

# CAPICHE 52

*ELECTRIC OR I/C*



The latest in Weston UK's range of high performance ARTF kits to provide the ultimate in freestyle and 3D performance.

READ THE INSTRUCTIONS FULLY BEFORE COMMENCING!

IF UNSURE ABOUT ANY STAGE OF ASSEMBLY PLEASE CONTACT WESTON UK.  
MATERIALS REQUIRED FOR COMPLETION:

Motor (.52 size 2 stroke) recommended motor West Eurotech 52T1 + Genesis pipe  
APC 13x4w / 12 1/4 x 3 3/4 Prop  
4 stroke engine .80-90 (Tuned By West)  
Electric West 590kv motor, West 85A bec control, APC 16x8E  
4cell or 5 cell 3700/4700ma lipo

Weston UK thin, thick Cyano  
Good quality tools and a very sharp blade.

WE RECOMMEND HITEC RADIO EQUIPMENT AS USED BY  
THE WESTON UK DISPLAY TEAM.

Recommended servos:

Throttle HS 311 Elevator, Ailerons HS 5625MG Rudder HS 5625MG

[www.westonuk.co.uk](http://www.westonuk.co.uk)

# KIT CONTENTS



BAG 1  
2 X WHEELS  
1 X TAIL WHEEL  
4 X VELCRO STRAPS

BAG 2  
1 x MOTOR BOX  
4 X WASHERS  
4 X 3MM X 50MM BOLTS  
4 X 3MM NY-LOCK BOLTS  
4 X 3MM X 10MM BOLTS  
1 X RECEIVER TRAY

BAG 3  
1 X SPINNER

BAG 4  
1 X U/C

BAG 5  
2 X ENGINE MOUNTS  
4 X 3MM X 20MM BOLTS  
8 X WASHERS

BAG 6  
1 X FUEL TANK

BAG 7  
1 X TAIL WHEEL ASSEMBLY  
1 X FUEL TANK PIPE  
2 X M4 X 22MM  
1 X CLEVIS  
1 X SWING KEEPER

BAG 8  
19 X HINGES  
8 X CONTROL HORNS  
2 X BACKING PLATES  
(6 SPARE)  
2 X WING BOLTS  
9 X CLEVISES  
3 X SWING KEEPERS

BAG 9  
4 X CAPTURE NUTS  
4 X DEEP CORE SELF TAPPERS  
(ENGINE MOUNTING)  
2 X 3MM X 35MM BOLTS  
2 X 3.5MM X 13MM BOLTS  
4 X 3MM WASHERS  
2 X 3MM X 12MM BOLTS  
6 X 2.5MM X 10MM BOLTS  
8 X 2.5MM WASHERS  
4 X 4MM NY-LOCK BOLTS  
10 X 2MM X 28MM BOLTS  
10 X 2MM NUTS  
2 X SELF TAPPING SCREWS 2.5MM  
2 X SELF TAPPING SCREWS 1.5 MM

BAG 10  
6 X CLOSED LOOP WIRE  
6 X CLEVIS ADJUSTERS  
2 X AILERON PUSH RODS  
1 THROTTLE PUSH ROD  
AND TUBE  
12 X CRIMPS

# RECOMMENDED MOTOR PACKAGES

## ELECTRIC PACKAGE

WEST 590KV MOTOR  
WEST 85A BEC CONTROLER  
4 CELL OR 5 CELL  
3700MAH / 4700MAH  
APC 16X8 PROP



## IC PACKAGE

WEST EUROTECH 52 T1  
GENESIS MINI PIPE



# “TIME TO BUILD”

**Before starting please check all components.**

### WING

### AILERONS

Each aileron has five hinge points pre-cut. Carefully insert the hinges supplied in the accessory pack into the aileron ensuring that the hole is clear and free. Repeat procedure on all the aileron holes and when happy install the aileron to the wing to ensure everything aligns. Remove all the hinges and glue them into place in the aileron with super thin cyano ensuring they are in the correct orientation. When you are happy glue the aileron into the wing so there are no gaps between the wing and the aileron and there is no binding at the edges. Repeat procedure on other aileron.

