

Radio control model / Flugmodell

CESSNA 208



ALL BALSA, PLYWOOD CONSTRUCTION AND ALMOST READY TO FLY

Instruction manual / Montageanleitung

SPECIFICATIONS

Wingspan:.....1700mm
Length:.....1175mm
Electric Motor:.....See next pager
Glow Engine:......46 2-T / .70 4-T
RTF Weight: 3.2Kg / 7.05lbs (Will vary with
Equipment Used).
Radio:.....6 Channel / 6-7 Servos
Function: Ailerons-Elevator-Rudder-Throttle
Flaps.

TECHNISCHE DATEN

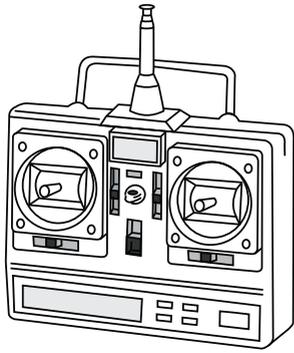
Spannweite:.....1700mm
Länge:.....1175mm
Elektroantrieb.....(siehe nächste Seite)
Verbrennerantrieb:.....7.45cc - 11.5cc
Fluggewicht:.....3.2Kg
Fernsteuerung.....6 Kanal / 6-7 Servos



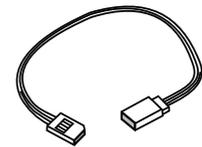
WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of control and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if you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

ACHTUNG! Dieses ferngesteuerte Modell ist KEIN Spielzeug! Es ist für fortgeschrittene Modellfluggpiloten 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.

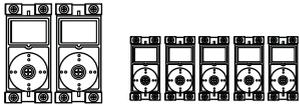
REQUIRED FOR OPERATION (Purchase separately) More info: www.pichler-modellbau.de



11x6 for .46 - 2 cycle engine
 12x6 for .60 - 4 cycle engine
 12x7 for .70 - 4 cycle engine
 13x7 for electric motor

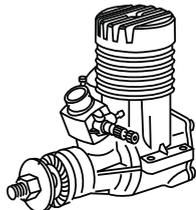


Extension for aileron servo, retract servo and Rx battery pack.

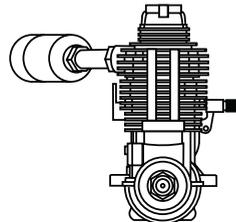


Minimum 6 channel radio for airplane with 2 standard servos and four servo mini. (five in case of GP)

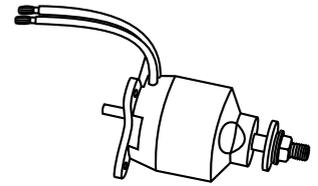
.Motor control x1(for GP) .Elevator x1 . Rudder x1 (standard servo)
 .Aileron and Flapx2 (mini servo)



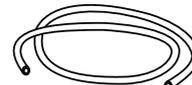
.46 ~ .50 - 2 cycle



.60 ~ .70 - 4 cycle



700Watt

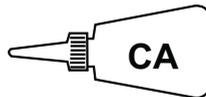


Silicone tube

GLUE (Purchase separately)



Thread locker



CA

Cyanoacrylate Glue



EPOXY A

Epoxy Glue (5 minute type)

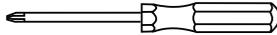


EPOXY B

Epoxy Glue (30 minute type)

TOLLS REQUIRED (Purchase separately)

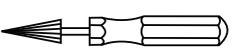
Hobby knife 

Phillip screw driver 

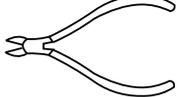
Hex Wrench 

Needle nose Pliers 

Scissors 

Awl 

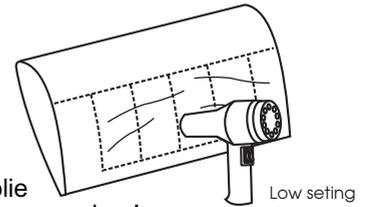
Sander 

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 \varnothing)

 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

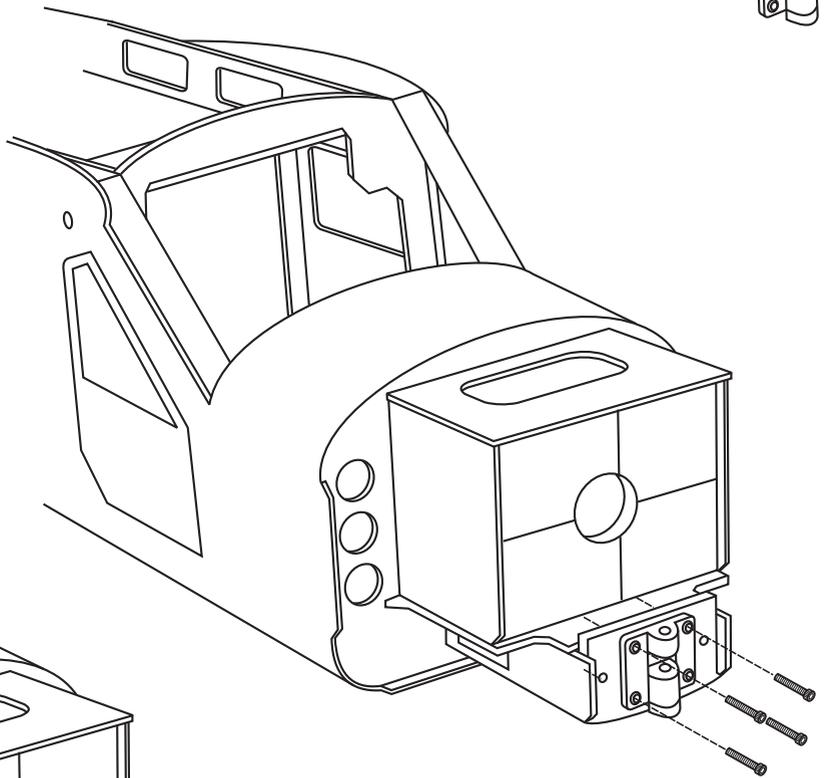
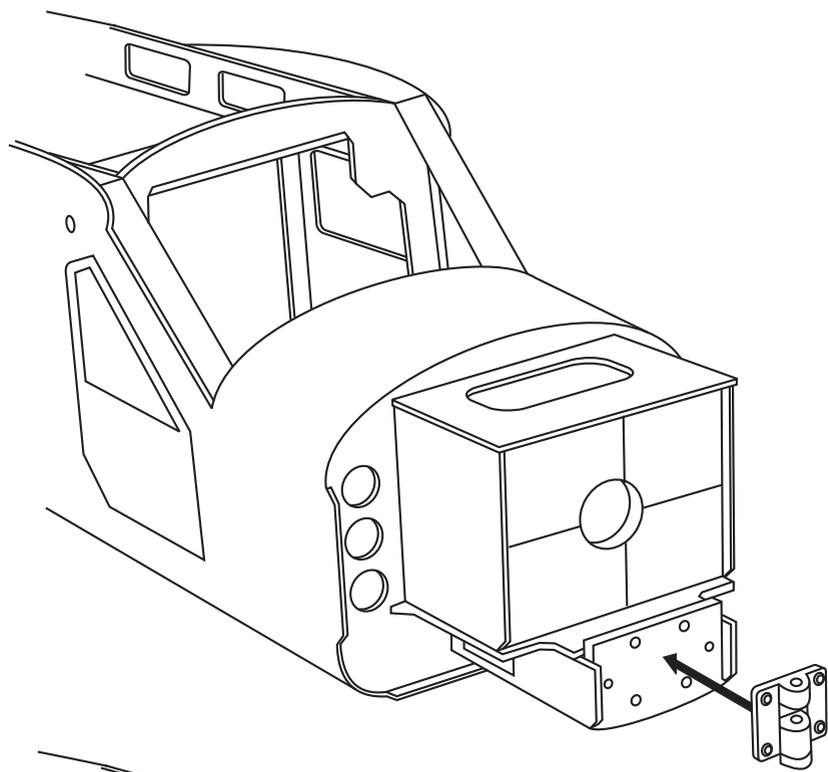
 Nicht enthalten. Teile müssen separat gekauft werden.

