

EXTREME FLIGHT X

TURBO **RUSHMASTER** V2



84IN/2.1M

6S 3000-5000MAH

7.5-8.5 LBS / 3.4-3.9 KG

LEGACY
AVIATION

Please read the following paragraphs before beginning assembly of your aircraft!

THIS IS NOT A TOY! Serious injury, destruction of property, or even death may result from the misuse of this product. Extreme Flight RC is providing you, the consumer with a very high quality model aircraft component kit, from which you, the consumer, will assemble a flying model. It is beyond our control to monitor the finished aircraft you produce. Extreme Flight RC will in no way accept or assume responsibility or liability for damages resulting from the use of this user assembled product. This aircraft should be flown in accordance to the AMA safety code. It is highly recommended that you join the Academy of Model Aeronautics in order to be properly insured, and to operate your model at AMA sanctioned flying fields only. If you are not willing to accept ALL liability for the use of this product, please return it to the place of purchase immediately.

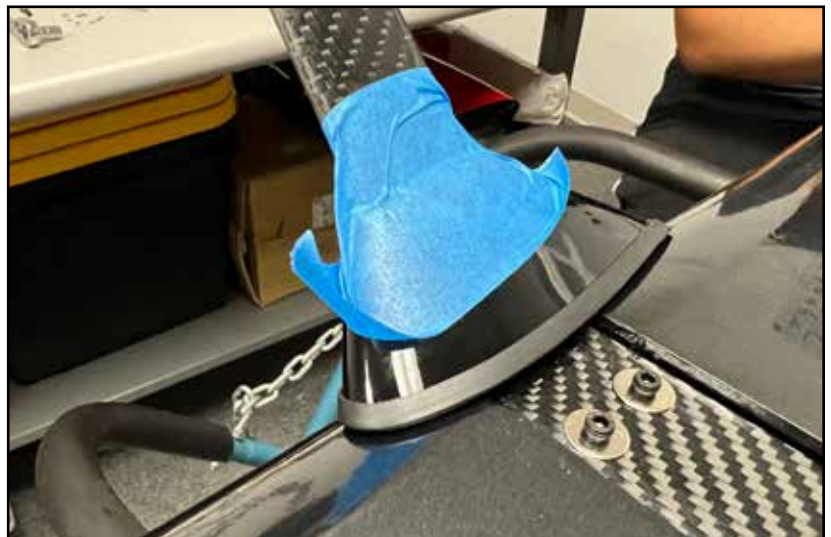
Extreme Flight RC guarantees this kit to be free of defects in materials and workmanship for a period of 30 DAYS from the date of purchase. All warranty claims must be accompanied by the original dated receipt. This warranty is extended to the original purchaser of the aircraft kit only.

Extreme Flight RC in no way warranties its aircraft against flutter. We have put these aircraft through the most grueling flight tests imaginable and have not experienced any control surface flutter. Proper servo selection and linkage set-up is absolutely essential. Inadequate servos or improper linkage set up may result in flutter and possibly the complete destruction of your aircraft. If you are not experienced in this type of linkage set-up or have questions regarding servo choices, please contact us at info@extremeflightrc.com or 770-887-1794. It is your responsibility to ensure the airworthiness of your model.



1.

Attach the landing gear to the fuselage with the 4 included screws and washers. Use blue loctite thread locking compound on these screws. Test fit the fiberglass landing gear fairings, and mark the location onto the landing gear. Sand the area and apply "Goop" or Gorilla Clear Grip or other rubberized adhesive and install the fairing. Apply tape and allow to dry. Note the landing gear sweeps slightly forward when installed the correct direction onto the fuselage.



2.

Using the washer and locking nut, attach the axle to the landing gear. We recommend to grind small flat areas into the axle as shown to help the set screws in the wheel collars to grip the axle better. Install one collar (using loctite on the set screw), then the wheel, then the second collar. NOTE: We like to add a small piece of Flowmaster fuel line as a collar backup. Locate the bottom fin and install as shown using CA glue.