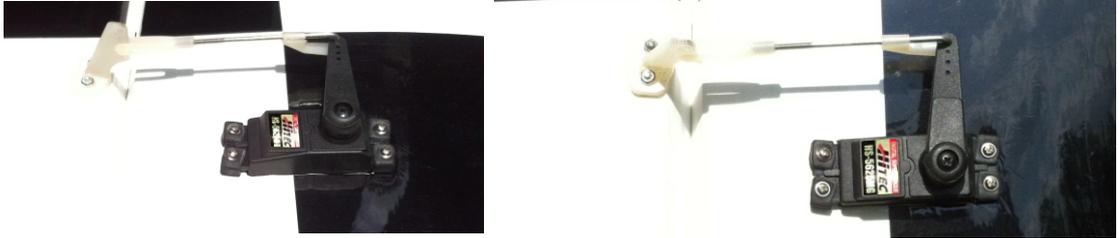


Ensure once assembled there are no gaps and no binding

If any glue has run down the wing or aileron this can be removed with Cyano Wipe available from Weston uk.

## AILERON SERVOS

Install a small draw wire through the wing section very carefully ensuring you do not catch any ribs and draw the servo cable through the wing section to the exit point in the centre of the wing. Install the servo so the output arm is to the **outer edge** of the wing and screw into position. **If the arm orientations is not to the outside the bolts provided will not fit.** Take the two aileron pushrods supplied and attach clevises to the threaded ends. With your servo in the neutral position clip the pushrod onto the servo arm. You can now use this to align the position of your aileron control horns on the aileron over the strengthening points. Once the position has been found, ensuring the clevis attachment point on the horn is positioned over the hinge line secure into position by drilling and bolting the control horn and backing plate together. Repeat procedure on other aileron.



## RUDDER

The rudder utilizes a closed loop control system. Slide the tailwheel bracket into the fin post to ensure that it aligns with the rudder. When you are happy insert the tailwheel bracket and cyano into position. Align the rudder to the fin. Mark and drill the rudder to accept the steering rod of the tailwheel. Insert the hinges into the rudder into the pre-cut holes and repeat procedure as per ailerons. Run some slow cyano on the tailwheel steering rod while assembling rudder to fin. Attach control horns into position on the rudder so that when the closed loop wires exit the fuselage they do not run at an acute angle so as to lessen any binding but also with clearance for full up elevator. Attach control horns on both sides of the rudder over the strengthened area and bolt into position ensuring correct alignment over the hinge line. Please note that the rudder horns are better fitted after the stabiliser is fitted.



## TAILPLANE

Insert the tailplane into the fuselage slot ensuring correct alignment. When happy mark out the joining points with a pen and remove tailplane. Using a very sharp knife remove film, ensuring you do not cut into the wood, to make a good balsa to balsa glue joint. Reinstall tailplane and using thin cyano glue into position.



## ELEVATOR

The elevator utilizes a closed loop control system. Attach elevator to tailplane as per ailerons using the hinges provided. Once installed attach the control horns to the elevator using the same method as per rudder.



## UNDERCARRIAGE/SPATS

Insert 4mm bolt through the recessed side of the wheel then screw nylock nut onto bolt so that the bolt begins to make the thread into the nylon section of the nut. Once this is achieved take the nut back off the axle and turn it round so the nylon part of the nut goes onto the axle first. This is then tightened up until it is 2mm from the wheel hub. Push bolt through undercarriage and using the second nylock nut and washer fasten to undercarriage leg. Slide spat over wheel and bolt and fix spat to undercarriage leg using bolt provided and washer into capture nut in spat. Secure u/c to fuselage using the 4mm x 25mm bolts and washers



## ELEVATOR SERVO

Install the servo in the rear servo tray so the servo arm is forward most. Pass the closed loop wire through one of the elevator outlet holes at the rear of the fuselage, along inside the fuselage and to one side of the servo. Before going through the servo horn slide a crimp down the cable then pass the cable through the servo horn and back through the crimp and terminated. Terminate the cable at the control horn as per the rudder using the clevis and clevis adjuster and secure the crimp at the servo horn and carry out the same to the other control wire .

Closed loop terminated with clevis, clevis adjuster and crimp at the control surface.



