



SUPER FLYING MODEL MANUFACTURE



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TRI-40 II GP/EP



SPECIFICATIONS

Wing Span: 1600mm Wing Area: 45 dm² Length: 1240mm

Total Weight: 1900g (with battery 2600mAh)

Radio: 4 ~ 6(if use flap) channels

Motor: 850KV brushless Thrust: 2 KGS and up

Battery: Li-Po 4-cell 2600mAh and up

ESC: 60A

Engine: 10cc 2-stroke(Gas)

.46 2-stroke .60 4-stroke

Propeller for EP: 12 x 8"

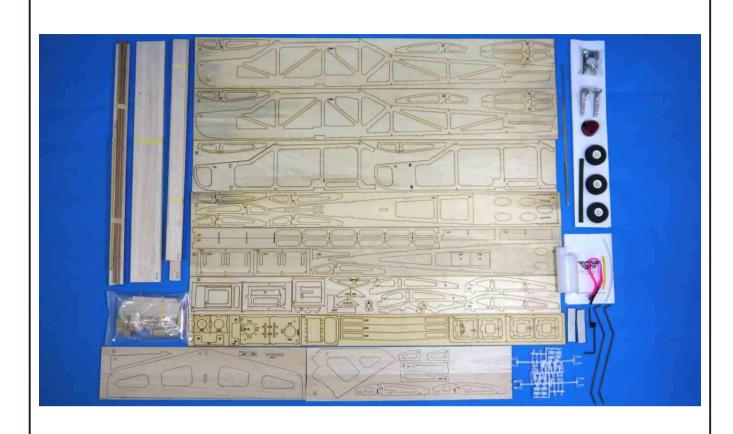
Propeller for GP: 12 x 6" (Gas)

Propeller for GP: 11 x 6"

Warning

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, following all instructions included with your radio.

Before beginning the assembly, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.



Contents of Kit / Parts Layout

Recommended radio and equipment (Not included in kit):

4-6 (if use flap) or up channel radio

Receiver

Servos (45g) x 4 pieces + 3 pieces if use flap

60Amp or up Brushless ESC x 1 piece

11x6 – 12x8 propeller x 1 piece

Aluminum nut x 1 piece

Y-harness x 1 piece + 1 piece if use flap

600mm extension x 2 pieces + 2 pieces if use flap

Tools and suppliers needed (not included in kit):

1200mm x 400mm x 10mm flat surface planking, Triangle ruler, Straight aluminum ruler 1000mm Clips, Heavy object around 1 KG, Tissue, Double-side adhesive tape, Vernier scale, 10-12mm thickness planking, Sanding paper #150 & #200, Planer tool, 2mm hand driller, Iron, Phillips screws driver #0 & #1, Curved scissors, Hobby knife, Instant glue, UHU glue, Epoxy 5-10 minutes, Marker, white glue, Driller 1.5mm/2.6mm/4.2mm, Transparent tape, Masking tape, Brush, Painting, Z-bender pliers, Side-cut pliers, 1.5mm hex wrech, Solder iron, Pin, Rubber band, Sharp-nose pliers, Super glue, Cross wrench

FOR ASSEMBLING KIT

II

The following steps are showing right wing .



Try to find a flat surface planking or glass (L: 1200mm; W: 400mm) as working table for the following steps. Place the W3 hard wood strip and W2 on the working table. Use instant glue to secure the W3 on the bottom of W2; make sure the alignment of both bottom lines.

Hint: you can use triangle ruler when secure W3 on W2.



Refer to the assemble drawing inside the box and fit ribs W8 – W9 onto the W2 combination. Use triangle ruler between the ribs and W3; make sure the angle is 90 degree and drop some instant glue to secure ribs in place.



Try to fit W2 on the top of the middle beam and use instant glue to secure it in place.



Try to fit W13 and W14 (2 pieces) on the indicated locations as the pictures show.



Try to fit W1 onto the ribs combination. Place 1 meter long straight rule in front of the leading edge. Drop some instant glue to secure W1 in place.



