

H·KING

BUSHMASTER²



INSTRUCTION MANUAL

PNE
PLUG N FLY

Please read this manual carefully before operating this plane.



WARNING

Read this instruction manual fully so as to become completely familiar with the features of the product before operating. Failure to operate this product correctly could result in damage to the product, personal property, and cause serious injury. This is a sophisticated hobby product and is NOT a toy. It must always be operated with caution, common sense, and some basic mechanical ability. This manual provides instructions on the assembly, safe operation, and maintenance of this hobby product. It is highly recommended that you read and follow fully the instructions and warnings stated in this manual, including safety, assembly, set-up, and flying guidelines, in order to operate this product correctly and avoid damage or serious injury.

SAFETY PRECAUTIONS

As the user of this product, you and you alone are responsible for operating it in a manner that does not endanger yourself and others around you or result in damage to the product or property of others. This product is operated via a radio-controlled system that, in some cases, can be subject to interference from sources outside of your control. Interference may result in a momentary loss of control, so it is always recommended that this product be used in a suitable open outdoor space.

- This is a radio-controlled flying model and, as such, must always be flown with caution. This is NOT a toy.
- The BushMaster is a versatile sports aircraft designed specifically for model enthusiasts with some flying experience.
- Always exercise great caution when using the recommended battery to power this product. For full safety notes and operating procedures, please read the information provided by your battery supplier.
- Take great care when connecting/disconnecting the battery. Once again, see your battery supplier's information for the full safety procedures.
- Never power up the model in a confined space, and always keep the propeller clear of obstructions, clothing, and parts of your body.
- This product is not a toy. Children must be accompanied by an adult at all times when operating this product.
- Only fly this model in an open area away from crowds, people, buildings, trees, power lines, roads, airports, and other obstructions.
- Always put safety first when operating this model and consider the warnings stated above.
- The supplier/manufacturee accepts no responsibility for damage or injury caused through the use of this product. A reminder that it is not suitable for children under the age of 14. THIS IS NOT A TOY.



INTRODUCTION

Thank you for purchasing the BushMaster, a sports-style 3D RC model aircraft that offers exceptional flight performance.

The Bushmaster is a STOL capable high wing aircraft with 3D aerobatic performance and very smooth slow flight characteristics. The large air-filled and shock-absorbing tyres make short take-offs and landings possible on almost any surface. The 6S LiPo compatible brushless motor in combination with an 80A controller and a 16" propeller has proven to be the optimal setup for impressive climb performance and a very good top speed. The long flight time of 6-10 minutes with a 3200mAh 6S Lipo battery are perfectly chosen for the ambitious sport pilot and the 3D connoisseur.

FEATURES

Lightweight yet robust EPO with composite reinforcements.

Deep wings with very large flaps and ailerons (approx. 40% of the total area), which can be switched to a control surface via the transmitter and are suitable for extreme 3D manoeuvres.

Oversized air-filled tyres with valve for shock-absorbing properties. Take-offs and landings on almost any surface.

Short take-off characteristics (with flaps fully set to approx. 1 - 2m).

Short landing characteristics due to large landing flaps and the possibility to switch them with the ailerons e.g., as butterfly.

Various accesses to all components on the fuselage and a large battery compartment for 6S LiPo batteries from 3000-5000mAh.



SPECIFICATIONS

- Motor : 5015-550KV Brushless Outrunner
- ESC : Aerostar G2 80A w/SBEC 6V/7.4V 8A Brushless
- Servos : 2×25g, 4×19g Digital Servo MG
- Wingspan: 1830mm
- Length: 1330mm
- Flying Weight: 2961g
- Propeller: 16×6 blade

REQUIRES TO FLY

4-6 ch RC Transmitter and receiver
Flight Battery
3000~5000mAh 6S 40~60C LiPo w/XT90 Battery

