GoldWing RC

91in EXTRA300LP 50–60CC
Giant Scale Aerobatic Aircraft

Specifications

Wing Span: 91"(2310mm)
Length: 88-1/4"(2240mm)
Wing Area: 1494sq in(96.4sq dm)
Flying Weight: 16.5-18lbs(7500-8200g)
Gas：   50CC-70CC Gas   DLE55, DLE61, DA50, DA60, GP61

Electric Power: Hacker Q80-8M with 12S 5000mah 24x10 prop
                 Or other 4000Watt electric mot
ESC：   160A
Radio: 6+ Channels
Servos: 5-6 servos required 330 oz to 500 oz (20-30kg/cm)

JR 8911, Savox 1256

Dear Customer,

Thank you for purchasing the new Goldwing RC giant scale aerobatic aircraft. This manual covers the 91in EXTRA300LP 50-60CC aircraft. The EXTRA is designed for the popular 50-70 cc engines and weighs approximately 7.6 kg to 8.2 kg. Perfect for IMAC or Freestyle flying, this new giant offers everything you want in a giant scale aerobat including great looks! Covered in genuine Ultracote, this ARF comes with premium hardware, carbon fiber landing gear, Larger diameter carbon fiber wing tube, stainless steel Axle kits，**carbon fiber horns** and pre-hinged ailerons. **Also the new Carbon fibre tail wheel assembly with CNC machined metal parts, including the aluminium tail wheel hub.** And including new KUZA Gas Tank with alloy tank cap.

We hope you will enjoy your new giant scale aircraft as much as we have.

A QUICK WORD ABOUT SAFETY AND RADIO CONTROL FLYING MODELS

With radio control aircraft, like any hobby or sport, there are certain risks. The operator of these models is responsible for these risks. If misused or abused, you may cause serious bodily injury and/or damage to property. With this in mind, you will want to be certain that you build your model carefully and correctly. If you are not an experienced flier, have your work checked and ask for help in learning to fly safely. **This model aircraft is not a toy** and must be operated and flown in a safe manner at all times. Always perform a pre-flight check of the model including all control surfaces, correct function of the radio gear, structure, radio range, and any other area relating to the safe operation of this aircraft.

Models are not insurable but operators are. You can obtain coverage through membership in the Academy of Model Aeronautics (AMA). For an AMA information package call 1-800-435-9262, ext. 292 or visit the AMA website at "www.modelaircraft.org". Or if you are in any other country please contact the appropriate body.

By the act of using the final assembled model, the purchaser/operator accepts all resulting liability.

Goldwing RC WARRANTY AND RETURN POLICY

GoldWing RC guarantees this product to be free from defects in both material and workmanship at the date of purchase. This does not cover any parts damaged by use, misuse or modification. In no case shall liability exceed the original cost of this kit. Because Goldwing RC has no control over the final assembly or equipment/components used in the final assembly, no liability shall be assumed for any damage resulting from the use of this model by the user. By the act of using the final assembled model, the user accepts all resulting liability. If you should find any missing or damaged parts, or have any questions about this product, please contact within 30 days of the purchase in order to be covered by our warranty. You may contact us at **service@goldwingrc.com**.

Included Features:
- Larger aileron and elevator design. Up to 60 degrees of throw on all control surfaces for excellent 3D aerobatic flying
- High quality ball link assemblies
- Servo lead safety clips
- High performance cap head bolts
- Flat nylon hinges for inproved flying strength
- Pre-hinged control surfaces
- Full length tuned pipe design inside the fuselage

- Adjustable pushrods for easy fine tuning(Includes wrench)

- Aluminium hub rubber wheels
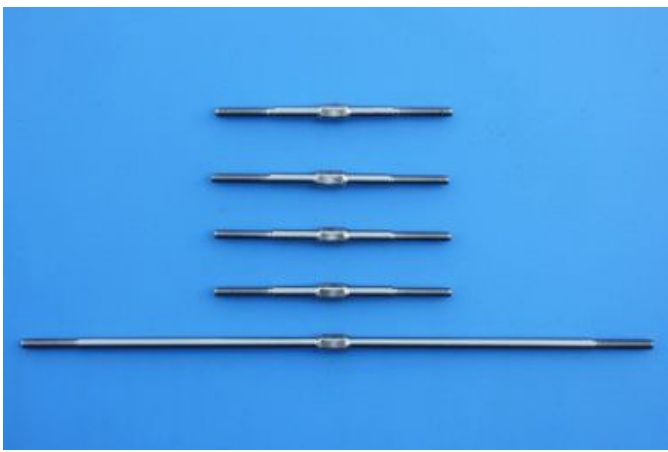
New Aluminium hub rubber wheels

- Stainless steel axles

- Extra covering provided for small repairs, genuine Ultracote / Oracover
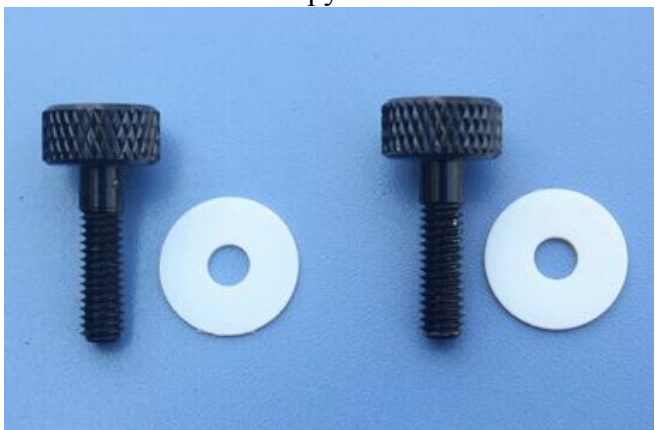
Extra covering provided for small repairs

- Removable rudder

- Side force generators

- CNC ALU canopy bolts

- X basla batten structure ensures high strength of fuselage

- Canopy hatch pins are made of nylon rods for better resistance aganist vibration

- **The EXTRA is designed to directly accommodate KUZA® rudder servo tray**

- **New KUZA Gas Tank with alloy tank cap**

Carbon Fiber accessories version：

- Extra strength carbon fiber control horns

Extra strength Carbon Fiber control Horns

- One piece airfoiled carbon fiber landing gear

- Carbon fiber tail wheel assembly with CNC machined metal parts, including the aluminium tail wheel hub.

- Carbon fiber wing tube
- Carbon fiber stab tube

Scheme A : Silvery/red/ black

Scheme B ： White/ blue/black

Scheme C : White /red/blue

Items required to complete this Model:

- 50-70 cc gas engine with stock or aftermarket exhaust systems
- Appropriate propeller for your engine
- All the required engine and exhaust mounting hardware
- Ignition battery and switch
- Two heavy duty switches with charging jacks for the Rx
- Two high quality Rx batteries of significant capacity to power your choice of servos.
- One receiver of your choice

- One quality throttle servo and appropriate servo arm
- Four high quality metal gear servos of 330 in-oz or better for the ailerons and elevators
- One high quality rudder servo of 330 in-oz or better
- Appropriate servo arms for the above
- Heavy duty servo wire extensions. Recommends two 48", one 18", two 12" extensions. Your installation though may vary.

Required Tools

- Covering Iron and heat gun
- Assortment normal hobby tools such as screwdrivers, hobby knife, drill and drill bits, pliers, etc.
- Thick and thin CA adhesives
- 30 minute epoxy
- Isopropyl alcohol
- Ruler or tape measure
- Blue thread-lock or equivalent

Note: As with all kits, it's a good idea to read all the instructions and study the parts before you begin construction. Handle the parts of this kit with care so you do not damage any of the structure or covering. Inspect all the parts for any shipping damage and report any issues to as soon as you can. Make sure you have a flat and sturdy workbench and follow all safety advice for the tools and adhesives you plan to use.

AIRCRAFT COVERING

1. With all ARFs, varying temperatures and storage delays can cause covering material to loosen over time and transportation. We recommend lightly going over all the covering with a covering iron set at medium temperatures. Be sure to use a soft cover over your iron so you do not scratch the covering surface. Be sure you go over all seams and edges of the covering to assure it is secure to the airframe and other covering. Be careful not to apply too much heat or you may cause bubbles or damage to the covering. A heat gun may also be used along with a soft cotton cloth to shrink and adhere the covering. Again, be extremely careful when using a heat gun.

2. Be sure to seal any exposed wood with a thin coating of epoxy to prevent engine oil from soaking in. This is especially important around the engine compartment and servo openings with exposed areas.

