ROYAL AIR FORCE

RED ARROWS HAWK

105mm EDF, ARF+



ASSEMBLY MANUAL

HobbyKing.com®

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ARF
ALMOST READY TO FLY

Please read this manual carefully before operating this aircraft



KIT CONTENTS:

1.



2.



3.



4.



5.



6.



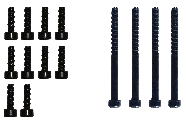
7.



8.



9.



10.



11.



1. Main Fuselage
2. Nose Section
3. Left Wing
4. Right Wing
5. Left All-Flying Stab
6. Right All-Flying Stab
7. Vertical Stab
8. Accessory Pack
9. Screw Set
10. Canopy
11. Wing and Vertical Stab Joiners

Notes for the supplied machine screws in picture 9.

- 4pcs M3x10mm are for wing fixing
- 4pcs M3x10mm are for horizontal stabilizer fixing
- 2pcs M3x10mm are for vertical stabilizer fixing
- 4pcs M4x50mm are for attaching the nose section



SPECIFICATIONS

Wingspan: 1500mm (59.1")
Length: 1753mm (69")
Controls: Ailerons/Elevator/Rudder-Nosewheel/Flaps/Retracts
Retracts: 3 x all-metal electronic w/oleos, lightweight wheels, and sequencer box **(supplied)**
Servos: High torque, metal-geared digital-1 x 65g/5 x 12g/5 x 25g **(supplied)**
Lights: Day-bright LED **(supplied)**
Flying Weight: 6kg **(without battery)**

REQUIRED

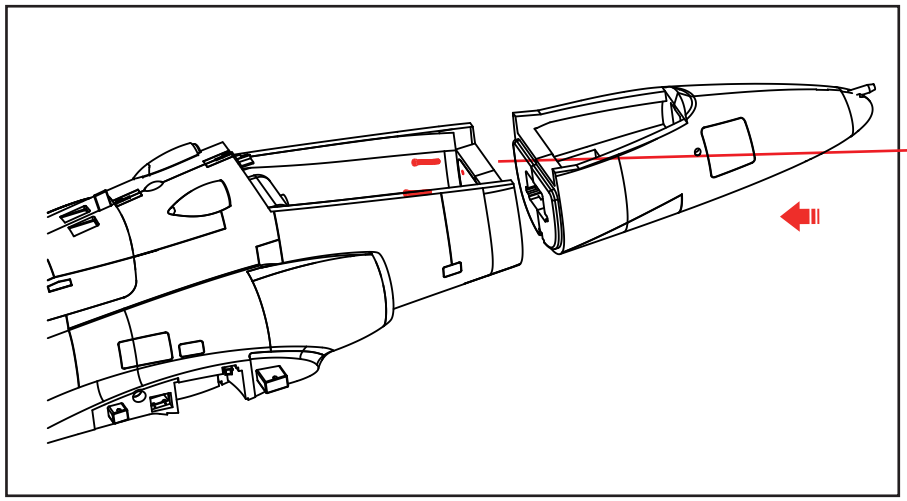
8ch or more transmitter and receiver
1 x 100~110mm EDF fan unit w/motor (JP 105mm w/motor recommended)
1 x 130~160A HV brushless speed controller
1 x BEC system
2 x 6S (22.2V) 5000~7000mAh 65C LiPo battery (wired in series)
1 x Suitable LiPo charger