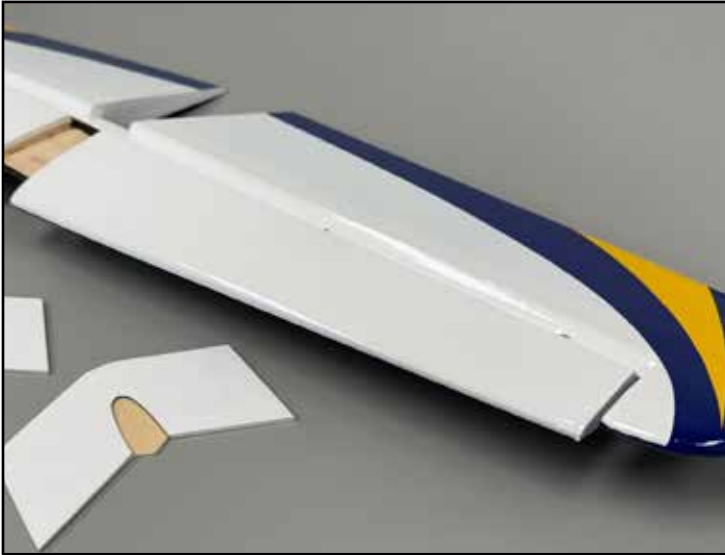


3.

Glue the fences onto the ends of the horizontal stabilizer as shown, use CA or Goop/Gorilla Clear Grip.

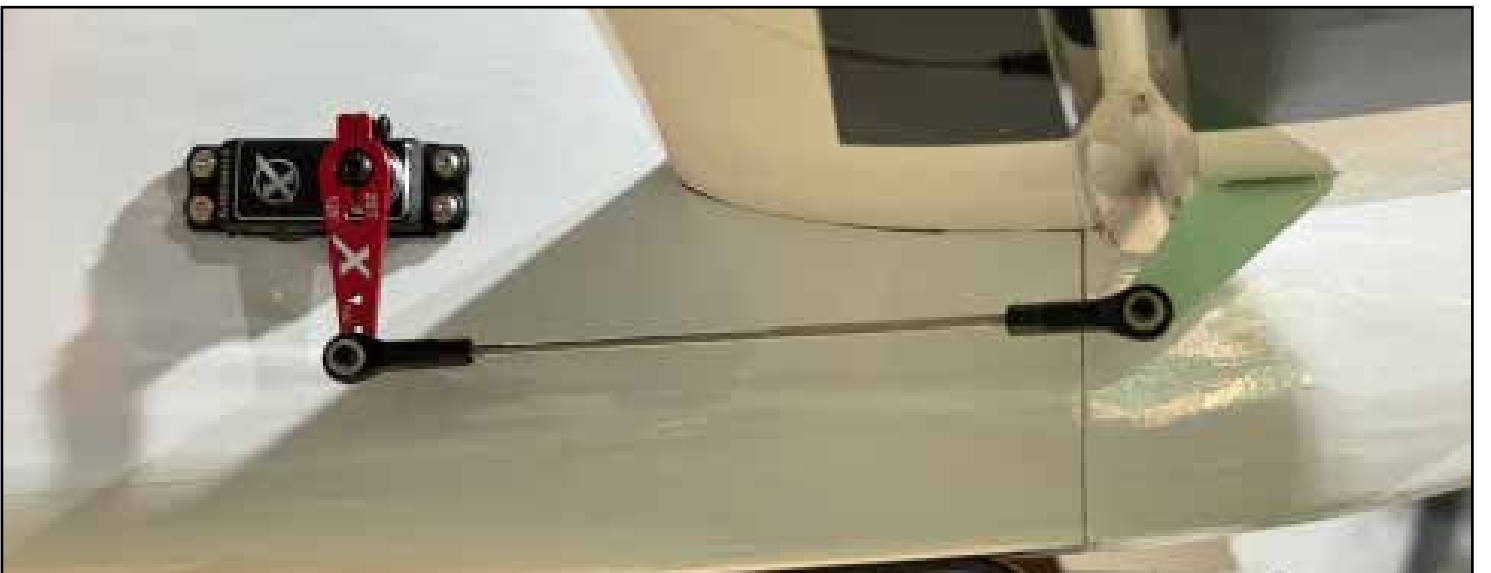
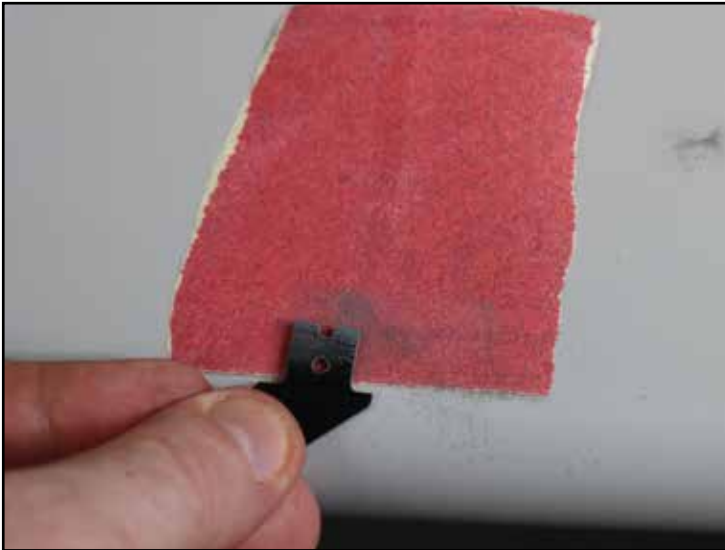
The horizontal stabilizer inserts from the rear into the fuselage slot. MAKE SURE the stab is right-side up. MAKE SURE you push the stab all the way forward into the slot. You can either put epoxy glue onto the mating surfaces before inserting the stab, or you can use thin CA glue after you install the stab and allow it to wick into the slot, your choice.