Some people find it very hard to understand closed loops on elevator. A simple way to think about it is the two top control horns of the elevator are linked to one side of the servo horn and the two bottom control horns are linked to the opposite side of the servo horn.



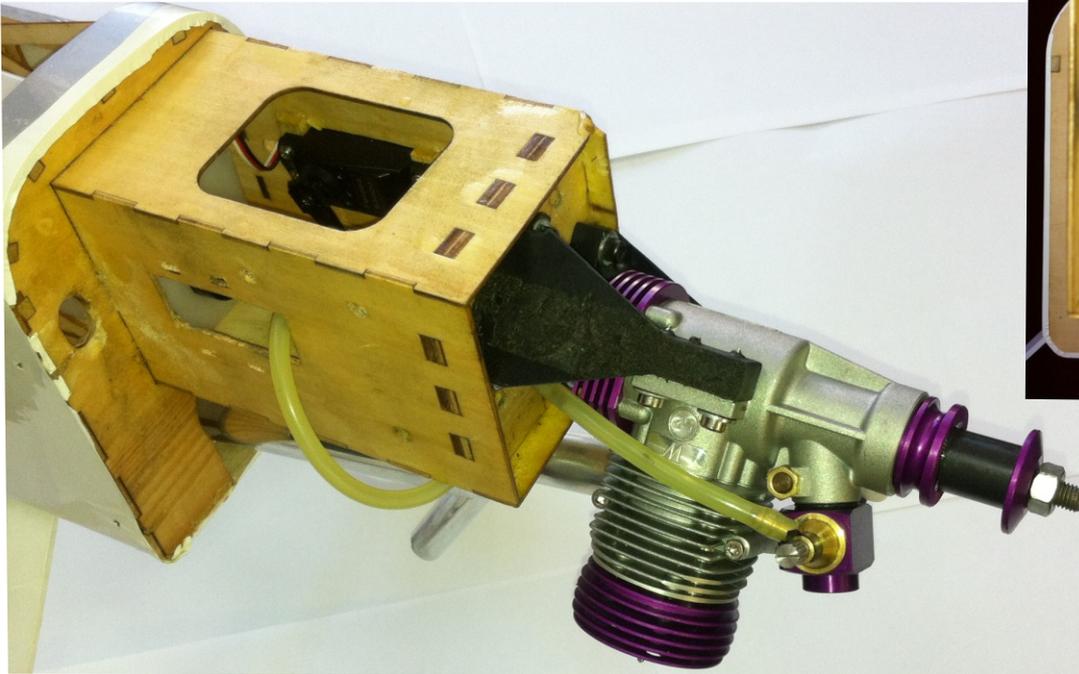
## RUDDER SERVO

Install the rudder servo forward most with the output arm rear most. Pass the wire through the fuselage from the rudder outlet point to the servo arm. Terminate the cable at the servo arm using the crimp only. Terminate the cable at the rudder end with the crimp, clevis adjuster and clevis. These items are always external to allow easy adjustment. Ensure when doing so that the rudder and servo are in the neutral position. Repeat procedure on other control wire .

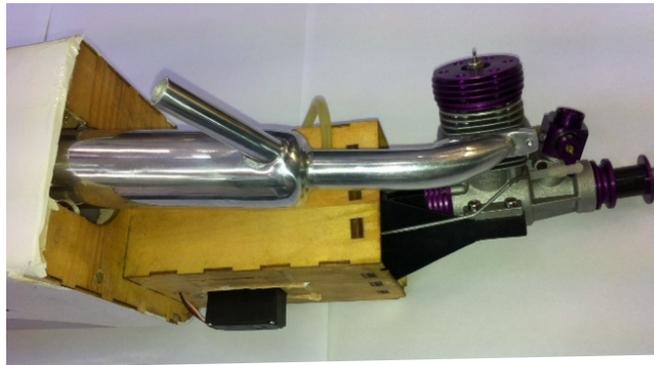
# IC MOTOR INSTALATION

## MOTOR

Using the supplied bolts, nuts and washers attach the engine mount to the firewall via the capture nuts pre installed as per picture. You will have to shave the corners off the engine mount where it hits against the projection box

