

## Radio Control Model / Flugmodell

# ZLIN

## Z-526 Akrobat



ALL Balsa, PLYWOOD CONSTRUCTION AND ALMOST READY TO FLY

## Instruction manual / Montageanleitung

### SPECIFICATIONS

Wingspan:.....1610mm  
Length:.....1190mm  
Electric Motor:.....See next pager  
Glow Engine:......46 2-T / .70 4-T  
RTF Weight: 3.2Kg (will vary with equipment use)  
Radio:.....7 Channel / 7 Servos  
Function: Ailerons-Elevator-Rudder-Throttle  
Flaps-Optional Retractable Landing Gear.

### TECHNISCHE DATEN

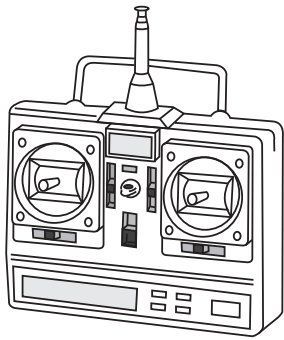
Spannweite:.....1610mm  
Länge:.....1190mm  
Elektroantrieb.....(siehe nächste Seite)  
Verbrennerantrieb:.....7.45cc - 11.5cc  
Fluggewicht:.....3.2Kg  
Fernsteuerung.....7 Kanal / 7 Servos



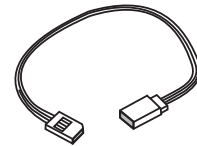
**WARNING!** This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if you are unexperienced.

**ACHTUNG!** Dieses ferngesteuerte Modell ist KEIN Spielzeug! Es ist für fortgeschrittene Modellflugpiloten bestimmt, die ausreichende Erfahrung im Umgang mit derartigen Modellen besitzen. Bei unsachgemäßer Verwendung kann hoher Personen- und/oder Sachschaden entstehen. Fragen Sie in einem Modellbauverein in Ihrer Nähe um professionelle Unterstützung, wenn Sie Hilfe im Bau und Betrieb benötigen. Der Zusammenbau dieses Modells ist durch die vielen Abbildungen selbsterklärend und ist für fortgeschrittene, erfahrene Modellbauer bestimmt.

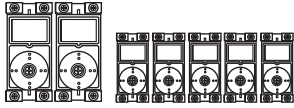
Optional accessories. Please visit [www.shop.pichler.de](http://www.shop.pichler.de) for more information



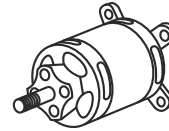
Empfohlenes Sonderzubehör.  
Mehr Infos unter [www.shop.pichler.de](http://www.shop.pichler.de)



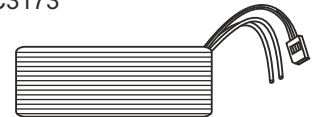
Extension cord for aileron servos: 50cm(x2)  
Extension cord for flap servos: 50cm(x4)  
Extension cord for retract servos: 30cm(x2)  
Extension cord for Rx battery pack: 20cm(x1)



Standard Mini  
Minimum 7 channel radio  
Elevator : 1 standard servo  
Rudder: 1 standard servo  
Aileron: 2 mini servo  
Flaps: 2 mini servo  
Throttle: 1 mini servo (for glow engine only)



BOOST 50 Brushless Combo Set # C3173

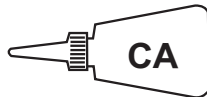


LiPo Akku RED POWER 3500-14,8V # C9418

**GLUE (Purchase separately)**



Silicon sealer



Cyanoacrylate Glue (thin type)



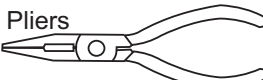
Epoxy Glue (30 minute type)

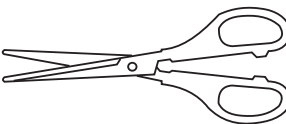
**TOLLS REQUIRED (Purchase separately)**


Hobby knife 


Phillip screw driver 

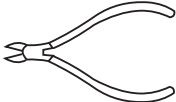
Hex Wrench 

Needle nose Pliers 

Scissors 

Awl 

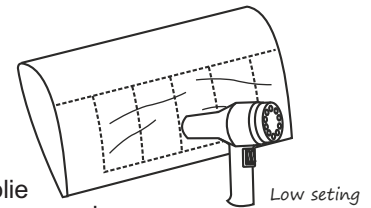
Sander 

Wire Cutters 

Masking tape - Straight Edged Ruler - Pen or pencil - Drill and Assorted Drill Bits


If exposed to direct sunlight and/or heat, wrinkles can appear. Storing the model in a cool place will let the wrinkles disappear. Otherwise, remove wrinkles in covering film with a hair dryer, starting with low temperature. You can fix the corners by using a hot iron.


Bei Sonneneinstrahlung und/oder Wärme kann die Folie erschlaffen bzw. Falten entstehen. Verwenden Sie ein Warmluftgebläse (Haartrockner) um evtl. Falten aus der Folie zu bekommen. Die Kanten können Sie mit einem Bügeleisen behandeln. Nicht zuviel Hitze anwenden





Low setting


Symbols used throughout this instruction manual, comprise:


 Drill holes using the stated size of drill (in this case 1.5 mm)


 Take particular care here


 Hatched-in areas: remove covering film carefully

 Check during assembly that these parts move freely, without binding

 Use epoxy glue

 Apply cyano glue


 Assemble left and right sides the same way.

 Not included. These parts must be purchased separately

 Löcher bohren mit dem angegebenen Bohrer (hier 1,5 mm)


 Hier besonders aufpassen

 Schraffierte Stellen, Bespannfolie vorsichtig entfernen

 Während des Zusammenbaus immer prüfen, ob sich die Teile auch reibungslos bewegen lassen

 Epoxy-Klebstoff verwenden

 Sekundenkleber auftragen

 Linke und rechte Seite wird gleichermaßen zusammgebaut

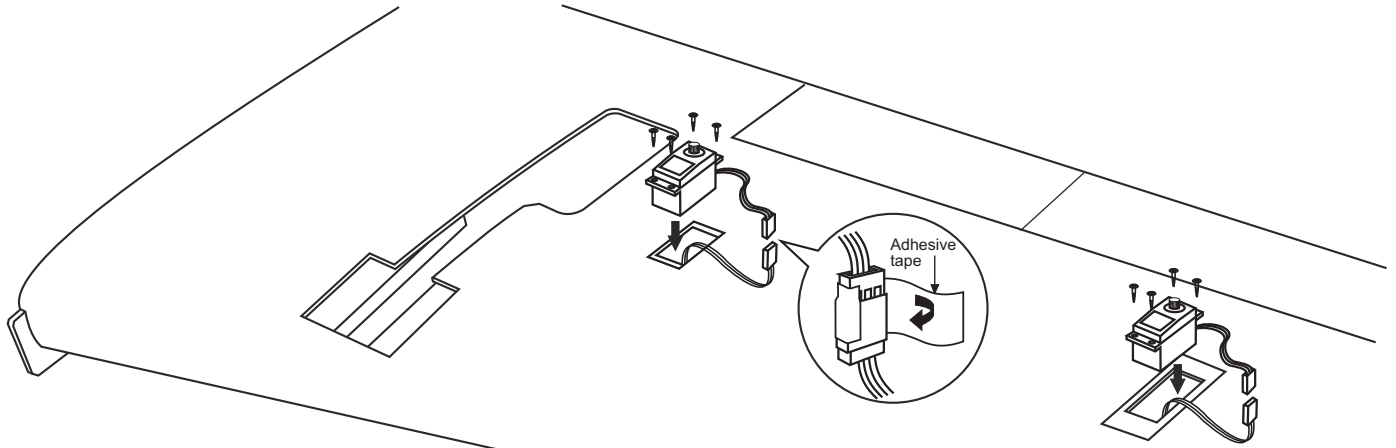
 Nicht enthalten. Teile müssen separat gekauft werden.

Read through the manual before you begin, so you will have an overall idea of what to do.

**CONVERSION TABLE**

1.0mm = 3/64"	3.0mm = 1/8"	10mm = 13/32"	25mm = 1"
1.5mm = 1/16"	4.0mm = 5/32"	12mm = 15/32"	30mm = 1-3/16"
2.0mm = 5/64"	5.0mm = 13/64"	15mm = 19/32"	45mm = 1-51/64"
2.5mm = 3/32"	6.0mm = 15/64"	20mm = 51/64"	

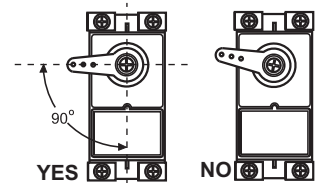
# ZLIN Z-526 1- Aileron and Flap servo



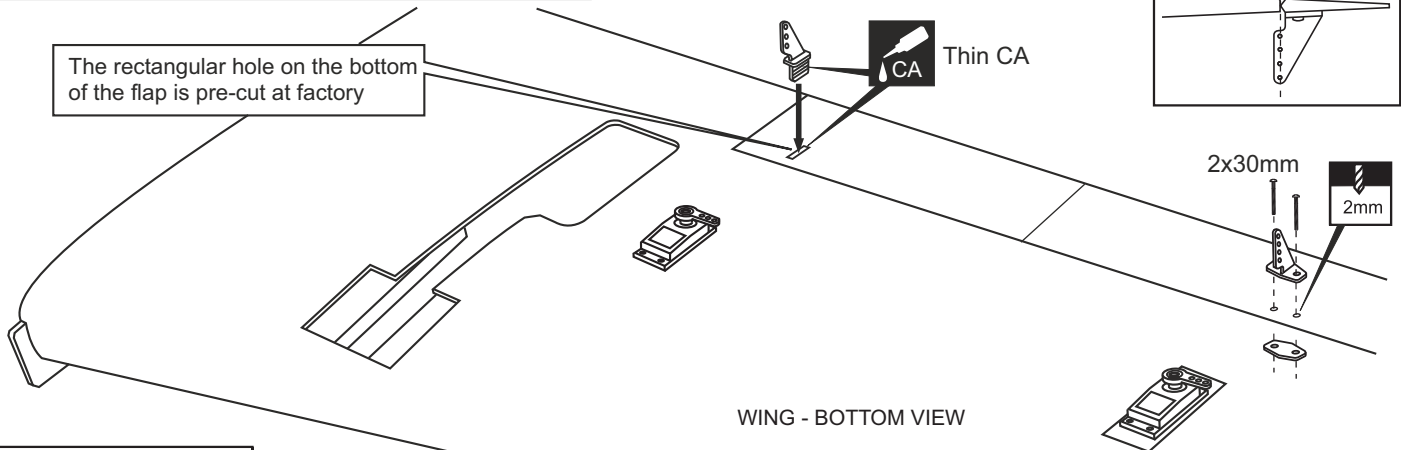
- 1-Cut away the covering of the wing bottom where the aileron servo goes.
- 2-Connect the aileron and flap servo cord to the extension cords.
- 3-Install the aileron and flap servo on the servo mount.

Do the same way with second wing half

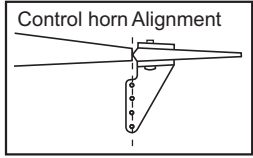
- Switch on the radio (trims centered)
- Then mount the ailerons servo horn in neutral position.
- The servo horn should be Perpendicular to the servo



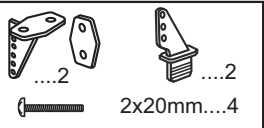
## 2- Aileron and Flap control horn



The rectangular hole on the bottom of the flap is pre-cut at factory

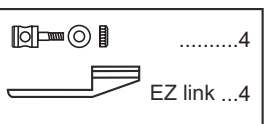
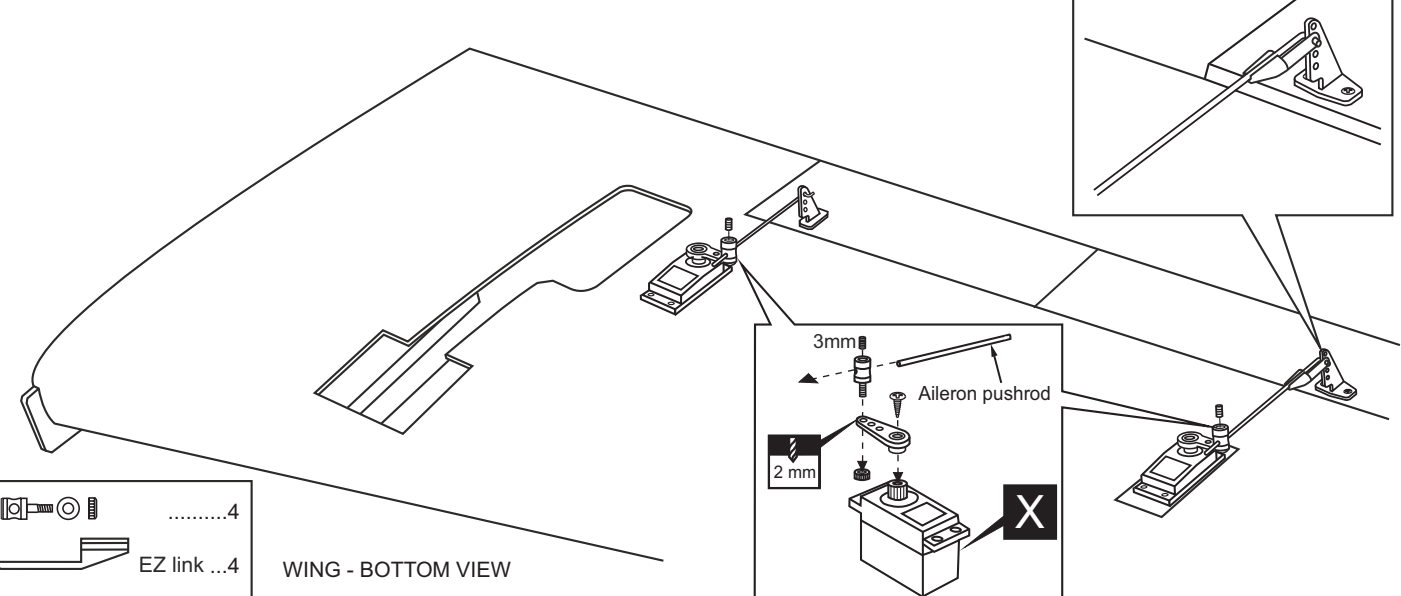


WING - BOTTOM VIEW



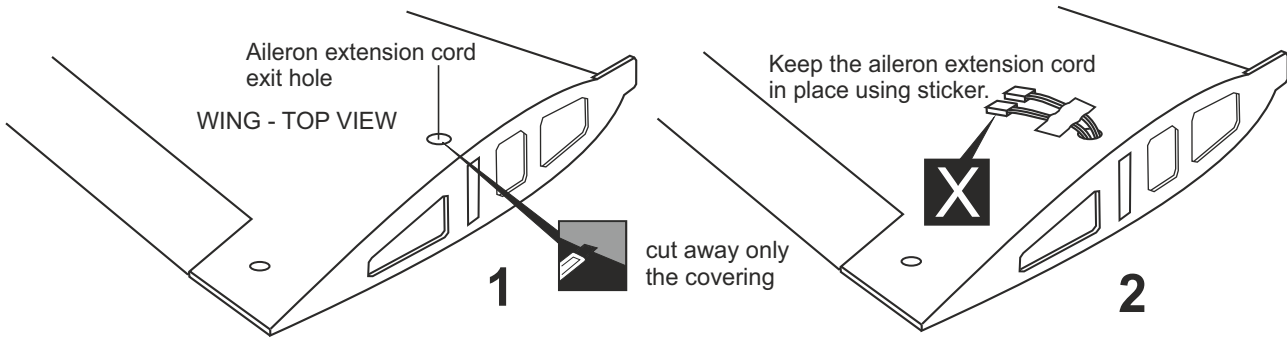
- 1-Depending on the position of the linkage, determine the location of aileron control horn. The horn holes must be perfectly aligned with the axis of articulation.
- 2-Mark the position of the "foot" of the horn on the aileron. Then, with the drill, make the 2 holes.
- 3-Install the aileron control horn as shown.