After, glue the tail cone on with CA.



4.

Scuff the base of the elevator horn and glue into the elevator as shown using epoxy glue. Install the elevator servo with extension wire. Assemble the pushrod and install with servo arm as shown, using 2mm hardware with washers and locknut.



5.

Locate the long tailwheel pushrod. Push the pushrod through its guide tube as shown. Attach the tailwheel to the fuselage using the included screws and blue loctite. Screw the ball link connector onto the pushrod and attach to the tailwheel tiller with 2mm screw and locknut. Install the tailwheel steering servo using the barrel connector as shown. NOTE: The barrel connector needs to be free to rotate on the servo arm. Don't torque the barrel connector down to the arm, instead only tighten enough so that the barrel rotates without wobbling, then lock the nut with a drop of medium CA glue.



6.

Locate the vertical stab/rudder. Scuff the base of the rudder control horn as you did on the elevator and install into the rudder slot with epoxy glue. Install the rudder servo into the vertical stab as shown. Assemble the pushrod and install with the arm as shown. Install the rudder servo extension with a plug lock, feed through the fuselage and install the vertical stab with carbon tube as shown. Latch into place. The vertical stab remains removable for transport.



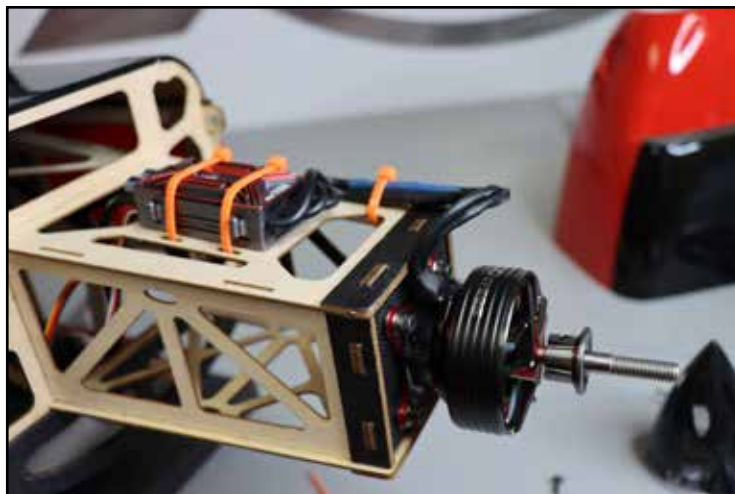
7.

Locate the rudder filler panel. It mounts onto the fuselage as shown with a carbon locator pin. Glue the filler panel to the fuselage using CA glue or Clear Grip/Goop. The exhaust stacks attach to the cowl with screws and we recommend to apply a layer of Goop/Clear Grip to the mating surface on the cowl before screwing the stacks on.