3. Some modelers prefer to seal the hinge gaps using strips of appropriate covering or clear trim tape. We have found this to be helpful with models intended for higher speed flight or models with unusually large hinge gaps. Our aircraft utilize a very tight double beveled hinge line and do not normally require this step. Sealing the hinge gaps is therefore left as an option for the modeler.
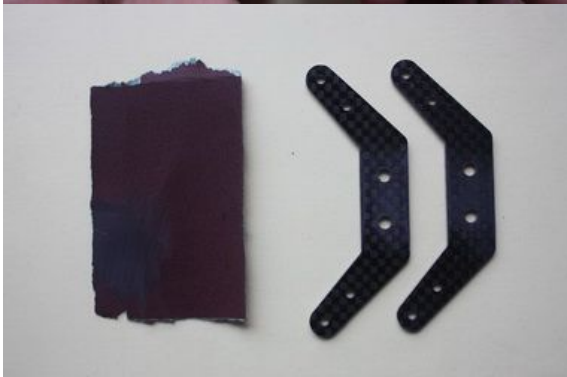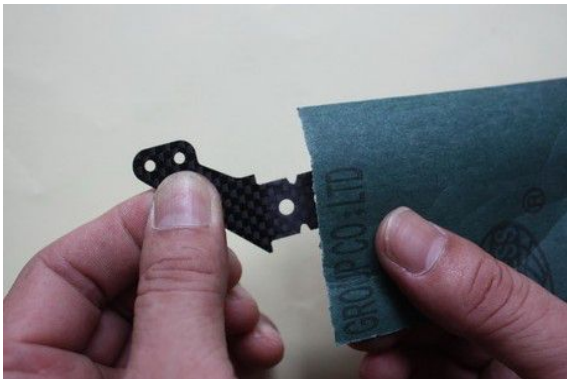
Please verify the accessories before commencing assembly:

- Carbon Fiber control Horns (Bag No. KA06CA) : 8 single horns for ailerons and elevator. 2 dual horns for rudder.
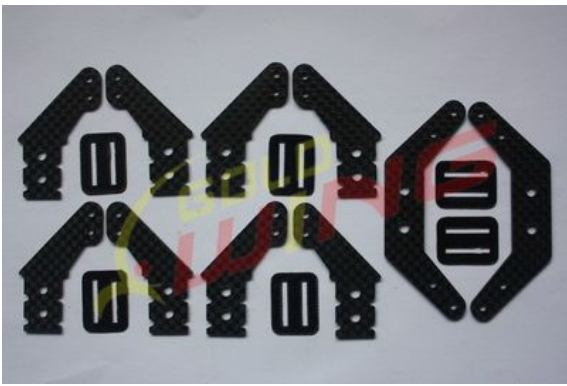
Sand the area of the horn that will be glued to help adhesion.

- Adjustable pushrods kits: (Bag No. KA05CBG2) Four 3x61mm pushrods for ailerons. One 3x125mm pushrods rudder（Pull-push style）

- Pull-pull assembly kits for the rudder. (Bag No. KA05CD)

- Ball link assembly (Bag No. KAG00131): 8 for ailerons and elevators.

- Alu long arm kits (Bag No. KA05CC): 4 single arms for ailerons and elevators. 1 dual arm for the rudder.

- Servo lead safety clips：6 pcs （Bag No. KAG0021)

- 3.5" Alu main wheels：2pcs（Bag No. KAG0159）

- New stainless steel Axle kits （Bag No. KA05CH)

- Carbon fibre tail wheel assembly with CNC machined metal parts, including the aluminium tail wheel hub. (Bag No. KAGC104)

CNC Aluminium & Carbon fiber tail wheel assembly
(Include Aluminium hub tail wheel)

- 4mm ALU canopy bolts & 12mm PTFE washers (Bag No.KAG0043)

- Extra covering provided for small repairs

Extra covering provided for small repairs

- Wrench set (Bag No. KA05CE)

- Side force generators (mounted with four M3X18 hand bolts and 2 balsa sheets)
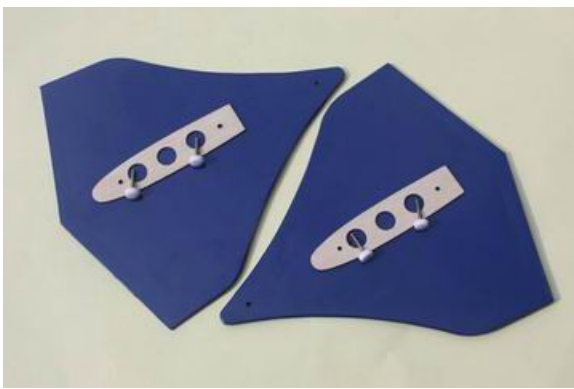
- Bolts for landing gear: 4(4x20mm) hex bolts and 4(M4) stainless steel self-locking nuts & 4 washers
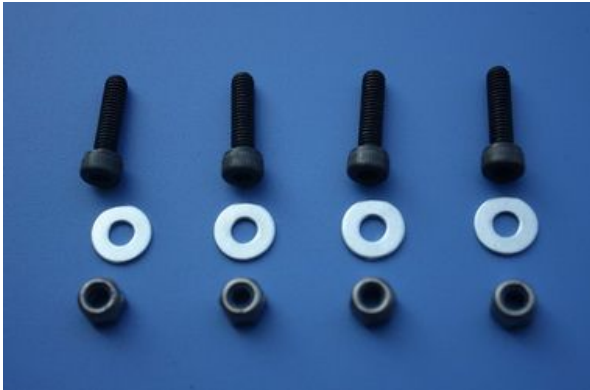
- Bolts & washers for cowl: 4(3x16mm) Hexagon bolts and 2(10mm) PTFE washers and 2 wsahers

- Bolts & washers for stab tails: 4(3x12mm) Hexagon bolts and 4(10mm) PTFE washers

- Washers for gas engine: 12(20mm) POM washers
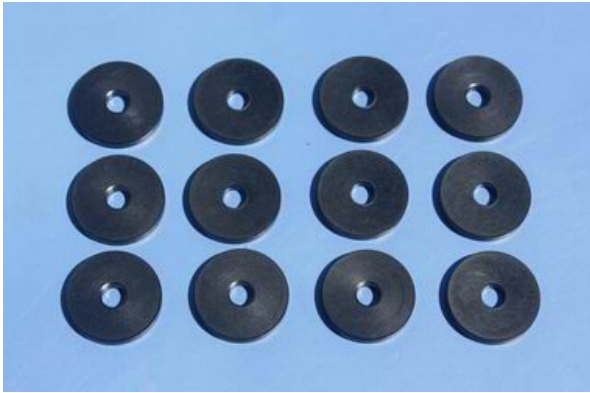
- Spares bag(Two spare aluminum hand-twist bolts \Two spare wing bolts\One spare tail wheel spring)

RUDDER ASSEMBLY

1. It is much easier to install the twin control horns before installing the rudder. Locate the carbon fiber rudder control horns, ball links, and associated bolts and nylon-insert lock nuts. Use some fine sandpaper to roughen up the center areas of the two control horns so that the glue adheres better. Using a sharp hobby knife or soldering iron remove the covering away from the slots in the rudder and trial fit the two control horns.

2. Mix up some 30 minute epoxy and coat the inside of the slots and the center of the control horns. Hint: a scrap piece of 1/16" ply, tooth pick, or old hobby blade can be used to coat the inside of the rudder slots. Slide the control horns in place and make sure they are centered perfectly by using a ruler to measure between the pivot holes and the hinge line. Wipe any excess glue off with isopropyl alcohol and paper towels. Install the ball links, bolts and nuts into the holes to help assure alignment of both control horns while the glue cures. Set aside until cured. NOTE: There are pictures of different planes in this manual; however, this plane's rudder is assembled the same way.

3. To fit the rudder to the fin, locate the rudder hinge wire and insert. To make it easier to insert twist as it is inserted.

4. The EXTRA can use either closed loop or a rear push pull servo for the rudder. We recommend that you balance the model assembled before choosing your servo placement.

5. The EXTRA is supplied with a high quality set of pull-pull cables and ball-links.

6. Install your rudder servo into the precut locations in the fuselage. Using a fine drill pre-drill the holes and drop thin CA into the holes to strengthen the wood. You will need 3 inch arms on the servo.   Set up your radio accordingly and center the rudder servo.

7. Aluminum dual servo arm are include in the kit, enlarge the control holes with 3mm drill bit.

8. The EXTRA has the closed loop pre-installed and crimped at the rudder end. These can be connected with the M3 bolt and nut. The wire will be left looped inside the fuselage and will need to be connected to the servo arm.

9. Use your radio system to center the rudder servo and attach either the supplied arm or an appropriate arm for your servo. Thread one of the ball links about half way onto one of the threaded couplers. Feed the loose end of one of the cables through a brass tube and then through the threaded coupler. Holding the rudder centered, adjust the cable length as tight as possible while checking the ball link position over the servo arm. When satisfied with the position, pinch the cable around the threaded coupler and then feed the loose end back through the brass tube. Loop the cable back through the brass tube as before and crimp the brass tube three times just tight enough not to cut the brass tube but enough to securely hold the wire in place. Cut off the excess cable with wire cutters. Wick thin CA into the brass tube to help hold the cable secure. Repeat for the other cable. Hint: Once you have established the position of the threaded coupler on the cable, you can remove the ball link from the rudder horn to give you more working slack in the fuselage. Re-install the ball link prior to setting the other cable.

10. Check the operation of the rudder using your radio and make sure there is no binding and the cables are adjusted properly. You may have to tighten the cables after a few flights as they may stretch slightly from the initial installation.

11. We recommend using KUZA 4" aluminium CNC servo arm (sold separately) for rudder

control.
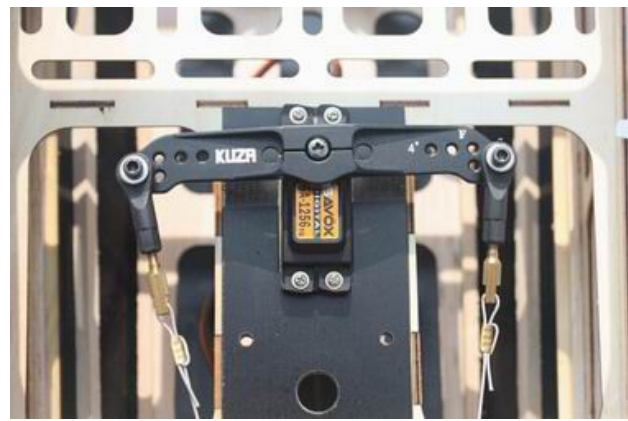
12．We recommend using KUZA® rudder servo tray (available separately) for better rudder performance.