ASSEMBLY

Nose Fuselage Installation

1. Attach the nose section to the main fuselage using the 4 supplied M4x50mm machine screws as shown in the drawing.

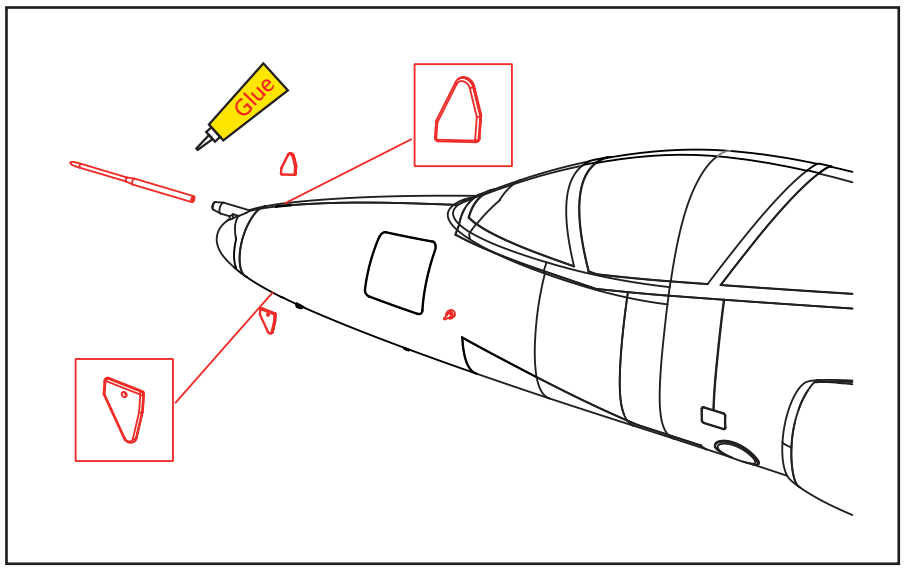


M4.0x50mm/4PCS

⚠ WARNING

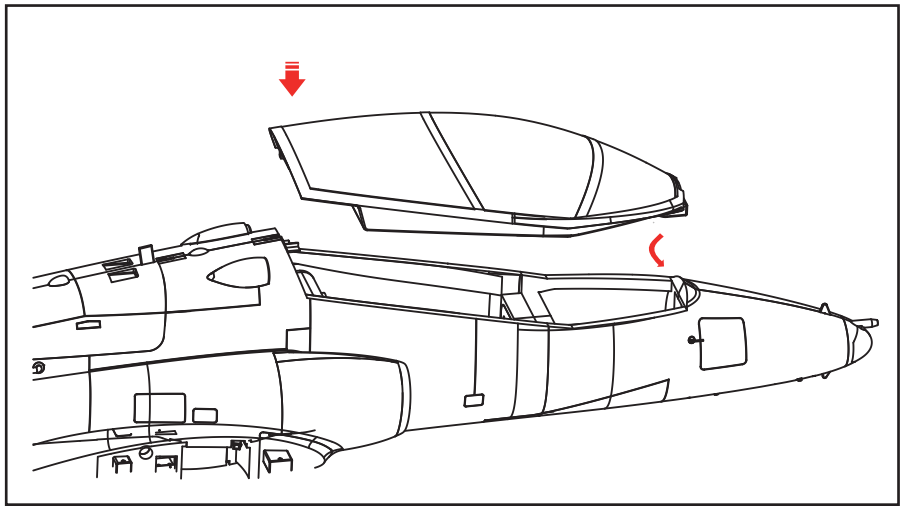
Do not overtighten screws or damage may occur.

2. Glue the pitot tube and disturbed airflow generators to the nose section as shown in the drawing.



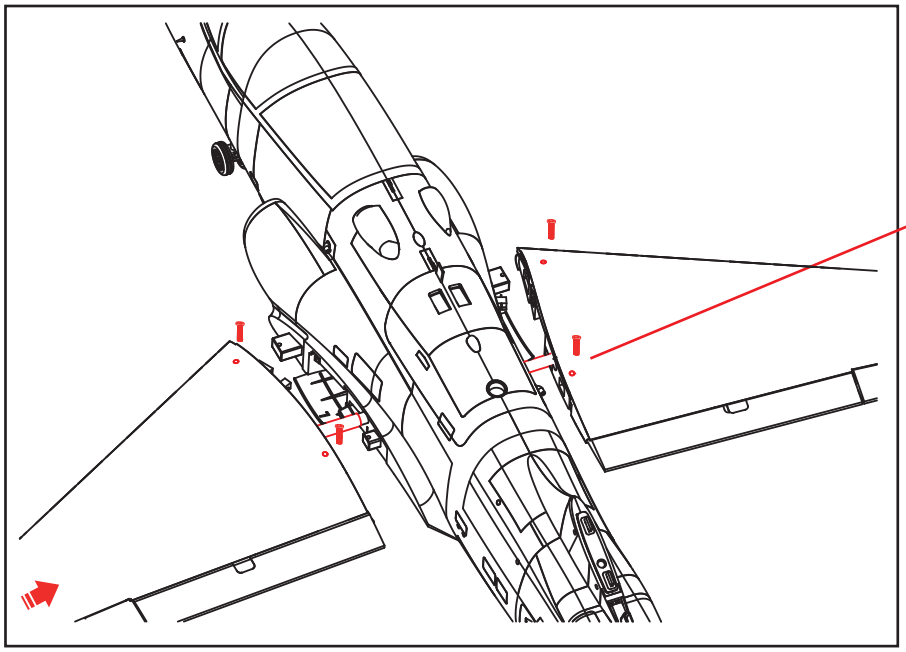


3. Attach the Canopy to the Main Fuselage.



Main Wing Installation

4. Slide the main wing joining spar through the slot in the fuselage. Then slide both wing panels onto the spar until they are snug against the fuselage wing roots, please ensure the multi-pin connectors align correctly and plug together. Secure the wings using the 4 M3x10mm machine screws supplied.