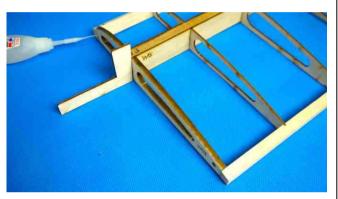
Try to fit the rear edge of the ribs into the slots on W4R and make sure the W11 is aligning to the side edge of W4R; drop some instant glue to secure W4R in place. (W4L is the rear edge for the left wing.)



Fit W7-1 and W7 into W2 and drop some instant glue to secure it in place.



Turn the main wing up-side down. Try to fit W11 onto the main wing and secure it in place with some instant glue.



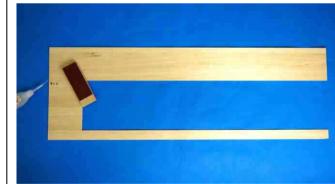
Fit W6-1 and W6 into W2. Use W6-2 as a gauge and secure them in place with glue.



Try to fit W12 on the top of W11 and drop some instant glue to secure it in place.



Try to fit W10 onto the main wing and secure it in place with some instant glue.



Top planking: Try to fit W13, W14 and W16 in order. Make sure they are alignment and drop some instant glue to secure them in place. Use sanding paper to trim the surface.

III



Bottom planking: Try to fit W13, W15 and W16 in order. Make sure they are alignment and drop some instant glue to secure them in place. Use sanding paper to trim the surface.



Turn the main wing bottom-side down. Place some heavy objects on the main wing and wait for the glue to dry enough.



Place the main wing up-side down and spread the white glue on all ribs.



Use hobby knife to trim the extra planking.



Place the bottom planking on the main wing and make sure the edges are alignment.



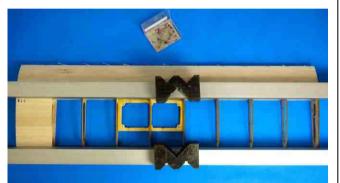
Spread the white glue on all ribs.



Place the top planking on the main wing and make sure the edges are alignme



Use clips to hold the joiners in place for temporary.



Place some heavy objects on the top planking and wait for the glue to dry enough. If some parts are curved, use pins to hold them in place for temporary.



When the glue on the top planking is dried enough; use hobby knife to trim the extra planking.

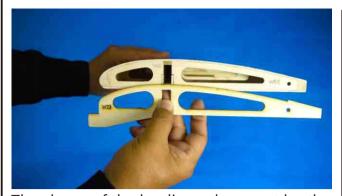


Place 3 pieces of wing joiners on the working table. Use white glue to secure them into one combination.

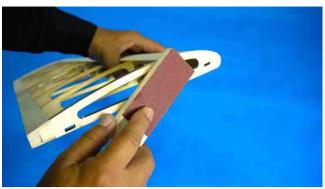


Use planer and sanding paper to trim the leading edge.

V



The shape of the leading edge must be the same as W19.



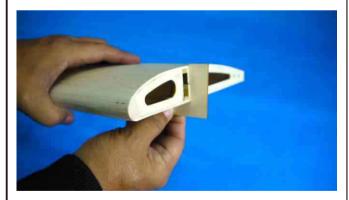
Use sanding paper to trim the wing root flat and even.



Use sanding paper to trim the wing root.



Place W17 and W18 on the working table. Use instant glue to secure the W17 onto W18 as the picture shown.



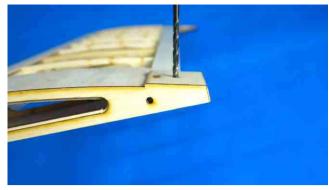
Use W6-2 to check the angle of W6.



Try to fit the W19 and W18 onto the main wing. Use instant glue to secure them in place.



Try to fit the wing joiner into the main wing. If they cannot fit perfect, use sanding paper to trim the contacting area.



According to the hole on the W18, use 4.2mm driller to open a vertical hole on W18 through the whole main wing.



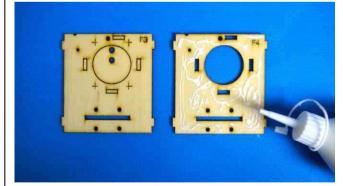
Place W21, W22, W23, W24, W25, W25-1 on the working table for assembling the wing tip. Use instant glue to secure these parts in place.