## 3- Aileron and Flap - Linkages



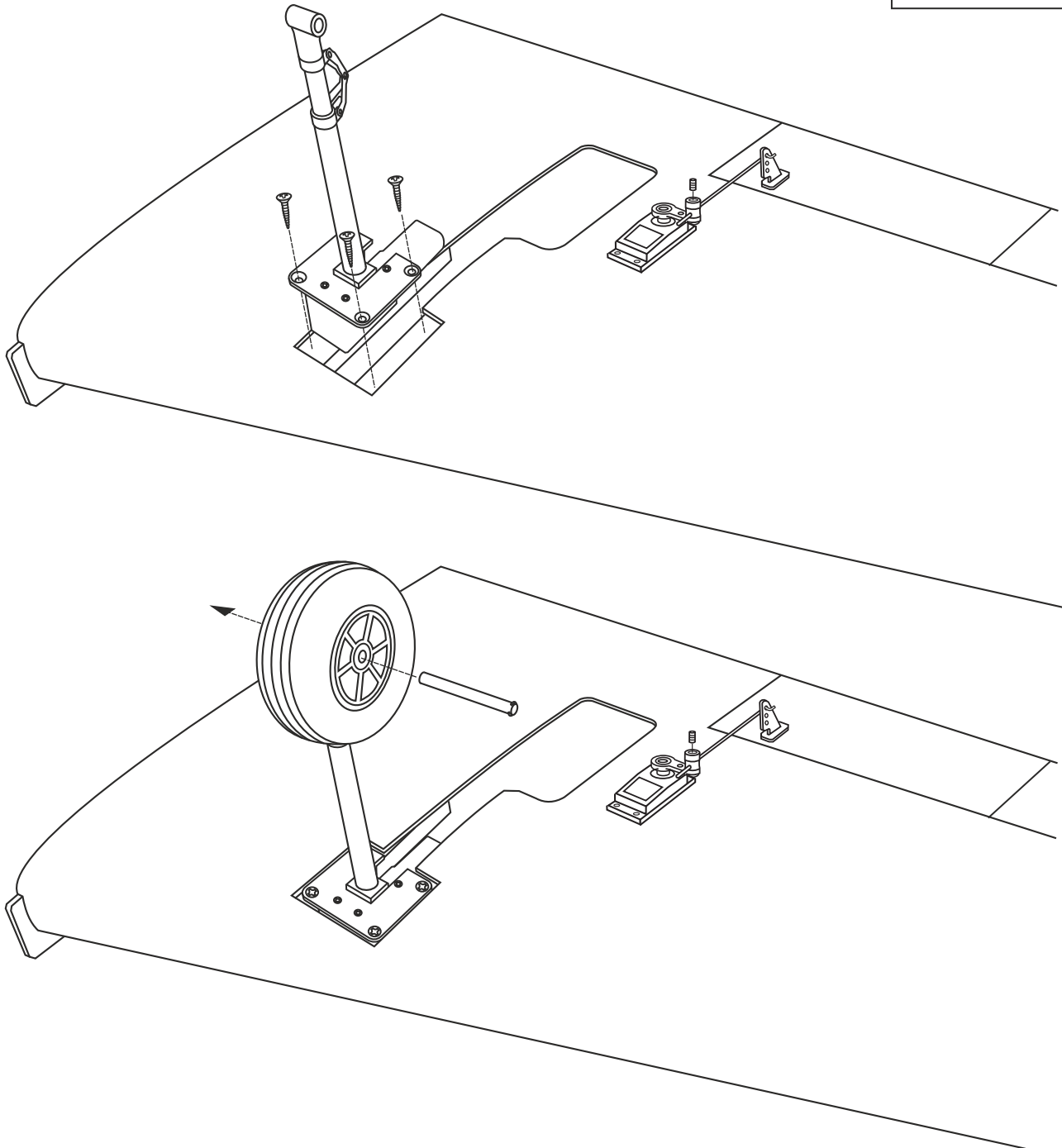
WING - BOTTOM VIEW

## ZLIN Z-526 4- Extension cord secured




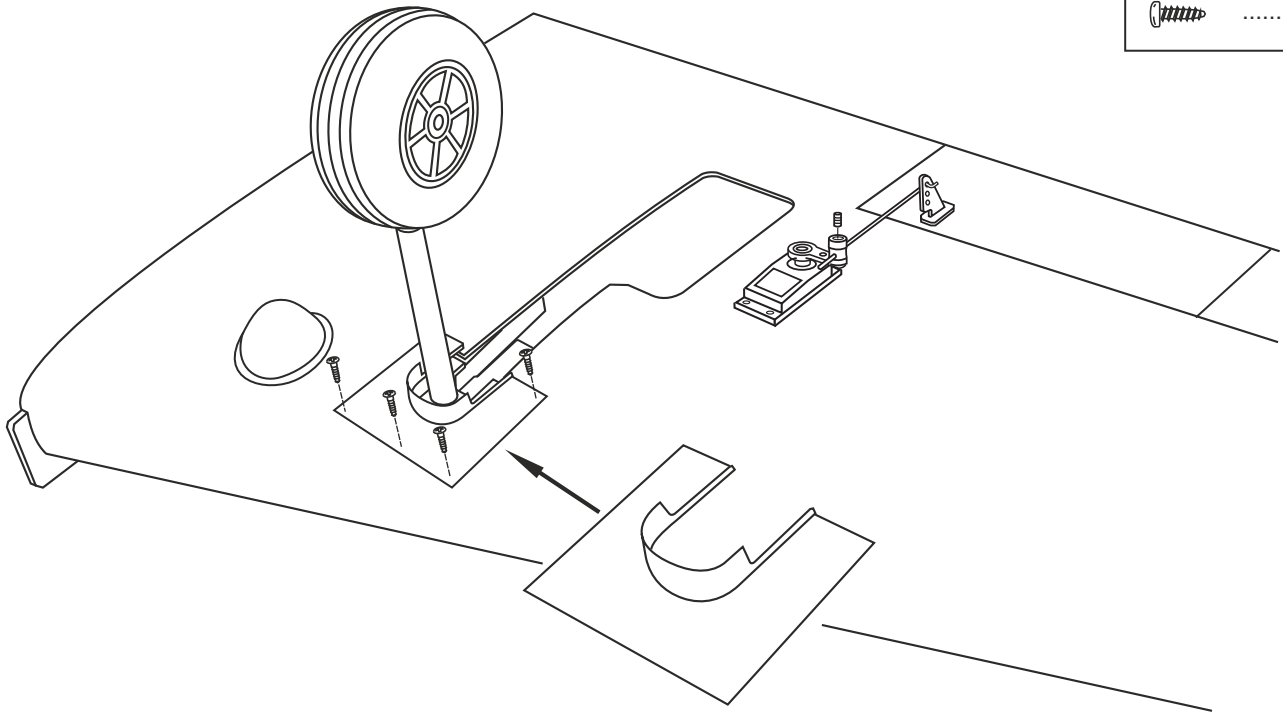
## 5- E-retract - Strut installation

3x15mm screw  
▲...4 / not include

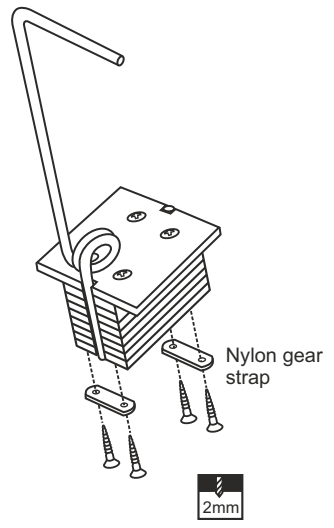
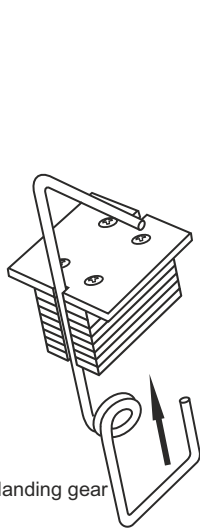
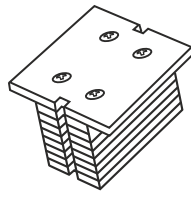
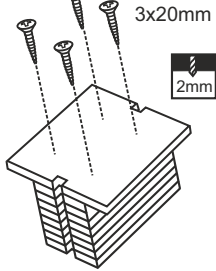
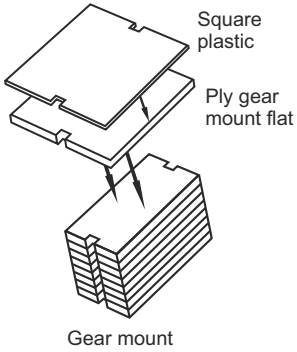








# ZLIN Z-526 6- Decor

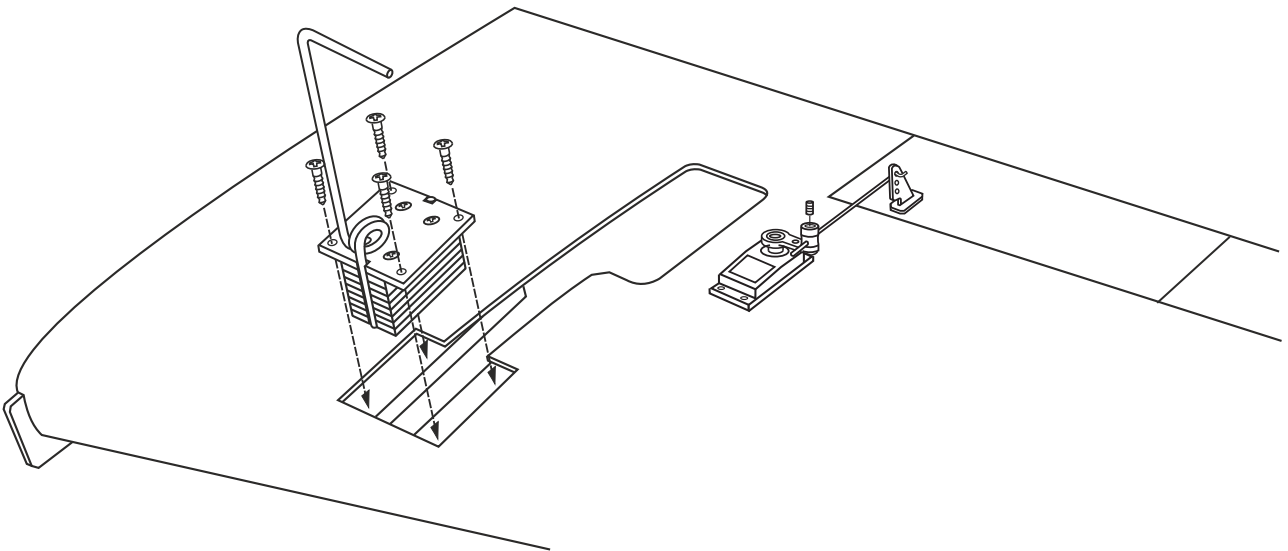
2x6mm screw  
 .....5



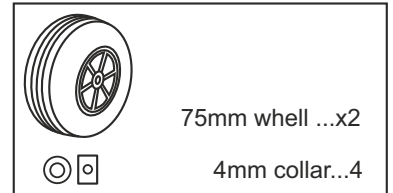
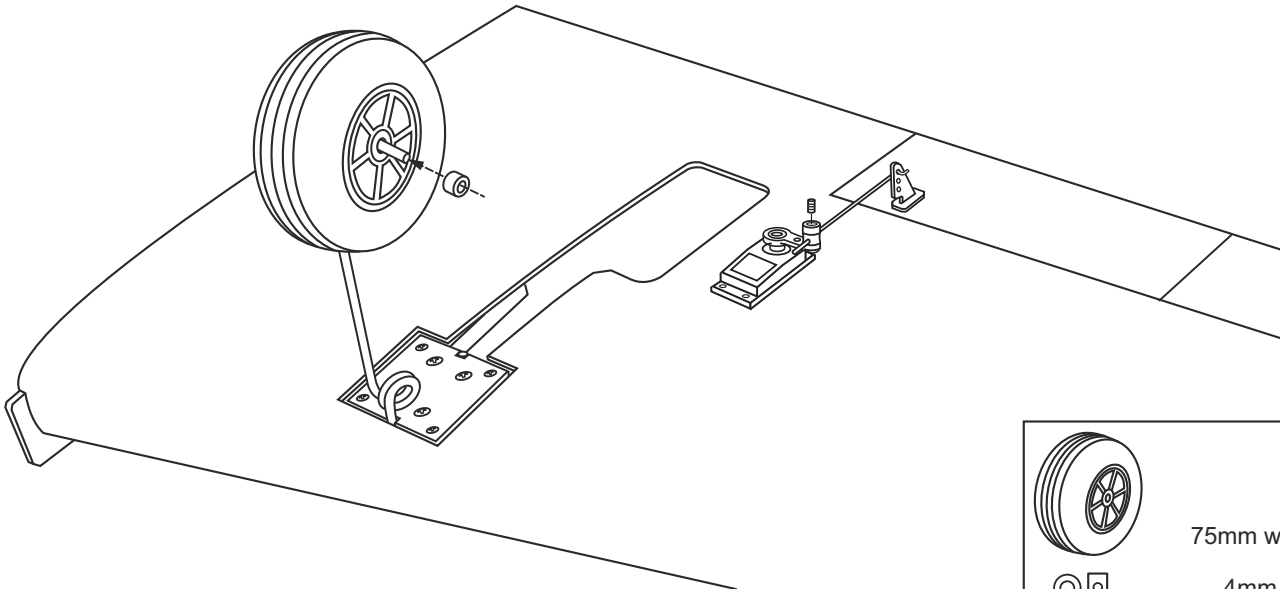
# 7- Fixed gear



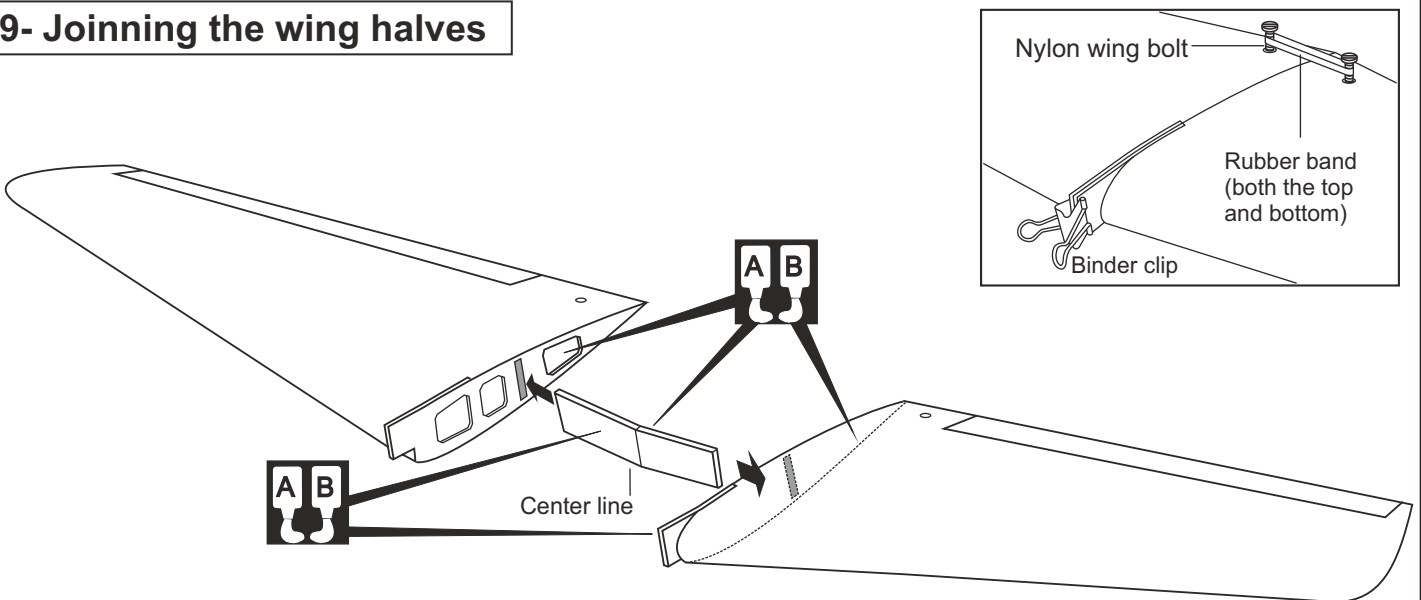
3x12mm screw  .....8			
3x20mm screw  .....16	Gear mount x 2	Ply gear mount plate x 2	Square plastic x 2
Nylon gear strap  .....4			