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

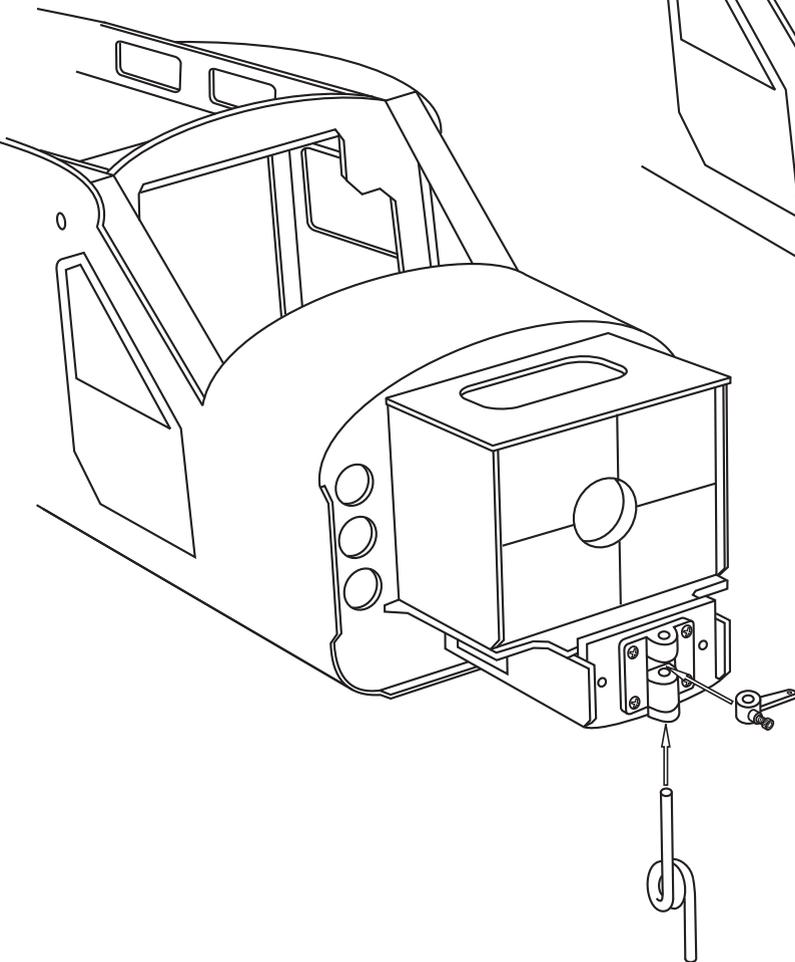
CONVERSION TABLE

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"	

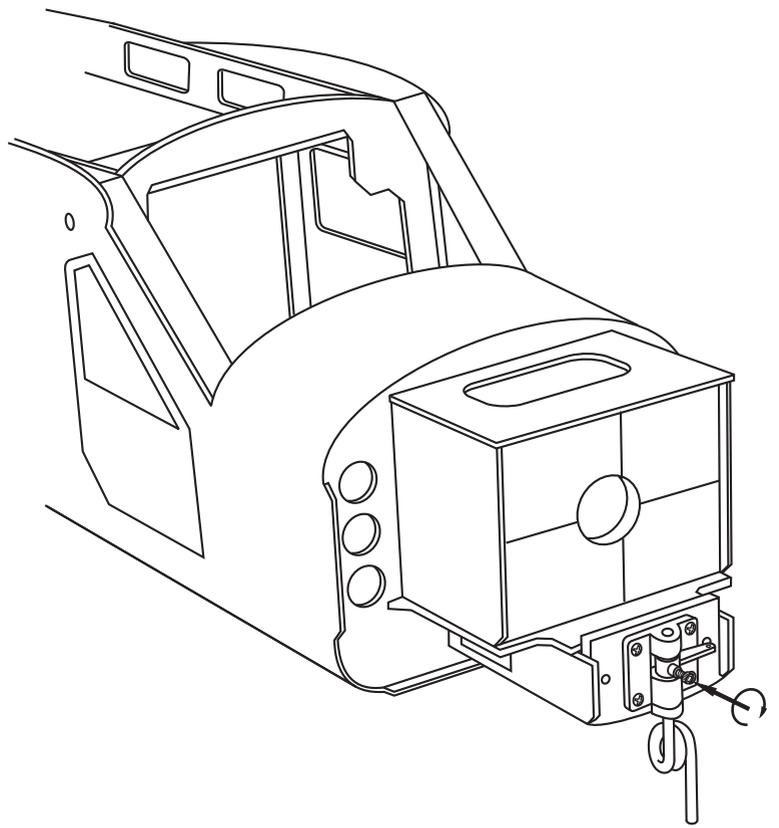
CESSNA 208 1-Nose gear



3x20mm screw
...4



CESSNA 208 2-Nose gear



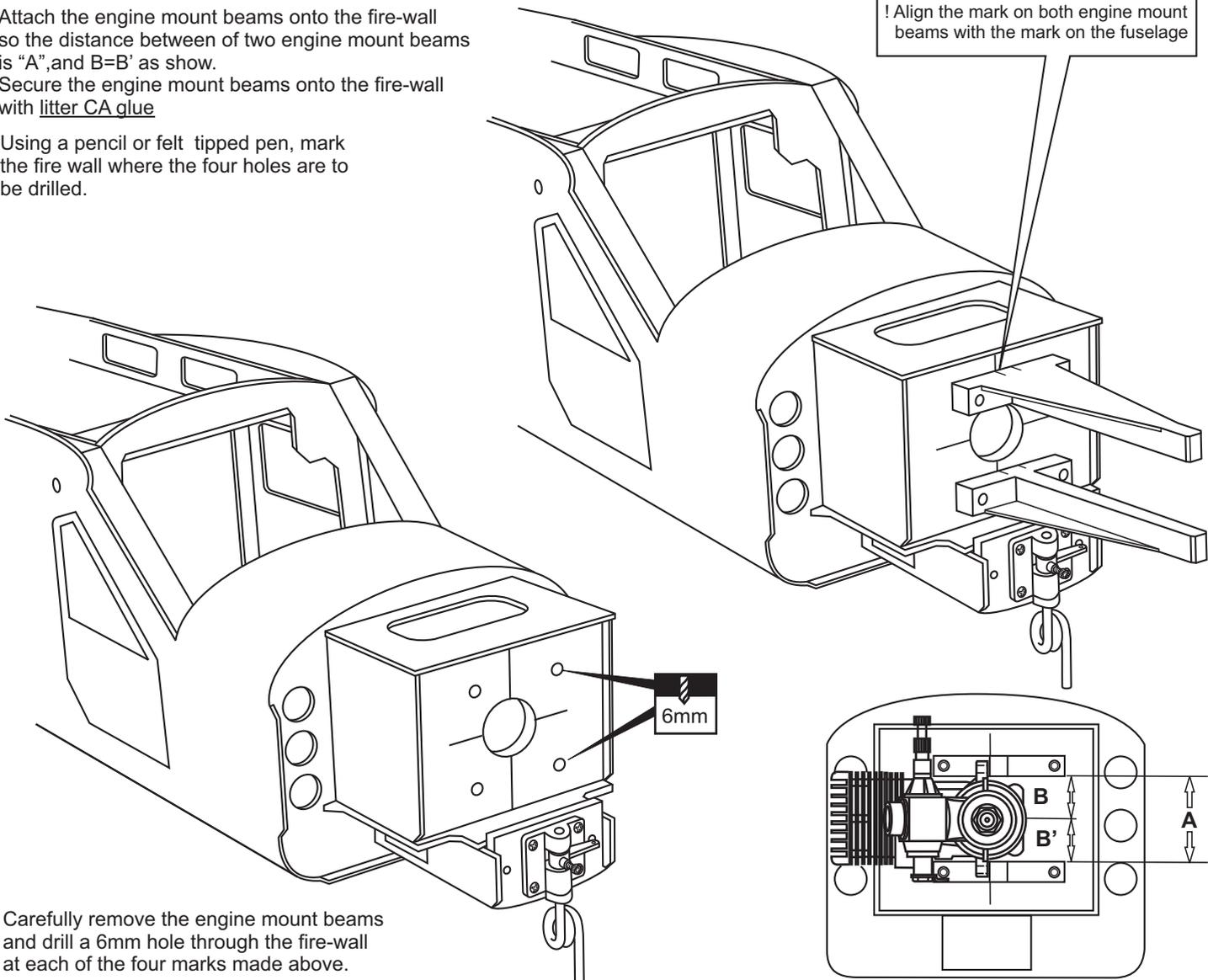
CESSNA 208 3-Engine mount

Attach the engine mount beams onto the fire-wall so the distance between of two engine mount beams is "A", and B=B' as show.