When complete the assembly of the left and right main wing, iron the covering your preferred.

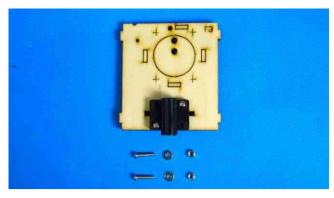


Use sanding paper and hobby knife the trim the edges of W25-1.



Place F3 and F4 on the working table. Please note there is concave mark on their top left side. Place F3 on the top of the F4 with concave mark on the same location applies white glue to secure them together.

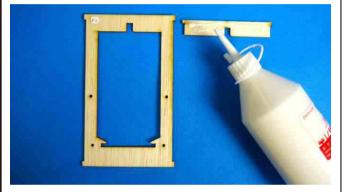
VII



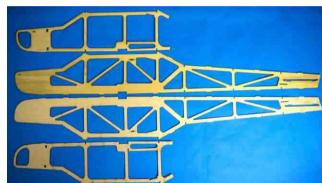
When the glue is dried enough, place nose gear mount on F3 with the longer side face outside. Insert M3x15mm screws through the nose gear mount, F3 and F4, secure with 3mm washers and M3 nuts.



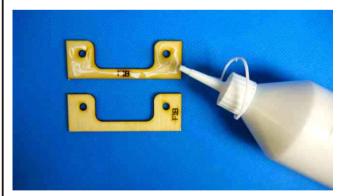
When the glue on F8 is dried enough, nail the clutch nail. It is better to drop some instant glue around the clutch nail for reinforcement.



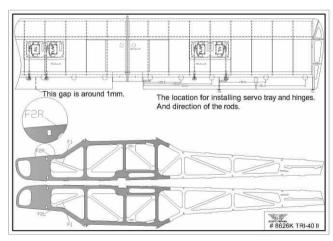
Place F5 on the top of F6, pay attend to the concave marks must match each other; apply white glue to secure them together.



Place F2R, F1, F1 and F2L in order as displaying on the picture. Use white glue to secure F2R to F1 and F2L to the second F1. Please note the edges must be alignment.



Apply white glue to secure 2 pieces of F18 together.



Please refer to the attachment #A.



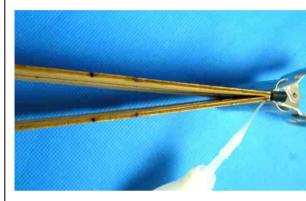
Try to fit F3 – F8 onto the F2R. Please don't use glue to secure them right now. Fit battery planking F13 onto the F2R.



Try to fit F9 – F11 into the fuselage. Please don't apply any glue.



Please note the concave mark on F3 will near to the firewall and face the right side of the fuselage. Make sure the direction is correct and apply glue on the contacting area of the firewall.



Please pay attention to the tail on the fuselage. The ends must be alignment. Drop some instant glue to secure the ends of F1 together.



Try to fit the F1 and F2L onto the fuselage. Use rubber band to hold them in place for temporary.



Use instant glue to secure the firewall and F3 – F11 on side planking.

IX



Use instant glue to secure the F9 – F11 on side planking.



Fit the F18 into the fuselage and drop some instant glue on every parts which will contact F18 for securing it in place.



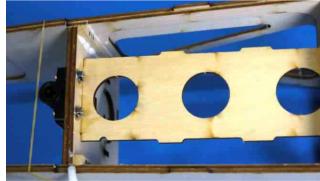
Place the fuselage up-side down. Drop some instant glue on the contacting area of F6 and F13.



Fit the F19 into the fuselage and drop some instant glue on every parts which will contact F19 for securing it in place.



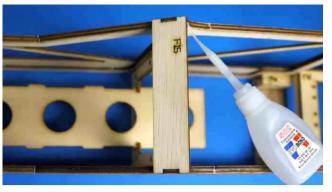
Fit the F14 into the fuselage and drop some instant glue on every parts which will contact F14 for securing it in place.