## ZLIN Z-526 8- Fixed gear



## 9- Joining the wing halves



Use epoxy glue to bury the opening

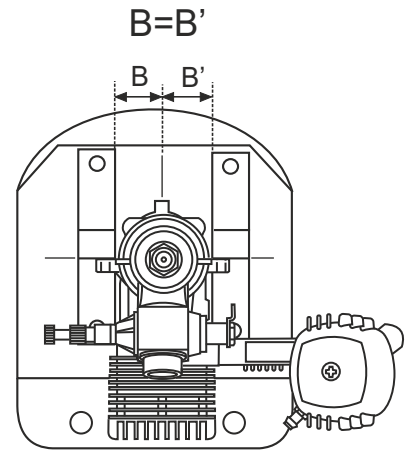
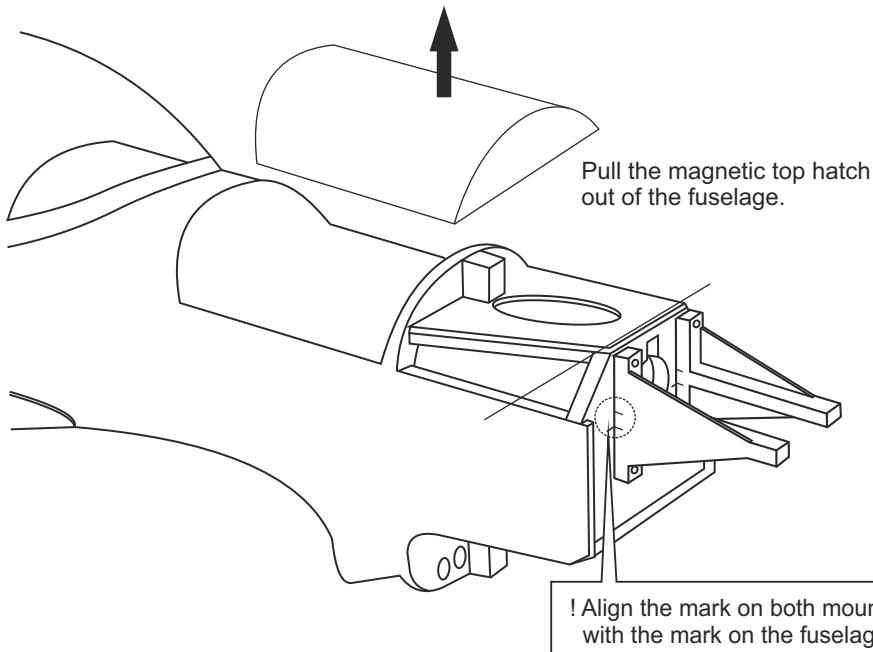


Top view

- 1- Using a pencil, mark the center of the brace.
- 2- Trial fit the wing joiner into one of the wing panels. It should insert smoothly up to the center line marked above.
- 3- Slide the other wing half onto the dihedral brace until the wing panel meet. If the fit is over tight, it may be necessary to lightly sand the dihedral brace.
- 4- Check for the correct dihedral angle.
- 5- Mix up some 30 minute epoxy and apply a generous amount of epoxy into the wing joiner cavity of one wing half.
- 6- Coat one half of the dihedral brace with epoxy up to the center line. Install the epoxy-coated side of the dihedral brace into the wing joiner cavity up to the center line, marking sure that the "V" of the dihedral brace is positioned correctly
- 7- Do the same way with the other wing half.
- 8- Carefully slide the wing halves together, ensuring that they are accurately aligned. Firmly press the two halves together, allowing the excess epoxy to run out. Clean off the excess epoxy with paper towel and kerosene.

**IMPORTANT:** Please do not clean off the excess epoxy on the wing with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.

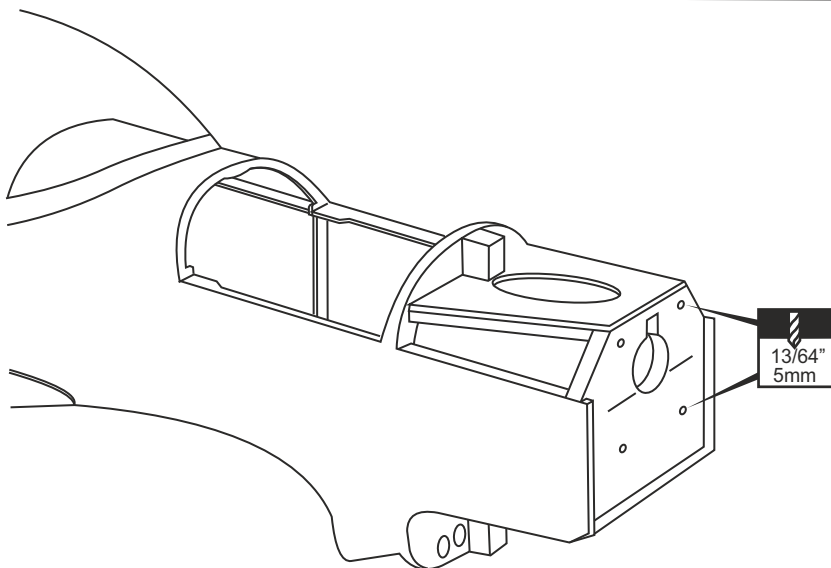
**ZLIN Z-526 10- Engine**



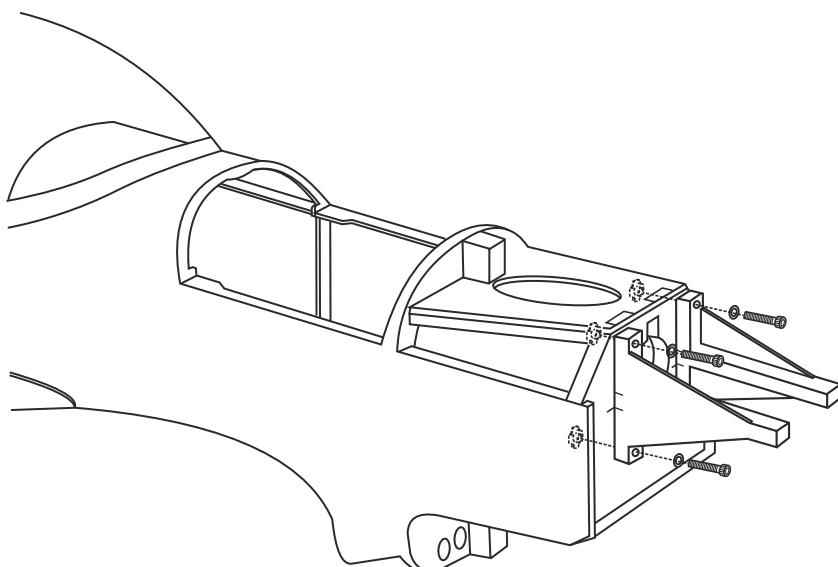
FRONT-VIEW

- Using a pencil or felt tipped pen, mark the fire wall where the four holes are to be drilled




**! Engine thrust on fire-wall is already adjust at factory**



- Remove the engine mount and drill a 13/64" (5mm) hole through the fire-wall at each of the four marks marked.



- Reposition the engine mounts on to the fire-wall. Secure them with four 4x25mm bolts and blind-nuts.

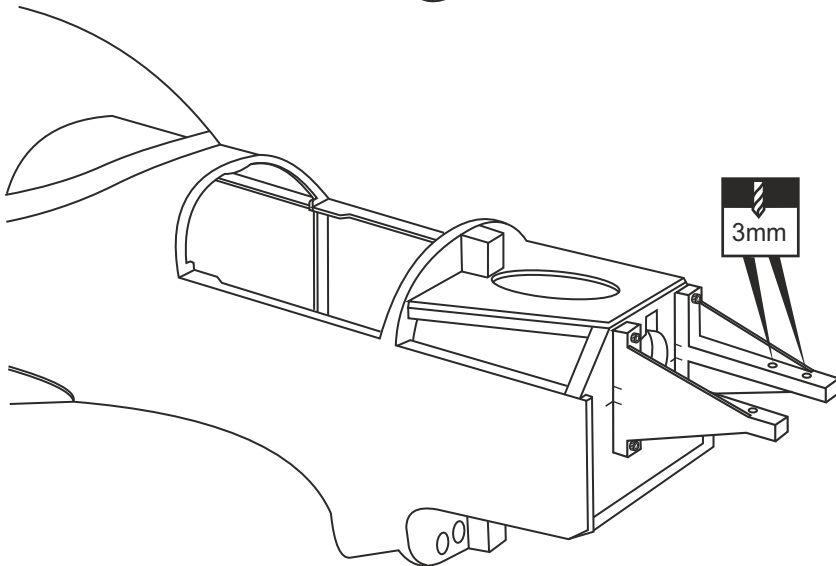
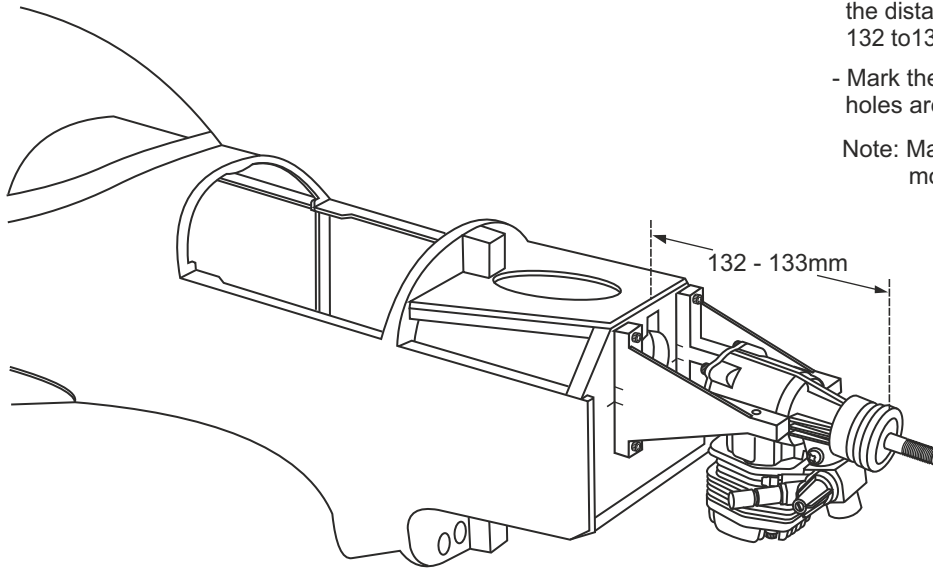
- 5/32x1" 4x25mm bolt
-   ...4
- Blind-nut
-  .....4

**ZLIN Z-526 11- Engine**

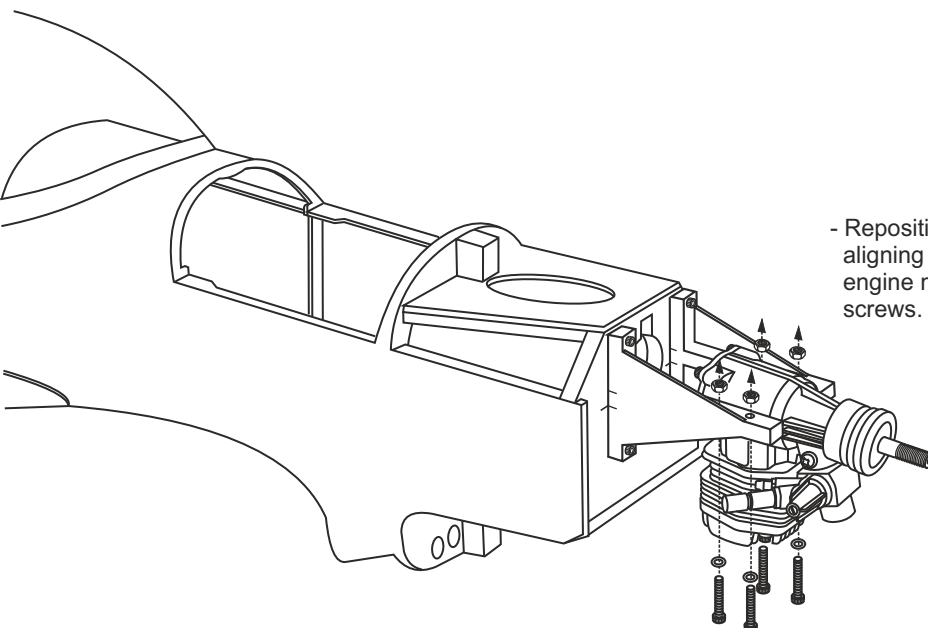
- Reposition the engine on to the engine mounts so the distance from the prop hub to the fire wall is 132 to 133mm.

- Mark the engine mounting plate where the four holes are to be drilled.



Note: Mark the mounting plate through the engine mounting flanges.



- Remove the engine and drill a 1/8"(3mm) holes through the beam at each of the four marks made above.

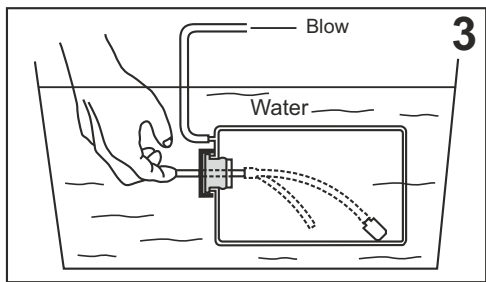
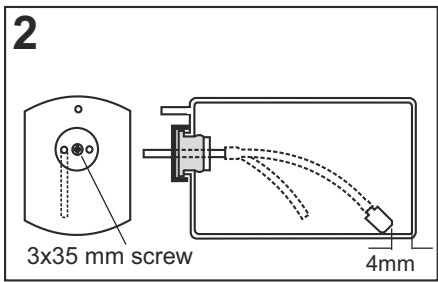
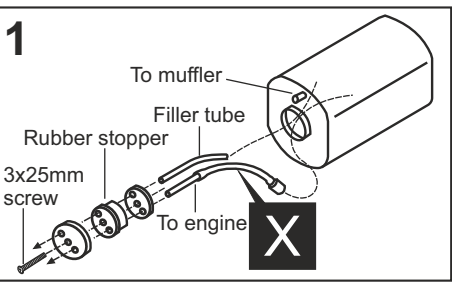


- Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 1/8x51/64"(3x25mm) screws.