13．This EXTRA is designed to directly accommodate KUZA® rudder servo tray, and so will be all other pending Goldwing airplanes that are 50cc or greater.
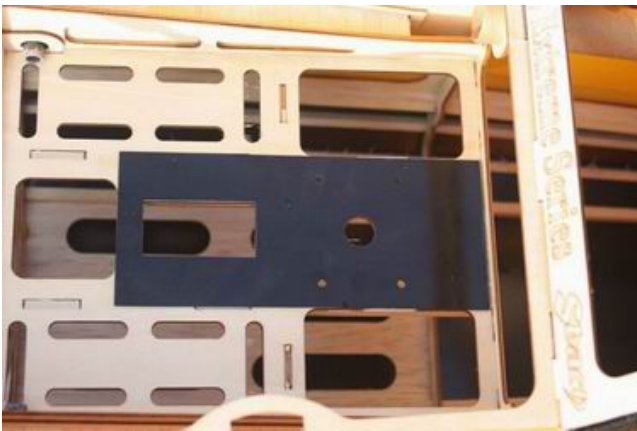
14．You will need to provide 3X42 mm push rods (2 Pcs) and ball links (4 Pcs), depending on the servo of your choice, a KUZA 3.25" aluminum CNC servo arm may also be needed.
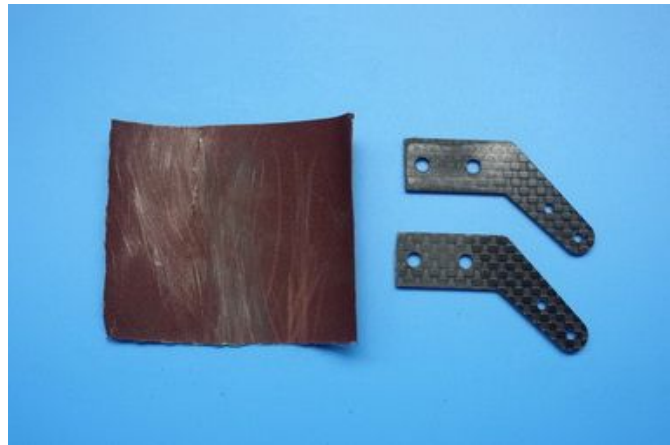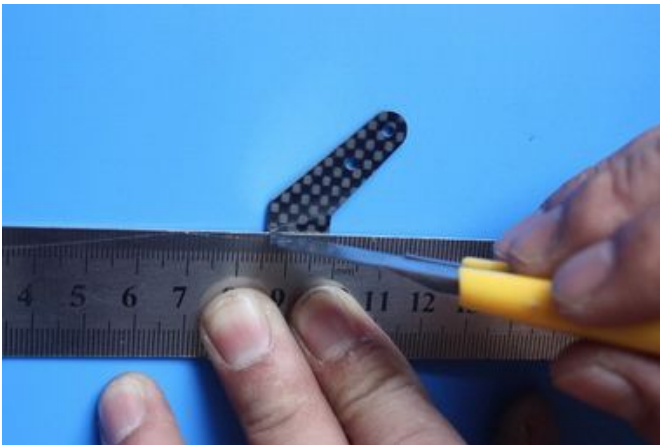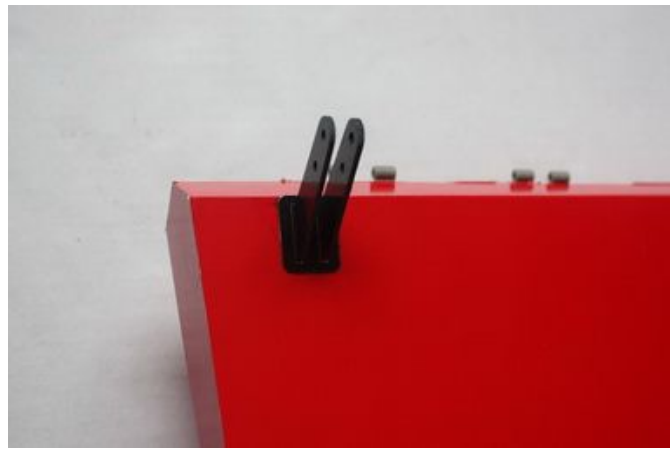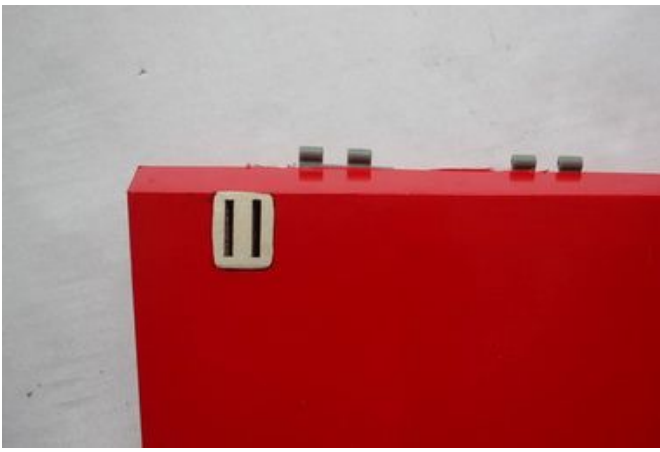
15. Assembling rudder servo tray.
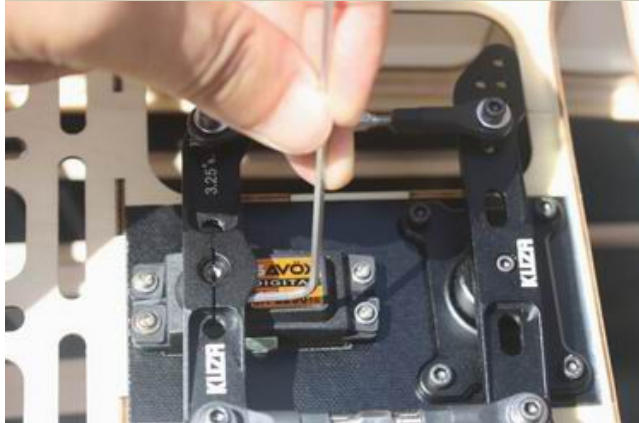
16． The EXTRA also provides pull-push style for rudder. Below is picture of pull-push style linkage set.

Not Included

17． Cut off excess carbon fiber rudder horn, and use sandpaper to rough the parts needed to inlay, and use epoxy glue to glue the horn in place.

18. Use 3x125mm push rod between the servo and the rudder horn. Then use the wrench to adjust the pushrod to the appropriate length.

19. We recommend using KUZA 1.75" aluminium CNC servo arm (sold separately) for rudder control.

LANDING GEAR ASSEMBLY

1. Locate the supplied main and tail wheel landing gear parts and sort them out on your workbench.

CNC Aluminium & Carbon fiber tail wheel assembly
(Include Aluminium hub tail wheel)

2. Bolt the main gear to the bottom of the fuselage using the supplied bolts. Place the nuts in through the can tunnel opening with appropriate size spanner. Remember the gear will rake forward.

3. Loosen out the inner nut, then apply thread lock to the axle. Tighten the nut back in place, allow the thread locker to dry.

4. Install the main wheel axles to the composite landing gear and tighten the nylon-insert lock nut. Install one wheel collet onto the axle. Use a second wheel collar as a guide to leave a gap on the inboard of the axle. Use a small drop of thread-lock and tighten in place. Slide the wheel onto the axle and install a second wheel collar also using thread-lock on the set screw.   For greater strength, filing a flat where the grub screw mounts will stop the collet being able to be turned.

5. Fit the wheel pant in place and install using the two supplied bolts. Use thread-lock to secure the bolts in place. Repeat the above steps for the other side.

6. Use your finger to find the three holes at the bottom of the fuselage. Using a knife clear the holes and fix the tailwheel in place. Use loctite on the bolts. Then install the spring, using the self-tapping screw to attach the other end of the spring onto the rudder.

CNC Aluminium & Carbon fiber tail wheel assembly
(Include Aluminium hub tail wheel)
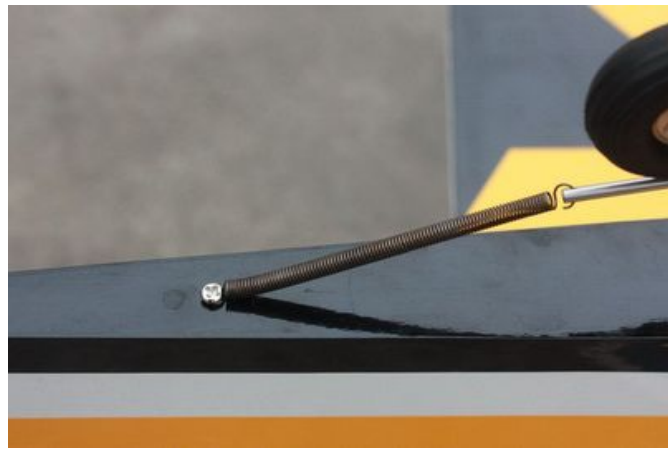
7. The following is a picture of correctly installed tail wheel assembly.

NOTE: One spare tail wheel spring is included in the spare hardware pack.