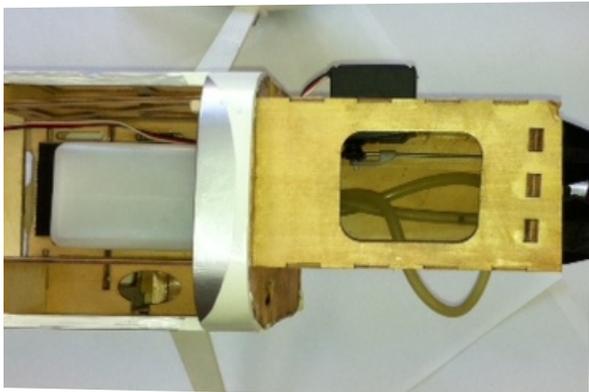


Mount your chosen motor (West 52T1 recommended) to the supplied mount ensuring that when you fit the cowling the prop drive protrudes past the cowling. Please note the pipe is at 5 o'clock and the cylinder head will be at seven o'clock.



## FUEL TANK

.Once you are happy with your fuel tank install it into the fuel bay with some foam and straps. If you are requiring a three pipe system you will need to add the extra pipe to the tank for filling **It will be necessary to fuel proof the engine box and fuel tank bay to eliminate fuel contamination.**

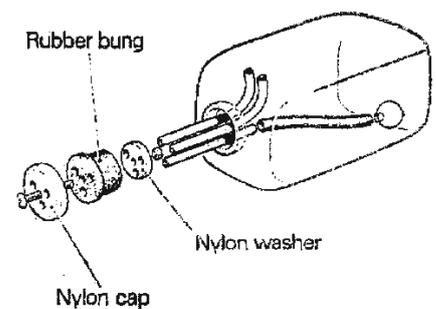


### ASSEMBLY INSTRUCTIONS FOR R/C CLUNK TANK

Assemble the parts of the kit as shown in the diagram but do NOT tighten up the nut and bolt before inserting the assembly into the neck of the bottle.

After insertion tighten up the bolt which will result in the rubber bung expanding in the bottle neck and making a perfect leak-proof seal.

The two bent vent tubes should be pointing upwards in the bottle and the tank can be assembled with either the narrow or wide side of the bottle uppermost to suit the shape and size of your fuselage.



## THROTTLE SERVO AND PUSH ROD

Install throttle servo as shown in picture. Once in position mark the fire wall and drill a hole for the throttle push rod to pass through. Install clevis on the threaded end of the throttle control rod and pass through firewall. You will have to put a set in the control rod to ensure a good alignment with the throttle arm ensuring no metal to metal contact. Terminate the other end of the control rod to the servo arm with the swing keeper as per picture.



Cut cowling for your engine as per picture



# ELECTRIC MOTOR INSTALATION

Before installing the electric motor box we recommend running medium or thick cyano around the inside of the motor box to ensure good security. The holes are pre-drilled for our west 590kv motor and mount so you may have to adjust if you are using something else. Using the bolts provided in the motor pack and capture nuts pre installed install the electric motor box and motor to the fire wall.

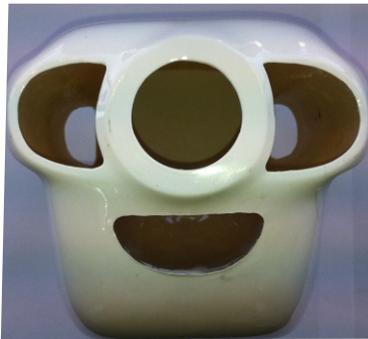
For added security you can glue the electric motor box to the fire wall as well as bolting it.

Secure your speed controller to the under side of the box work using velcro and tie-wraps. A small hole will need to be made from the speed control tray to the tank bay to pass the cables up.



## Cooling requirements

We recommend you cut the rear cheeks out for cooling and cut a hole at the front for the motor cooling duct



Insert the pre-moulded scoop inside the cowling to re-direct airflow onto the motor.