M3x10mm/4PCS

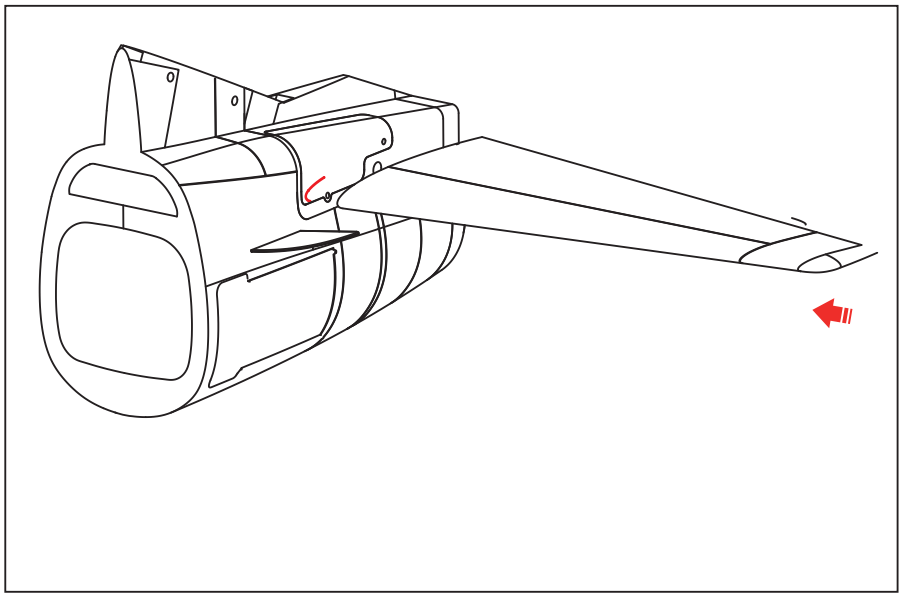
⚠ WARNING

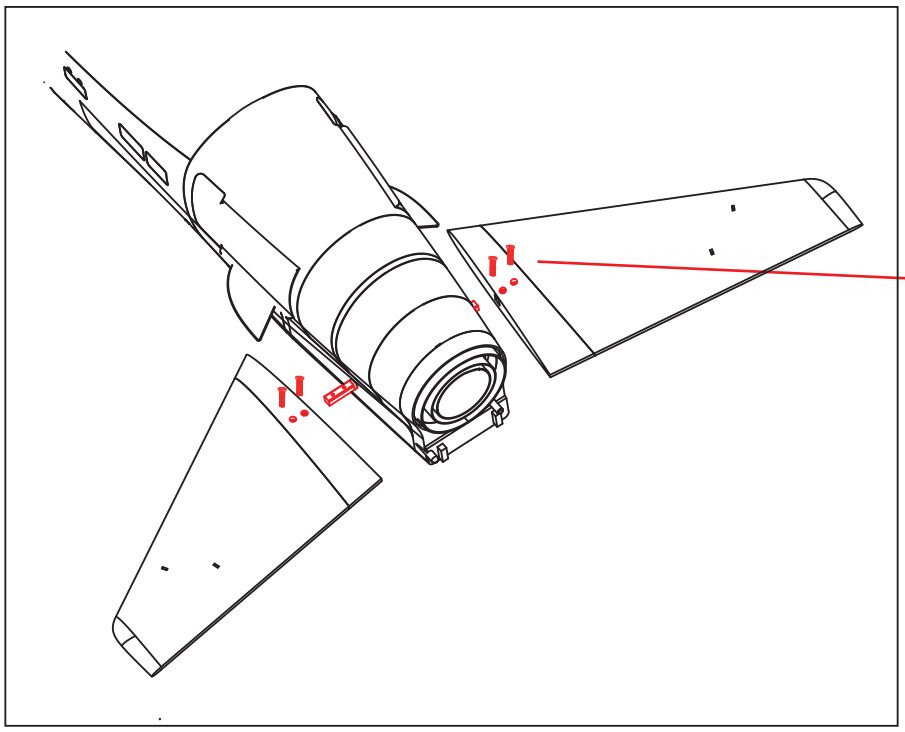
Do not overtighten screws or damage may occur.



Horizontal Stabilizer Installation

5. Slide the left and right all-flying stabilizers/elevators onto the spar protruding from the rear of the fuselage. Please ensure both line up as per the red line on the drawing below.