WINGS ASSEMBLY

1. Aileron push rod linkage set. 3mmx61mm Pushrods for aileron.

2. Locate the slots for the aileron control horn and remove the covering with a sharp knife. Place the horns into position and the cover over the top to work out the area needing to be removed.
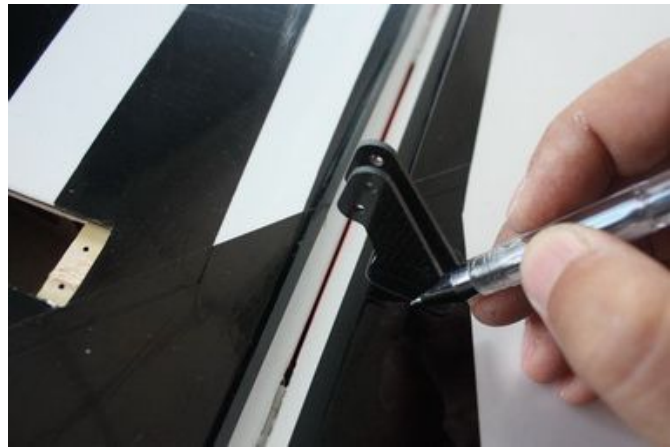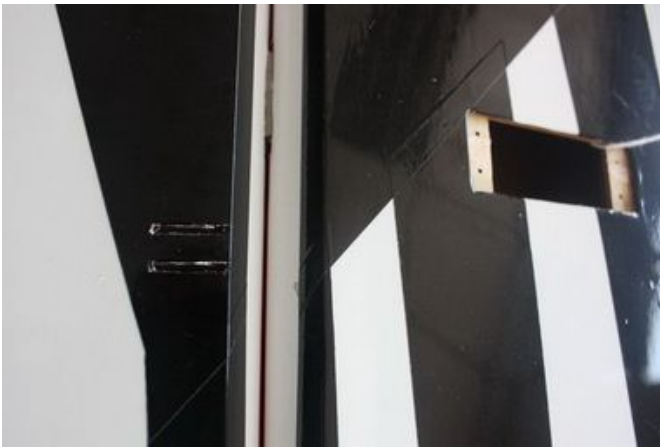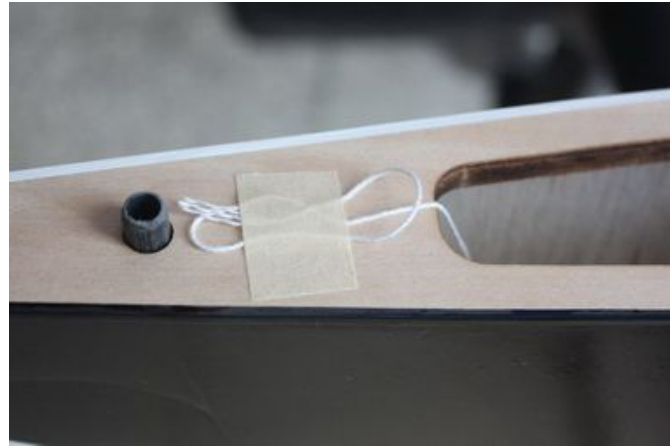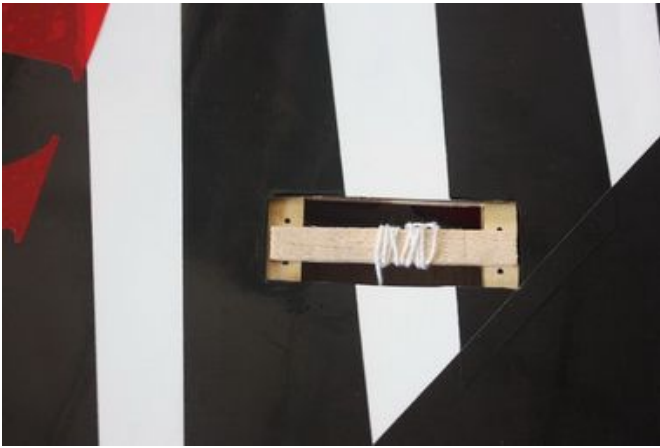

3. Rough the area of the horn that will be glued in place.

4. Using 30 minute epoxy glue the horn and plate into the aileron.

REPEAT FOR THE OTHER SIDE

5. A string is pre-placed in the wing to facilitate the installation of aileron servo wire.

6. Connect extension servo wire, secure with safe clips.

7. Tie up servo extension with the string, and then pull it through the wing.
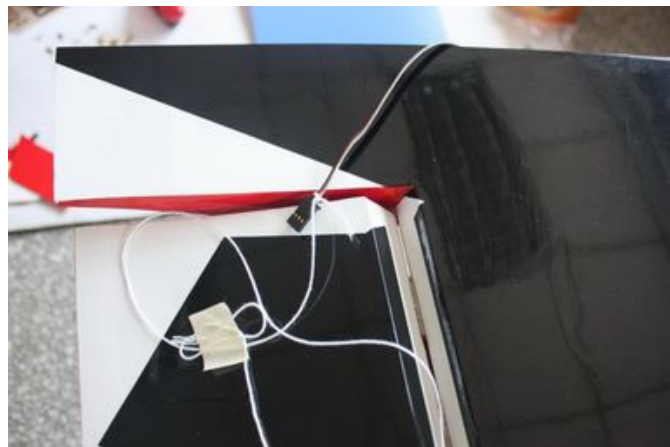
8. Screw holes for servo mounting are pre-drilled by laser in factory, install servo with 4 self threading screws.

9. Locate the included aluminum long servo arm, enlarge control holes with 3mm drill bit

Not Included

10. Using the pushrods connect the servo arm to the horn. Remember that on the pushrod one end is reverse threaded.

For Carbon Fiber Horn   For Servo Arm

Use M3 bolts and nuts to connect the pushrod. Set it so the aileron is level when the arm is at 90 degrees.

REPEAT FOR THE OTHER SIDE

11. We recommend using KUZA 1.75" aluminium CNC servo arm (sold separately) for wing control.

ELEVATOR ASSEMBLY

1. Push rod linkage set for elevator. 3mmx61mm Pushrods for elevator.

2. Find the slots for the control arms in the elevators and remove the covering where the horns are inserted and the area for the plate.

3. Sand the area on the horn that will be glued inside the elevator.

4. Using plenty of 30 minute epoxy fit the horn and plate into place. Use a ball joint and bolt to hold the horn in place while drying.
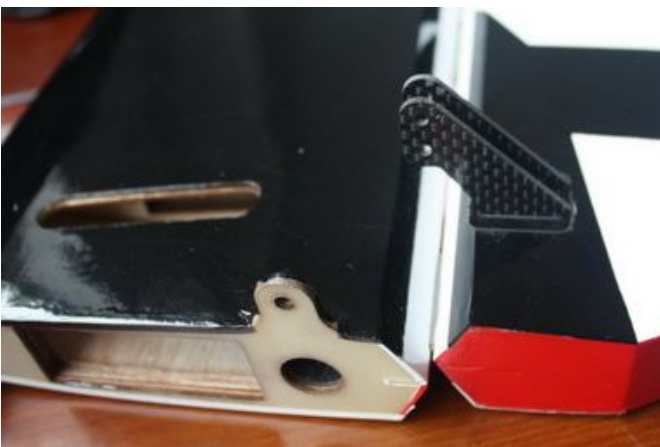
REPEAT FOR THE OTHER SIDE

5. Place long arms onto the servo's you are planning to use for the elevators.

Not Included
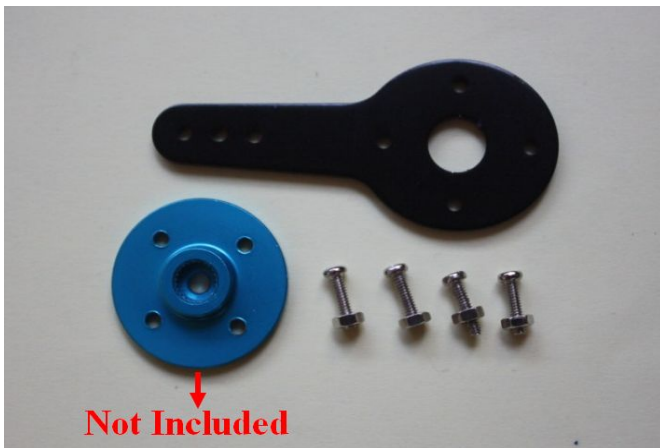
6. Place the servo into the elevator and screw in place. Remember to harden the holes with thin Cyano.
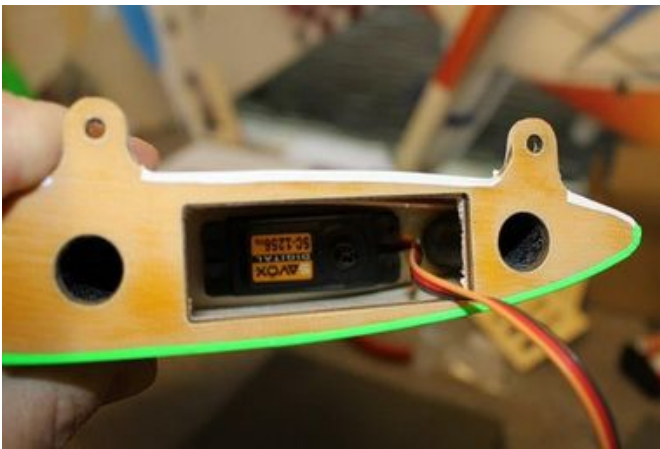
7. Place the servo arm back onto the servo, remembering to centre.

Use nutlock on the servo arm screw.

8. Fit the pushrod in place remembering one end is reverse threaded. Set it so the arm is centered and the elevator is flat. Choose the holes depending on how much deflection you require.