Secure the engine mount beams onto the fire-wall with litter CA glue

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

! Align the mark on both engine mount beams with the mark on the fuselage



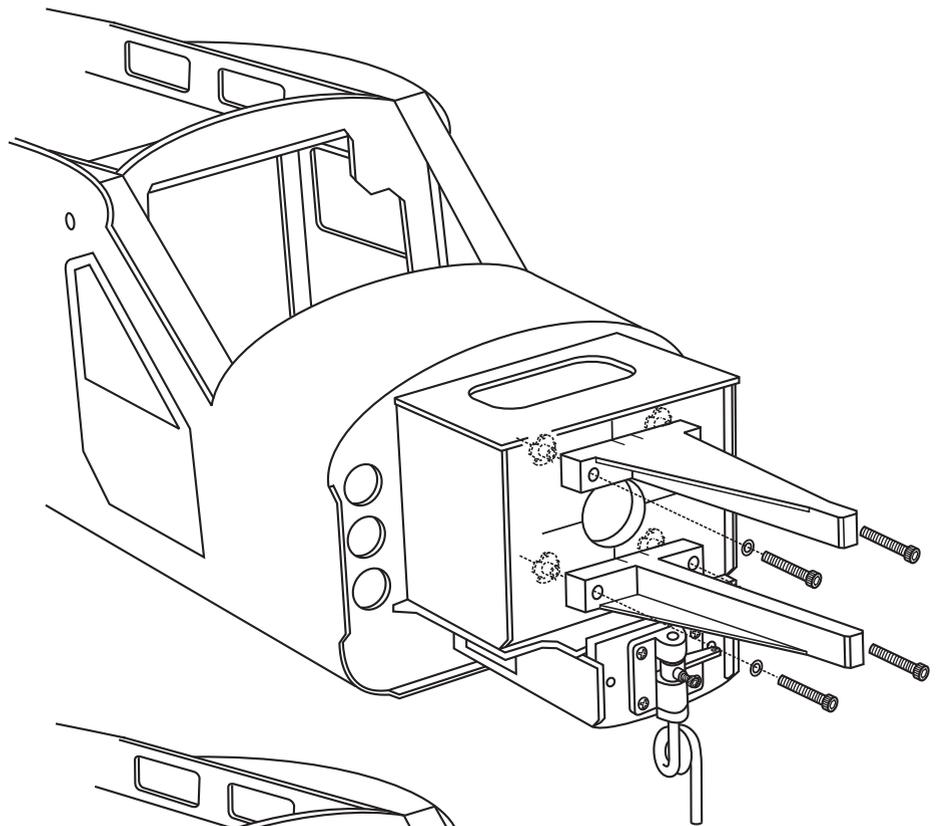
Carefully remove the engine mount beams and drill a 6mm hole through the fire-wall at each of the four marks made above.

CESSNA 208 4-Engine mount

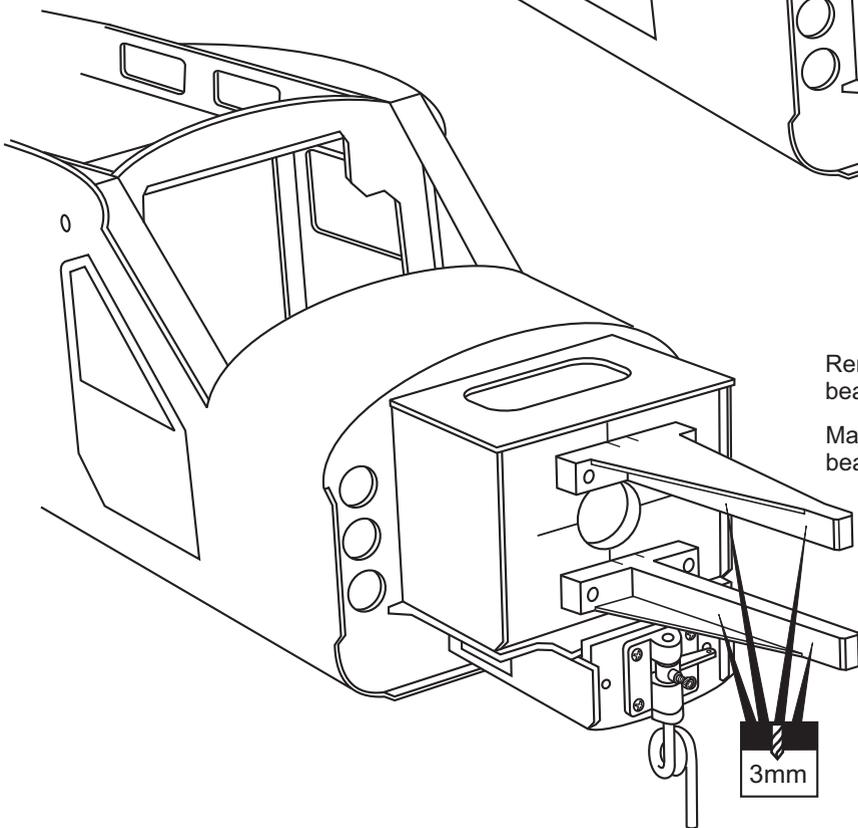
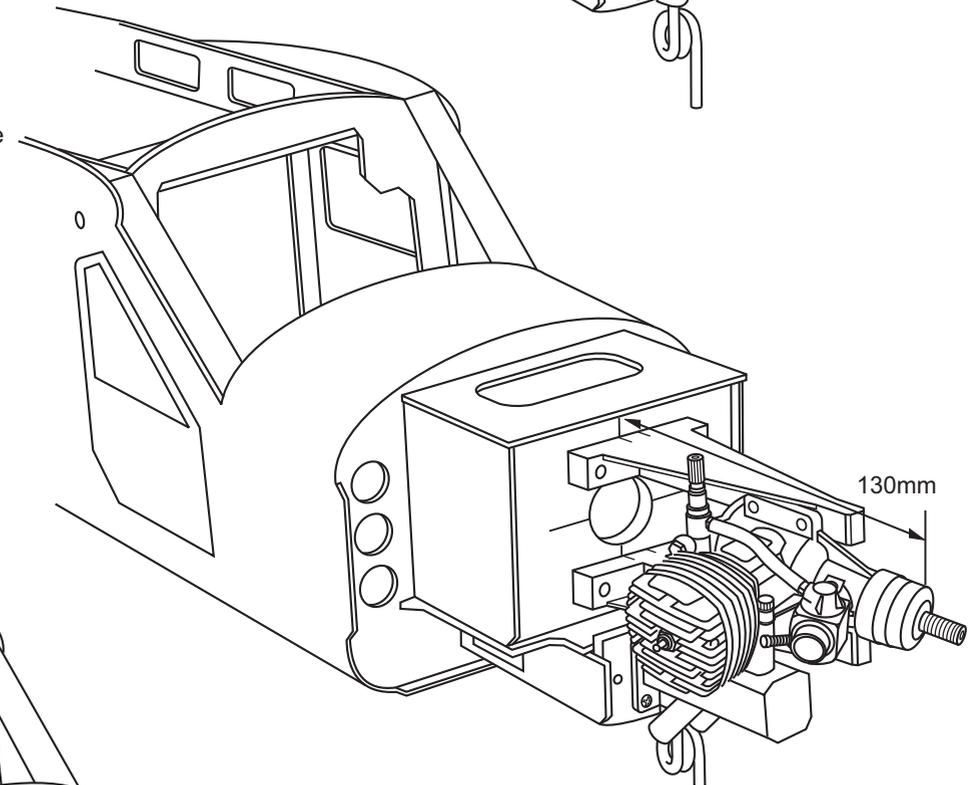
Insert the blind-nut onto each of the four holes make above.

Reposition the engine mount beams on to the fire-wall and secure them with four 4x25mm screws.