M3x10mm/4PCS

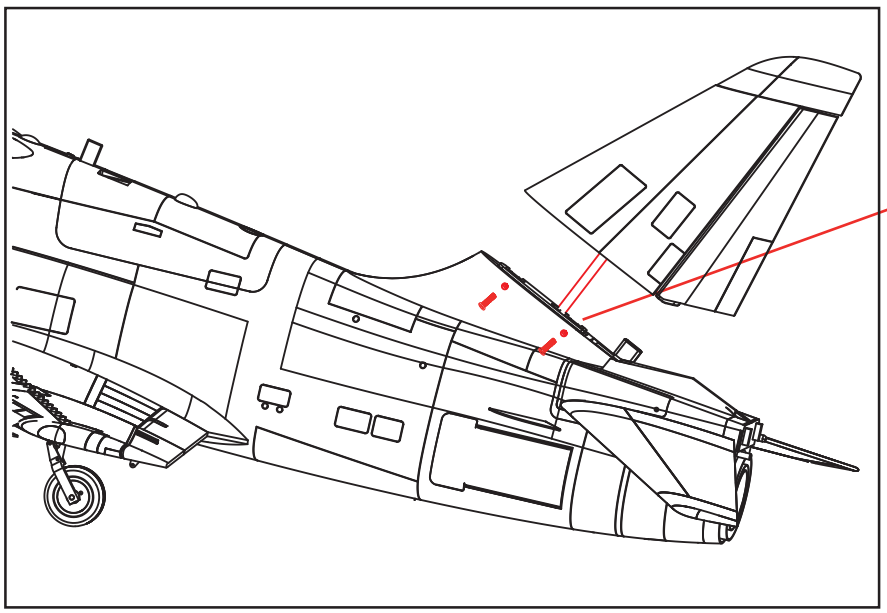
⚠ WARNING

Do not overtighten screws or damage may occur.

5A. Secure the left and right all-flying stabilizers/elevators to the spar using the 4 M3x10mm machine screws supplied

Rudder Installation

6. Slide the vertical stabilizer joining spar into the slot in the top of the rear fuselage. Then slide the horizontal stabilizer onto the spar until it is snug with the fuselage horizontal stabilizer molding.



M3x10mm/2PCS

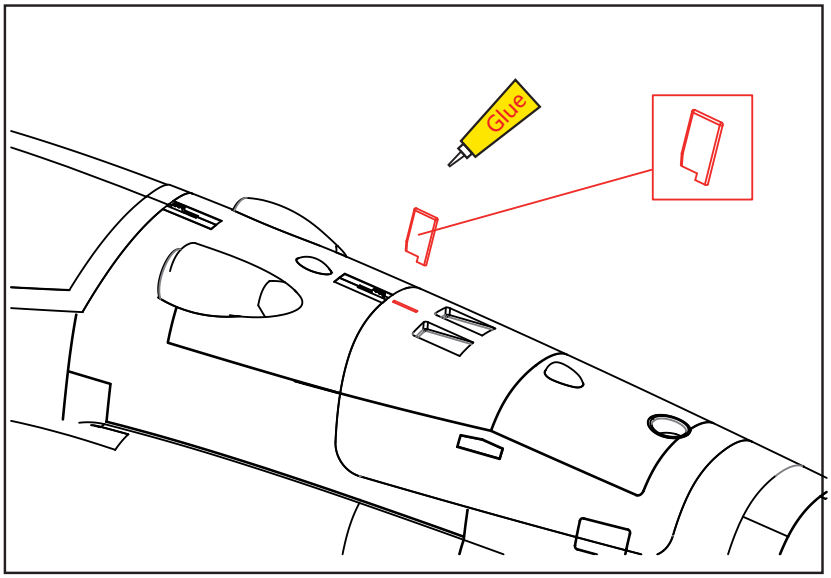
⚠WARNING

Do not overtighten screws or damage may occur.

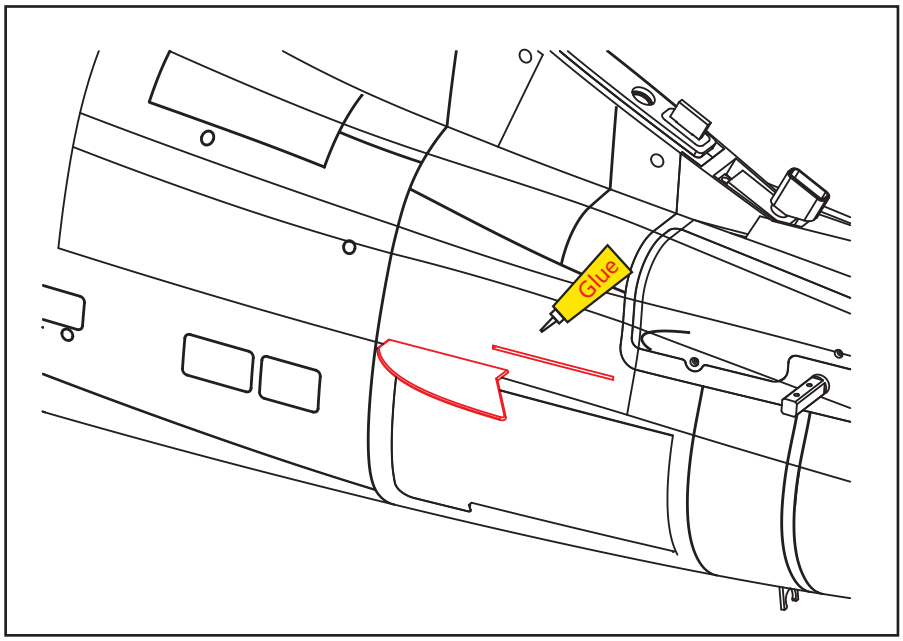
6A. Secure in place using the 2 M3x10mm machine screws supplied as shown.