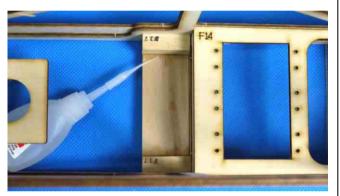
Fit F12 (reinforcing strip) on the contacting area of backside of firewall and side planking. Apply epoxy to secure it in place.



Please fit the main gear mount F16 into the preserved location on the bottom of the fuselage. When satisfy the location use instant glue to secure it in place.



Use instant glue to secure the F15 on the fuselage.



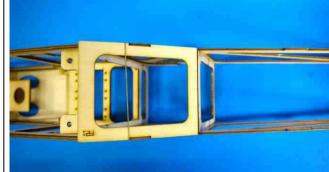
Place the fuselage top-side up. Fit the F17 on the contacting area of F16 and side planking. Use instant glue to secure in place.



Fit the bottom planking F20 on the fuselage and use instant glue to secure it in place.



Please take the 1:1 drawing as a reference and drill 4.2mm hole n F16.

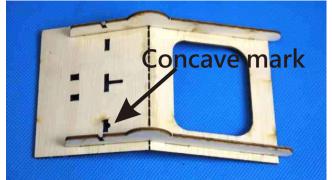


Place the rear window F21 on the fuselage and sue instant glue to secure it in place.

XI



Place the top planking F22 on the tail of fuselage and use instant glue to secure it in place.



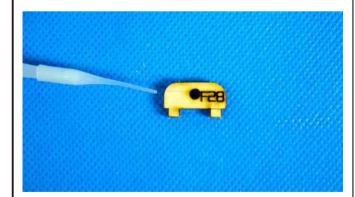
Bend the F24 and F25 according to the marked line. Try to fit F26 onto the F24/F25. Please note the direction. Use instant glue to secure them in place.



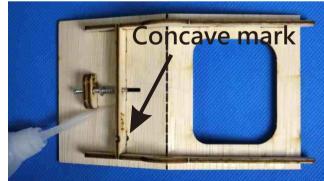
Place the bottom planking F23 on the tail of fuselage and use instant glue to secure it in place.



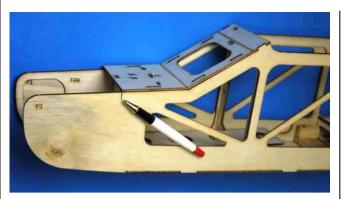
Please take the picture as a reference when assemble F28 onto F27, place a small spring between F27 and F28, insert the pop rivet. Please note the direction of F27.



Use instant glue to secure two pieces of F28 together.



Try to fit the combinations of previous two steps together. Please pay attention to concave mark. Use instant glue to secure them.



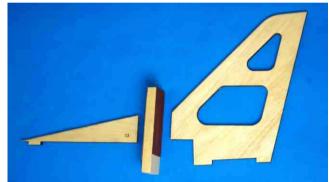
Place the front window on the fuselage. Please pay attention to marked line.



Use planer and sanding paper to trim the edges of V1, V2, V3 and makes the angle of chamfer around R6mm.



Use sanding paper to trim the side planking and makes the angle of chamfer around R3mm.



Use sanding paper to trim the surface where V1 meets V2.



Use planer and sanding paper to trim the edges of horizontal and makes the angle of chamfer around R6mm.



Use instant glue to secure V1 on V2.

XIV



Place the whole fuselage on the working table for checking if there's any bending or un-smooth place. If yes, please check the whole assembly steps.



If this plan is intended for engine or Gas engine; please apply epoxy on planking inside the head and firewall for preventing the oil.



Iron on covering on the fuselage, horizontal, vertical and front window.

