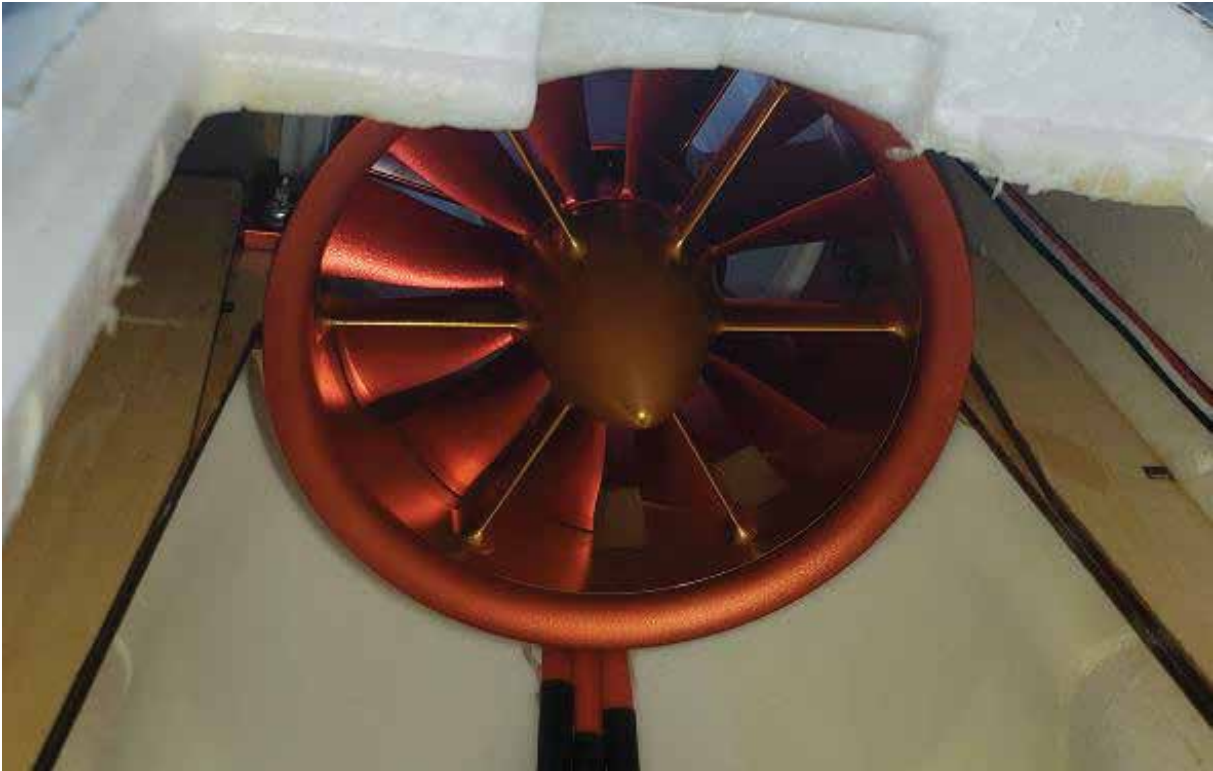


EDF SUPPORT:

The EDF is partially supported by three plastic air diverters that direct airflow to the center of the airframe. If your model includes a pre-installed fan, you may need to carefully remove the top two diverters to access the fan if removal becomes necessary.



The installation below shows a JP fan with the two plastic diverters removed. The airframe has only two openings on the top of the fuselage, and 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 held on with only a minimal amount of glue. If you need to remove them, simply wedge a small flat-blade screwdriver between the fuselage and the plastic diverter. Do not try to pry them off. Work the screwdriver around the edge of the diverter first to avoid risking damage to the plastic.



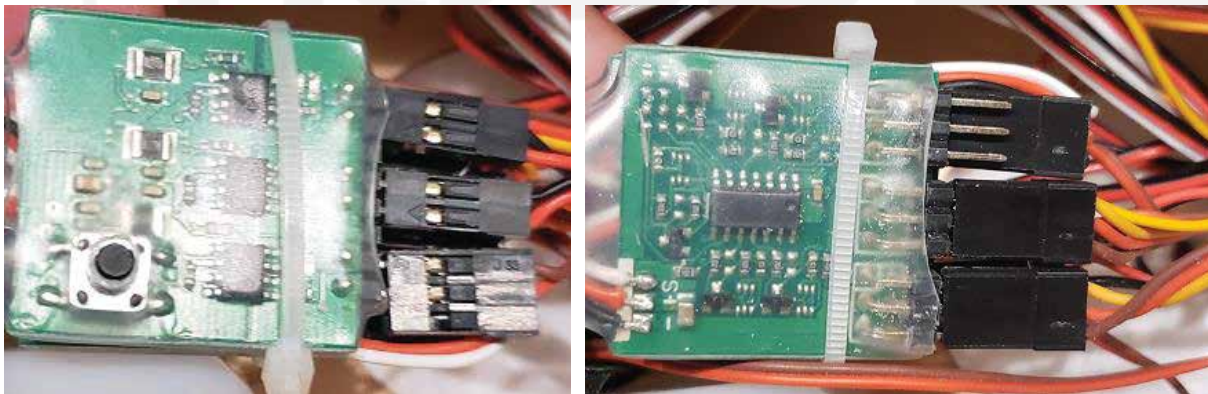
When installing or removing the fan, you will need to install the two screws from the top of the fuselage. You may need to look through the top to ensure you align your screwdriver with the screw deep inside the fuselage. If you are removing the fan, it is best to first carefully remove the plastic air diverters from the front of the fan. This will allow 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 1/4 - 4 1/2 inches) from the leading edge of the wing at the fuselage. This is measured where the wing meets the fuselage.



The retract and brake controller continues to evolve, so we won't spend too much time on them. One servo lead connects to your receiver for the retracts, and the controller will handle all the timing for the gear and doors





The AF-Model L-39 EDF is available from:

(626) 629-8552

<https://www.bananahobby.com>

Info@bananahobby.com