For Carbon Fiber Horn   For Servo Arm
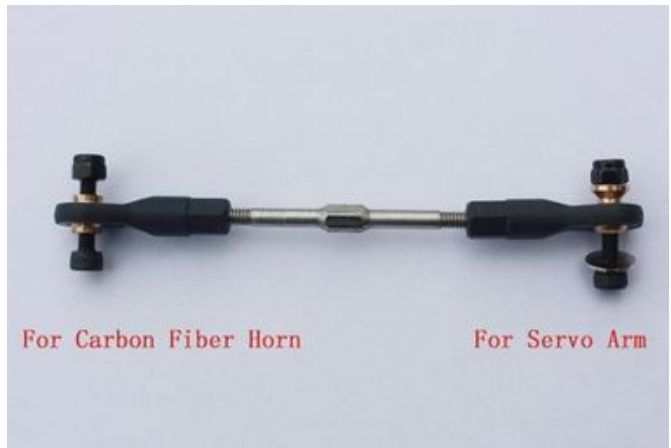
REPEAT FOR THE OTHER SIDE

9. We recommend using KUZA 1.75" aluminium CNC servo arm (sold separately) for elevator control.

ENGINE, EXHAUST, & FUEL SYSTEM INSTALLATION

1. Templates are provided in the kit for both DA 50 and 60 along with the 3W 55 cc. Select the correct guide for your engine and mark and drill the mounting holes and cut out the

center as indicated. Notice that the engine center line is offset to the left to compensate for the right thrust built into the engine box.


2. Fit the Cowl and measure the distance from the engine bulkhead to the front of the cowl, add approx 2-3mm for the spinner back plate and this is the length that your engine should be set Using the correct length stand offs, mount your engine securely using bolts, 20mm POM washers, and locknuts. The use of thread-lock is also highly essential for the engine bolts.
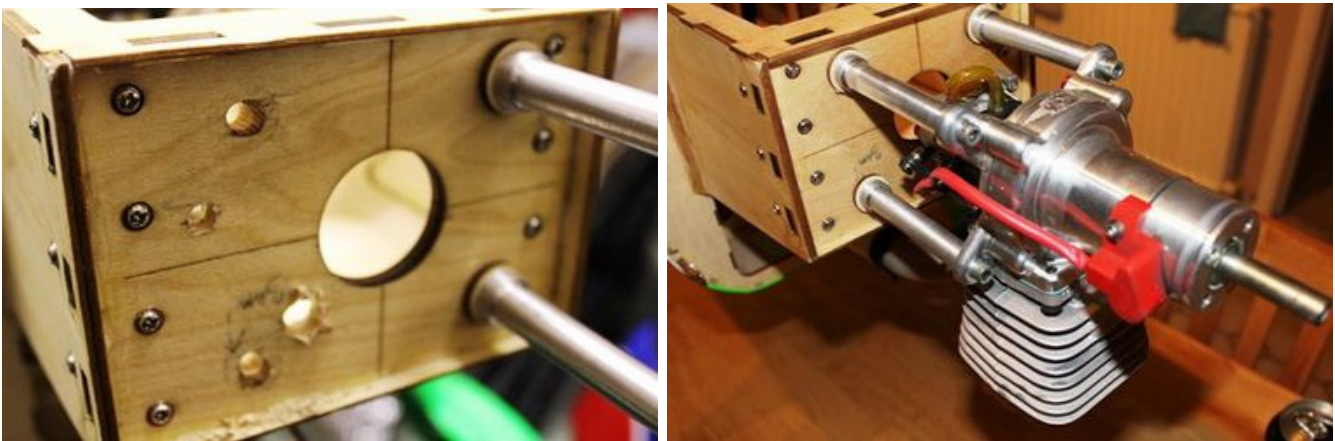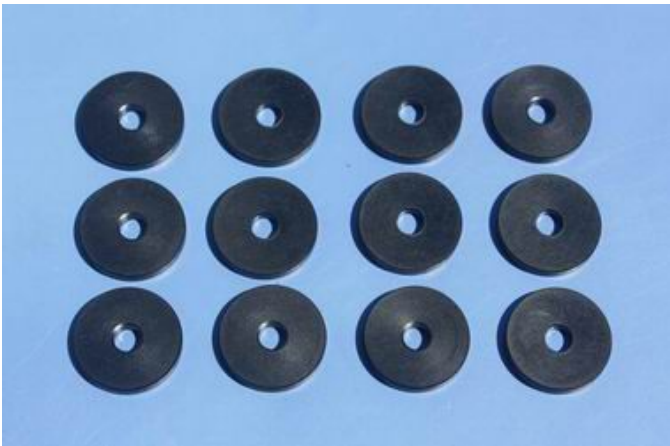
3. Mount the ignition module according to the manufacturer's instructions. The best place to mount it is on the side of the engine box. Secure the pickup lead and ignition wires with zip ties so that they do not vibrate or touch any hot part of the engine or exhaust.
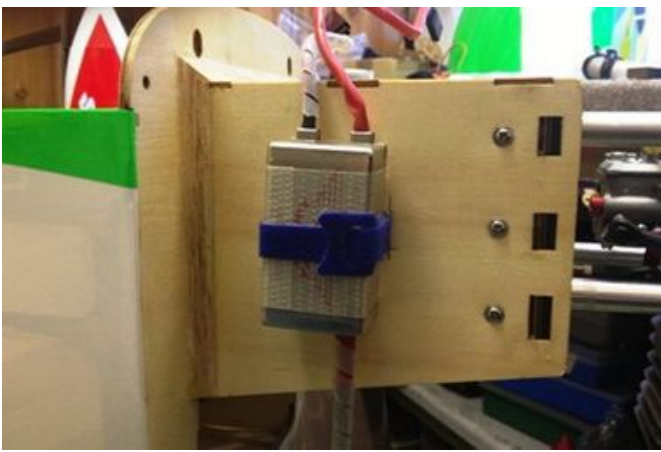
5. Assemble the throttle servo mount using the supplied laser cut parts or there is a servo cutout in the bottom of the engine box for 50cc-70cc engines. Mount your throttle servo and complete your linkage setup. A hole will need to be drilled on the firewall to allow the pushrod to connect to the throttle arm on the carb.
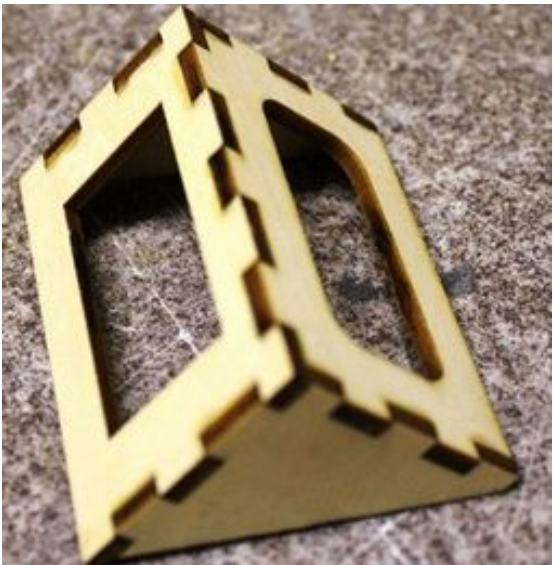
6. An extra servo can be fitted for choke or a mechanical linkage can be used.

7. The new KUZA 500cc Fuel Tank with aluminum tank cap is preassembled. Complete the installation in the fuselage using zip ties or velcro straps to hold the tank in position. Connect a fuel line between the tank and carb, a fuel line between the tank vent and the bottom of the fuselage, and a fill line to a fueling port which can be mounted on the fuselage side opposite your ignition switch. Make sure your vent line does not come close to any hot exhaust part such as the muffler or canister. GW recommends the use of small zip ties or fuel line clamps to secure the lines to the tank.
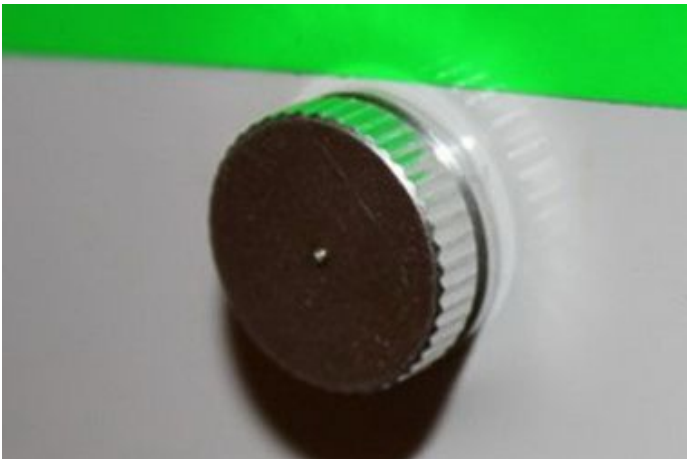
A barb on the bottom of the fuselage can be fitted for the vent.