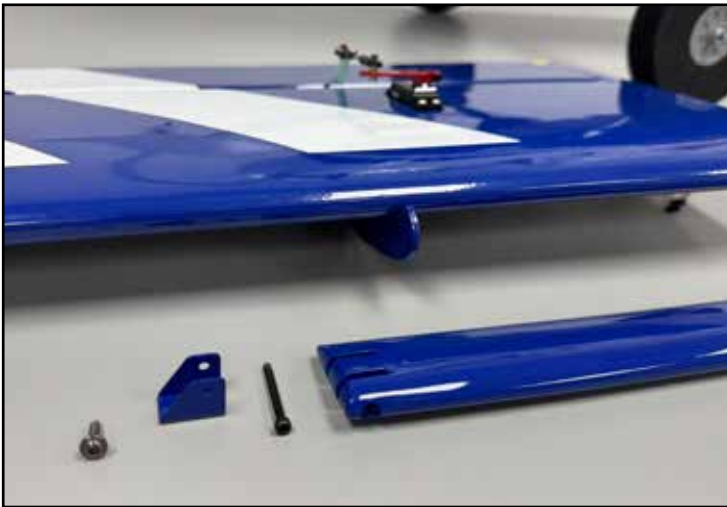
8

Attach your brushless motor to the motor box with bolts and blue threadlocker, here we are showing the installation of the recommended T-Motor AM600. Spacers are included to assist in getting perfect spacing of your motor-to-cowl as shown. Mount your ESC and run the wires with protection from vibration and chafing as necessary. Install the cowl with blue threadlocker.



9.

Locate the Main Wing hardware and install the aileron and flap horns as you did for the rudder and elevator. Assemble the pushrods and install with 2mm hardware and locknuts. Mount the servos into the wings, along with any extensions needed. Note the orientation of the servos, arms, and pushrods. Install the strut mount onto the wing as shown. Install the strut onto the mount with the long 3mm screw as shown. The strut folds against the wing for storage in the wing bag.



10.

Using Clear Grip or Epoxy or CA glue, install the wing fences onto the wing as shown. Note the small fences are asymmetrical, try them both directions, upright and upside-down, one will fit much better without gaps. Open the holes in the fuselage shown to allow the wires to enter the fuse from the wings. Install the wing tube (remove any adhesive ID tags on the wing tube and clean off any residue) and slide the wings onto the tube and latch in place. Attach the struts to the fuselage as shown and adjust the upper strut mounts as needed.



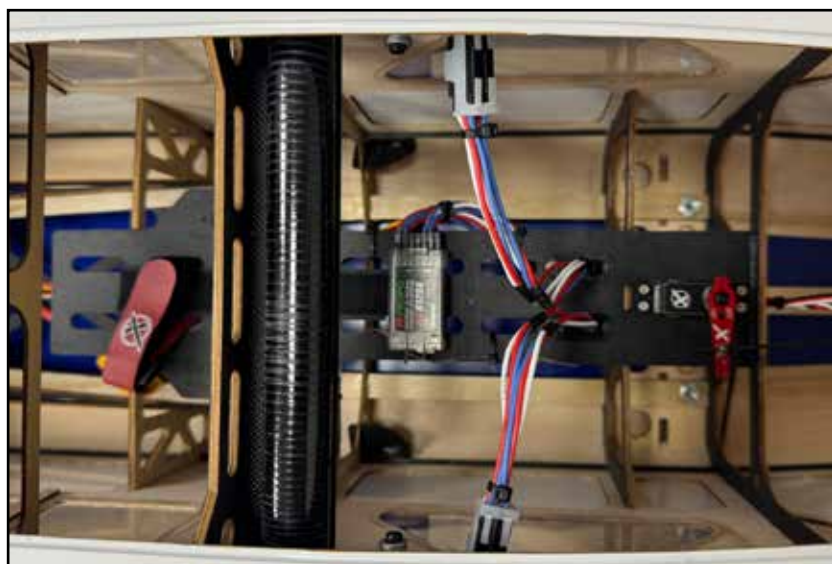
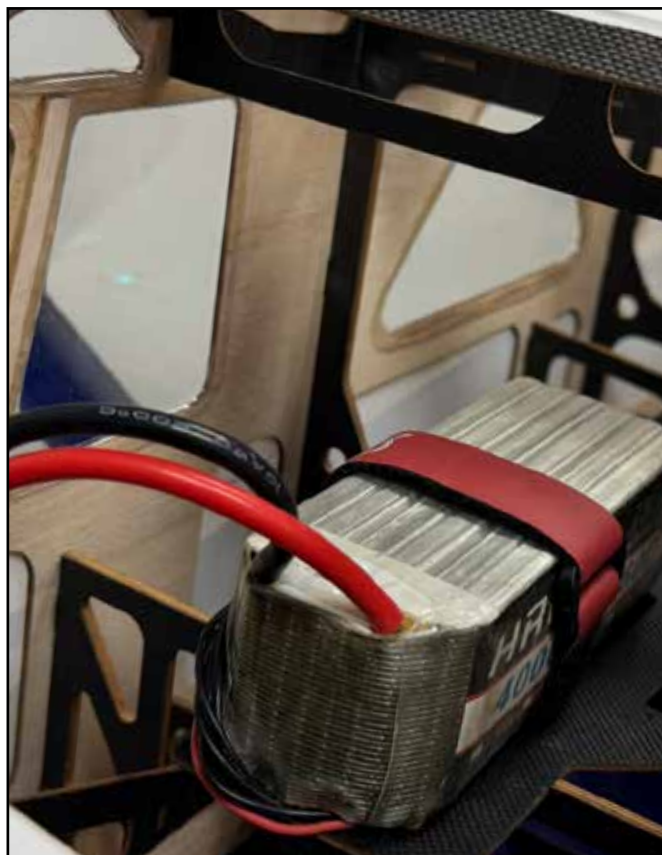
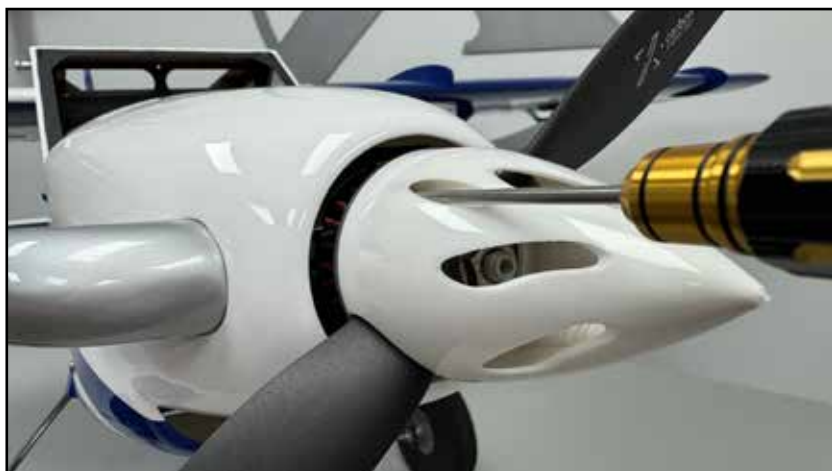
11.