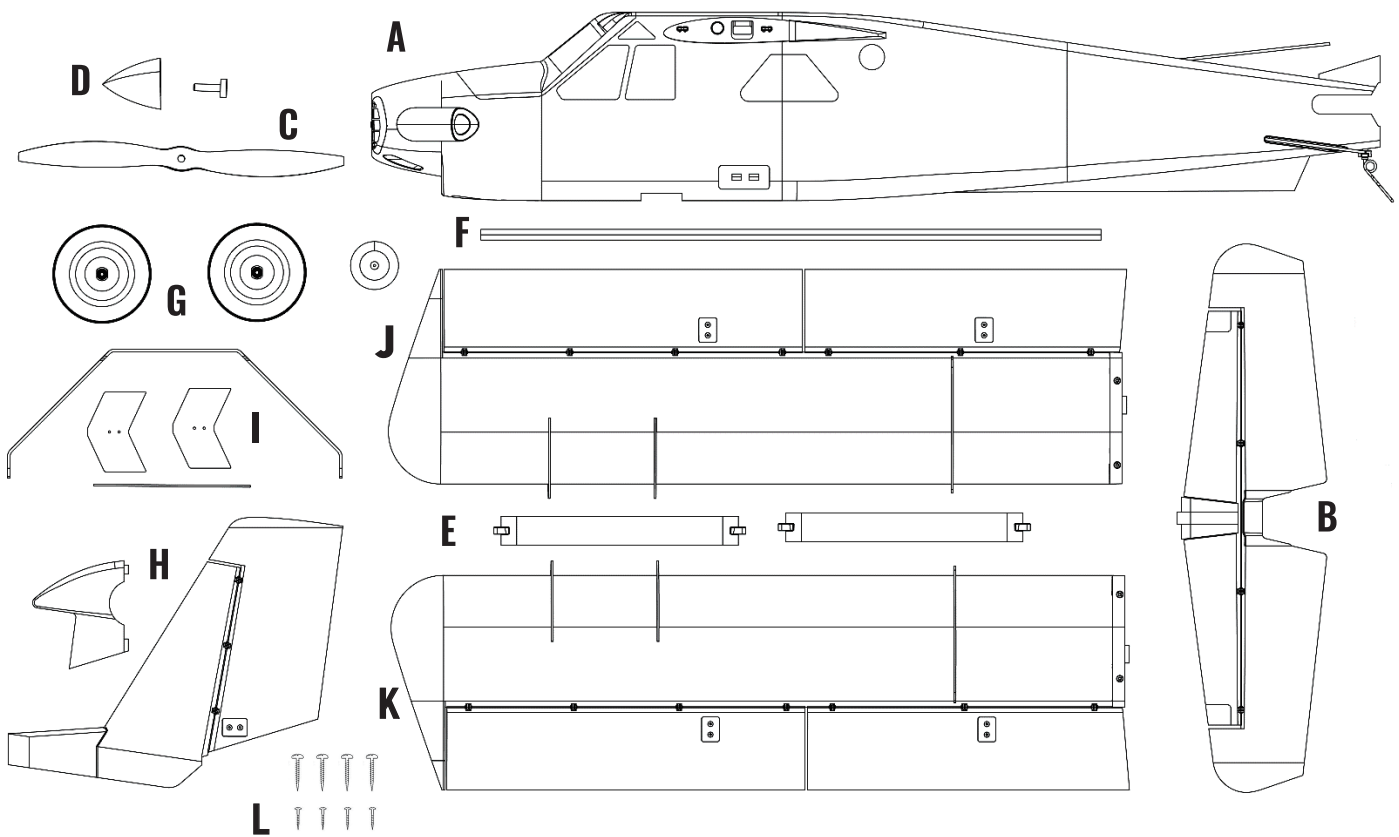
REQUIRES TO BUILD

Phillips screwdriver
Foam Glue



PACKING LIST

Please check the parts listed below carefully before assembly. If anything is missing or damaged, please contact your dealer first and inform them of the item designation or part number of the missing or damaged part(s). (A complete spare parts list can be found on this manual). Please note that different versions may sometimes contain slightly different parts in the packaging.