- 1/8x5-1/64"
- 3x20mm bolt  ...4
- 1/8"(3mm) nut  .....
- .....4

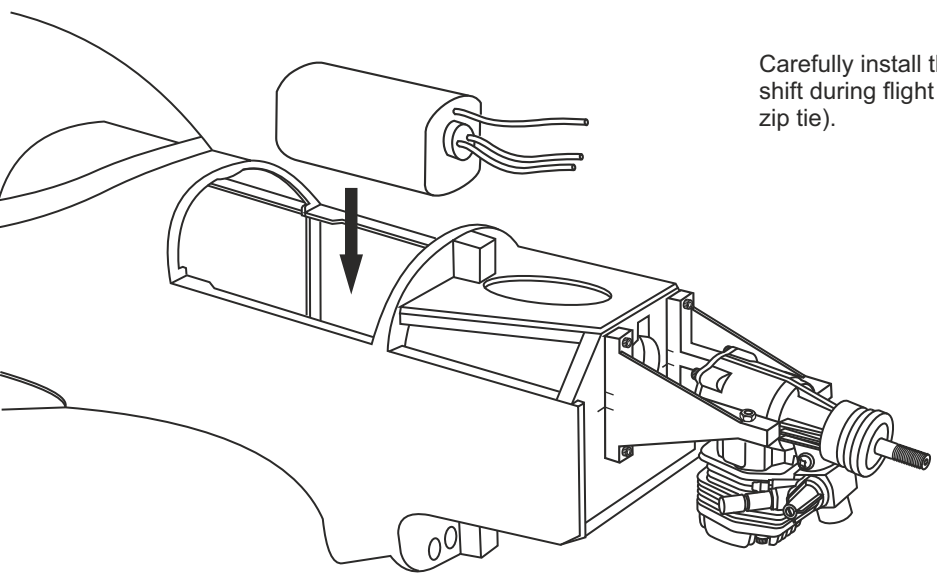


# ZLIN Z-526 12- Fuel tank



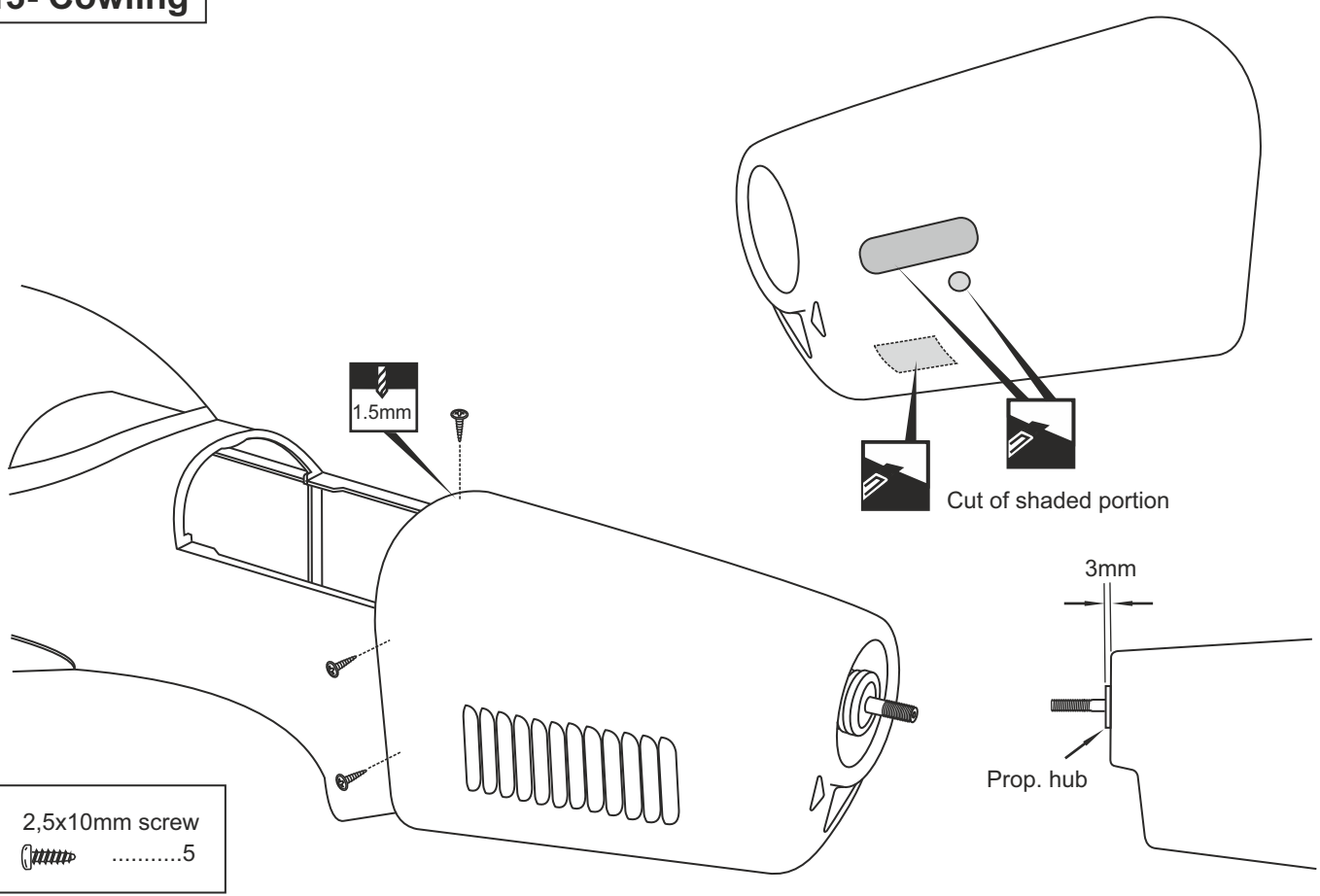
After confirming the direction . Insert this assembly, clunk end first, into the fuel tank and tighten and screw the fuel tank cap on firmly. Ensure that the fuel tank clunk does not touch the rear of the fuel tank.

Checking for leaks - block the vents and blow into the feed - if in doubt submersing the tank in a blow of water will show up any problems.

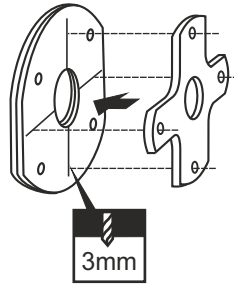


Carefully install the fuel tank to ensure that they will not shift during flight (secure the fuel tank in place using zip tie).

## 3- Cowling



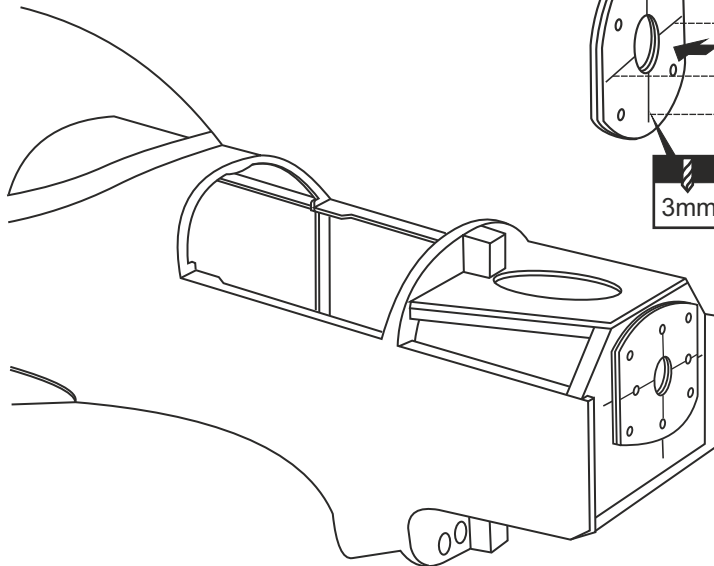
2,5x10mm screw  
 .....5



-Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled.

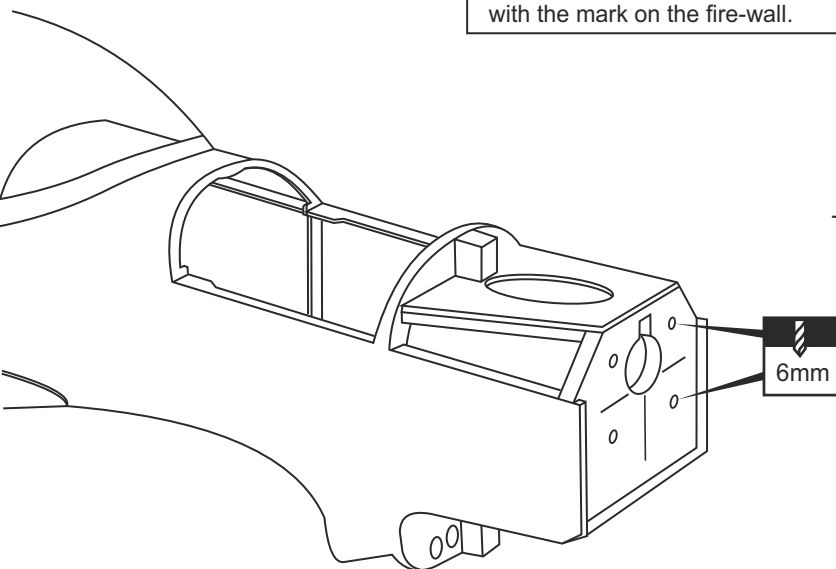
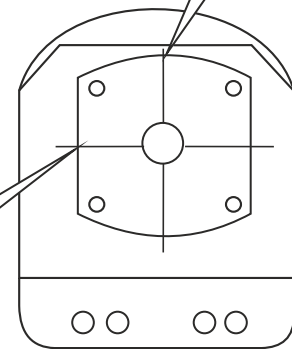
-Remove the aluminum motor mounting plate and drill a 1/8"(3mm) hole through the plywood at each of the four marks marked .

Note: The aluminum motor mounting included with electric motor set.

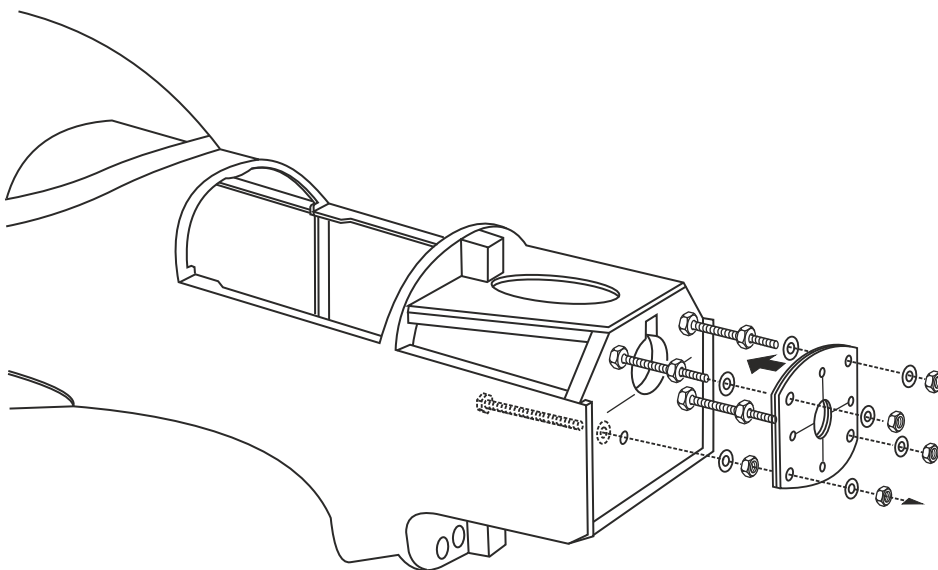


! Align the mark on plywood motor mounting with the mark on the fire-wall.

! Align the mark on plywood motor mounting with the mark on the fire-wall.

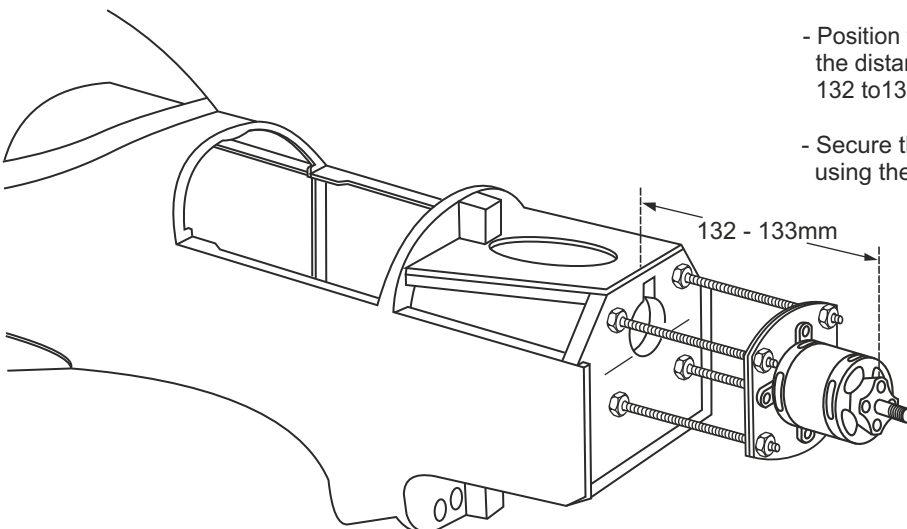


- Remove the plywood motor mounting and drill a 6mm holes through the beam at each of the four marks made above.



	6x100mm.....	4
	6mm nut.....	12
	6mm washer...	16

## ZLIN Z-526 15- Electric motor

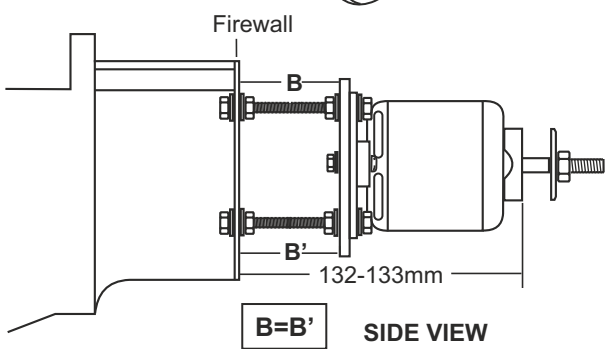


- Position the motor on to the plywood motor mounting so the distance from the prop hub to the fire wall is 132 to 133mm.

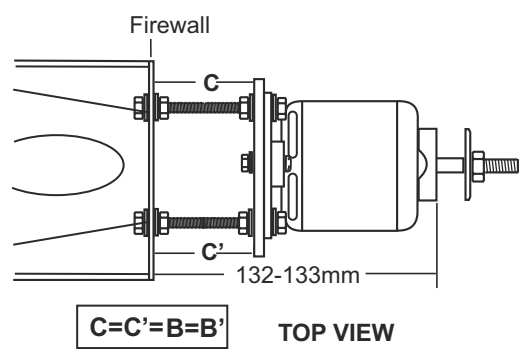
- Secure the motor to the plywood motor mounting using the four 3x20mm screws.



**! Engine thrust on fire-wall is already adjust at factory**

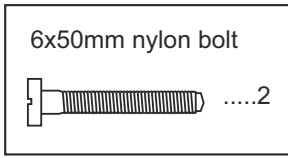
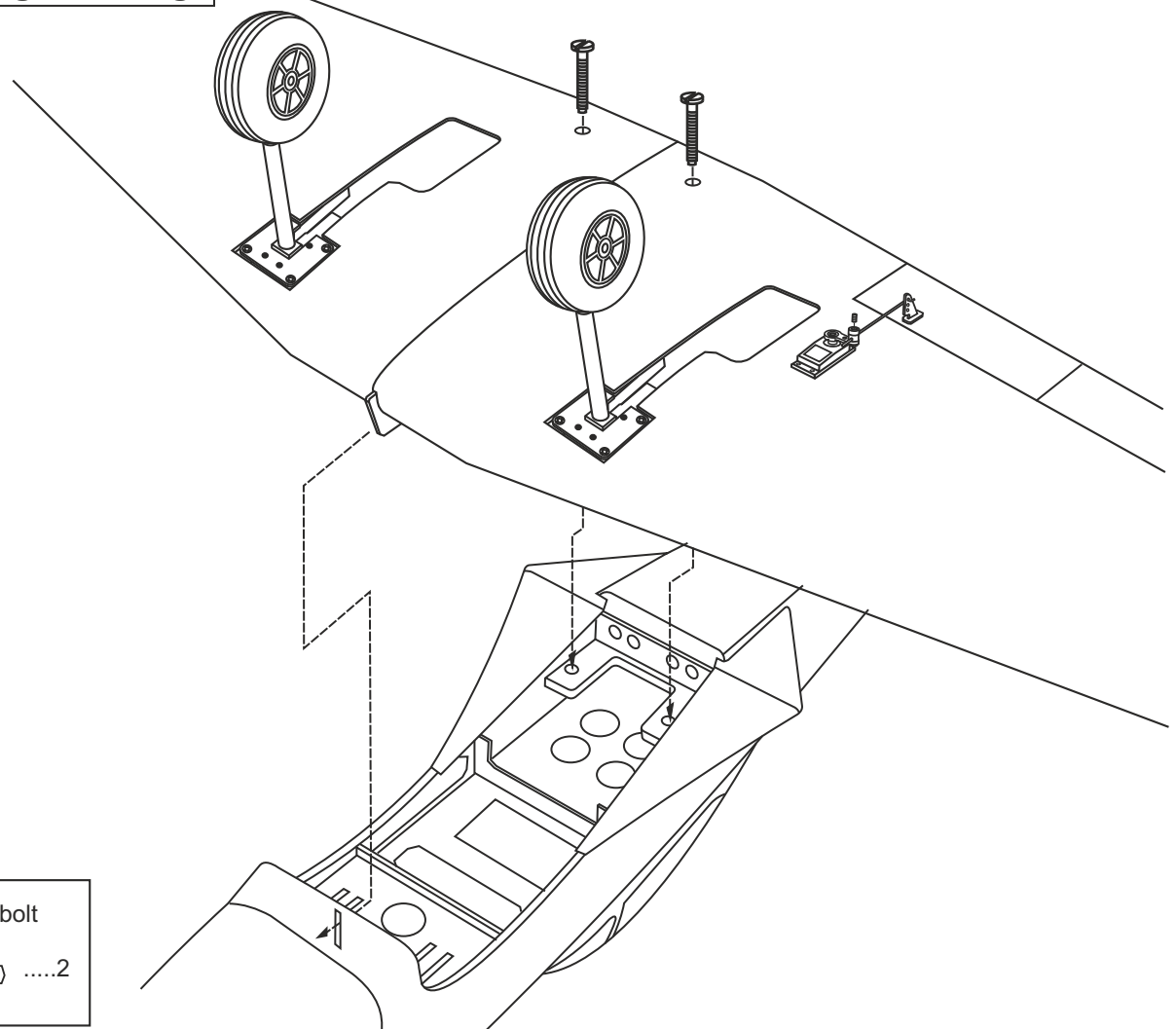