FOR ASSEMBLING ARF



Contents of Kit / Parts Layout

Recommended radio and equipment (Not included in kit):

4 or up channel radio Receiver Mini servos (9g) x 4 pieces 25 Amp or up brushless ESC x 1 piece 30mm Spinner x 1 piece

8x4" propeller x 1 piece Aluminum nut x 1 piece Y-harness x 1 piece 30cm Extension x 1 piece

Tools and suppliers needed (not included in kit):

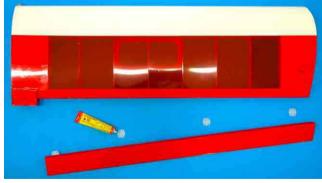
1.5mm hex wrench 1mm/2mm driller Soldering Iron Shrinking tube Z-bender Sharp Hobby Knife

Sharp-nose pliers
Epoxy
Instant glue
Ruler
Marker and transparent tape
Side-cut pliers

Cross wrench #0/#1 Rubber band Heat gun UHU glue Driller 2mm/3mm/4mm



Bend the plastic hinge so it can move freely.



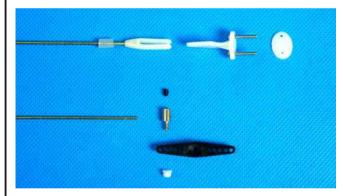
Use epoxy to secure the hinges into the aileron and main wing.



Use epoxy to secure the hinges into the elevator and horizontal.



Use epoxy to secure the hinges into the rudder and vertical.



Place the following accessories on the working table:

Servo arm/adjustable rod stand/M3x4 mm hex screw/plastic nut/clip/2mm threaded rod/silicone tube/M2x15mm screws/2mm nut/plastic plates

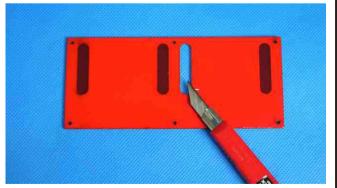
Drill 2mm hole on the servo arm. Install the adjustable rod stand on the servo arm and secure with M3x4mm hex screw and plastic nut. Don't screw too tight, it has to move freely. Thread clip onto the 2.0mm rod. Insert one piece of silicone tube to the rod. Assemble M2x15mm screw, 2mm nut and two pieces of plastic plates for completing control horn set.



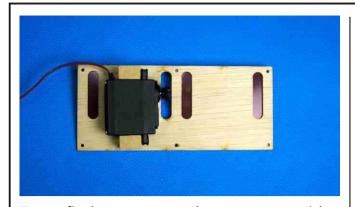
Use hobby knife to remove the covering over the hole for servo tray and plug exit on the main wing.



Use iron to trim the edges of the servo tray ad plug exit.



Remove the covering over the slot on the servo planking.



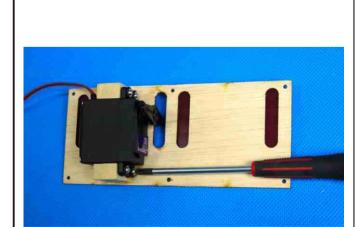
Try to fit the servos on the servo tray with two blocks to hole in place. If use flap, please equip 2 servos.



Drop some instant glue into the screw holes for the servo tray for reinforcement.



Connect the extension with servo plug. Secure the servo tray on the main wing. Use sharp-nose plier to pull the cable out of the plug hole.



Use instant glue the blocks in place. (if use

flap, please refer to the bottom page of

the manual).

When the glue is dried enough, use the screws come with the servo to secure the servo in place.



If want to use fly; please refer to the attachment #A and saw the flap off. Keep the space around 1mm between the flap and aileron.

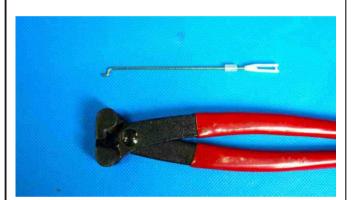
According to the marking on the attachment A, use hobby knife to open the hinge holes on the rear edge of main wing and aileron.



Try to fit the rod, find the location for control horn on the aileron and mark the location for Z-bend. (If use flap, please repeat the same steps for the second servo.)



Insert the washers to the wing blots M4x35mm and insert the bolt to its hole on the main wing. Slide a piece of 5mm silicone tube for preventing missing.



Use Z-bender to make a Z on the marked location.