A: Fuselage

B: Horizontal Stabilizer

C: Propeller

D: Spinner

E: Main Wing w. struts

F: Main Wing Spar

G: Landing Gear Set

H: Vertical Stabilizer Set

I: Winglets

J: Right wing set

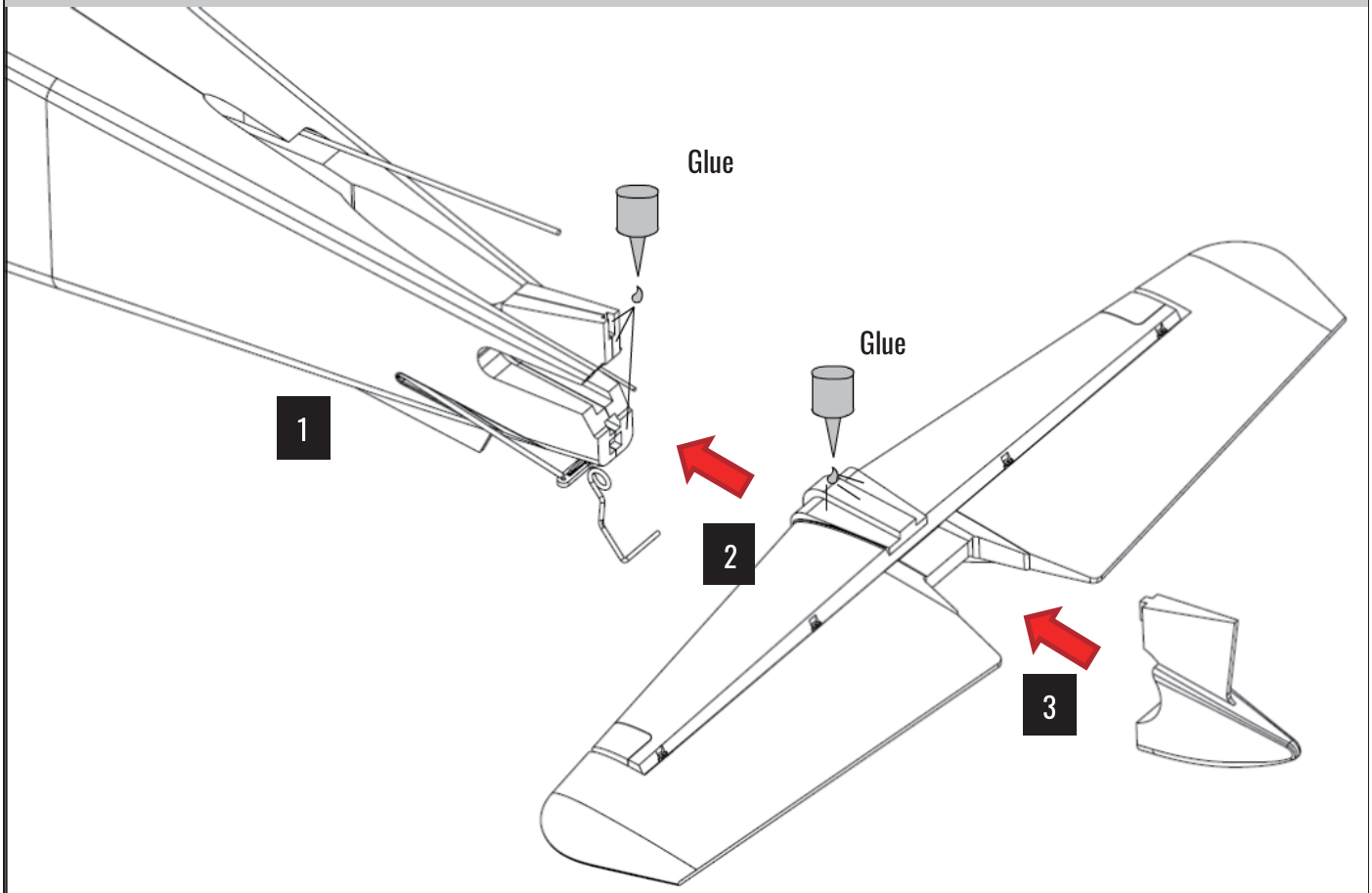
K: Left wing set

L: Screw Set



ASSEMBLY INSTRUCTIONS

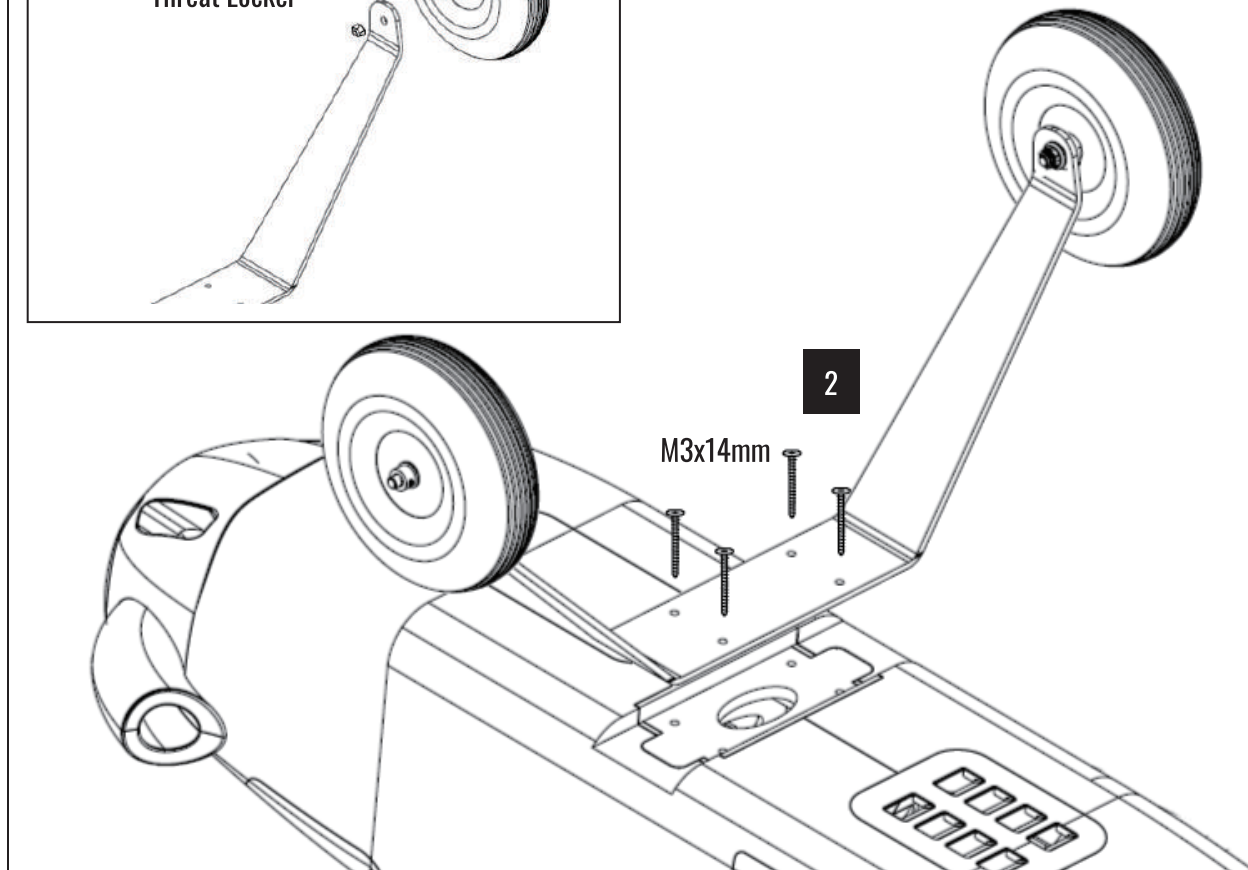
HORIZONTAL STABILIZER INSTALLATION



1. apply glue to the fuselage and the elevator in the places shown.
2. push the Elevator all the way into the guide in the fuselage and remove excess glue, making sure the elevator is placed cleanly and straight in the fuselage.
3. As soon as the glue is solid, you can insert the linkage from the servo into the guide on the rudder horn and screw it in place.



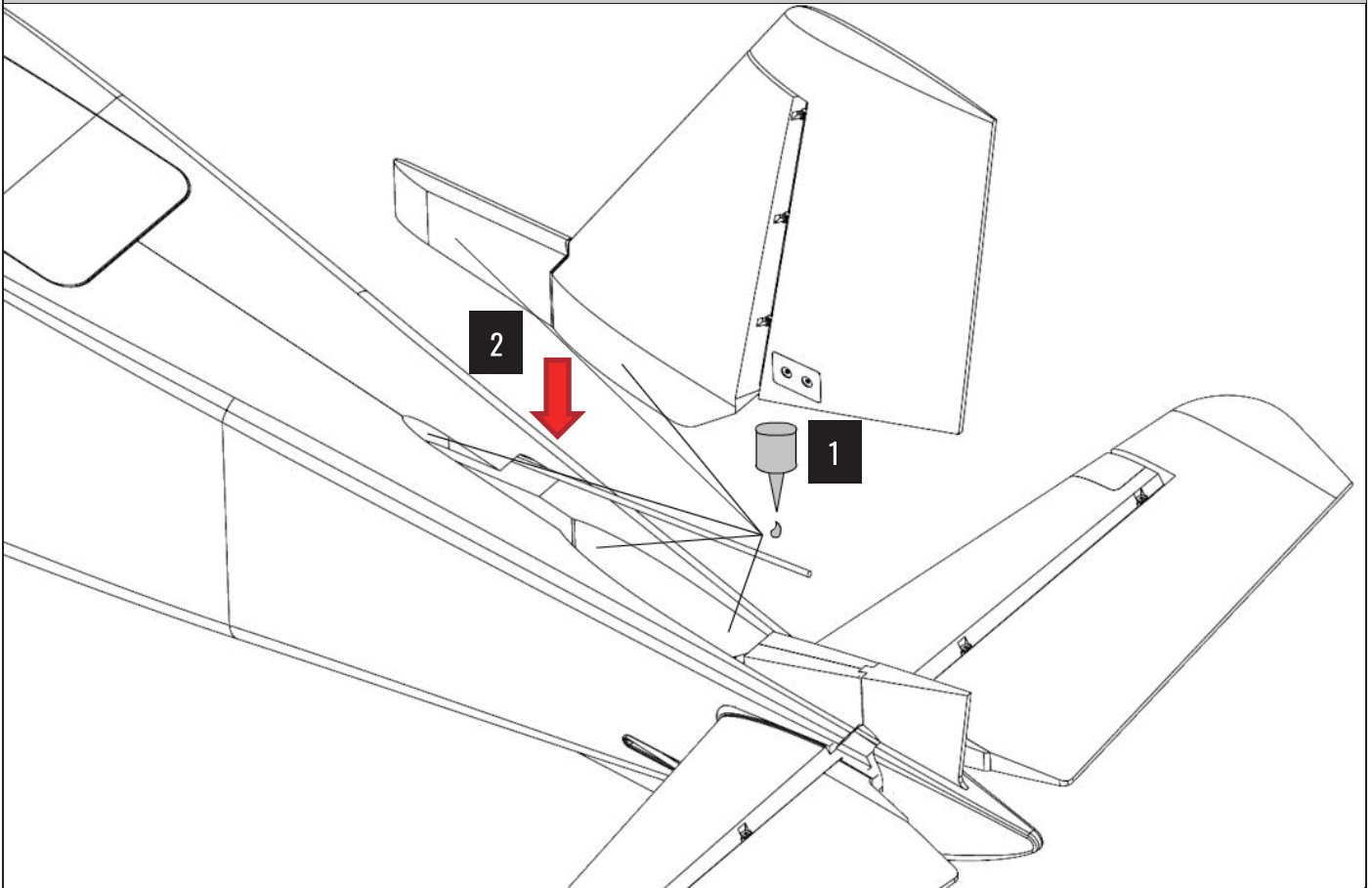
LANDING GEAR INSTALLATION



1. Attach the wheels to the undercarriage bracket. Use medium strength thread locker to secure the nut.
2. Attach the landing gear to the fuselage with the screw as shown.