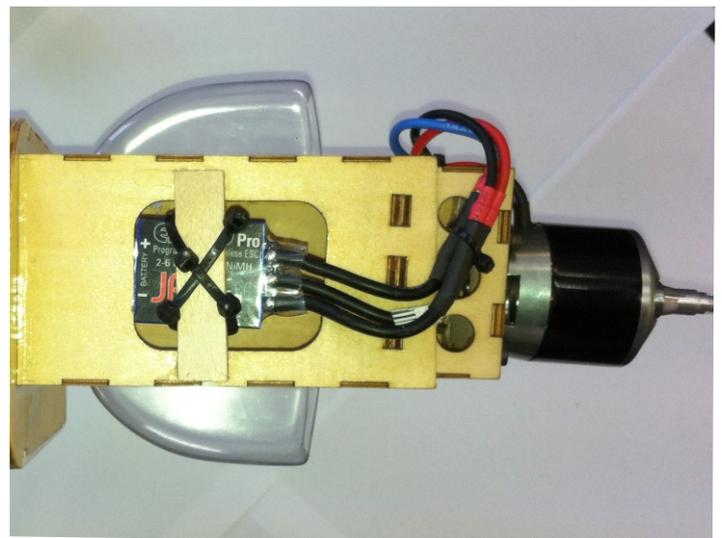


We recommend you open 2 of the air outlets at the bottom of the fuselage.



Attach the supplied cooling ducts to the servo position points on the motor box for battery cooling.

**Please note when putting cowling over ducts do so with care and be sure not to crack gell coat on cowling !!**

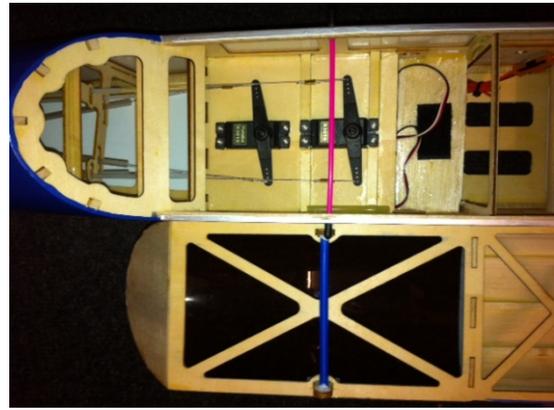


## Battery installation



Depending on your chosen lipo 4 cell or 5 cell will depend on where it is placed for your required C of G. But once established it is a good idea to install a small strap and velcro to eliminate the movement of the battery.

## Quick release canopy option



If you have chosen the electric route you can easily make a quick release canopy. Simply knock out the capture nuts and use an inner and outer control rod snake and a bit of fuel tubing at the ends.

## SWITCH INSTALLATION

Install your receiver switch in the pre-cut slot in the side of the fuselage

## COWLING

Once all holes have been cut and you are happy that there is no interference install cowling with bolts and washers.

## CANOPY

Install canopy to the hatch with Weston canopy glue or the self tappers provided.

## RX BATTERY INSTALLATION(IC VERSION)

The battery installation will vary depending on engine used and C.G position require. A good starting point is just behind the tank but if you want extreme 3D then slowly move the battery pack back to achieve your flight characteristics. You can also use the rx tray to mount the rx battery as well

## RX INSTALLATION

The Rx should be installed in foam and with all leads secured. A rx tray is provided and can also be used for the rx battery.

## SET UP

Use the nicad to adjust the C of G or lipo. The range for normal use is between and 145mm and up to 155mms - from the leading edge of the wing.

## CONTROL MOVEMENT SET UP MEASURED FROM INBOARD POINTS

Intermediate : ailerons 25mm up and down  
elevator 25mm up and down  
rudder 45 degrees side to side

Advanced: ailerons Max throw  
elevator Max throw  
rudder Max throw

## EXPEDENTIAL

Intermediate: 15% - 30%  
Expert 25% - 50%

## FLAPERONS

It is not necessary to have flaperons but these can give incredibly tight loop manoeuvres.

## WARNING

On take off and landing beware not to apply full elevator as this may cause damage to the elevator in long grass.

## REMEMBER

Before flying check your model and do a thorough range check. Check all electrical connections are solid and restrained and the receiver is in a padded area.

**We trust you will have many happy hours of flying this model!!**

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