4x25mm screw - washer4
Blind-nut4

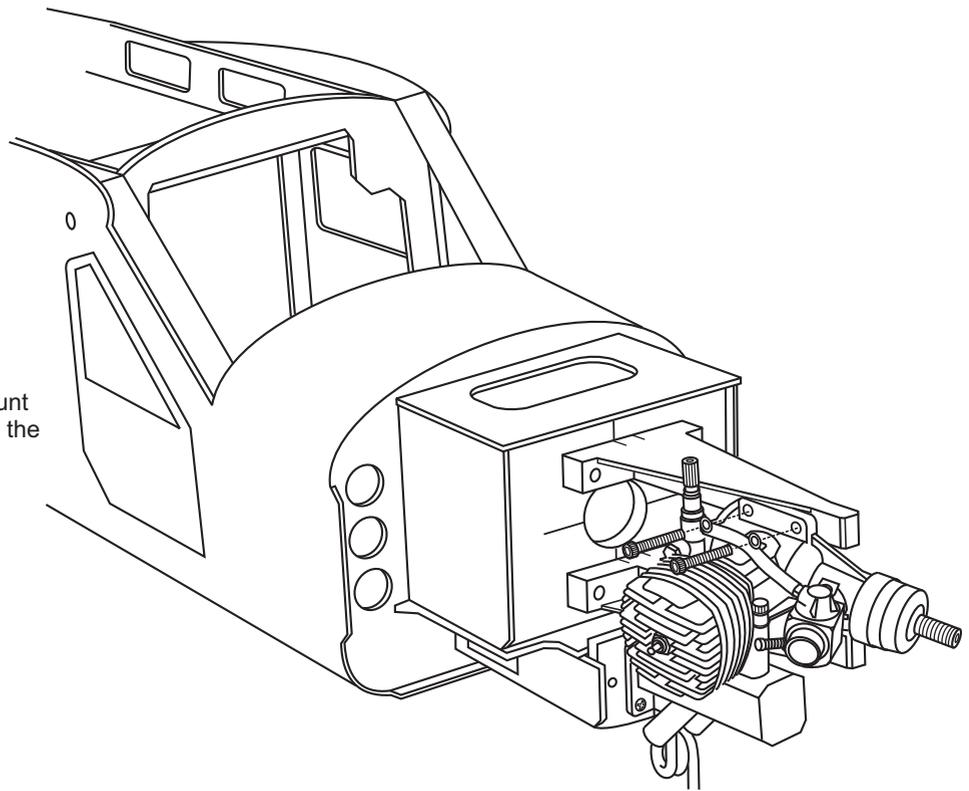


Position the engine to the engine mounts so the distance from the prop hub to the fire-wall is 130mm.
Mark the engine mounting plate where the four holes are to be drilled.



Remove the engine and drill a 3mm holes through the beam at each of the four marks made above.
Marking sure that you drill the hole perpendicular to the beam of the engine mount.

CESSNA 208 4-Engine installation



Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 3x25mm screws.

Note: Apply Silicon sealer to each of the 3x25mm screw and nut.

3x25mm screw



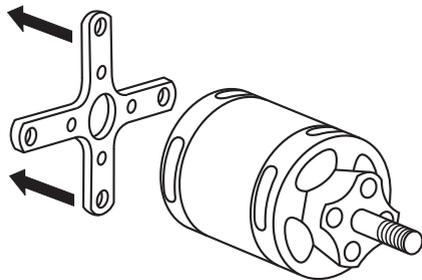
.....4

Washer

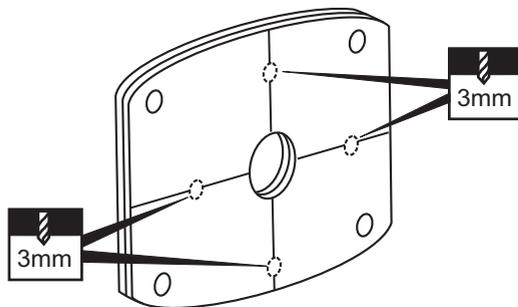
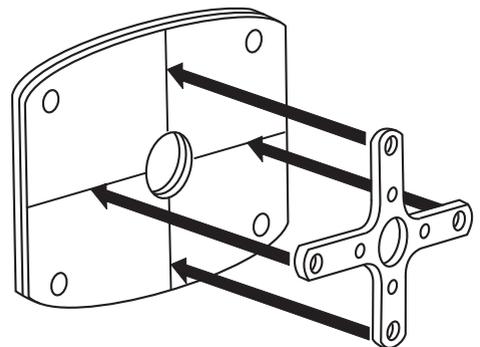


.....4

CESSNA 208 5-Electric motor mount



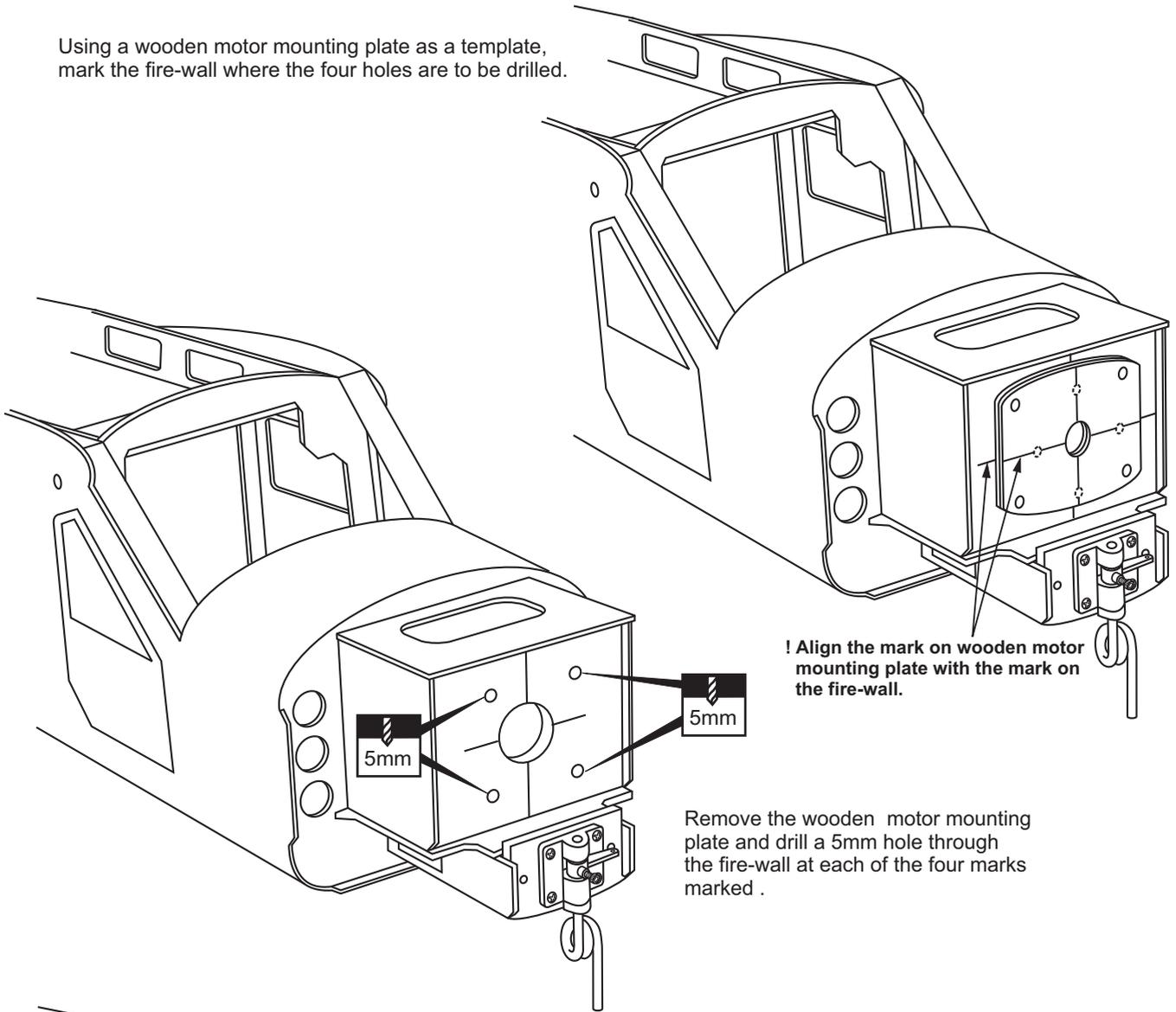
Using a aluminum motor mounting plate as a template, mark the plywood motor mounting plate where the four holes are to be drilled.



Remove the aluminum motor mounting plate and drill a 3mm hole through the plywood at each of the four marks marked .