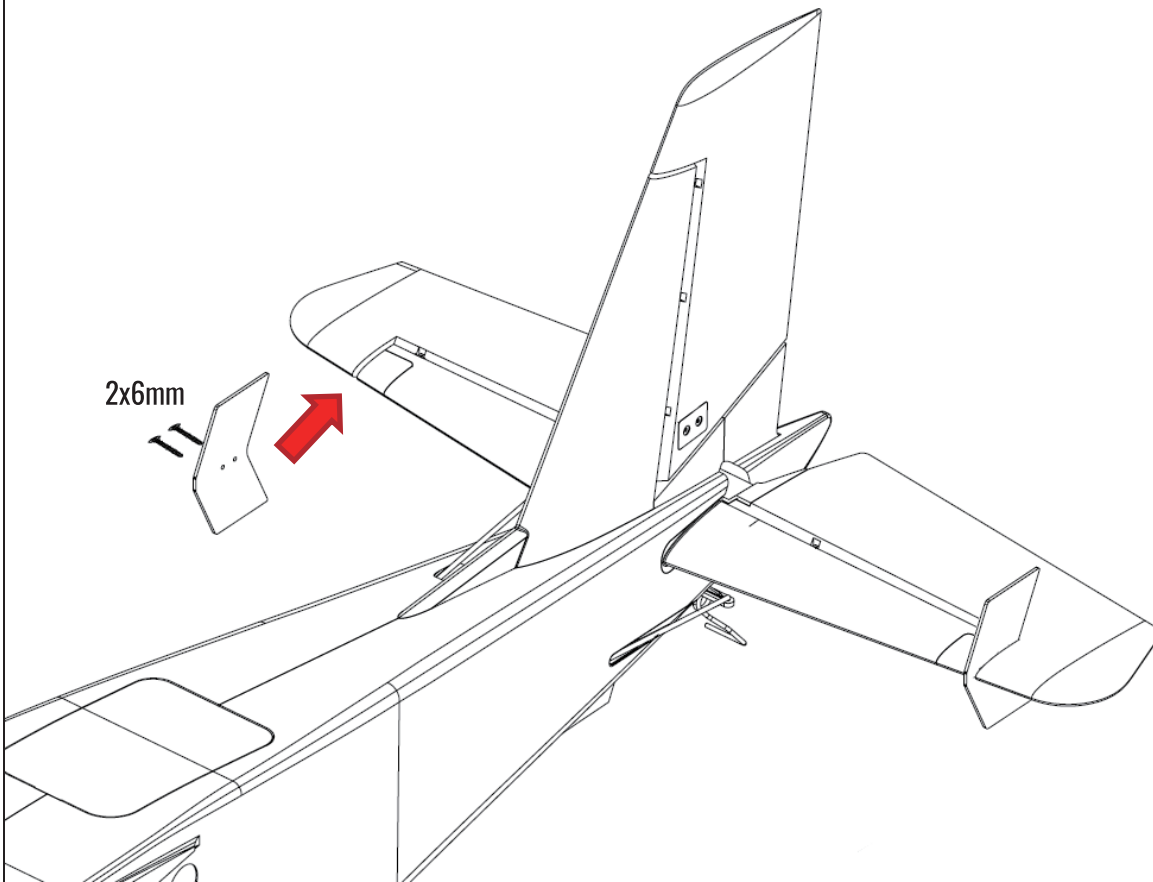
VERTICAL STABILIZER INSTALLATION



1. Apply glue to the specified surfaces of the rudder and to the counterpart on the fuselage.
2. Slide the rudder into the specified guide in the fuselage and remove excess glue. Make sure that the rudder sits straight in the fuselage.
3. Once the glue is solid, you can insert the linkage from the servo into the guide on the rudder horn and screw it in place.