8. The EXTRA comes with a canister pipe tunnel. Standard muffler, pitts muffler, canister or tuned pipe can be fitted. If a tuned pipe is going to be used the end of the can tunnel can

be removed. The tunnel can be closed off to accept canisters of all sizes, or stock mufflers. Follow the manufacturer's instructions for your exhaust system paying attention to vibration mounts if required and air flow requirements. Trial fit your exhaust system now and work out any additional supports, but do not permanently install the system until you fit the cowling in the next steps.
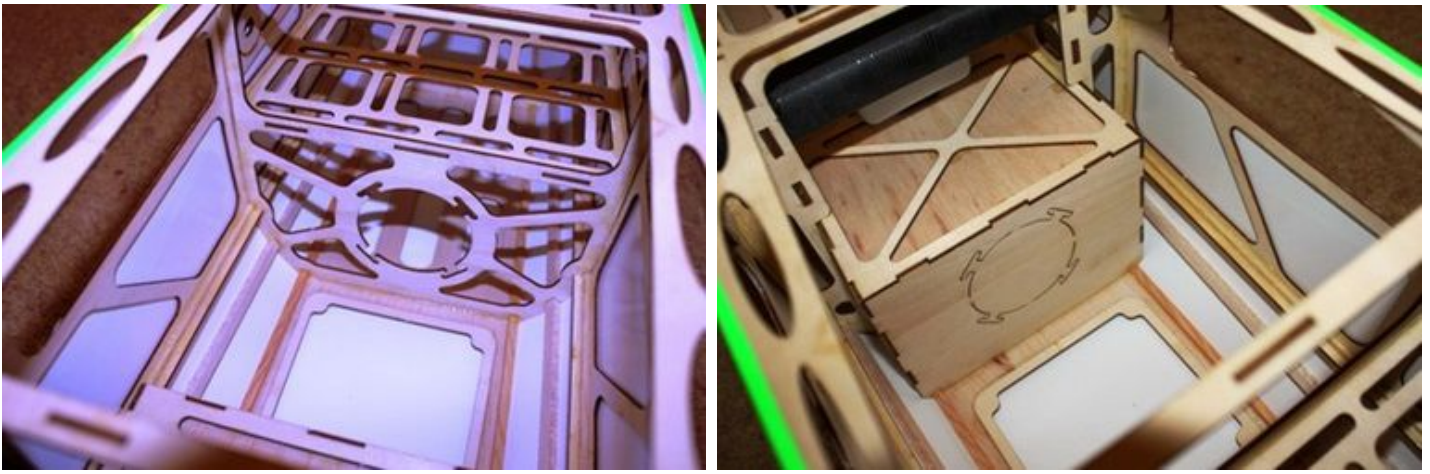
Pitts Muffler

Canister Fitting
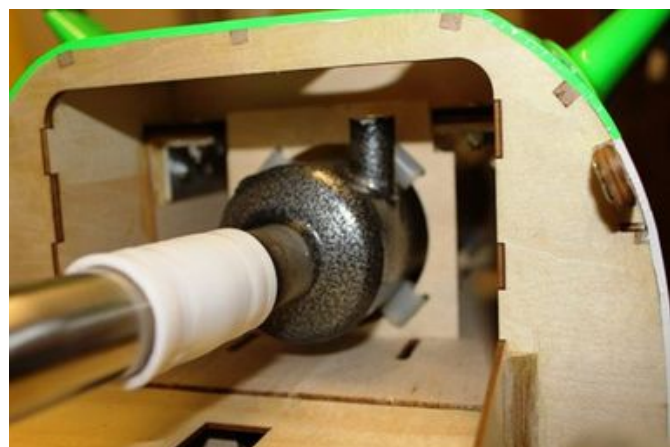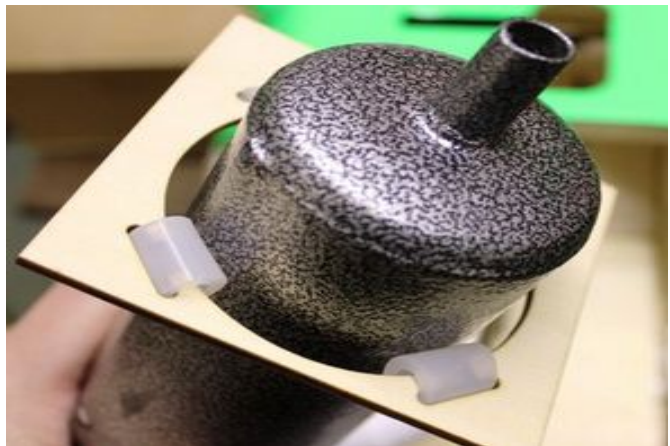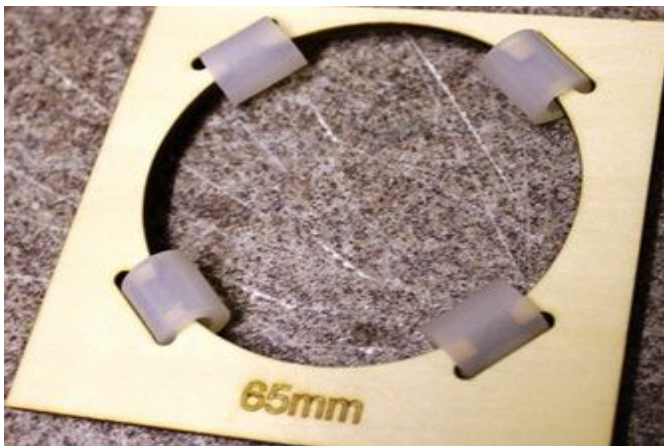
Tuned Pipe Mounting

The EXTRA comes with many openings for the exhaust outlet, line up the exhaust then remove the covering for the required outlet.   They come with covers that can be used for cooling. Use a soldering iron to open up the holes.

Installation of KUZA Fuel Dot and Fuel Vent Line Plug （Not included）

1. From June 2015 and on, all Goldwing gas airplanes are made ready for KUZA fuel dot and vent line plug. Available in three colors: black, red and blue.
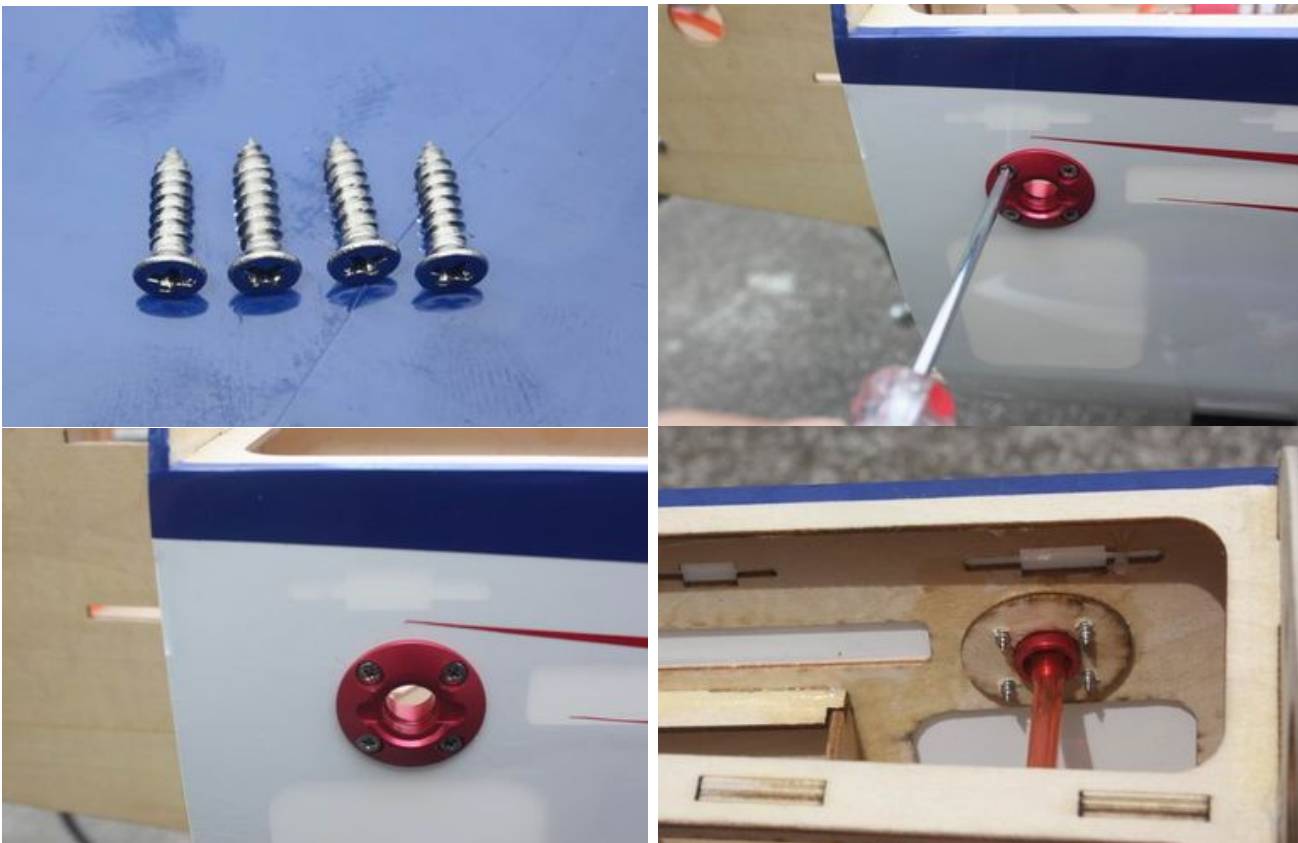

2. Installation of KUZA CNC Aluminum Fuel Dot

Sites for KUZA fuel dot installation are pre-cut on both sides of the fuselage, you may install it on either side. Use shape knife to remove the covering.

Secure the housing of fuel dot with supplied 2.5 mm self-tapping screws, then plug and install the fuel line to complete the setup of fuel dot.