**B=B'** SIDE VIEW

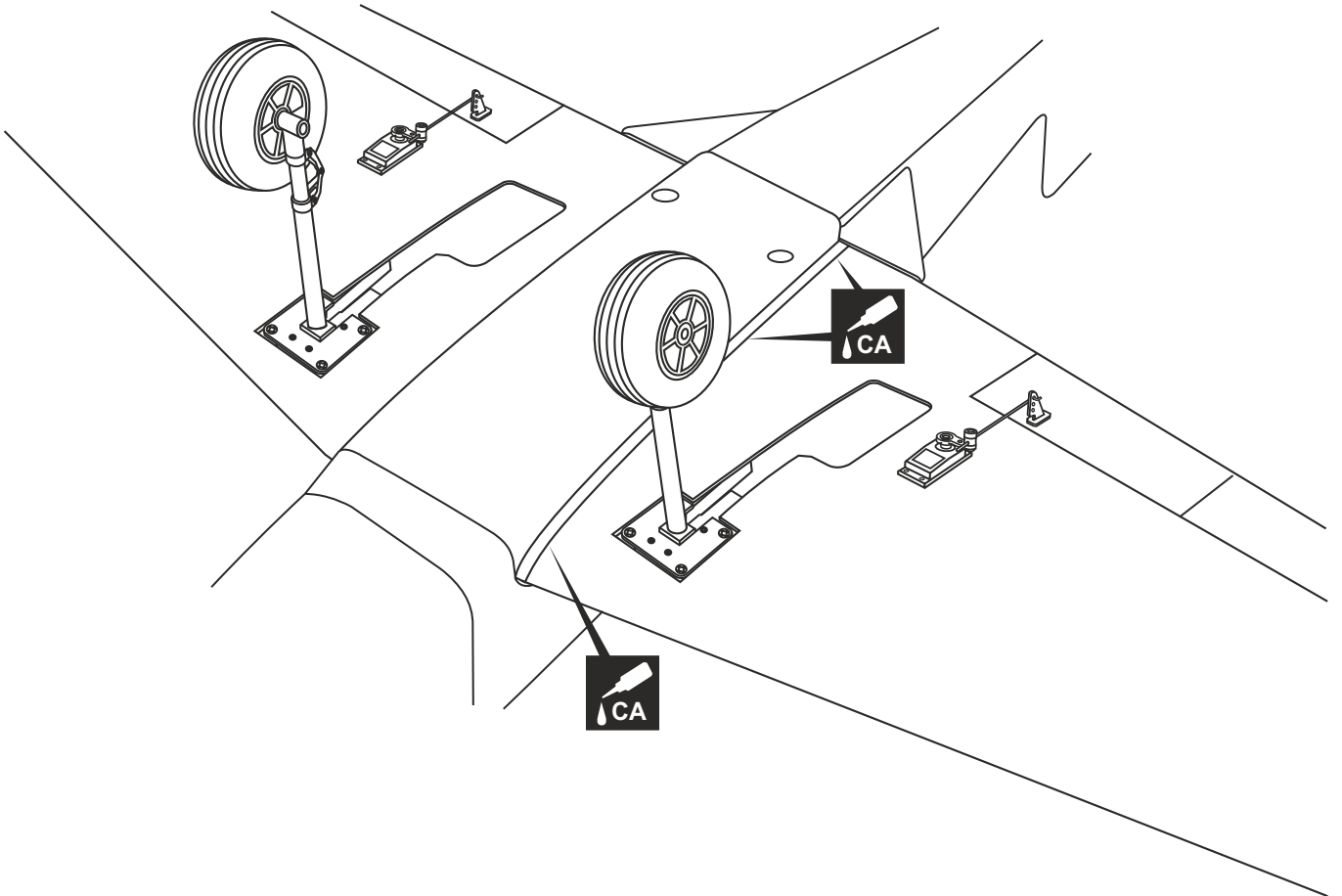
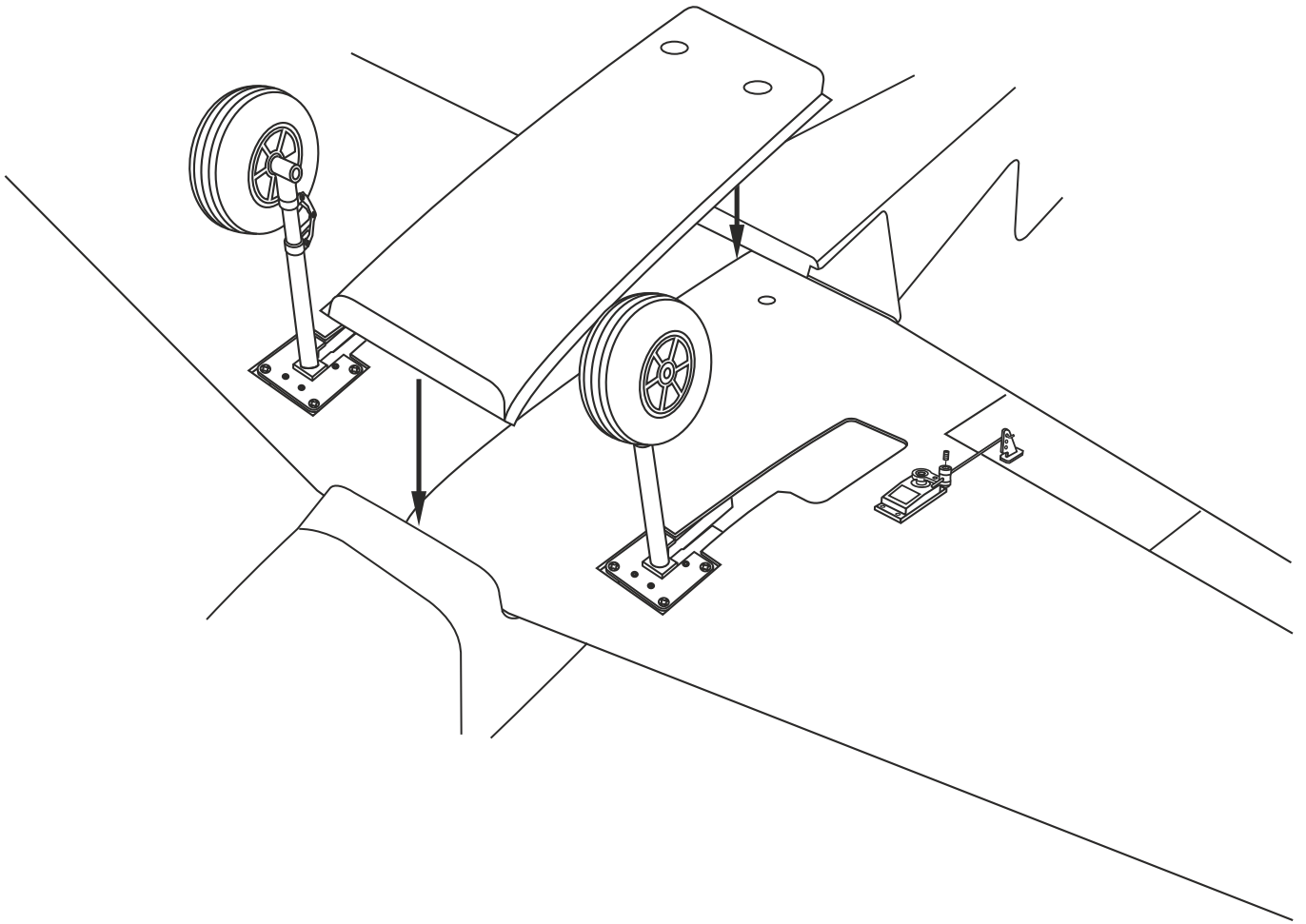


**C=C'=B=B'** TOP VIEW

## 16- Installing the wing



**ZLIN Z-526 17- Installing the bottom cover**



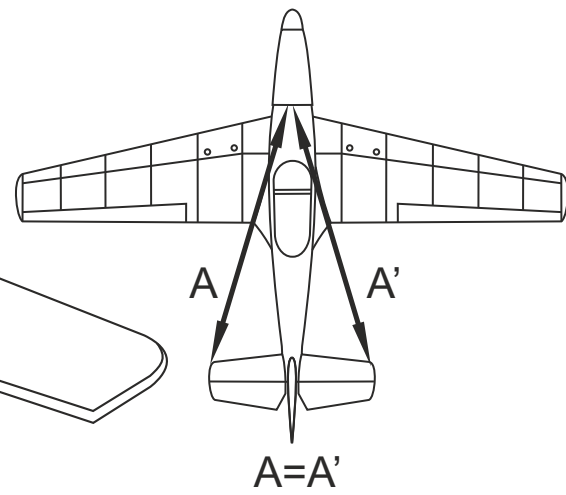
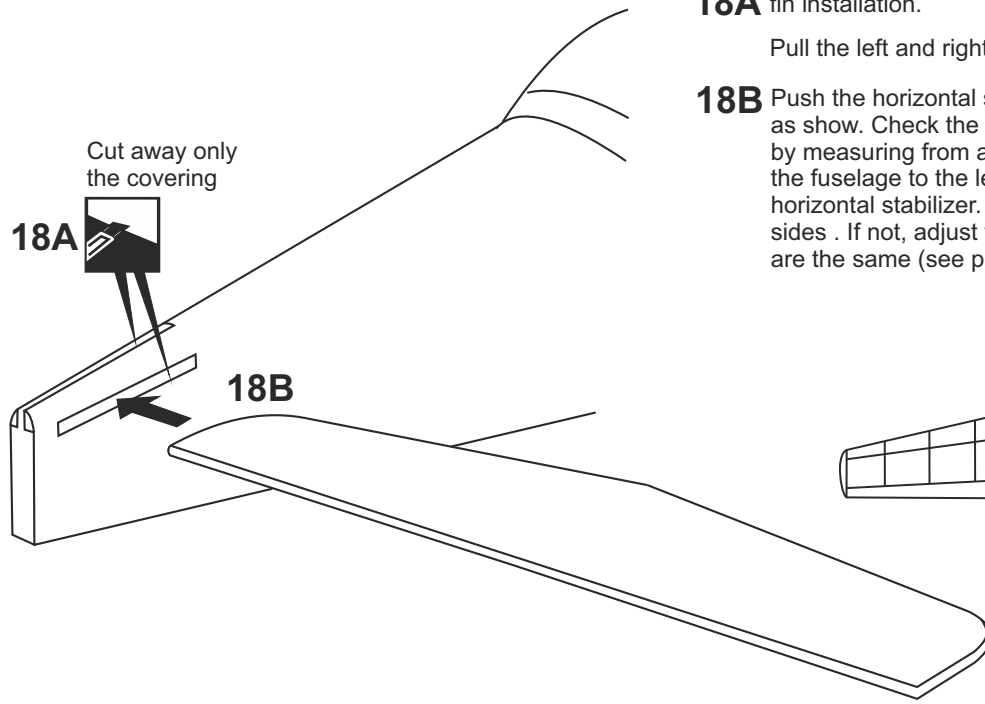
Using a sharp hobby knife, carefully cut away the covering around of all slots for the horizontal stabilizer and vertical fin installation.

**18A**

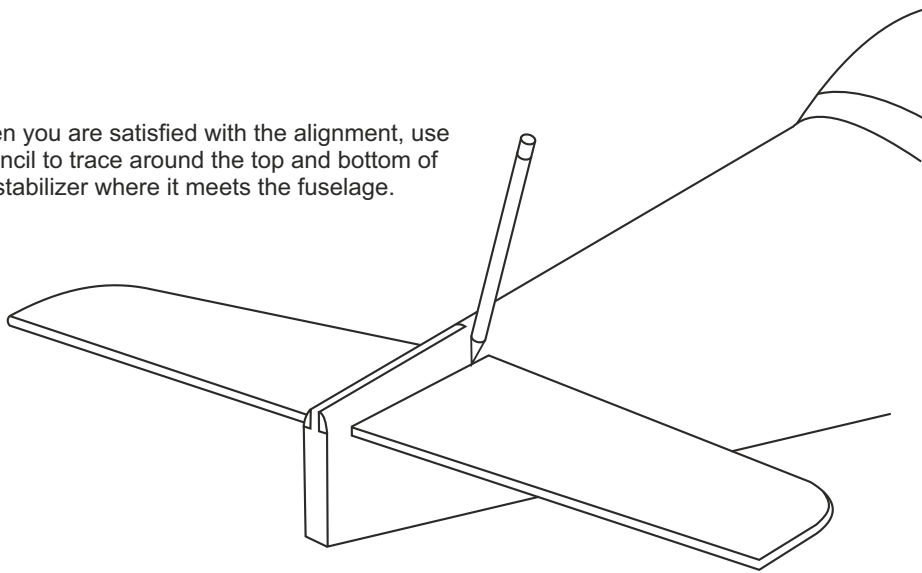
Pull the left and right elevator out of the horizontal stabilizer.

**18B**

Push the horizontal stabilizer into the slot on the fuselage as show. Check the alignment of the horizontal stabilizer by measuring from a fixed point along the center line of the fuselage to the leading edge on each side of the horizontal stabilizer. The distance must be equal on both sides . If not, adjust the stabilizer until the measurements are the same (see picture below:  $A=A'$ ).



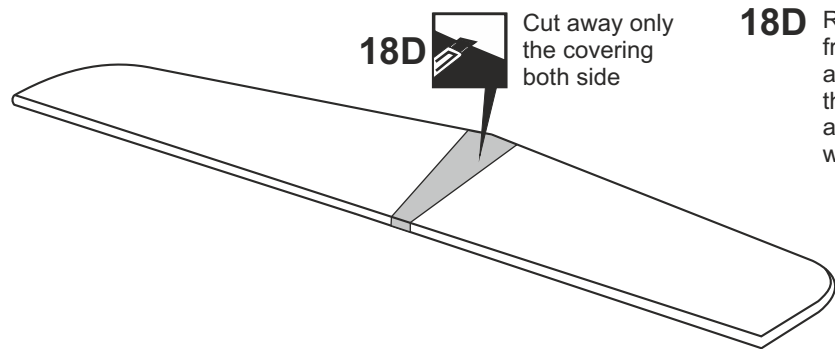
**18C** When you are satisfied with the alignment, use a pencil to trace around the top and bottom of the stabilizer where it meets the fuselage.



**18D** Cut away only the covering both side

**18D**

Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above. Be cautious **not to cut into the wood**-this will weaken the structure.

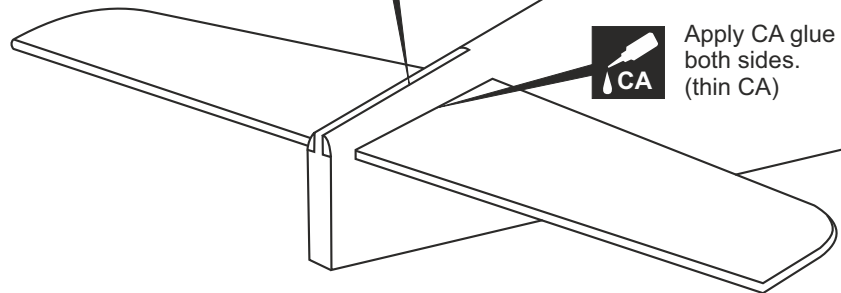


## ZLIN Z-526 19- Horizontal stabilizer

Install the horizontal stabilizer onto the fuselage and adjust the alignment as described in steep 18B. Note: it is important to ensure that the horizontal stabilizer is also level in regards to the fuselage. Apply the thin CA along the area where the covering was removed in the previous step and to the fuselage where the horizontal stabilizer mounts .