Use epoxy to secure one side of wing joiner one main wing. When assemble the main wing to the fuselage; slide another end of wing joiner to main wing and secure the main wing. (If want to reinforce the strength of the main wing; you can use epoxy to secure the two wing halves together, but in this way, the two wing halves cannot be separated.)



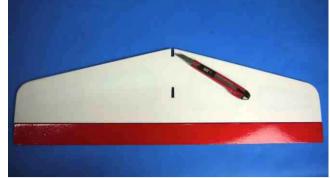
Drill 2mm hole on the control horn. Thread in M2x15mm screw to fix the plate.
Connect the rod onto the control horn.



Apply transparent tape to hold the main wing until the glue is dried enough.



Use hobby knife to remove the covering over the slots for the vertical ad horizontal.



Remover the covering over the pre-served holes on the horizontal.



Remove the covering over the exits for rods on the tail.



Try to fit the vertical and horizontal onto the fuselage. Don't spread any glue right now.



Remove the covering over the main gear slot and cooling holes.



Make sure the length of A must be equal to B and the angle between horizontal and vertical must be 90 degree.



Use marker to mark the line on vertical, horizontal and fuselage for where they contact with each other for two sides.



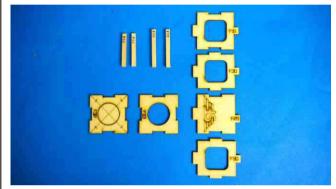
Use epoxy to secure the vertical and horizontal to the fuselage.



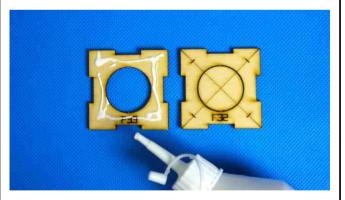
Remove the horizontal and vertical out of the fuselage. Use hobby knife to remove the covering inside the marking area. Be careful not to cut into the wood, as doing so will weaken the construction. .



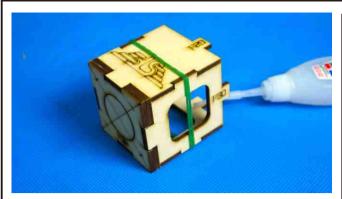
Remove the covering inside the marking on the fuselage. Be careful not to cut into the wood, as doing so will weaken the construction.



If intended to use electric; please take F29 – F35 out of the hardware bag for assembling the motor mount.



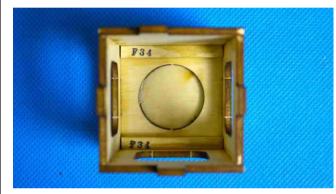
Use glue to secure the F32 on the top of F33.



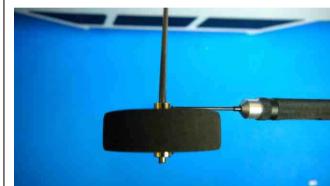
Use instant glue to secure F29-F33 in place with SF logo facing top.



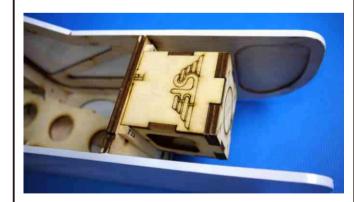
Use 2.6 x 8 mm tapping screws and gear plates to secure the main gear in main gear slot.



When the glue is dried enough; spread some epoxy on F34 and secure F34 inside the motor mount; spread some epoxy on the corners of F34 for reinforcement.



Assemble wheel with collars on the main gear and secure with M3 x4mm hex screw.



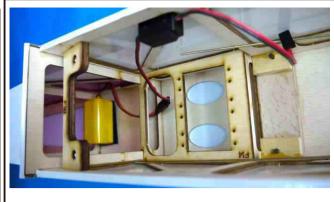
When the glue is dried enough; install the motor mount inside the head of fuselage, use instant glue to secure the motor mount in place. Place F35 inside the motor mount and use epoxy to secure it in place. Spread some epoxy on two sides of motor mount.



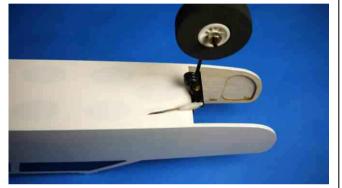
Install nose gear control horn on the top of nose gear; secure with M3x4mm hex screw.