3. Installation of KUZA CNC Aluminum Fuel Vent Line Plug

Similarly, two sites for vent line plug installation are available at the bottom of the fuselage. Secure KUZA vent line plug with four 2.5 mm self-tapping screws as shown below.
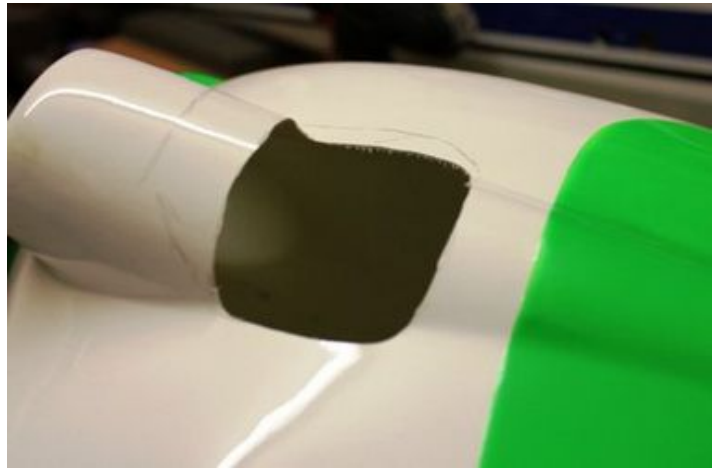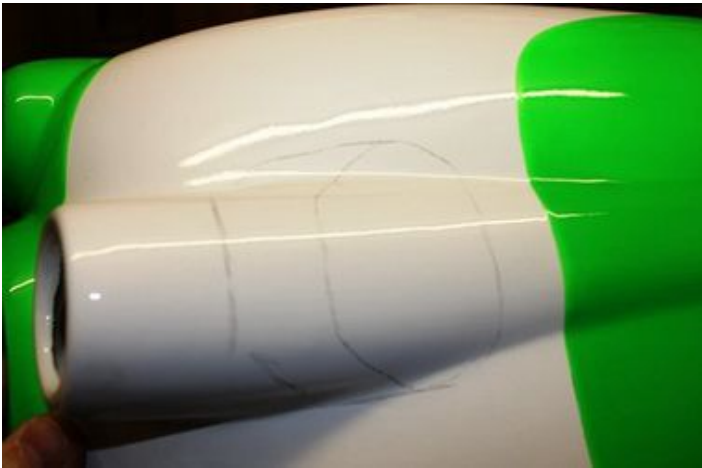

COWLING INSTALLATION

1. With the engine fitted, tape a piece of card to the bottom of the fuselage that can overlap the cylinder head. Remove the engine and refit the cowl. Then fold over the card to show where the cylinder head would be as below.

2. Mark onto the cowl the area to remove, and remove with a dremel.

As the EXTRA has a scale inlet, depending on your engine it may need to be removed. If it is still attached it may be beneficial to strengthen with a small amount of glass cloth.

- If your exhaust outlet comes out within the cowl area then use the same method.

- Depending on the amount of cooling required for your engine a template for louvers in the bottom of the cowl has been provided. Use a dremel tool to remove the material.
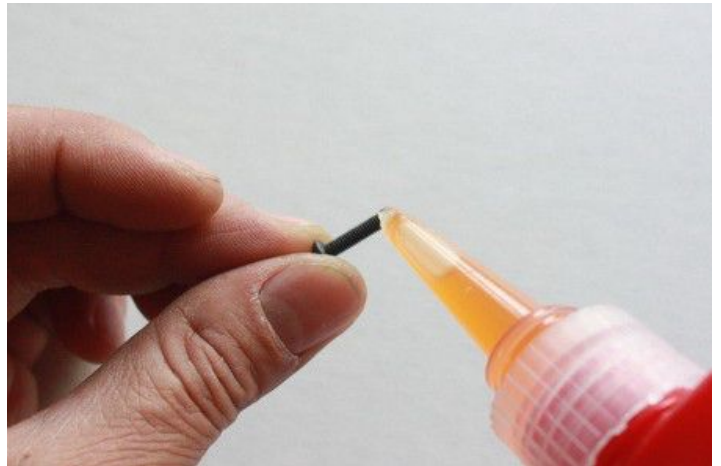
- When the cowl clears the engine etc correctly the prop shaft of the engine will be in the centre of the cowl.
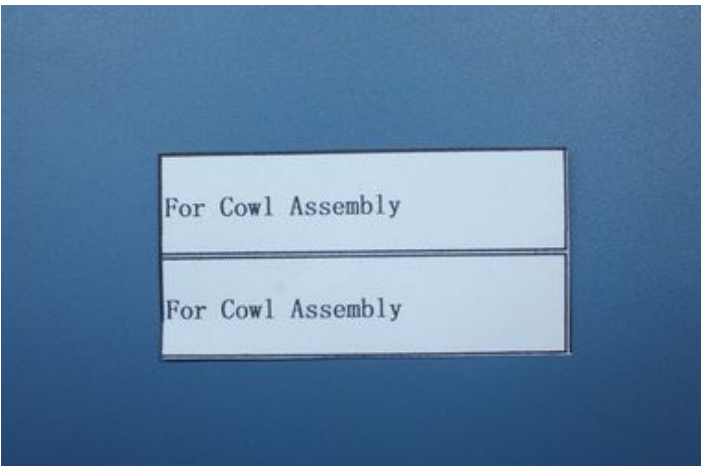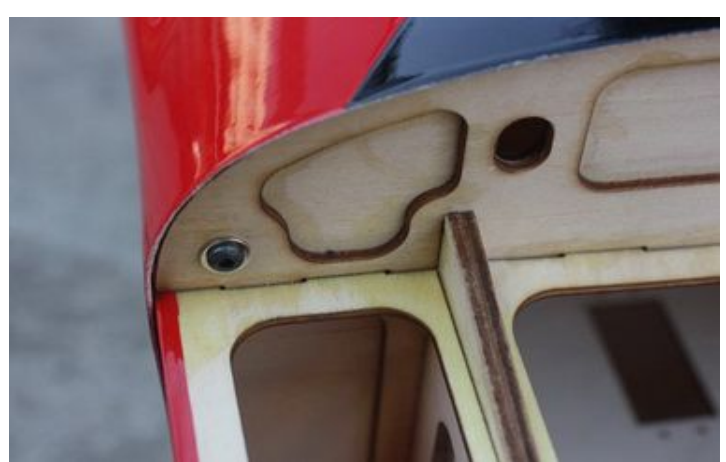

3.The cowl is secured with four 3 x 16mm bolts and washers.

Apply nutlock onto the bolts as the vibration from the gas engine will shake them come loose.

Labels are provided for aligning the drill holes for the cowl. Stick then on without the cowl, mark the hole. Fit the cowl then press back down. The hole will then show the area to drill. Sere below.

FINAL RADIO SYSTEM INSTALLATION

Whether you use 72 MHz systems or the newer 2.4 GHz systems, correct radio installation and care is vital to the safe and reliable operation of your aircraft. Follow the manufacturer's instruction for installation guidance of receivers and batteries paying attention to factors such as vibration isolation, adequate cooling, and clearances.

1. Mount your receiver(s) securely in a location which provides a clean and maintenance free solution to your setup. All servo wires should be neatly routed and secured in place so they will not come loose or flop around during flight.

2. The fuselage ply sides provide space to mount your switches just below the canopy. Mount your switches according to the manufacturer's instructions and route your wires safely and securely as above.

3. Your receiver battery(s) can be mounted in a variety of locations depending on your balance needs. Regardless of where you mount your batteries it is vital that they are very secure with no possibility of coming loose. Use double sided velcro to hold the batteries from sliding around and then use zip ties or Velcro straps to secure them tightly in place.

4. Servo and battery leads are the life blood of your aircraft. Make sure all wires are top quality and connectors are tight and display no loose pins or frayed wires. Servo clips are provided in the kit for your convenience. These servo clips can even be glued to the wood structure using CA if desired.

5. Check all radio programming and control surface operations thoroughly before your initial flight. Check your radio range according to the radio manufacturer's instructions both with the engine off and running.

Balancing and Pre-Flight Checks

Most state of the art aerobatic aircraft allow for a wide margin for balancing depending on what level of precision or freestyle flying the pilot prefers. To perform properly without being too pitch sensitive, you must not go too aft on the CG. **GoldWing RC recommends an initial CG setting of 143-163mm (5.6-6.4 inches) behind the leading edge of the wing at the root.**   More experienced pilots may want to set the CG further aft for more 3D capability. Varying weights of engines and radio gear will dictate how you should install each. The batteries can easily be located pretty much anywhere in the fuselage. For those using a heavy engine, servo cutouts are provided in the rear of the fuselage for the rudder servos. These options should allow you to balance the model without adding any weight.

Note: The best way to check your balance is to trim for level flight at about 1/2 to 3/4 throttle and then roll inverted. The aircraft should maintain level flight with very little to no down elevator input. If the aircraft climbs when inverted then you've probably got your CG too far aft. If the nose drops more than slightly, then you are most likely nose heavy.

Recommended control surface deflections:

	Low Rate	High Rate
Elevator	15 degrees	45-50 degrees
Rudder	25 degrees	40 – 45 degrees
Ailerons	25 degrees	35-40 degrees

Use exponential on the dual rates at levels that suit your flying style.