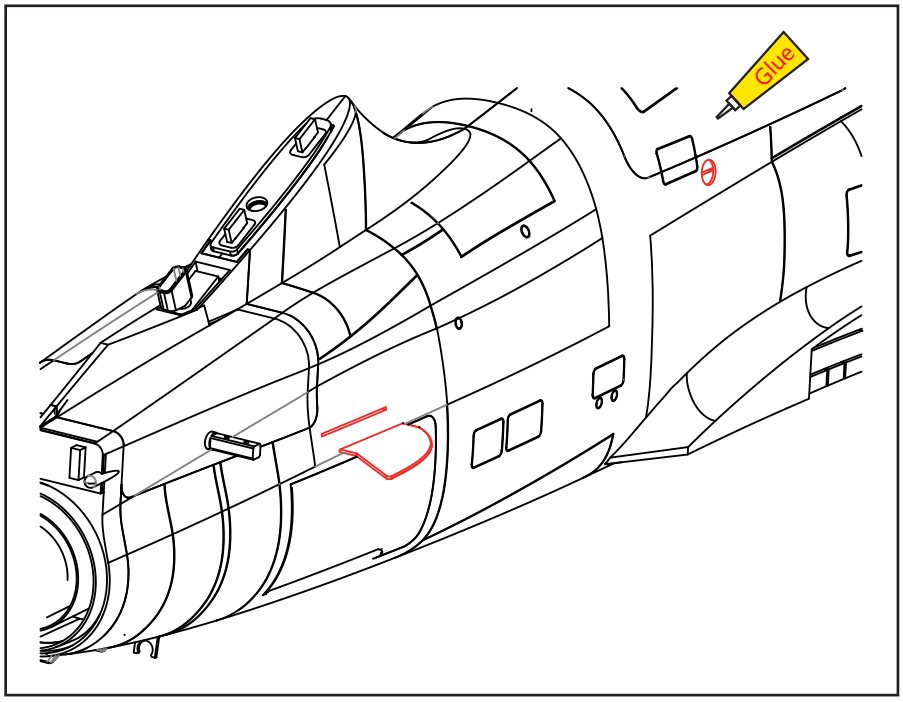
Main Fuselage Installation

7. Glue the antenna molding to the main Fuselage as shown in the drawing below.



8. Glue in place the disturbed airflow generator to the side of the fuselage as shown below in the drawing..





8A. Repeat this for the disturbed airflow generator on the other side.



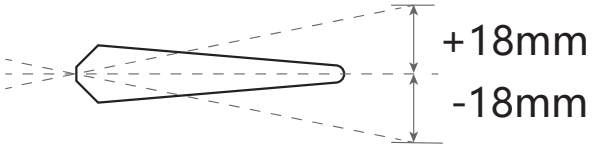
WARNING:

1. Before switching on your transmitter and powering up the model for the first time, please move the flap channel control to its mid-flap position.
2. Then switch on your transmitter and power up the model, the flap servos should go to the mid-position. If they don't and you can hear, or see that the servos are straining/buzzing and are binding against the end of their travel, disconnect the power in the model immediately.
3. Adjust the flap settings in your transmitter and/or the pushrod lengths as necessary.

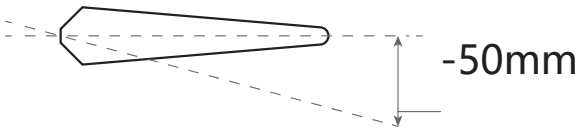
Once the flaps go to the mid-position Ok, then set the full flap and retracted flap positions, once again, make sure there is no binding at the end of each travel.