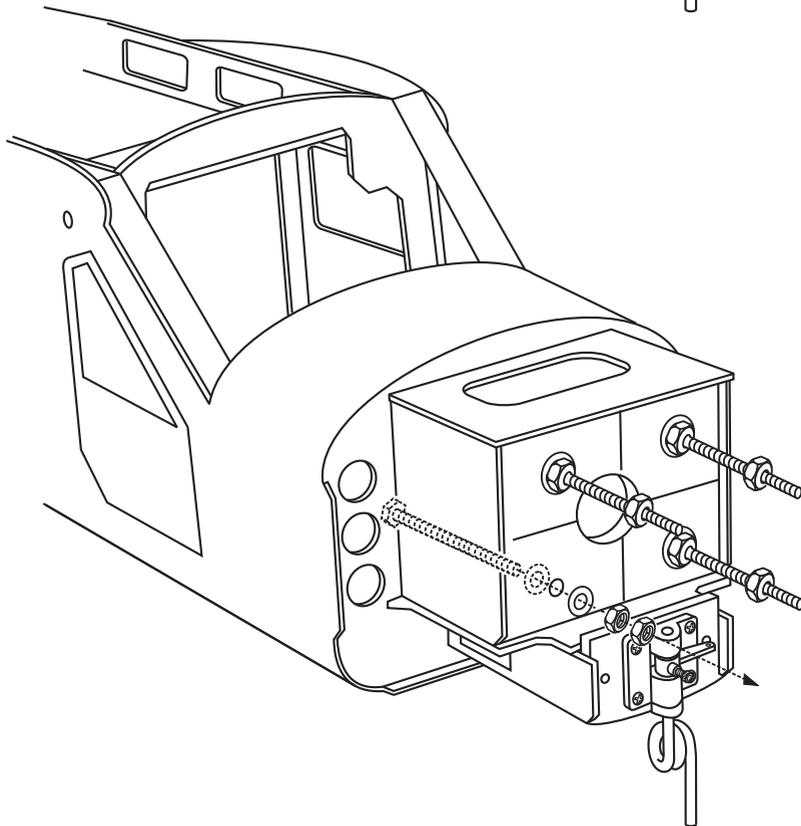
CESSNA 208 6-Electric motor mount

Using a wooden motor mounting plate as a template, mark the fire-wall where the four holes are to be drilled.



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

Remove the wooden motor mounting plate and drill a 5mm hole through the fire-wall at each of the four marks marked .

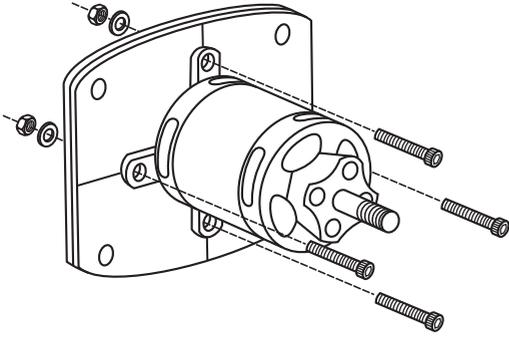


-  5x80mm bolt....4
-  5mm nut.....12
-  5mm washer...16

Attach the four 5x80mm bolts and nuts to the fire-wall as shown.

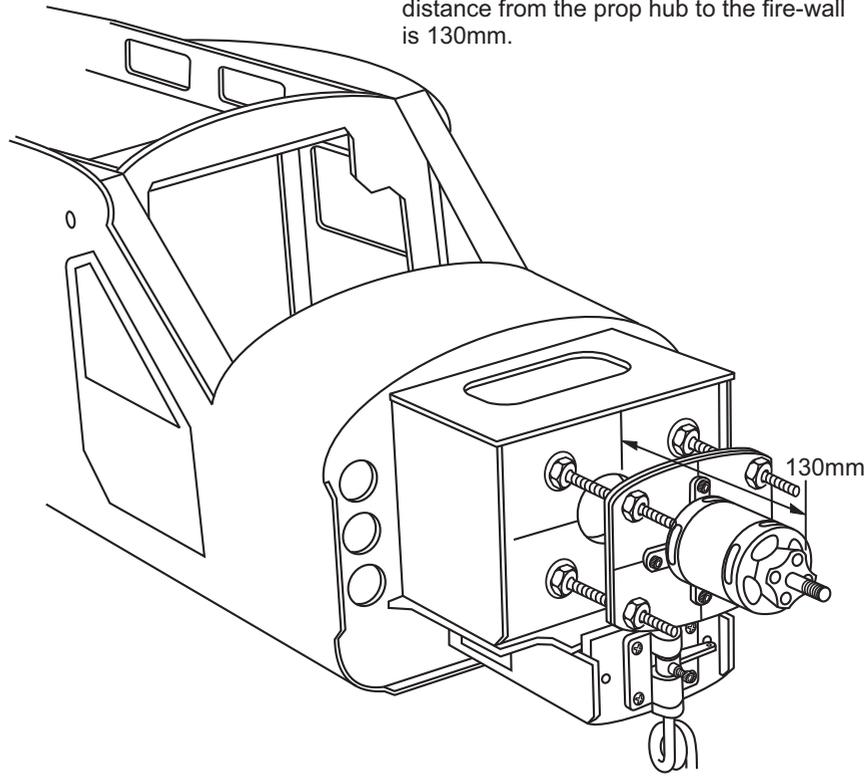
CESSNA 208 6-Electric motor mount

Adjust the wooden motor mount so the distance from the prop hub to the fire-wall is 130mm.

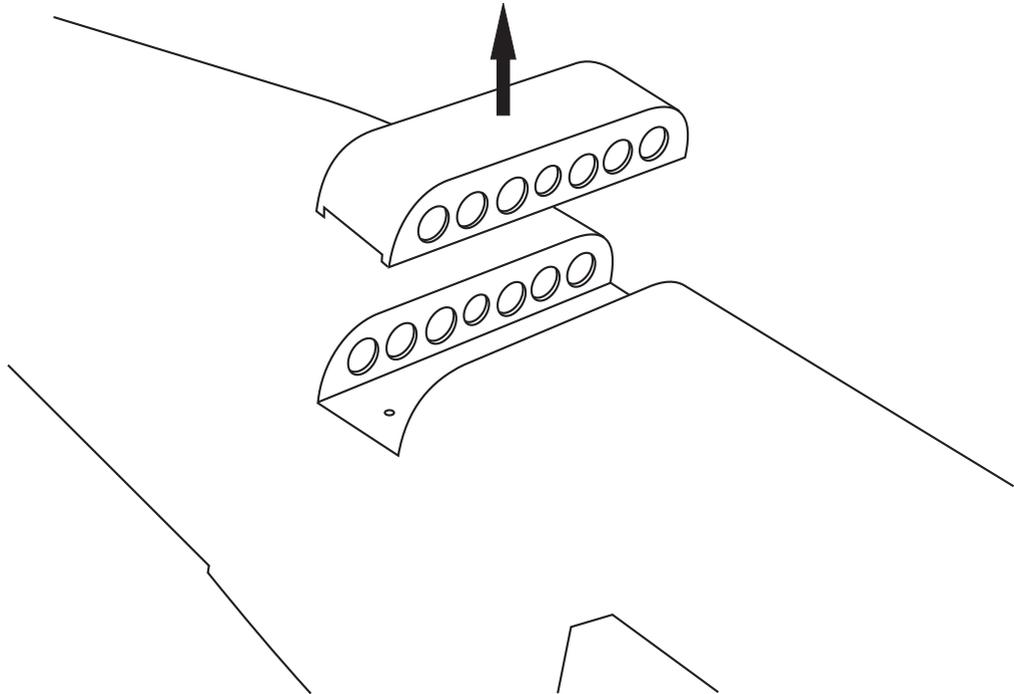


 3mm bolt / nut...4

Secure the Motor to the wooden motor mounting plate using the four 3mm bolts.