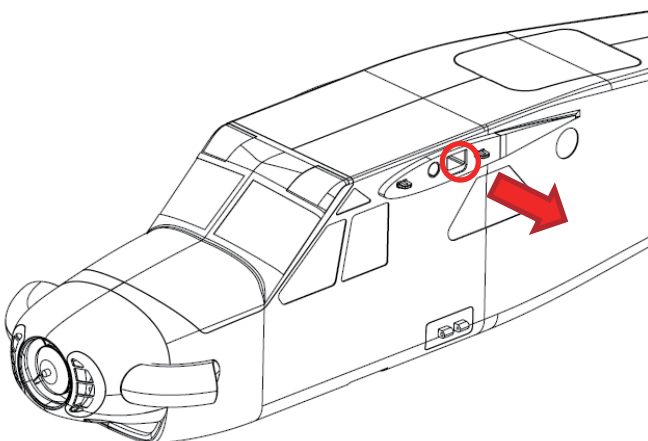


WINGLET INSTALLATION

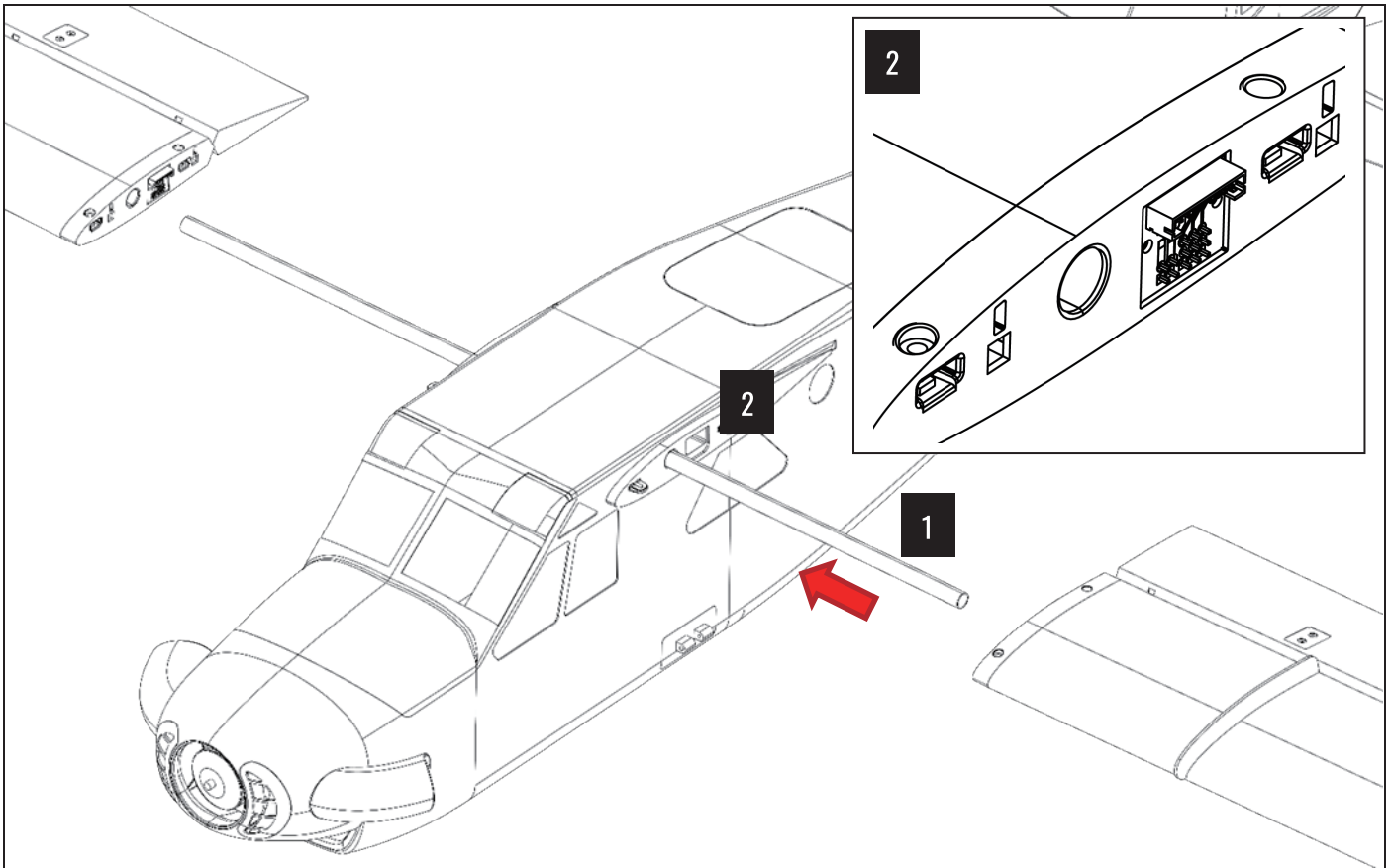


1. Attach the two winglets to the tailplane as shown.

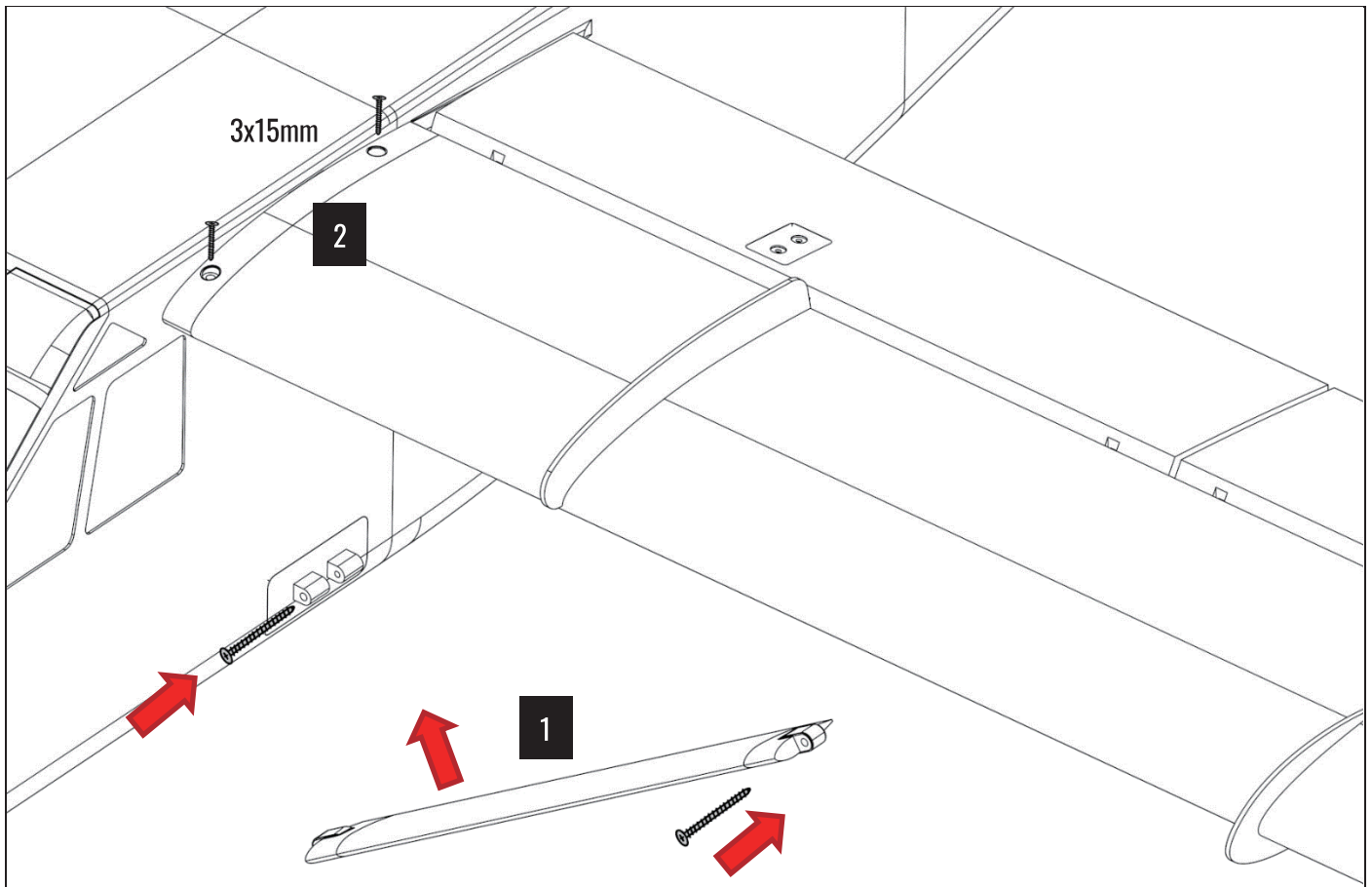
MAIN WING INSTALLATION



1. first lead the cables with the BEC connections for the wing lighting through the hole to the outside.