Check rotation direction on your power system and make sure all is working well before installing the prop. Install your prop and spinner once it is safe to do so. Note that the recommended spinner diameter leaves area for cooling air to enter the cowl as shown

The balance point for the maiden flight of the Bushmaster is on the wing spar tube, you can easily support the plane by the tube and it should hang level. Move your LiPo battery to adjust CG. Be sure to use adhesive velcro on your battery and battery tray AND a velcro strap around the battery and tray, to retain the battery in place.

For convenience in field setup, we recommend the use of MPX two-wire connectors (available at ExtremeFlightRC.com) to connect the aileron and flap servo wires in the fuselage.

The Bushmaster has a huge fuselage and sheds heat well, it can often be flown without an additional cooling air exit in favorable weather conditions. If you are going to fly as a float plane, be careful about having large cooling holes open on the bottom of the fuse behind the floats, water can enter here. If you do need additional cooling air to keep your battery cool, remove the covering over one of the openings in the bottom of the fuselage.



12.

Control settings:

Elevator: Low Rate 8-10 deg. 15-20% expo
3D Rate 45 deg. 60-70% expo

Aileron: Low Rate 15-20 deg. 20-30% expo
High Rate 35 deg. 60-70% expo (For best roll rate, mix flaps to ailerons)

Rudder: Low Rate 20 deg 40-45% expo
High Rate 45 deg. 70-80% expo (check for interference with elevator)

Flaps: 40-50 degrees full deflection with 5% down elevator mix at full deflection

NOTE: Check rudder and elevator for interference at full deflection. We recommend either a digital angle finder or angle-measuring app on your cell phone to measure throws.



Covering colors:

Oracover colors Ultracote colors

RED/WHITE Scheme

Ferrari Red #23	True Red-#HANU866
White #10	White-# HANU870
Silver # 91	Silver-#HANU881
Black #71	Black-#HANU874

BLUE/WHITE Scheme

#52 dark blue	Midnight blue #HANU 885
White #10	White-# HANU870
Cub Yellow #30	Cub Yellow-#HANU884

CAMO Scheme

Ferrari Red #23	True Red-#HANU866
White #10	White-# HANU870
Black #71	Black-#HANU874
Light grey #11	Light Grey -#HANU882
Seafire Grey #445	Seafire Grey- # HANU907

Orange Scheme

White #10	White-# HANU870
Black #71	Black-#HANU874
Orange #60	Orange - #HAN877

Before flight, use a covering iron to go over all seams on the covering. You will need to periodically shrink your covering to maintain its appearance.

Double check the direction the controls move in and verify your prop is installed correctly. Check your power system on the ground in a safe manner. Enjoy your Bushmaster!