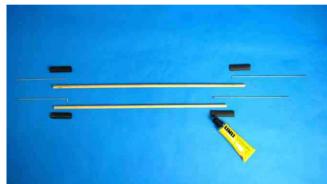
Install nose gear assembly into the nose gear mount, place a collar on top of it and secure with M3x4mm hex screw.



B) Install the receiver battery and switch.



Take on piece of M2 x 450mm rod out of the hardware bag; screw in clevis on one end; slide in a small piece of silicon tube, pull the rod through the fuselage, and screw in clevis on another end for connecting with nose gear control horn.



Please refer to the drawing and assemble the rods for the elevator and rudder. Use UHU glue to secure the conjunctions.

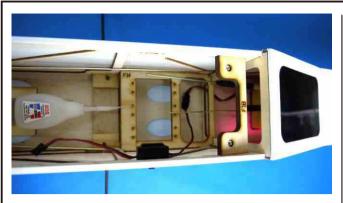


FOR GP ONLY:

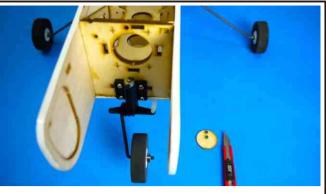
A) Take one piece of M2 x 450mm rod out of the hardware bag and insert through the pre-served holes inside the fuselage. Thread the clevis on the end of rod and slide in one piece of silicone tube.



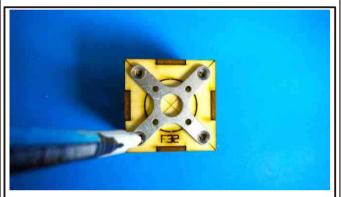
Slide in shrinking tube on the conjunction. Use heat gun to make the tube shrinking for reinforcement.



Drop some instant glue around the screws for servo mount.

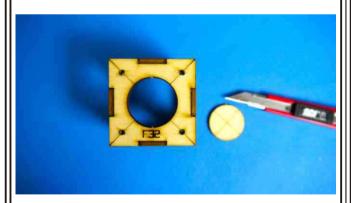


C) There is circle marking on the firewall. Use hobby knife to cut open the hole according to the marking.

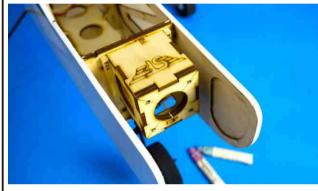


FOR EP ONLY:

A) Place the motor mount on the working table with the F32 facing top. Place the motor plate on the top of the motor mount, use marker to mark the position for the screws.



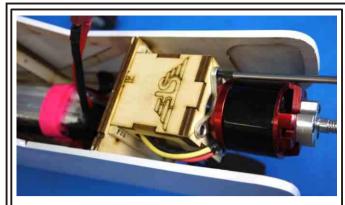
B) Remove the motor plane. Drill 3mm holes on the marked positions. Drop some instant glue around the screw holes. Use hobby knife to remove the center circle.



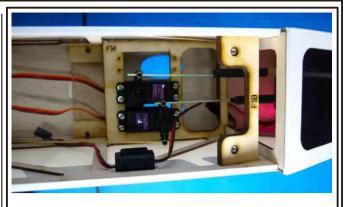
D) Use epoxy to secure the motor mount on the firewall.



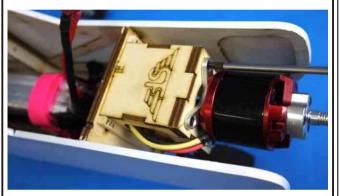
E) Pull the cable of the ESC out of the side hole of the motor mount and connect with the motor.



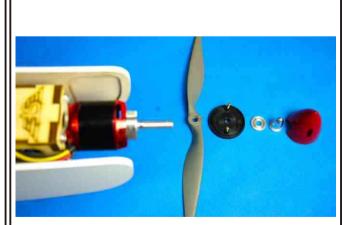
F) Secure the motor on the motor mount with the screws come with motor.