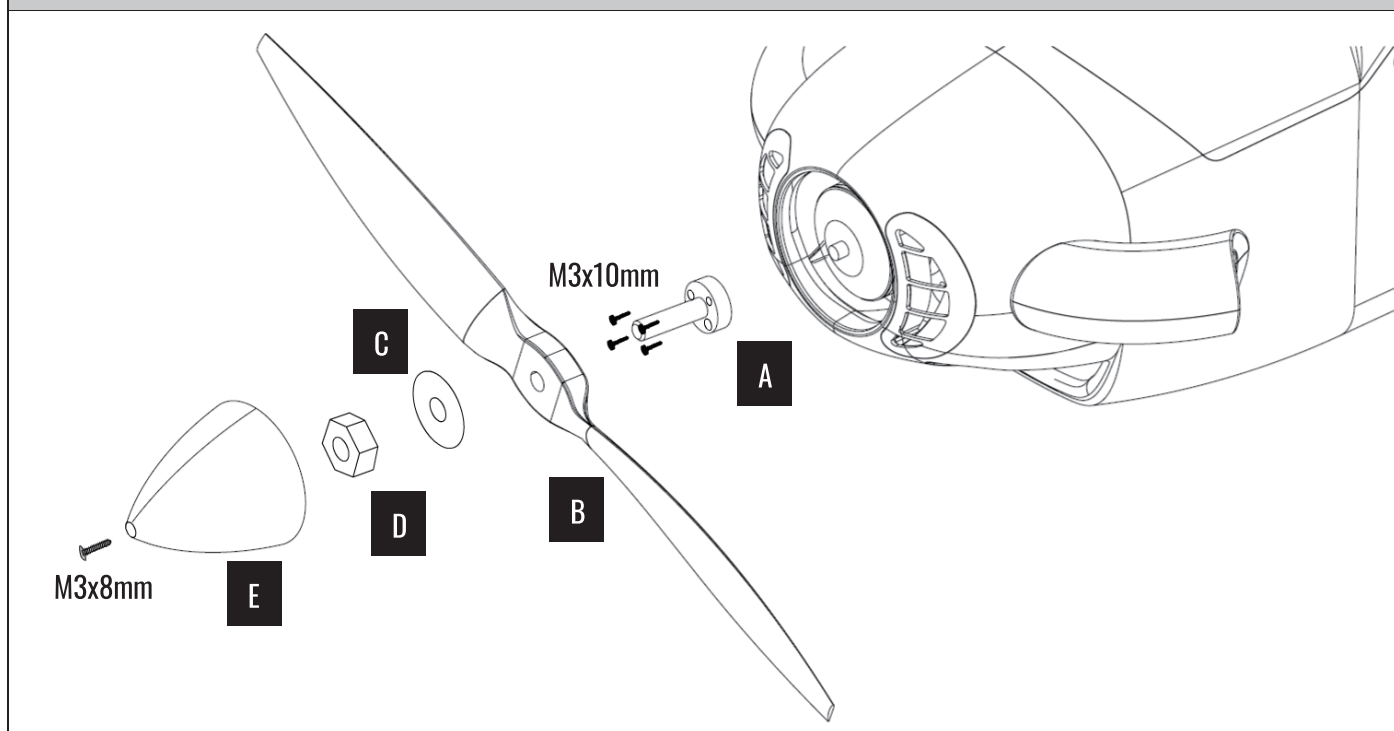
1. Push the wing spar through the opening provided in the fuselage.
2. Guide the respective wing onto the wing spar and connect the multi-core white cable for the servos to the respective connectors on the wings.
3. Connect the lights by connecting the two BEC connectors.
4. Now connect the servo leads to your receiver and switch on your system to put the servos in neutral.



1. Screw the wing struts to the respective wing and fuselage with the screws provided.
2. Screw the wing to the fuselage lock the wings firmly in place for flight.
(Please do this procedure in reverse to disassemble the wings again for transport).



PROPELLER INSTALLATION



Install the spinner set and propeller in sequence from A to E.

CONTROL HORNS INSTALLATION

Make sure all servos are in their central position and adjust the linkages to indicated positions.

The following pictures show the default factory settings for the control horns and linkages recommended for use for initial flight.

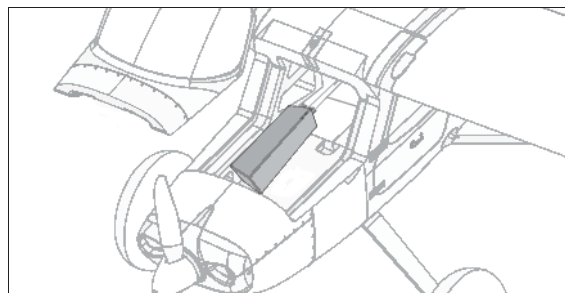
Hole reference for servo linkage





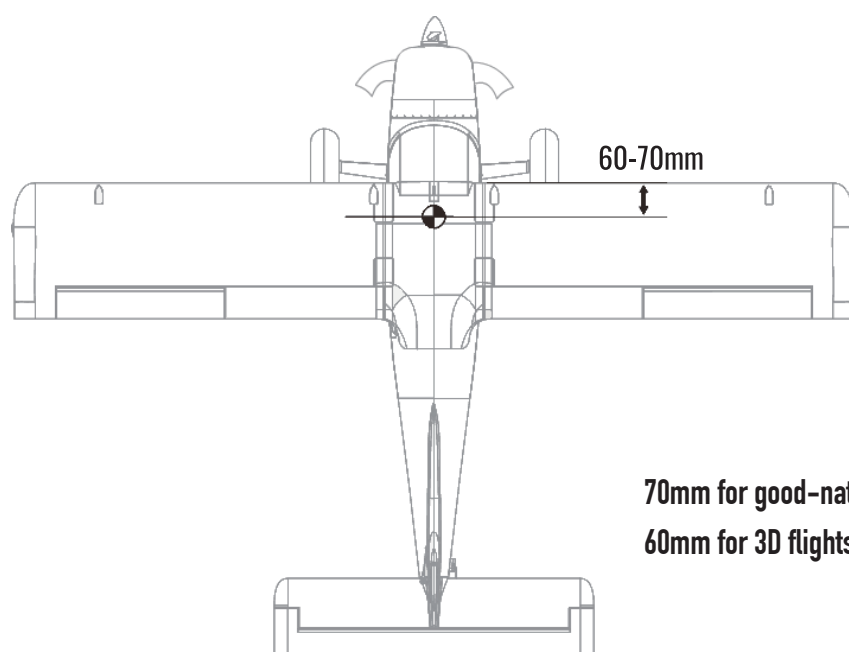
BATTERY INSTALLATION

1. Before connecting the battery to the plane, power on the transmitter and ensure throttle lever in the lowest position.
2. Remove the battery hatch.
3. Insert battery into the battery compartment with the power cable towards the front of the plane. Use straps to secure the battery.
4. If necessary, reposition battery to adjust the center of gravity (CG) by moving the battery forward or backward.



CG SETTING

Correct center of gravity is very essential for a successful flight. Please refer to the below diagram to adjust the CG of the plane. Adjust the CG position by moving the battery forwards or backwards. If necessary, add ballast weight to achieve the correct CG position before flight.



70mm for good-natured flight
60mm for 3D flights



CONTROL TEST

Power up the transmitter **BEFORE** connecting a fully charged battery and perform a full function test before flight - watch all control surfaces to verify correct direction of operation. If necessary, adjust the control direction of the servos (reverse).