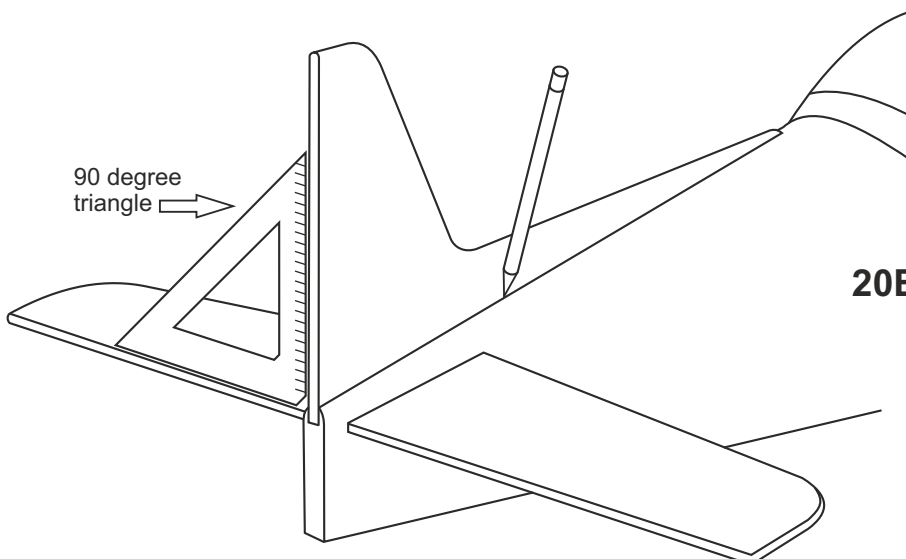
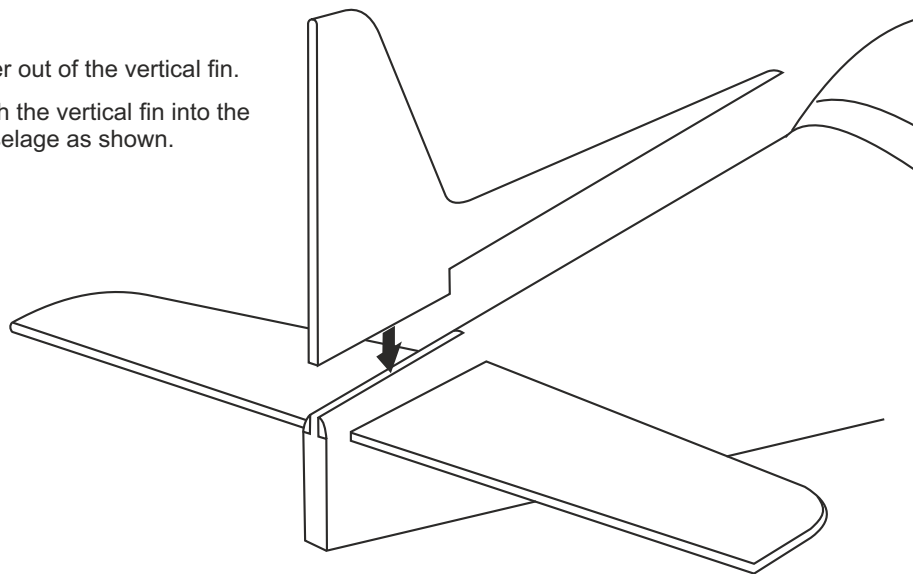
Apply thin CA glue into the slot where the fuselage meet the horizontal stabilizer.



Apply CA glue both sides. (thin CA)

## 20- Vertical stabilizer

**20A** Pull the rudder out of the vertical fin. Carefully, push the vertical fin into the slot on the fuselage as shown.

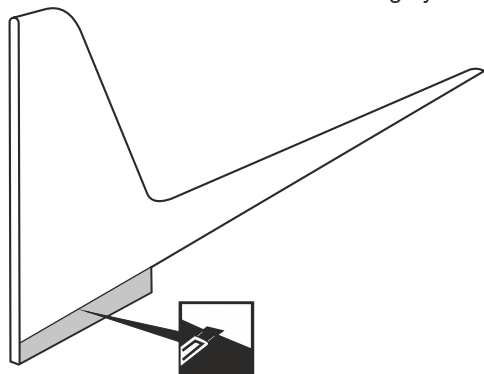


**20B** Trial fit the vertical fin in position. Using a 90 degree triangle, ensure that the vertical stabilizer is perpendicular to the horizontal stabilizer.

Using a pencil, trace around the vertical stabilizer where it meets the fuselage. Remove the vertical stabilizer from the fuselage.

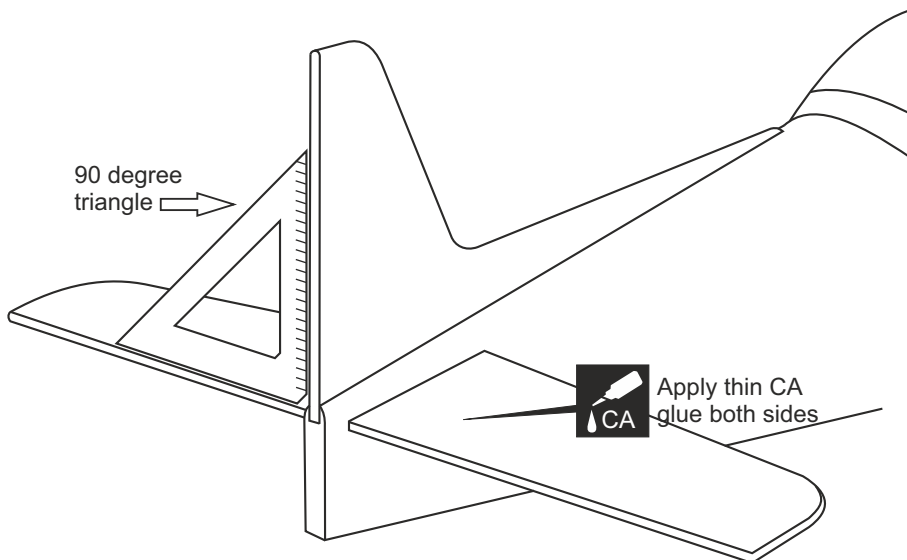
## ZLIN Z-526 21- Vertical stabilizer

**21A** Remove the vertical stabilizer from the fuselage. Using a sharp hobby knife, carefully cut away the covering **below the lines** which were drawn in the previous step. **Do not cut into the woods** as this will affect the structural integrity of the stabilizer.



Cut away only the covering (both sides)

90 degree triangle →



**21B**

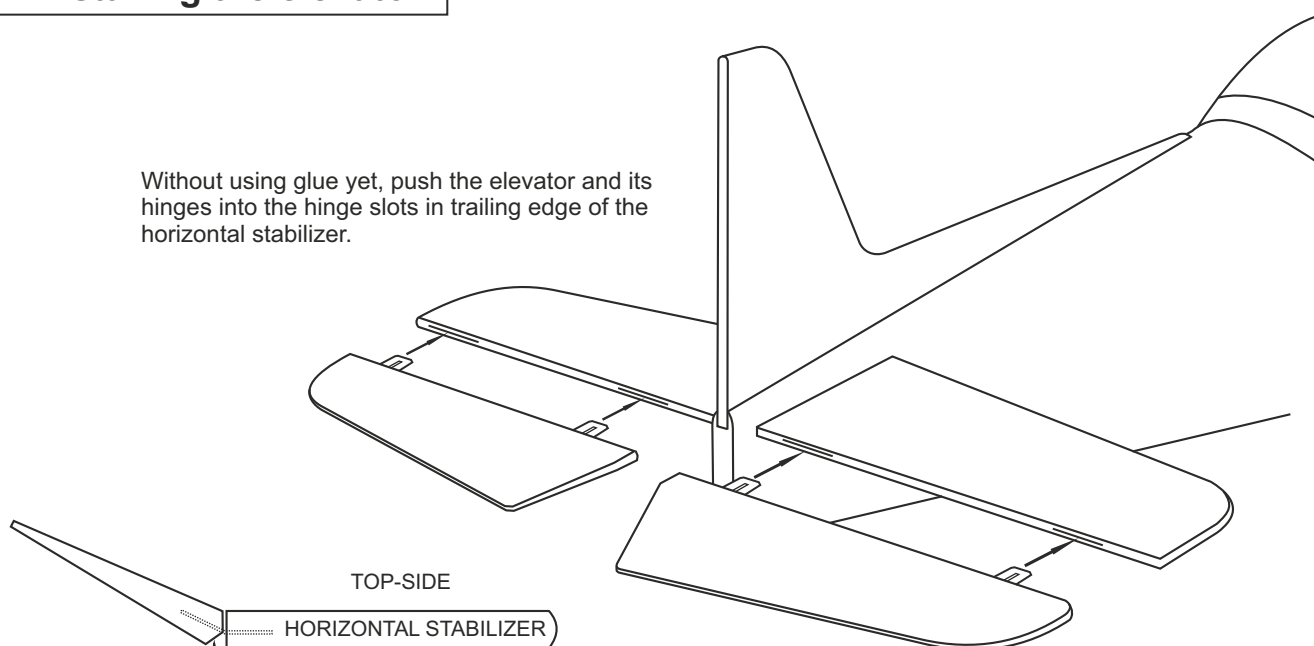
Insert the vertical fin into the fuselage, precisely align the vertical stabilizer as described in step 20B.

Apply the thin CA glue on the vertical stabilizer where it contacts the fuselage.

**! Securely glue together. If coming off during fly, you lose control of your air plane.**

## 22- Installing the elevator

Without using glue yet, push the elevator and its hinges into the hinge slots in trailing edge of the horizontal stabilizer.



TOP-SIDE

HORIZONTAL STABILIZER

**! Securely glue together. If coming off during fly, you lose control of your air plane.**

Apply thin CA glue on both sides of the hinge

TOP-SIDE

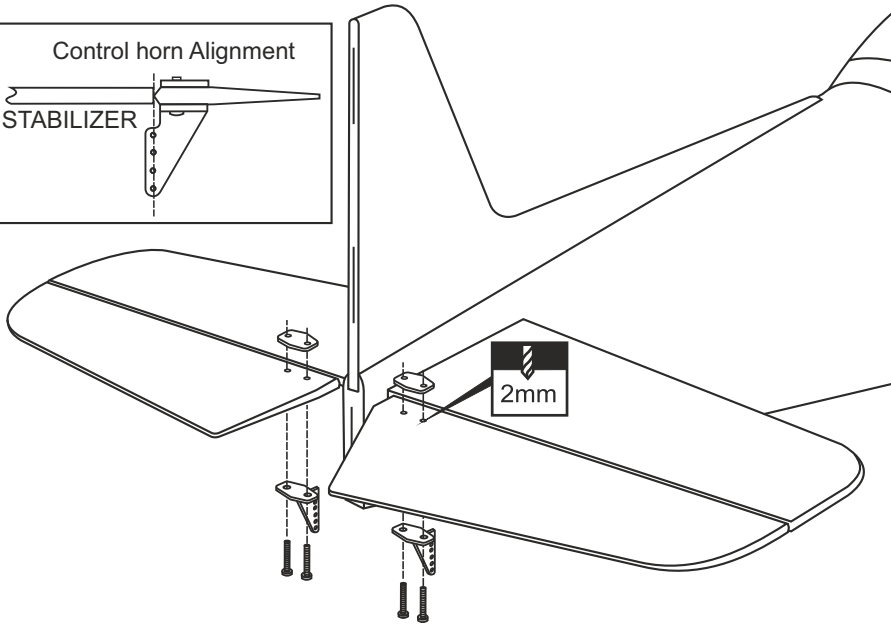
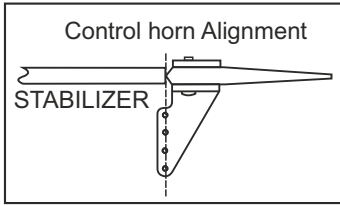
HORIZONTAL STABILIZER

TOP-SIDE

HORIZONTAL STABILIZER

Apply thin CA glue on the bottom of the hinge

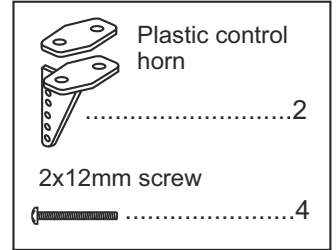
## ZLIN Z-526 23- Elevator control horn



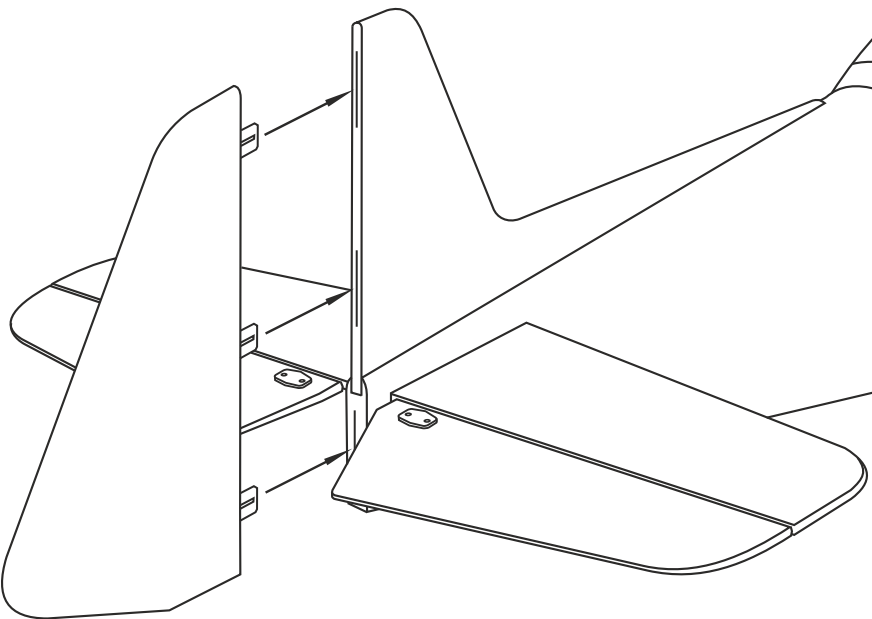
Push the elevator push-rod with clevis into the black nylon push-rod guide.

Using the plastic control horn as a template, mark the mounting hole positions, where the elevator clevis meet the elevator control horn with a felt tipped or a pencil. Move the plastic control horn and drill two 2mm holes through the elevator.

Attach the elevator control horn using the hardware provided (two 2x12mm screws and a back plate).



## 24- Installing the rudder - control horn



VERTICAL STABILIZER (TOP VIEW)

Apply a thin layer of petroleum jelly on the leading edge of elevator.



Apply **thin CA** glue on both sides of the hinge

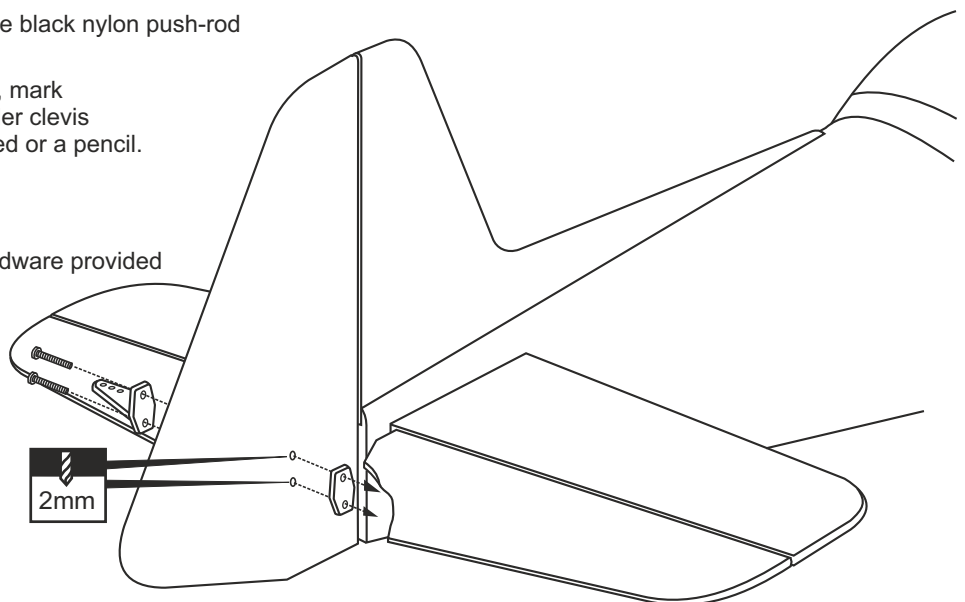
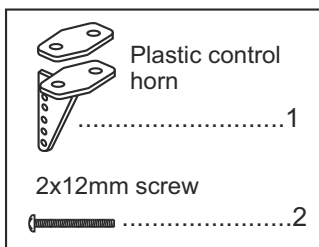
RUDDER

Push the rudder push-rod with clevis into the black nylon push-rod guide.