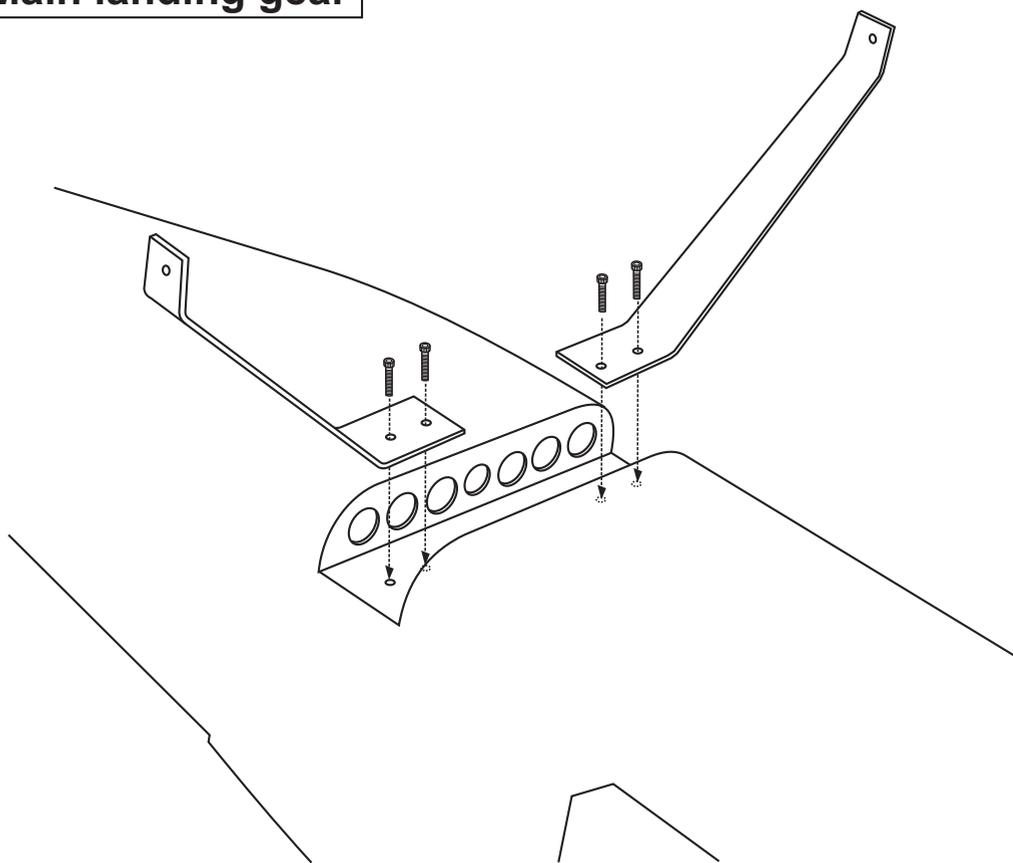
CESSNA 208 7-Main landing gear



CESSNA 208 8-Main landing gear

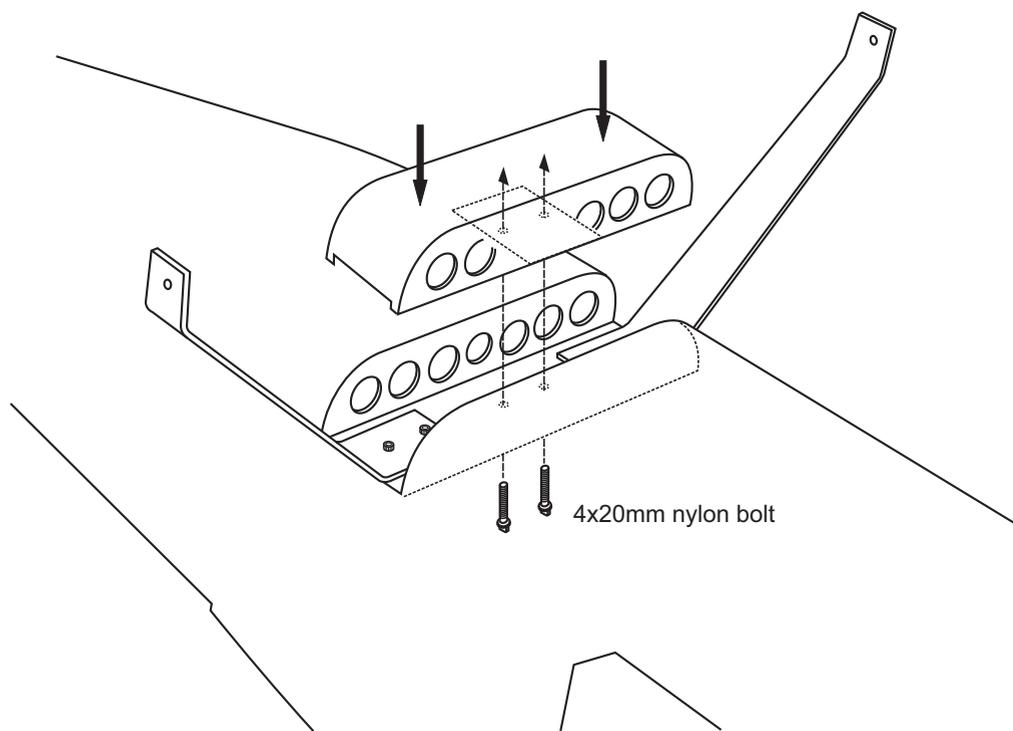
3x15mm screw

4



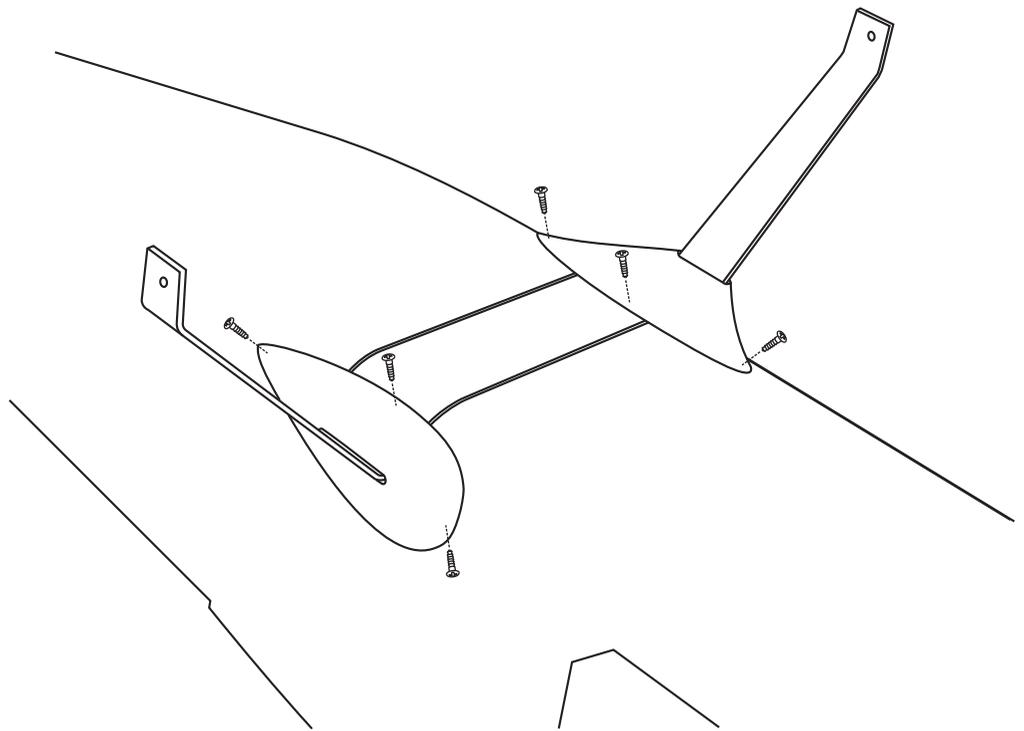
4x20mm nylon bolt

2

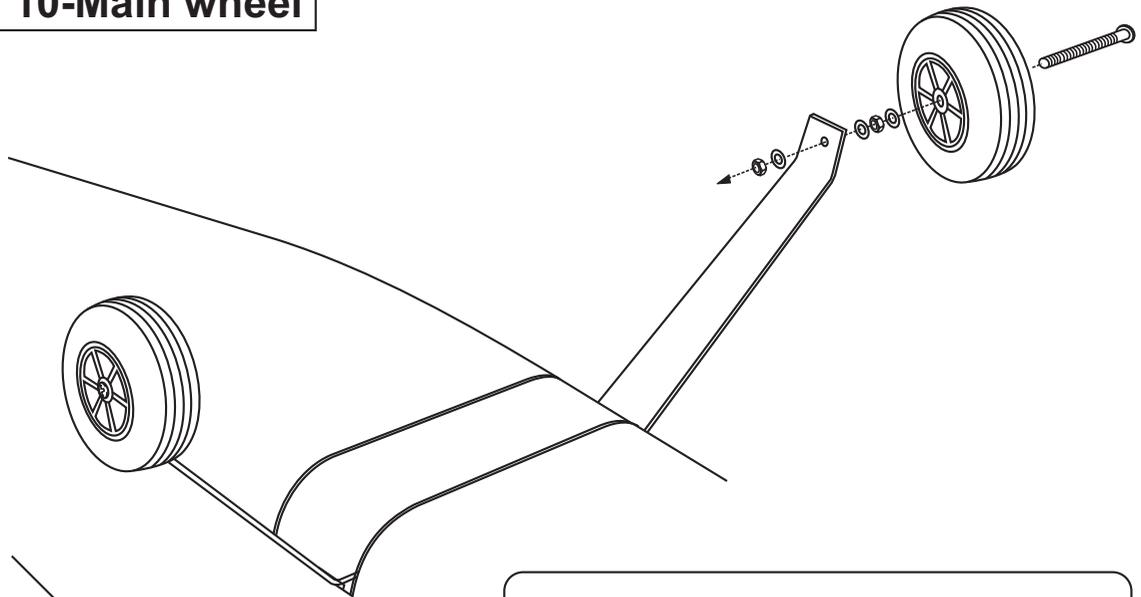


CESSNA 208 9-Main landing gear

2x8mm screw



CESSNA 208 10-Main wheel



75mm wheel



...2

4x45mm screw



...2

4mm nut

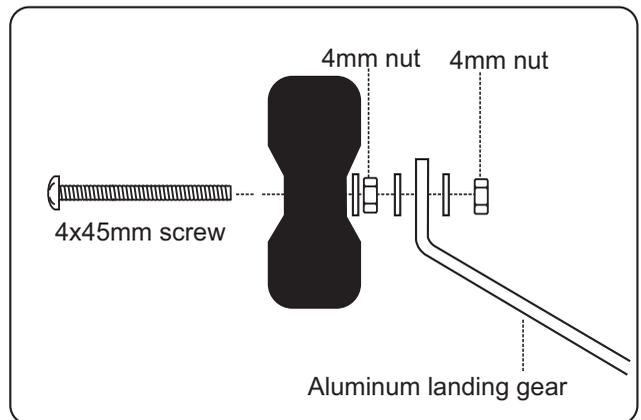


.....4

4mm washer