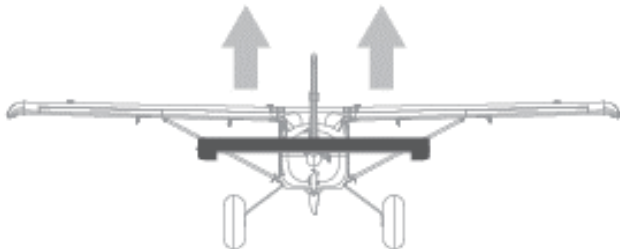
AILERON CONTROL LEVER MOVING LEFTWARD



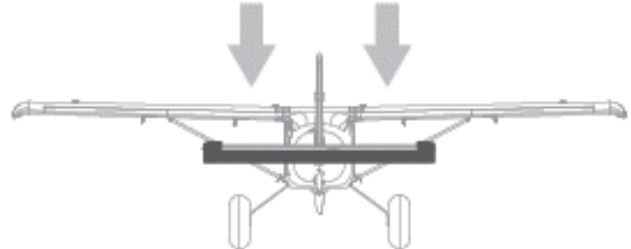
AILERON CONTROL LEVER MOVING RIGHTWARD



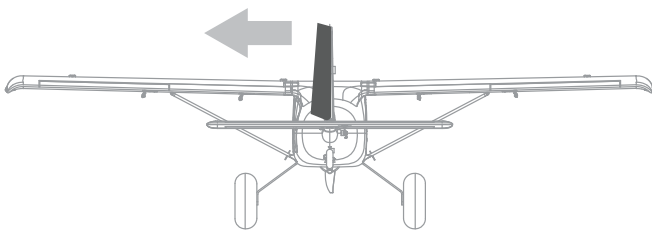
ELEVATOR CONTROL LEVER MOVING DOWNWARD



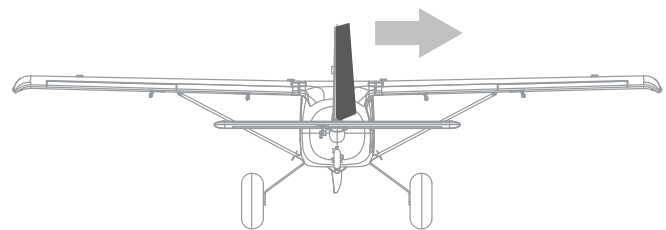
ELEVATOR CONTROL LEVER MOVING UPWARD



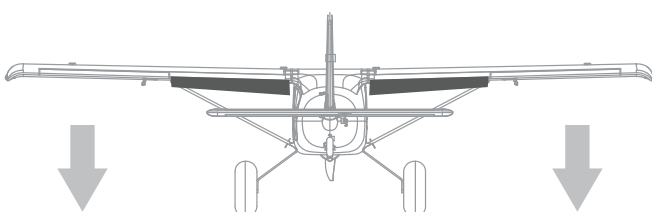
RUDDER CONTROL LEVER MOVING LEFTWARD



RUDDER CONTROL LEVER MOVING RIGHTWARD



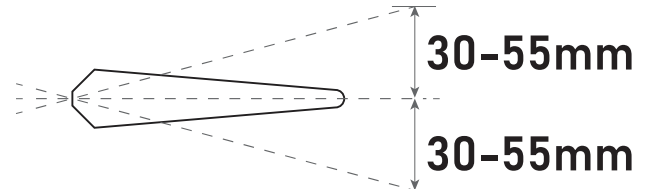
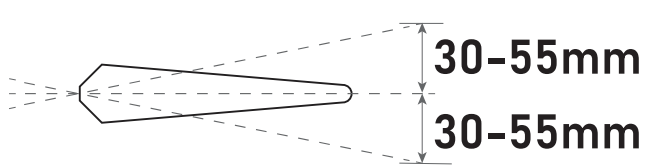
FLAPS DEPLOYED



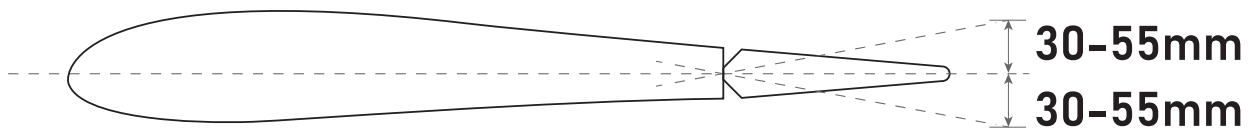


CONTROL THROWS LOW - HIGH

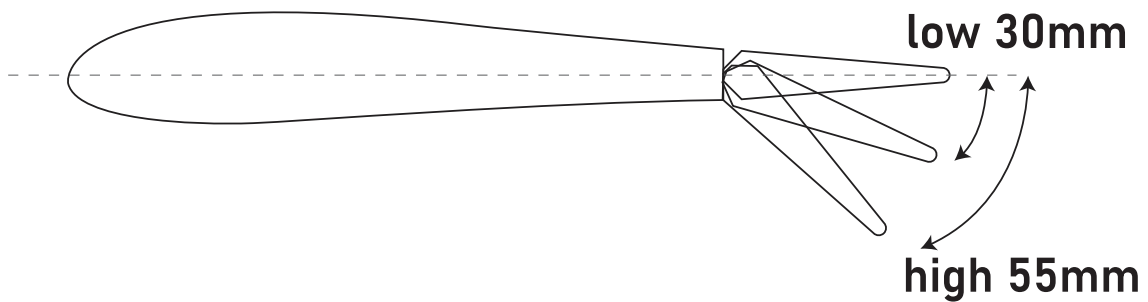
Elevator low 30mm, high 55mm Rudder low 30mm high 55mm



Aileron low 30mm, high 55mm



Flaps low 30mm, high 55mm





FLYING THE BUSHMASTER

**** Do not connect the battery when setting up the CG****

Pre-Flight & First Flight — H-KING BushMaster

Before your first flight, we strongly recommend joining a local club for expert help. If that's not possible, follow these essential steps carefully.

1. Choose your site & conditions

Fly in light wind (under 5mph / 8kph). Use an open area with short grass, away from roads, trees, power lines, buildings, people, and airports (at least 3 miles / 5km from full-size airfields). Stay below 400ft.

2. Pre-flight check

Inspect the BushMaster for damage. Check linkages, wing fixings, Wing strut, tail, Main wheel, and propeller security.

3. Power on

Switch on your transmitter. Check trims and switches. Connect the flight battery. Keep the BushMaster still with the motor disarm function of your transmitter. Do not arm your motor unless you are ready to fly.

4. Control direction test

Move the sticks: left aileron stick left aileron goes up.

Down elevator elevator goes up.