CONTROL THROWS LOW-HIGH

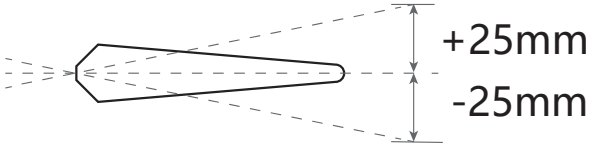
Elevator: 18mm low, 18mm high



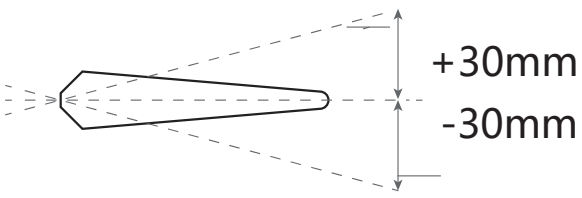
Flaps: 50mm low



Aileron: 25mm low, 25mm high



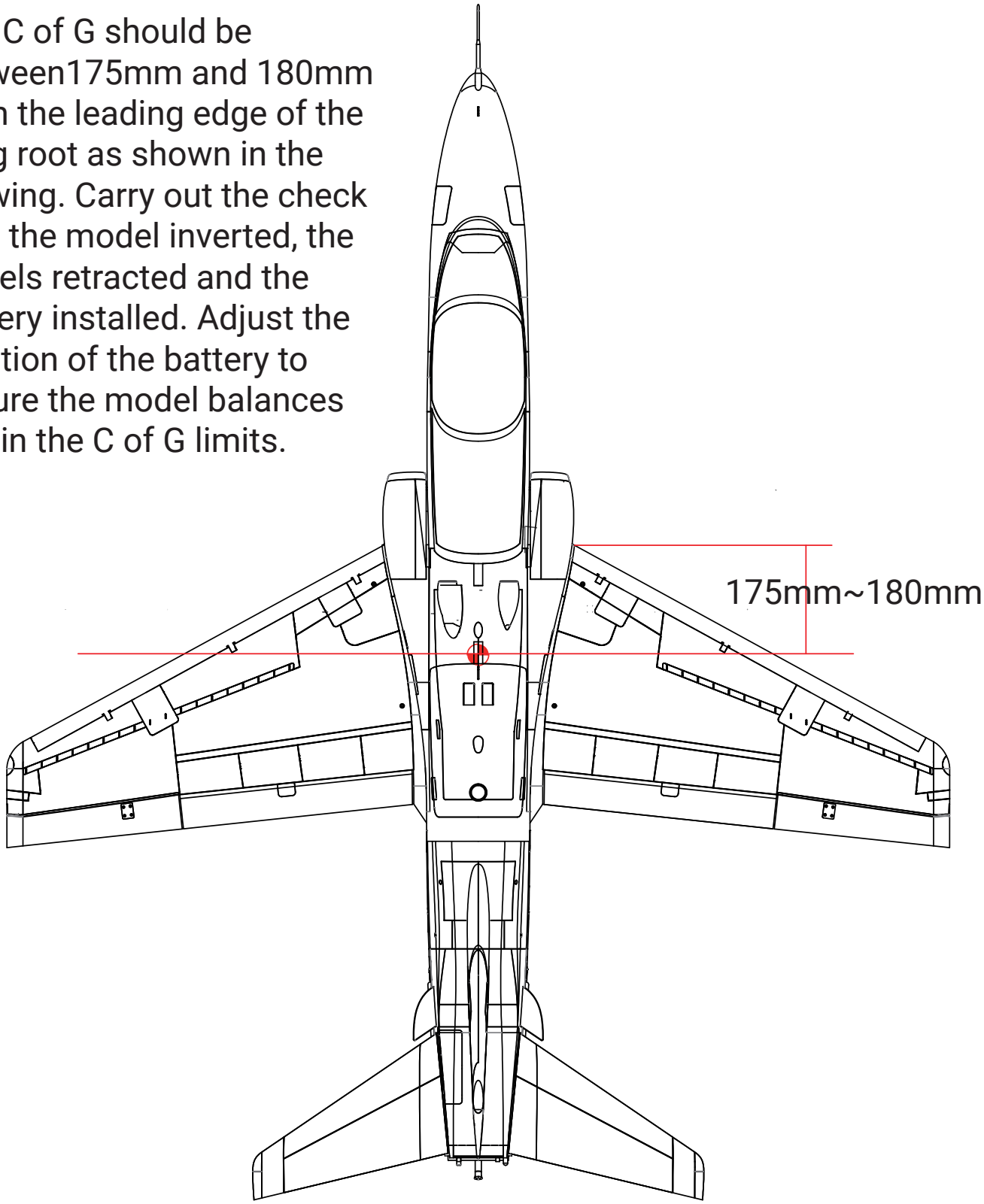
Rudder: 30mm low, 30mm high





C OF G LOCATION

The C of G should be between175mm and 180mm from the leading edge of the wing root as shown in the drawing. Carry out the check with the model inverted, the wheels retracted and the battery installed. Adjust the position of the battery to ensure the model balances within the C of G limits.