If you find that you require tail weight and cannot move parts around the aircraft a rear hatch has been added. Glue in the inner ring, once the covering has been removed. Then screw on the supplied cover.
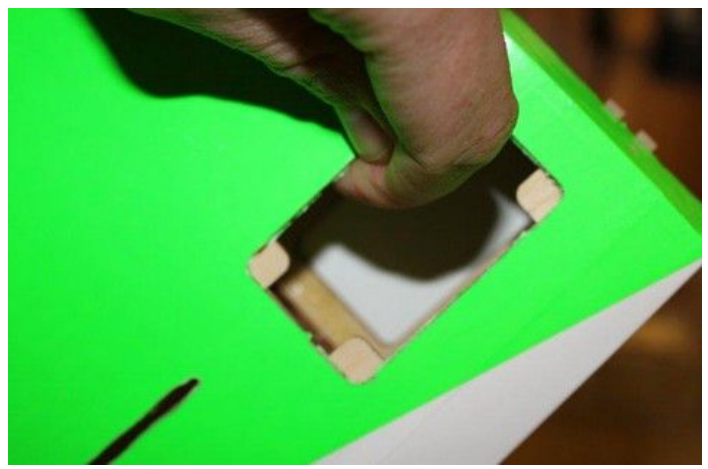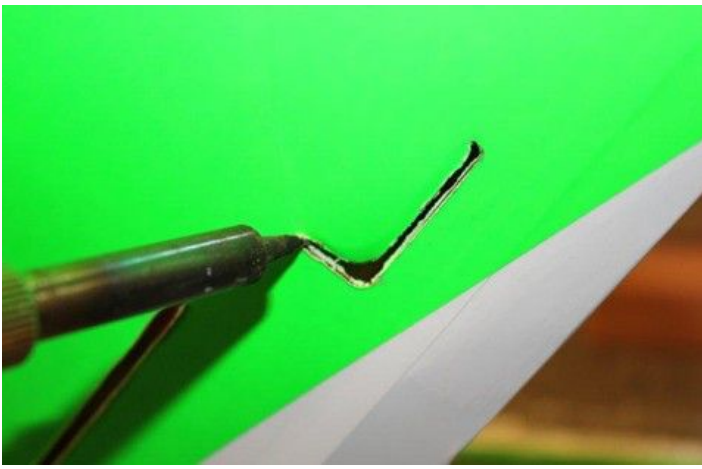
Final Assembly and Pre-Flight Inspections

1. Before arriving at your flying field, be sure all your batteries are fully charged and all radio systems are in working order.

2. Installation of the rudder

The rudder is removable for convenience in transportation, it is connected to fuselage by inserting a 1.8 mm steel rod through the hinge line.

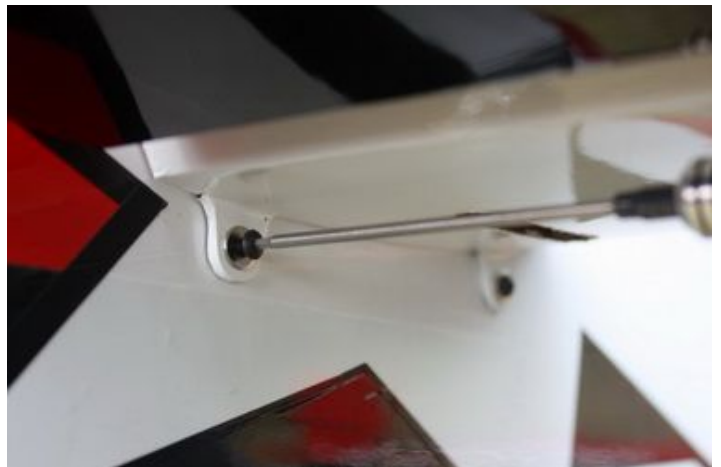Then install pull-pull ball links on control horns.

Hook up the tail wheel spring.

3．Installation of Elevators

Connect servo extension wire, secure with safe clips.

Attach elevators with 3x12mm Hex-head bolts and washers. Check these after every flight.

4．Install the wings onto the fuselage being careful to align the wing tube with the wings and not force it. The wing tube may be initially tight but will loosen after some with use. Guide your servo wires into the fuselage openings and connect to the correct aileron channels. Servo clips are highly recommended. Once you have the wings fully seated in the fuselage tighten the wing bolts inside the fuselage.


2 PCS for spare

5．Side force generators assembly.

Cut the wing film needed to be install the SFG. Fixed the SFG Use M3X18 hand bolts and balsa sheets. Installation of the SFG is optional.
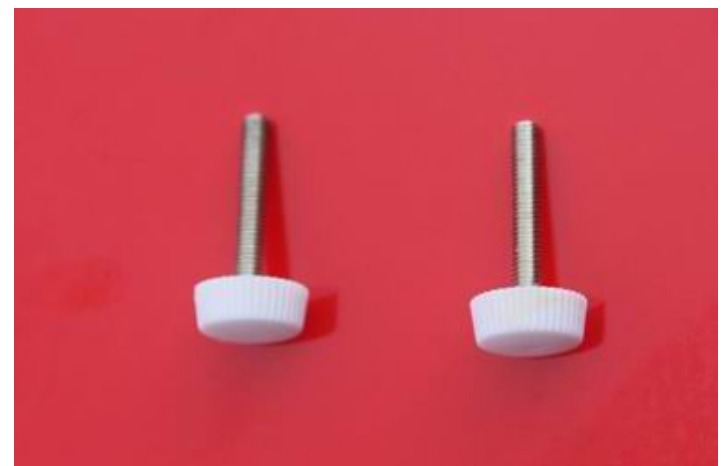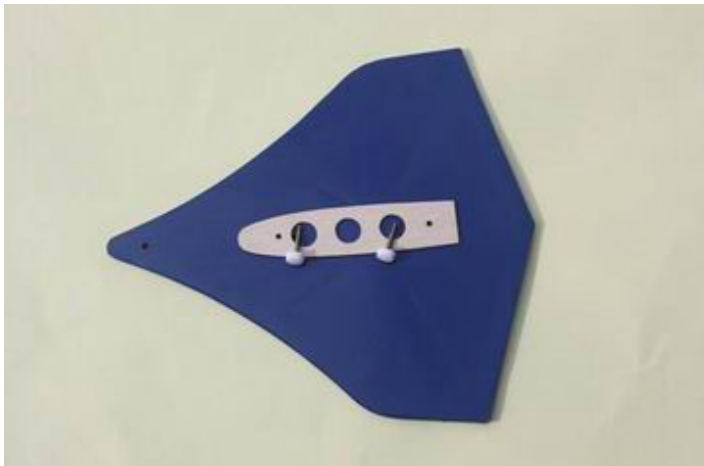
6. Fill your fuel tank making sure your vent line is not plugged or capped. With the canopy off, this is a good time to check for any fuel leaks.

7. Position the canopy in place and tighten ALU Canopy Bolts. Be sure to use the supplied PTFE washers under the screw heads.
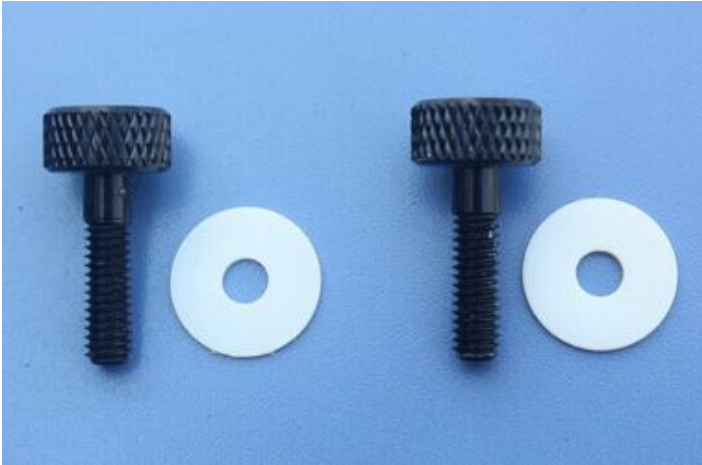
NOTE: Two spare aluminum hand-twist canopy bolts is included in the spare hardware pack.

8. Check all control surfaces for secure hinges by performed a slight tug on the control surfaces and observing if there is any give in the hinges. Check all control rods, ball links, servo screws, etc. for correct operation and installation.

9. Check your batteries and perform a range check once again with the engine off and running. Be sure all surfaces are moving in the correct direction and the correct amount for your flying setup.

10. You are now ready for your maiden flight! Good luck and enjoy your new aircraft! If you have any comments or questions about this manual or the aircraft please email **service@goldwingrc.com**

Recommend Accessories（Not included）：
* KUZA Gas Fuel line size: 6X3.5mm   3 color to choose: red , blue, yellow
No. KAG006131R or KAG0061U or KAG0061Y

* KUZA CNC Aluminum Fuel Dot   3 color to choose: black, blue, red   No. KAG0231B or KAG0231U or KAG0231R

* KUZA CNC Aluminum Fuel Vent Line Plug   3 color to choose: black, blue, red
No. KAG0232B or KAG0232U or KAG0232R

* KUZA Fuel line clips   10PCS   No. KAG02454

* KUZA 1x servo tray No. KAG0T01

* KUZA Heavy duty 7075 aluminum Servo Arm

For Futaba servo（25T）：
47mm/1.75in Single No. KAG0S7F
100mm/4in Dual   No. KAG0D723F

For Hitec servo（24T）：
47mm/1.75in Single No. KAG0S7H
100mm/4in Dual No. KAG0D73H

For JR servo（23T）：
47mm/1.75in Single No. KAG0S73J
100mm/4in Dual No. KAG0D73J

* KUZA new Wingbag for 50CC   Two color to choose: red/ black, blue / silver   No. KAG0093

3.5in C.F spinner (Not Included)

www.goldwingrc.com