Right rudder rudder moves right.

Toggle the flap switch, and the flaps deflect downwards.

5. Takeoff

Place the BushMaster on the runway facing into the wind, lower the flaps, and start the motor to prepare for takeoff.

(For the initial takeoff, it is recommended to lift off slowly with a shallow angle of attack.) Once the aircraft has climbed to an altitude of approximately 60 ~80ft, you may retract the flaps.

6. Climb & turn

Climb to 100–150ft, then reduce throttle to 50–60%. Make gentle turns. Keep the BushMaster close and upwind.

Remember: when flying toward you, controls appear reversed.

7. Trim for level flight

Ensure the BushMaster can fly level with the appropriate throttle setting. Adjust aileron, elevator, and rudder trims as needed.

8. Practice flying in a straight line and turning.

Maintain the aircraft at a safe altitude, execute gentle turns using the ailerons and elevators while ensuring no loss of altitude, then level off and fly straight; repeat these maneuvers to familiarize yourself with the aircraft's performance.

9. Landing

Point the nose into the wind and enter the landing area at an altitude of approximately 1.5 meters; carefully manage the throttle and flight attitude, gently and gradually reduce altitude and speed, and land the aircraft smoothly.

10. After landing

Disarm the motor immediately. Disconnect the battery first, then turn off the transmitter.

Congratulations — you've completed your first flight with the BushMaster!

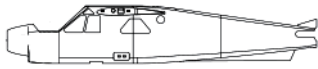
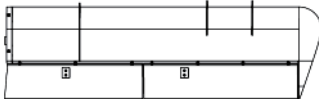
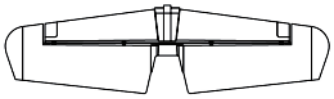
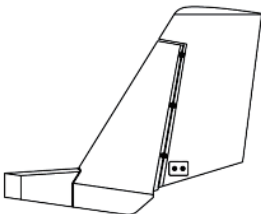
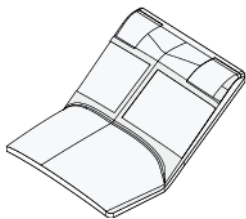
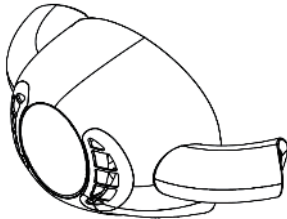
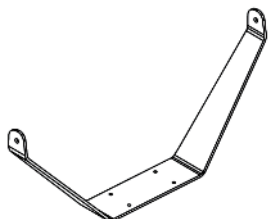
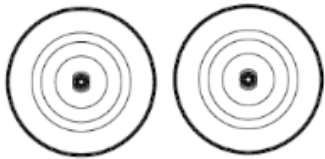
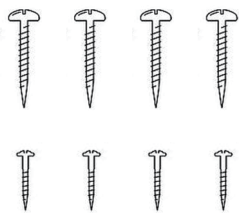
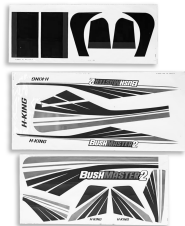
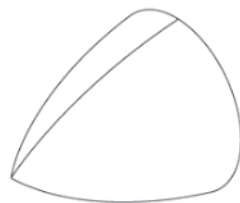
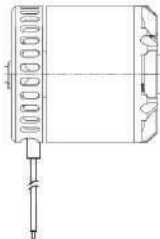
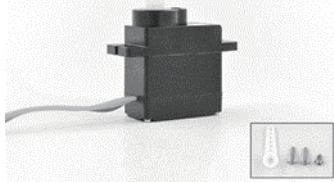
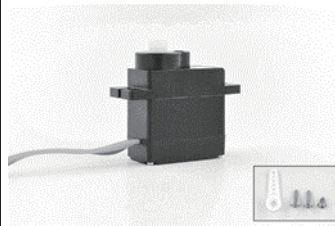
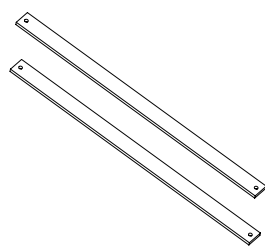
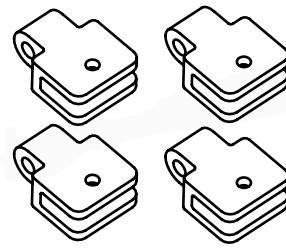


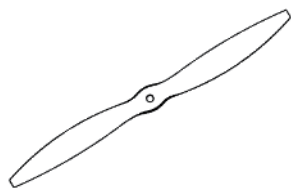
RECOMMENDED ACCESSORIES

9236720209	Turnigy/FrSky TWIN X14 ACCESS 2.4GHz Transmitter (Orange) – Exclusive to HobbyKing
9236720013	FrSky TW R6 Dual 2.4GHz 6ch TW Protocol SBUS/FBUS/S.Port Receiver
1021680019	Turnigy Heavy-Duty Folding Airplane Stand
9210000266-0	Turnigy Nano-Tech Plus 3000mAh 6S 70C Lipo Pack w/XT90
9067160604	Turnigy Heavy Duty 4000mAh 6S 60C Lipo Battery Pack w/XT90
9067160601	urnigy 6S 4000mAh 22.2V 40C Lipo Battery Pack w/XT90 for RC Car Boat Truck Helicopter Airplane
9067000386-0	Turnigy Heavy Duty 4000mAh 6S 60C Lipo Battery Pack w/XT90
9067110036	Turnigy 6S 5000mAh 22.2V 40C Lipo Battery Pack w/XT90 for RC Car RC Truck Boat Airplane Helicopter
9210000246-0	Turnigy nano-tech 5000mah 6S 45C Lipo Pack w/XT-90



SPARE PARTS

 Fuselage SKU:9447790098	 Left Wing SKU:9447790099	 Right Wing SKU:9447790100	 Horizontal stabilier set SKU:9447790101
 Rudder SKU:9447790102	 Canopy / Hatch Set SKU:9447790103	 Cowling SKU:9447790104	 Aluminum landing gear SKU:9447790112
 Main wheels set SKU:9447790113	 Tail Wheel Set SKU:9447790114	 Wing Tube Set SKU:9447790106	 Hardware Set SKU:9447790111
 Decal Set SKU:9447790110	 Spinner SKU:9447790105	 Motor 5015 KV500 SKU:9447790115	 DS15 servo SKU:9447790116
 DS20 servo for Tail SKU:9447790117	 Pushrod Set SKU:9447790109	 Wing Struts Joiner Carbon spar SKU:9447790107	 Aluminum keys SKU:9447790108



16×6 blade Propeller
SKU:9447790072



ESC: 80A
SKU:9164790058

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Made in China