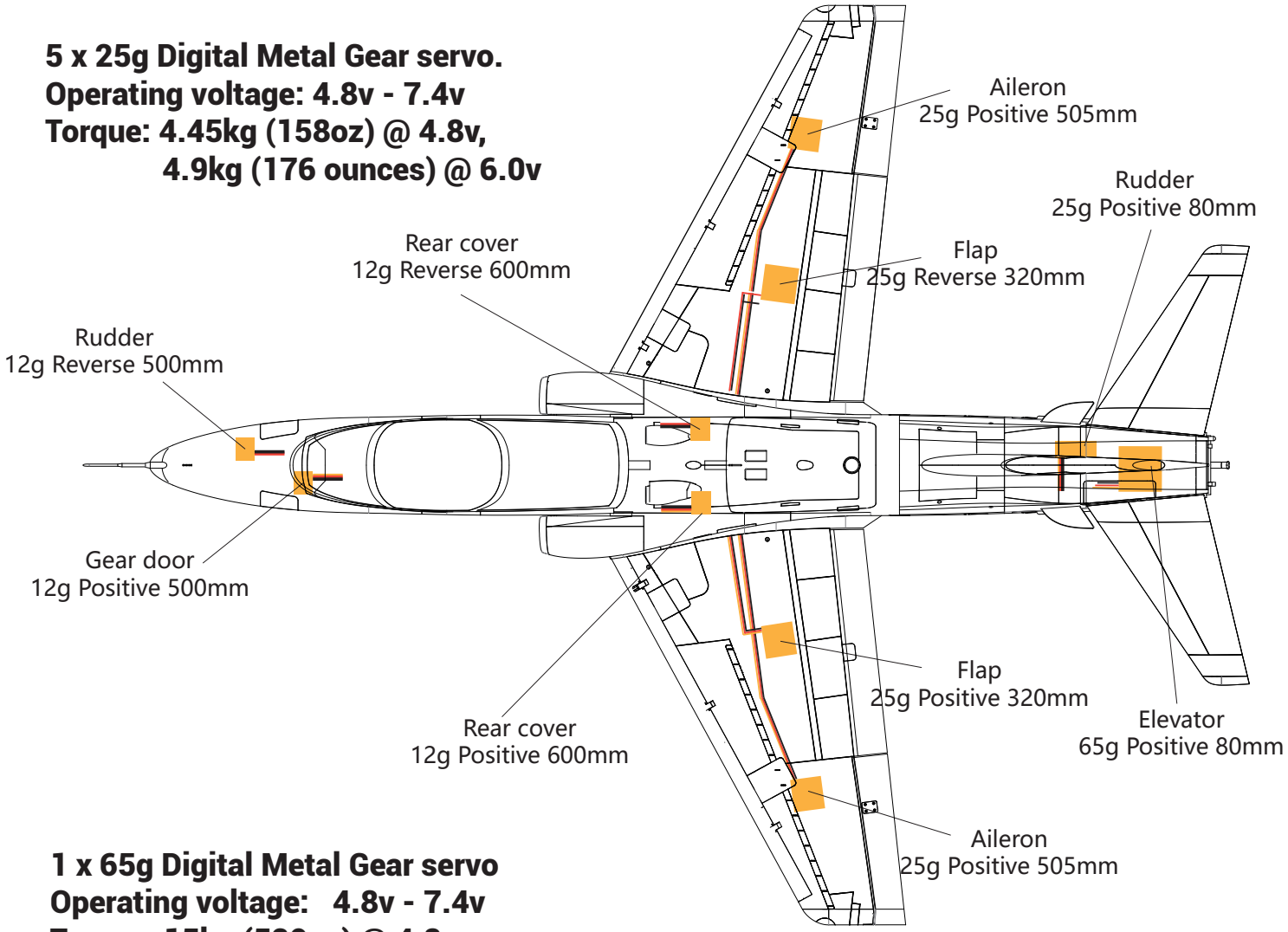




SERVO SPECIFICATIONS AND LAYOUT:

4 x 12g Digital Metal Gear servos.
Operating voltage: 4.8v to 6.0v
Torque: 1.3kg (45.85oz) @ 4.8v,
1.5kg (52.91oz) @ 6.0v

5 x 25g Digital Metal Gear servo.
Operating voltage: 4.8v - 7.4v
Torque: 4.45kg (158oz) @ 4.8v,
4.9kg (176 ounces) @ 6.0v



1 x 65g Digital Metal Gear servo
Operating voltage: 4.8v - 7.4v
Torque: 15kg (529oz) @ 4.8v,
20kg (705 ounces) @ 6.0v