Using the plastic control horn as a template, mark the mounting hole positions, where the rudder clevis meet the rudder control horn with a felt tipped or a pencil.

Remove the control horn and drill two 2mm holes through the rudder .

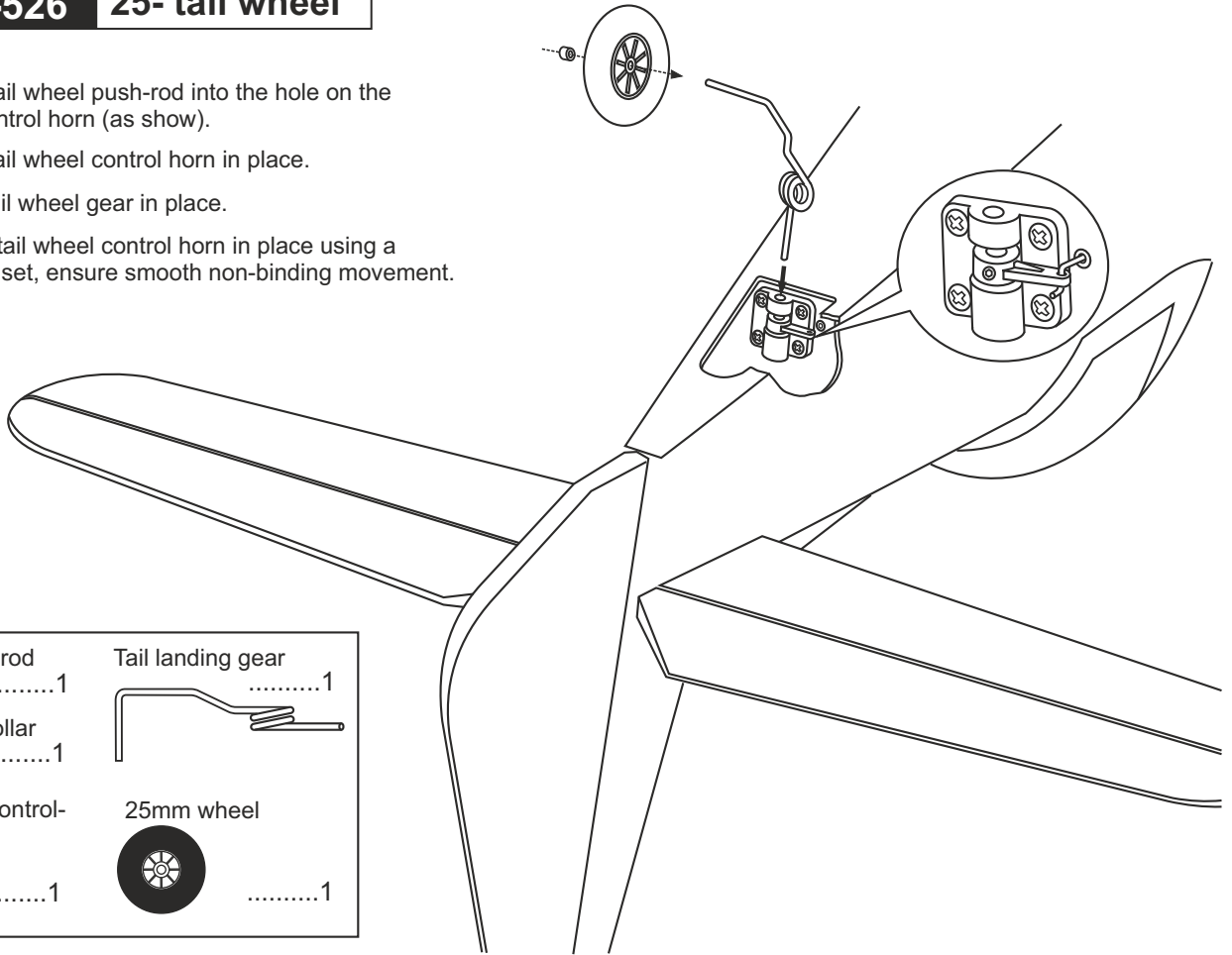
Attach the rudder control horn using the hardware provided (two 2x12mm screws and a back plate).

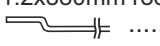
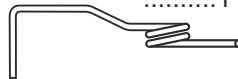
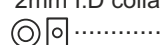






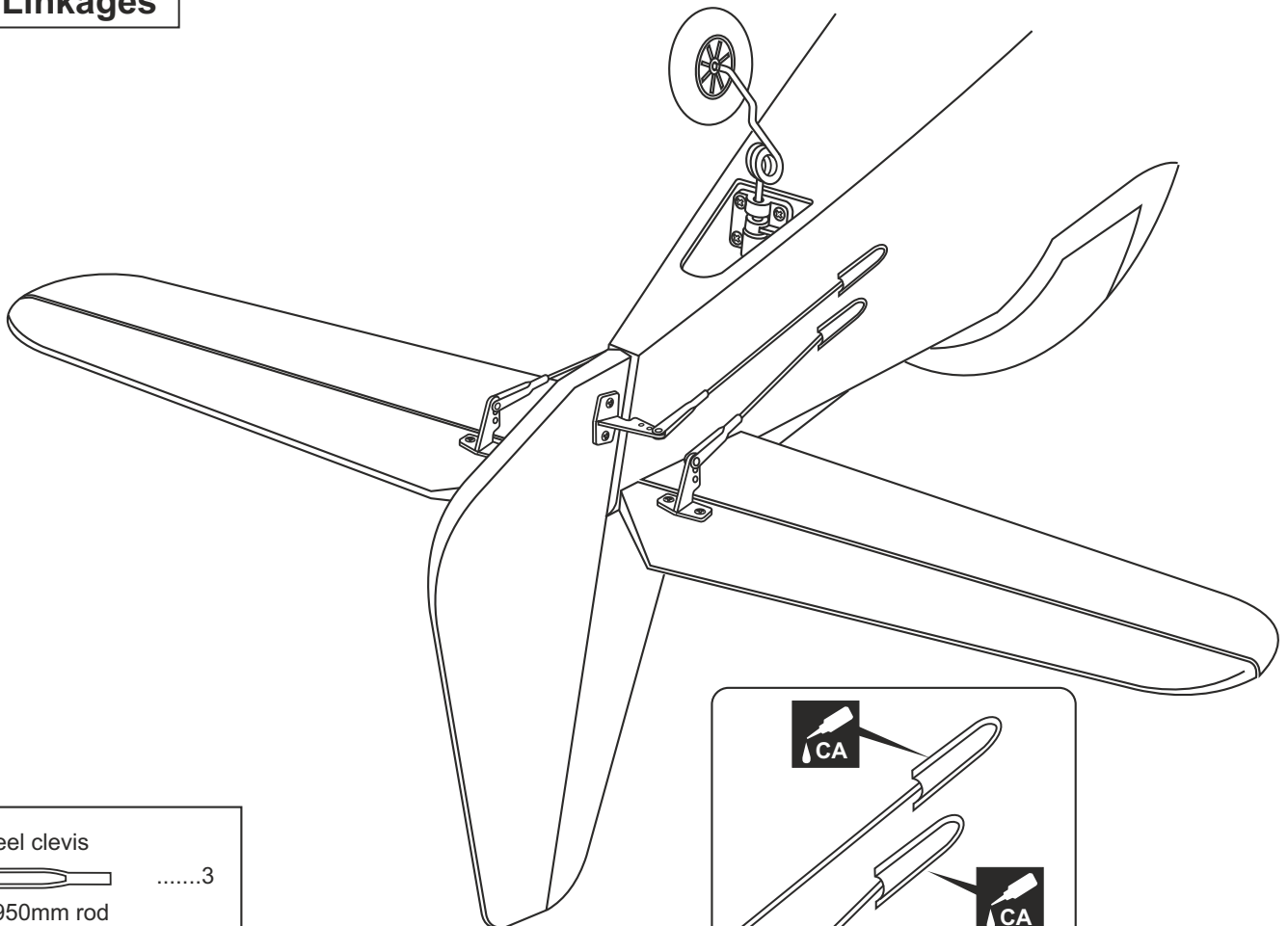
## ZLIN Z-526 25- tail wheel


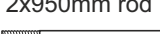
- Insert the tail wheel push-rod into the hole on the tail gear control horn (as show).
- Install the tail wheel control horn in place.
- Instal the tail wheel gear in place.
- Secure the tail wheel control horn in place using a 2mm screw set, ensure smooth non-binding movement.



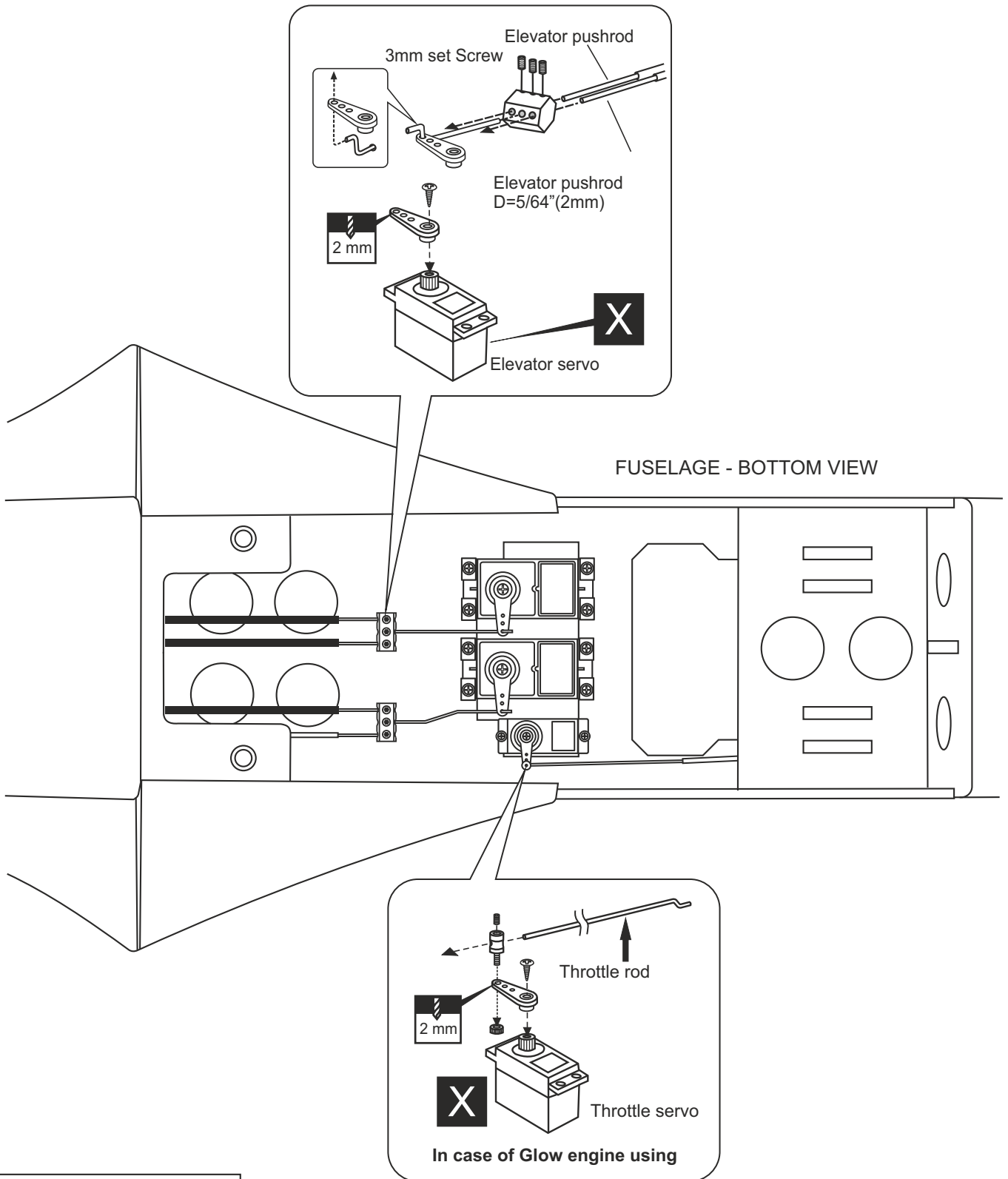
1.2x880mm rod  .....	1	Tail landing gear  .....	1
2mm I.D collar  .....	1		
Tail wheel control-horn  .....	1	25mm wheel  .....	1




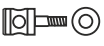
## 26- Linkages

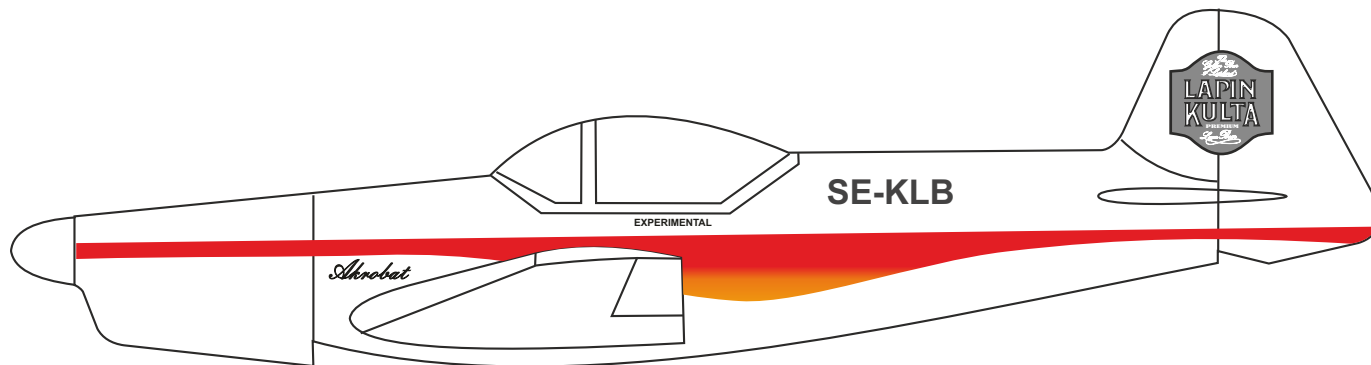


Steel clevis  .....	3
2x950mm rod  .....	3

**ZLIN Z-526 27- Servo - linkages**

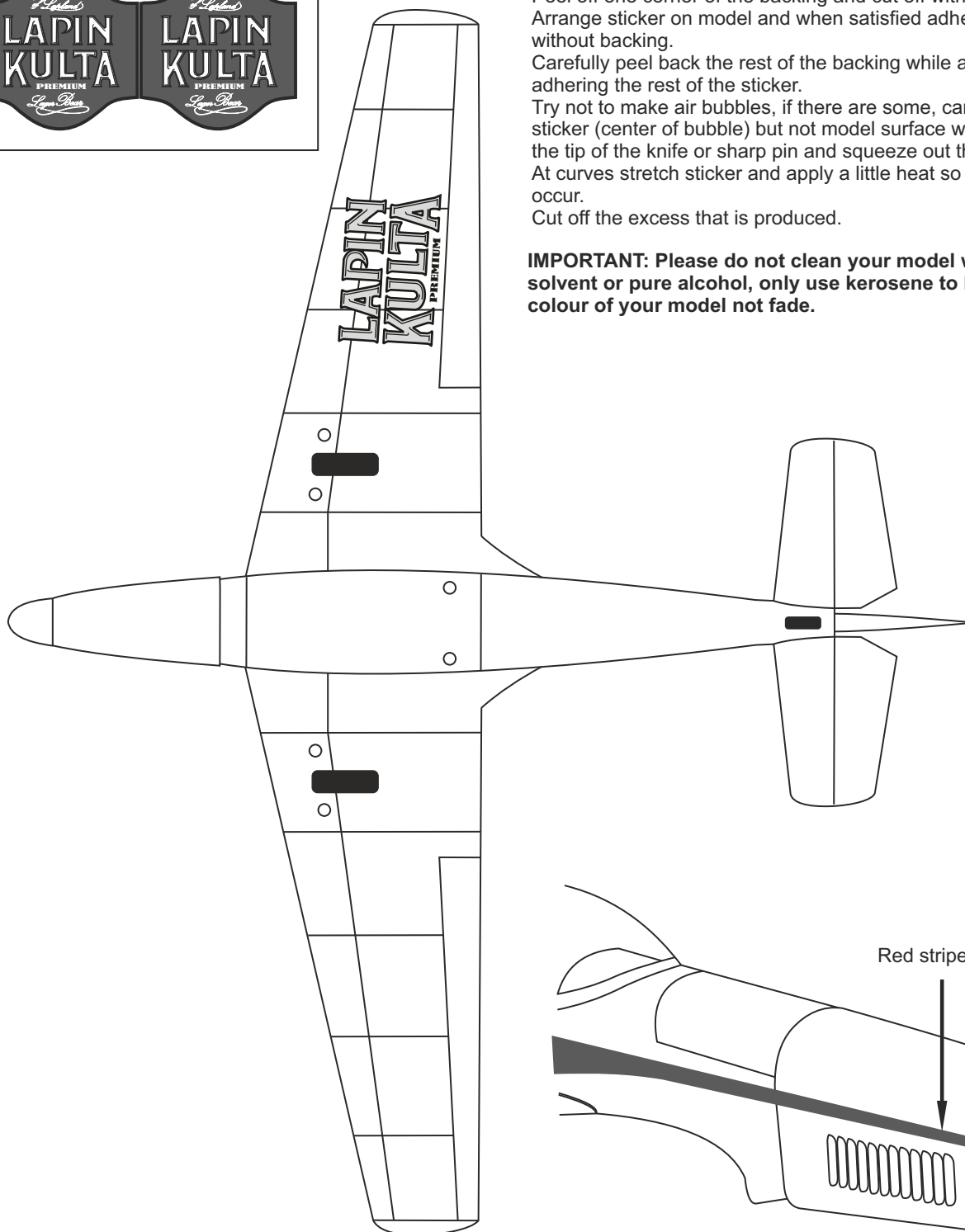


- (2 x 120mm) rod  .....2
- (1.2 x 500mm) throttle rod  .....1
- Connector  .....2
-  2mm .....1