I) Secure the servos onto the servo tray and connect with the rods. Use sharp-nose plier to remove the extra rod.



G) Apply a piece of hook and loop strap around the battery tray. Connect the RSC with battery for checking the motor rotation. The rotation must be anticlockwise.



H) Assemble propeller and spinner.



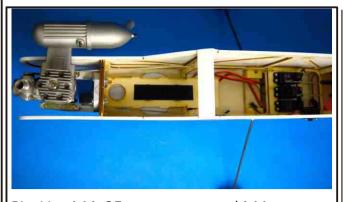
Please connect servo with Y-harness. (The servo for flap also has to connect the Y-harness).



FOR GP ONLY:

A) There are pre-marked screw holes on the firewall. Drill 4mm screw holes on these markings. Use M4x20mm screws, 4mm washers and M4 nuts to secure the engine mount on the firewall.

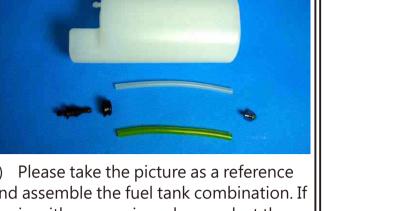
10

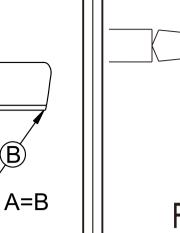


B) Use M4x25mm screws and M4 nuts to secure the engine onto the engine mount. Connect the throttle rod to the carburetor.



E) Please take the picture as a reference and assemble the fuel tank combination. If equip with gas engine, please select the yellow fueling tube.





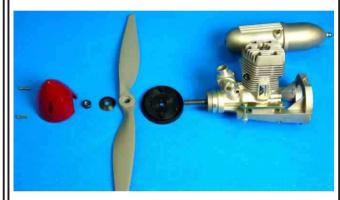
FLAP THROW

Tack off

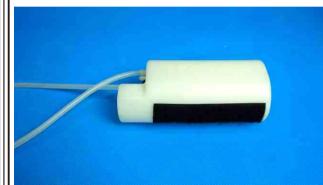
30°

Landding

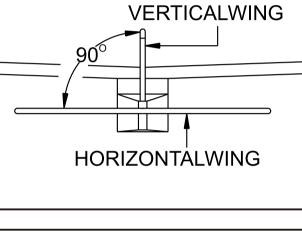
45° or more



C) Assemble propeller and spinner onto the engine.



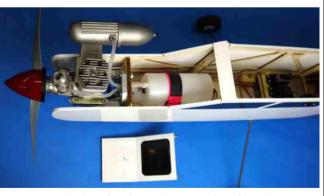
F) Connect the feed-line tubing and ventline tubing to the fuel tank. Please purchase correct tubing for the engine. Apply a piece of adhesive Velco tape on the bottom of fuel tank and another Velco tape on the battery tray.



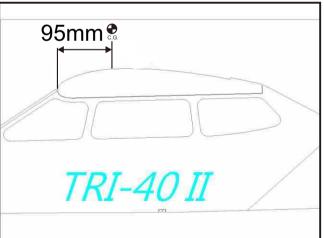
15mm 15mm AILERONS THROW



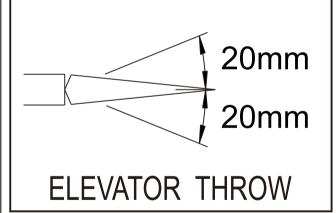
D) Secure the servos onto the servo tray and connect with rods. Use sharp-nose pliers to remove the extra rod.

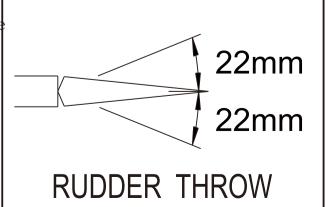


G) Install the fuel tank into the fuselage and use Hook and Loop strap to secure the fuel tank in place. Connect the tube to engine.



C.G. The recommended Center of Gravity location is 95mm back from the leading edge against the fuselage.





11 12