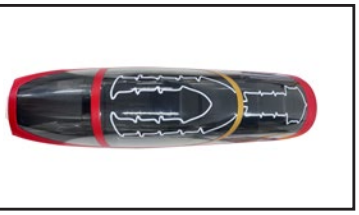
SPARE PARTS LISTING



Main Fuselage
SKU: 9306790760



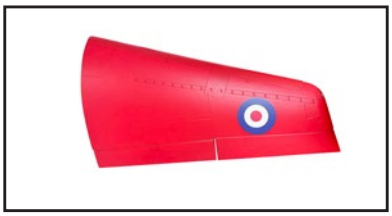
Fuselage Nose Section
SKU: 9306790759



Battery/Canopy Hatch
SKU: 9306790758



Left-Hand Wing
SKU: 9306790761



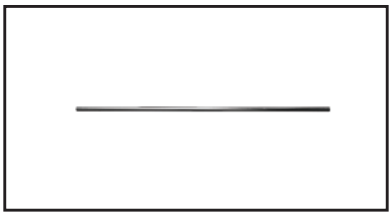
Right-Hand Wing
SKU: 9306790762



All-Flying Stabilizers (1pr)
SKU: 9306790763



Vertical Stabilizer
SKU: 9306790764



Wing Joining Tube
SKU: 9306790714



Screw Set w/Hex Key
SKU: 9306790715



Pushrod Set w/Screws
SKU: 9306790716



Main Landing Gear w/Wheels
(2pcs)
SKU: 9306790717



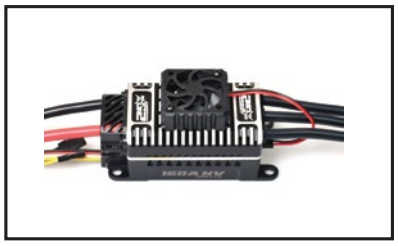
Nose Gear Set w/Wheel
SKU: 9306790718



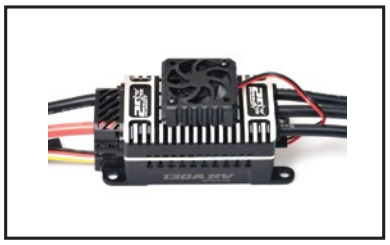
RECOMMENDED ACCESSORIES:



JP Hobby 105mm EDF w/Motor
SKU: 9306790719



Aerostar 160A RVS G2 ESC
SKU: 9164000055-0



Aerostar 130A RVS G2 ESC
SKU: 9164000054-00



Turnigy/FrSky TWIN X14
ACCESS 2.4GHz Transmitter
SKU: 9236720209



FLYSKY Paladin PL18
2.4GHz AFHDS3 18CH Tx
w/FTr10 Receiver
SKU: 9114000085-0



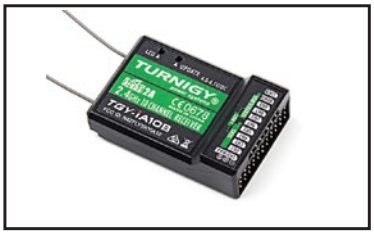
Turnigy TGY-i6 AFHDS Tx
and 6CH Rx
SKU: 9114000020-0



FrSky TW R8 Dual 2.4GHz 8ch
TW Protocol Receiver
SKU: 9236720012



FrSky TW R6 Dual 2.4GHz
6ch TW Protocol Receiver
SKU: 9236720013



Turnigy iA10B Receiver
10CH 2.4G AFHDS 2A
Telemetry Receiver
SKU: 9114000064-0



Turnigy Heavy Duty 5200mAh 6S
60C LiPo Battery Pack w/XT90
SKU: 9067000556-0



Turnigy Nano-Tech Plus 6000mAh
6S 70C LiPo Pack w/XT90
SKU: 9210000299-0



Turnigy Graphene Panther 6000mAh
6S 75C Battery Pack w/XT90
SKU: 9067000420-0



Turnigy Heavy Duty 5000mAh
6S 60C LiPo Pack w/XT90
SKU: 9067000243-0



Turnigy Heavy Duty 6200mAh 6S
60C LiPo Battery Pack w/XT90
SKU: 9067000550-0



Turnigy Graphene Panther
5000mAh 6S 75C Battery Pack
SKU: 9067000375-0

ROYAL AIR FORCE

RED ARROWS HAWK

105mm EDF, ARF+

HobbyKing.com ®

UK REP
APEX CE SPECIALISTS LIMITED
6f East Union Street, Manchester, England, M16 9AE

EC REP
APEX CE SPECIALISTS GmbH
Grafenberger Allee 277, 40237 Düsseldorf, DE

Made in China

Conformity with Directives
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