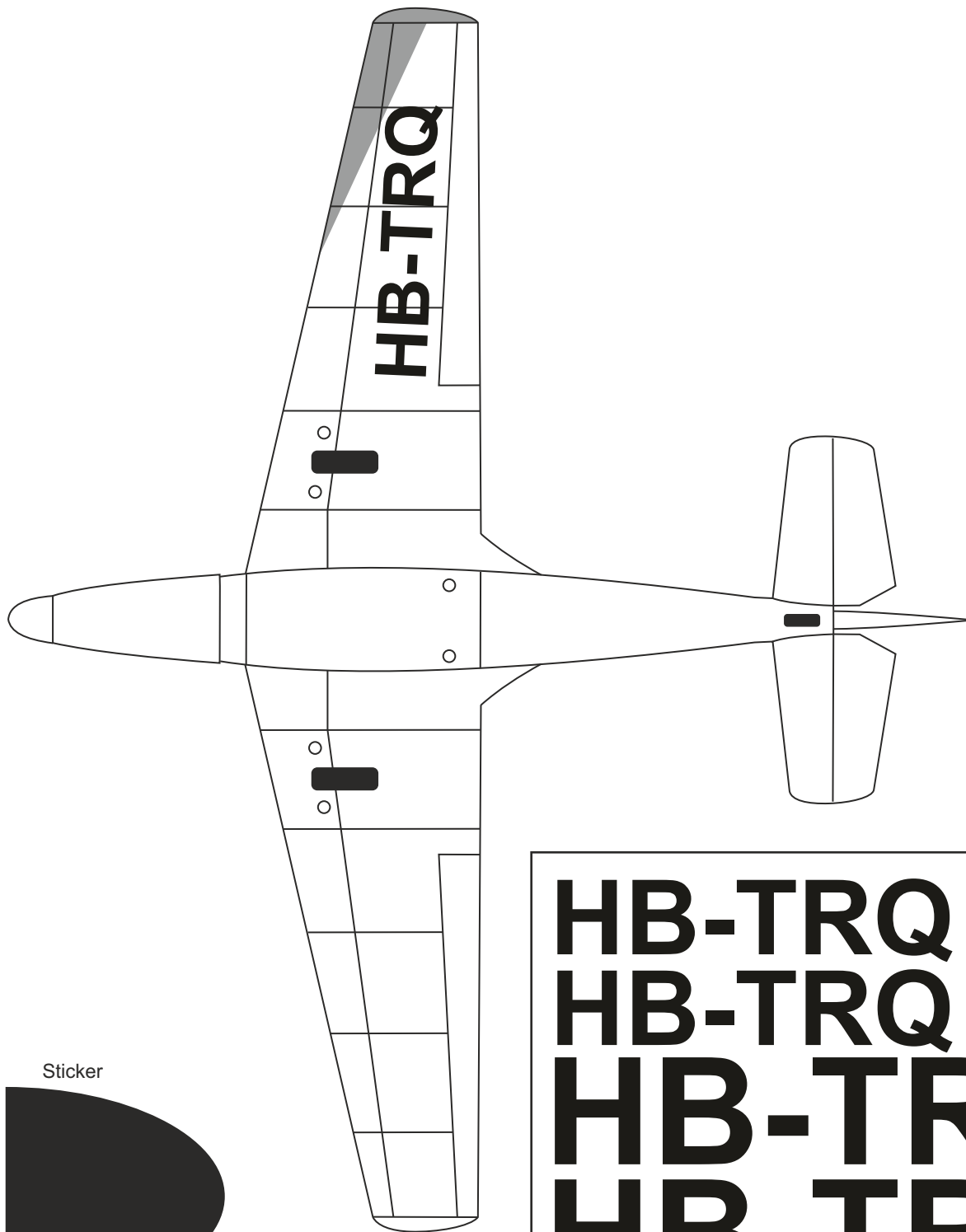
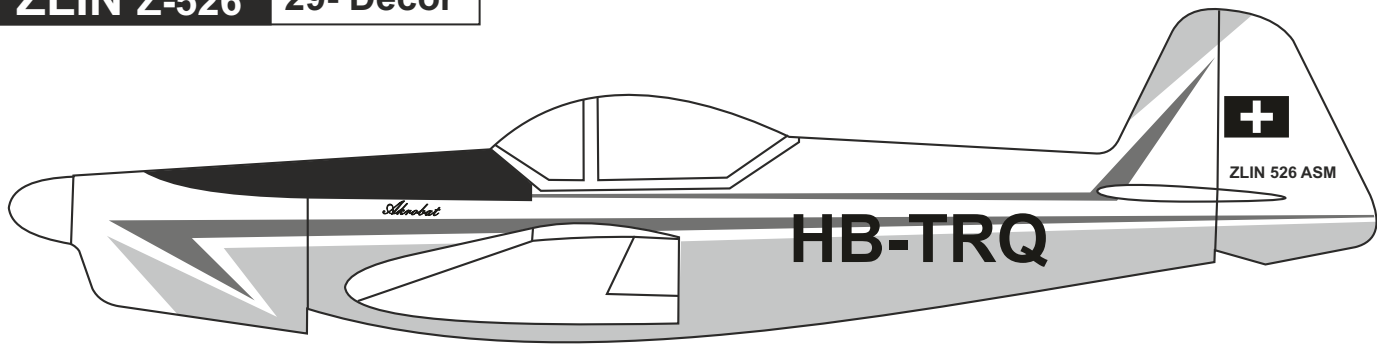


Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once. Peel off one corner of the backing and cut off with scissors. Arrange sticker on model and when satisfied adhere the corner without backing. Carefully peel back the rest of the backing while at the same time adhering the rest of the sticker. Try not to make air bubbles, if there are some, carefully puncture sticker (center of bubble) but not model surface with the tip of the knife or sharp pin and squeeze out the air. At curves stretch sticker and apply a little heat so that no ceases occur. Cut off the excess that is produced.

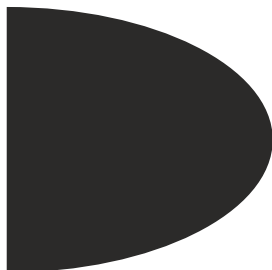
**IMPORTANT:** Please do not clean your model with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.



Red stripe decal



Sticker



**HB-TRQ**  

**HB-TRQ** *Akrobat*

**HB-TRQ** *Akrobat*

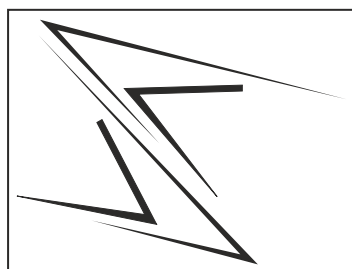
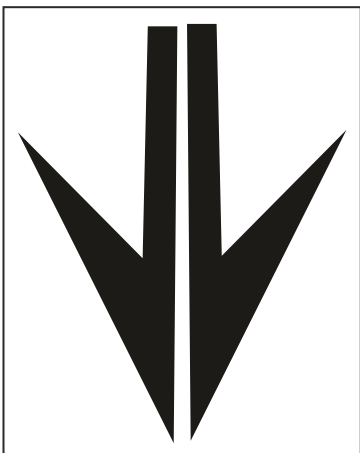
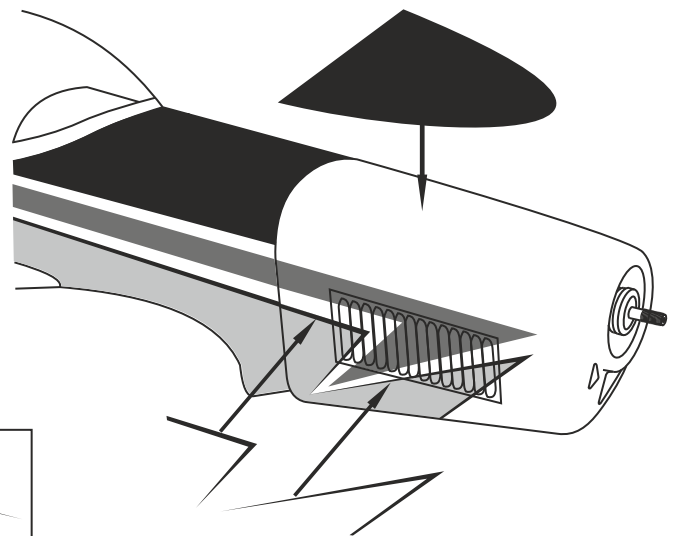
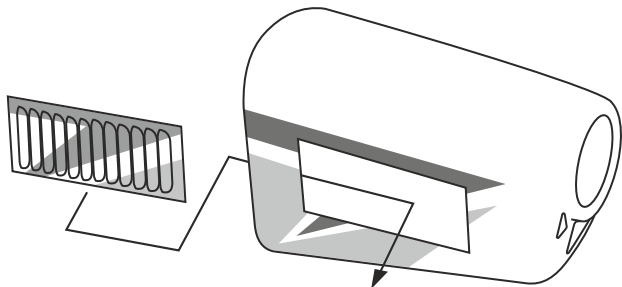
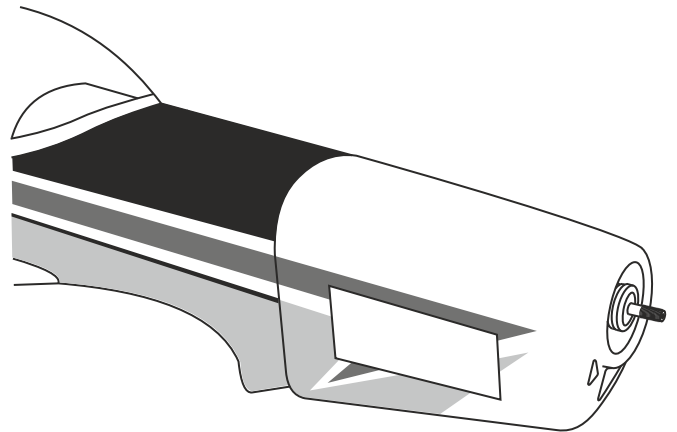
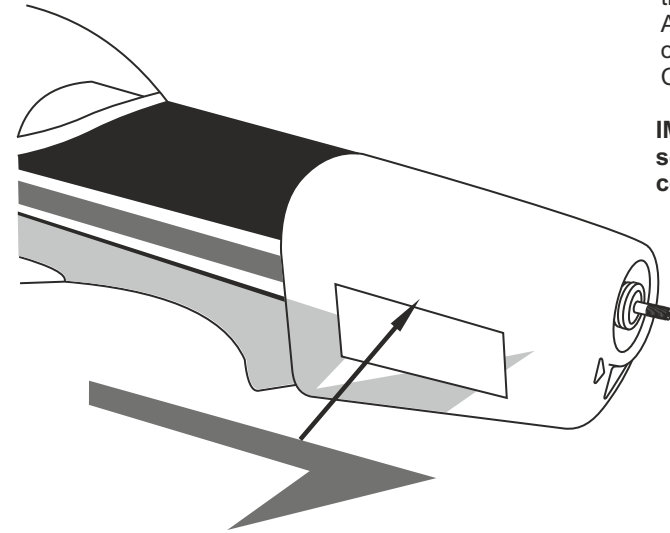
**HB-TRQ**

**HB-TRQ**

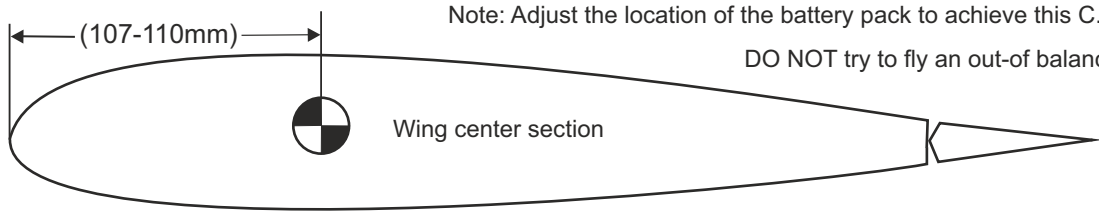
ZLIN 526 SWISS

Note: Cut out the stickers and apply them in the proper area.  
Do not peel the backing paper off all at once.  
Peel off one corner of the backing and cut off with scissors.  
Arrange sticker on model and when satisfied adhere the corner without backing.  
Carefully peel back the rest of the backing while at the same time adhering the rest of the sticker.  
Try not to make air bubbles, if there are some, carefully puncture sticker (center of bubble) but not model surface with the tip of the knife or sharp pin and squeeze out the air.  
At curves stretch sticker and apply a little heat so that no creases occur.  
Cut off the excess that is produced.

**IMPORTANT: Please do not clean your model with strong solvent or pure alcohol, only use kerosene to keep the colour of your model not fade.**

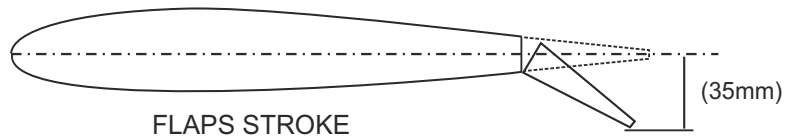
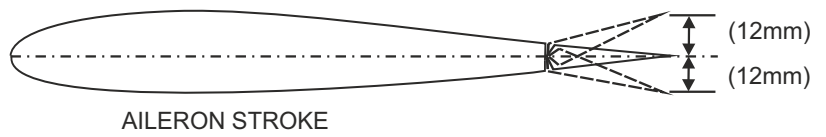
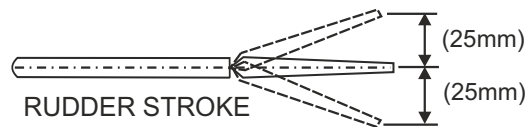
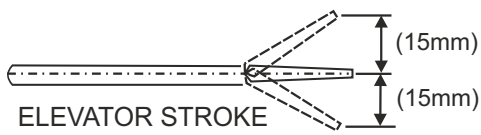


# ZLIN Z-526 31- Balance



Note: Adjust the location of the battery pack to achieve this C.G location.  
DO NOT try to fly an out-of balance model!

## 30- Control surface



Adjust the travel of the control surfaces to achieve the values stated in the diagrams.  
These value will be suitable for average flight requirements. Adjust the values to suit your particular needs.