.....6

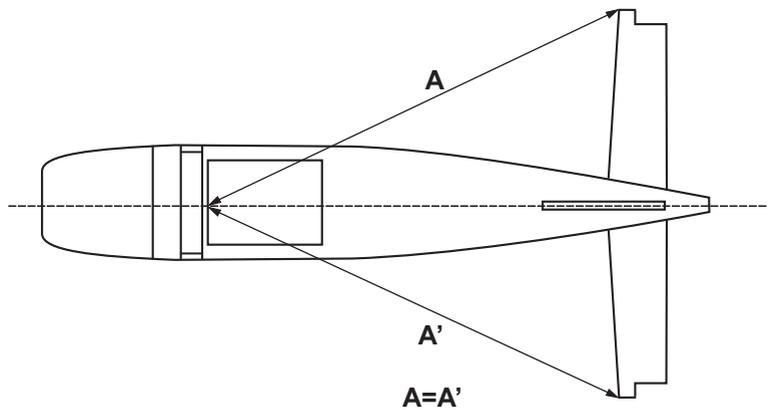
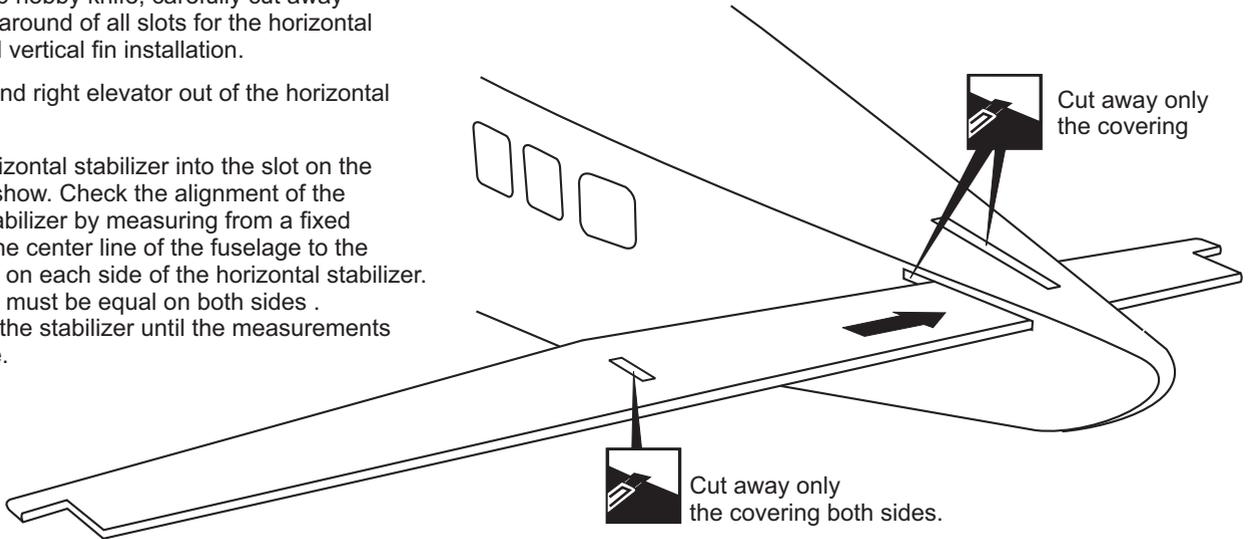


CESSNA 208 11-Horizontal stabilizer

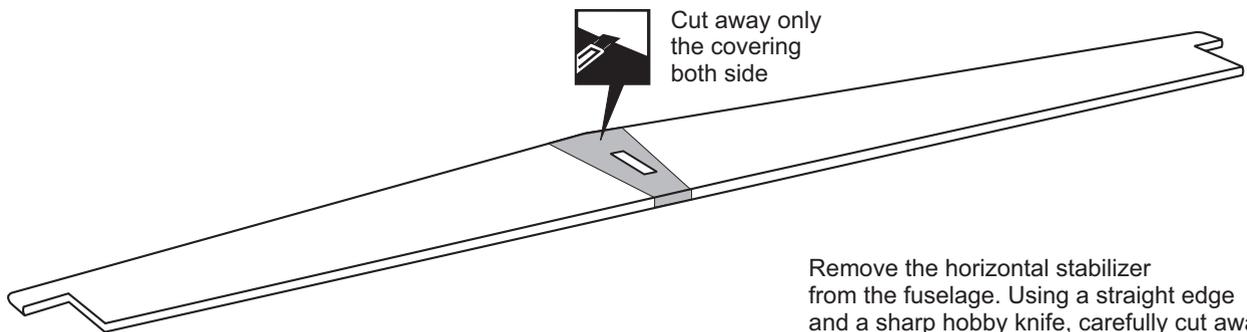
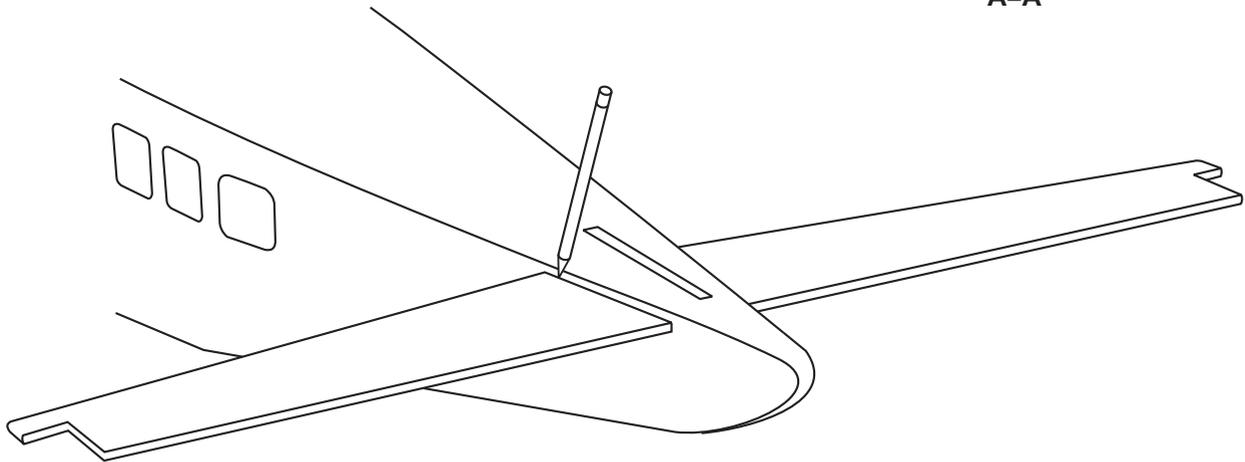
Using a sharp hobby knife, carefully cut away the covering around of all slots for the horizontal stabilizer and vertical fin installation.

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

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.



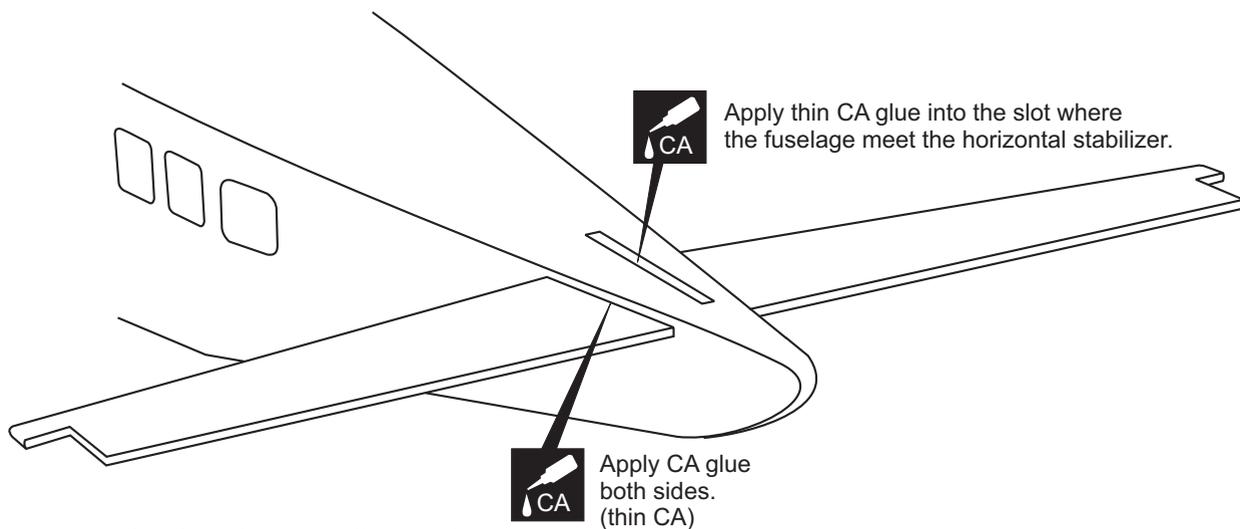
When you are satisfied with the alignment, use a pencil to trace around the top and bottom of the stabilizer where it meets the fuselage.



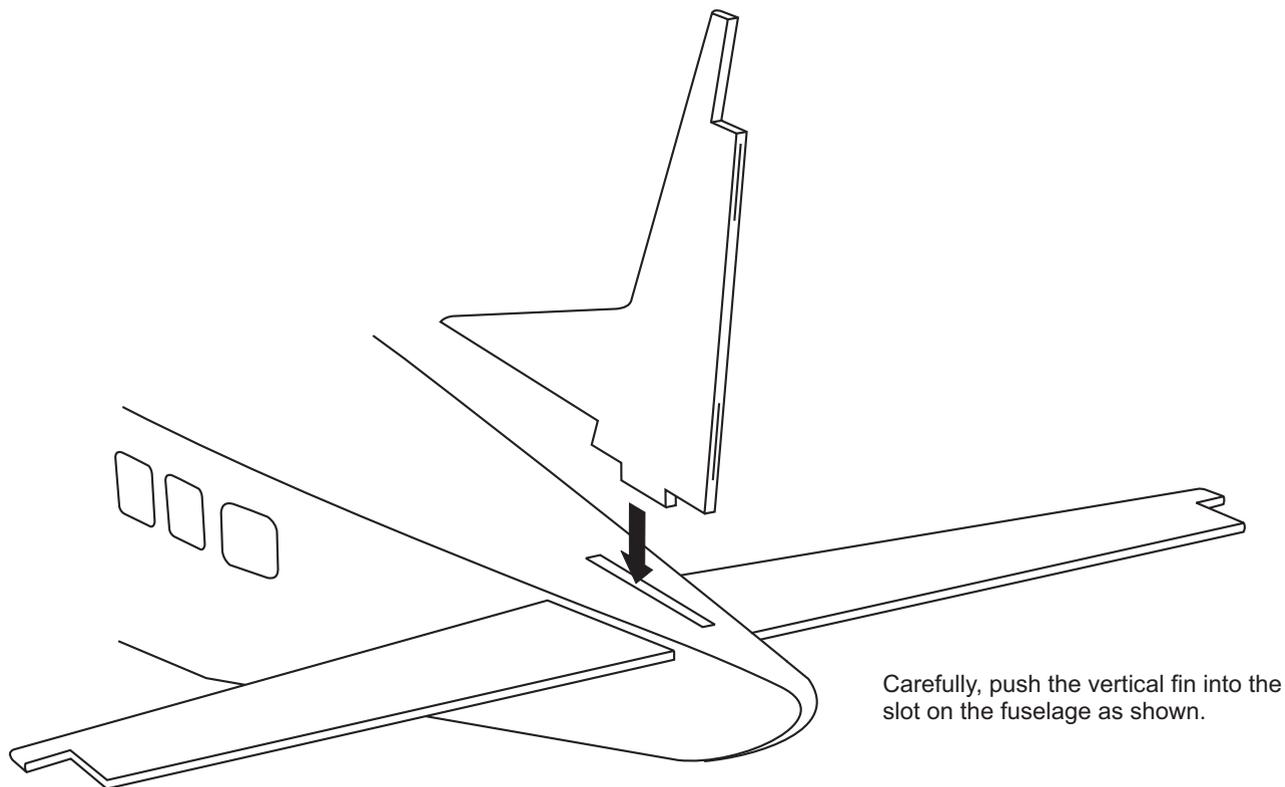
Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above. Be cautious **not to cut into the wood**-this will weaken the structure.

CESSNA 208 12-Horizontal stabilizer

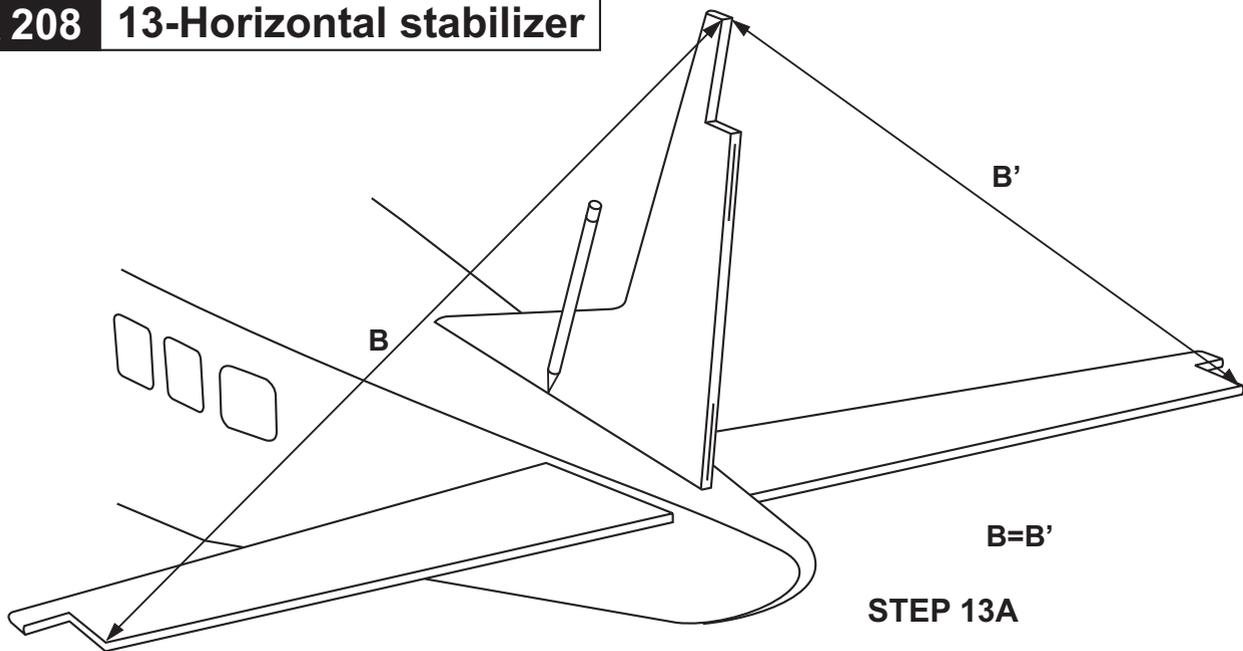
Install the horizontal stabilizer onto the fuselage and adjust the alignment as described in section 11. Note: it is important to ensure that the horizontal stabilizer is also level in regards to the fuselage. Apply the thin CA along the area where the covering was removed in the previous step and to the fuselage where the horizontal stabilizer mounts .



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



CESSNA 208 13-Horizontal stabilizer



Trial fit the vertical fin in position. Using a 90 degree triangle or adjust the vertical stabilizer ensure that the B=B' as shown, the vertical stabilizer is perpendicular to the horizontal stabilizer.

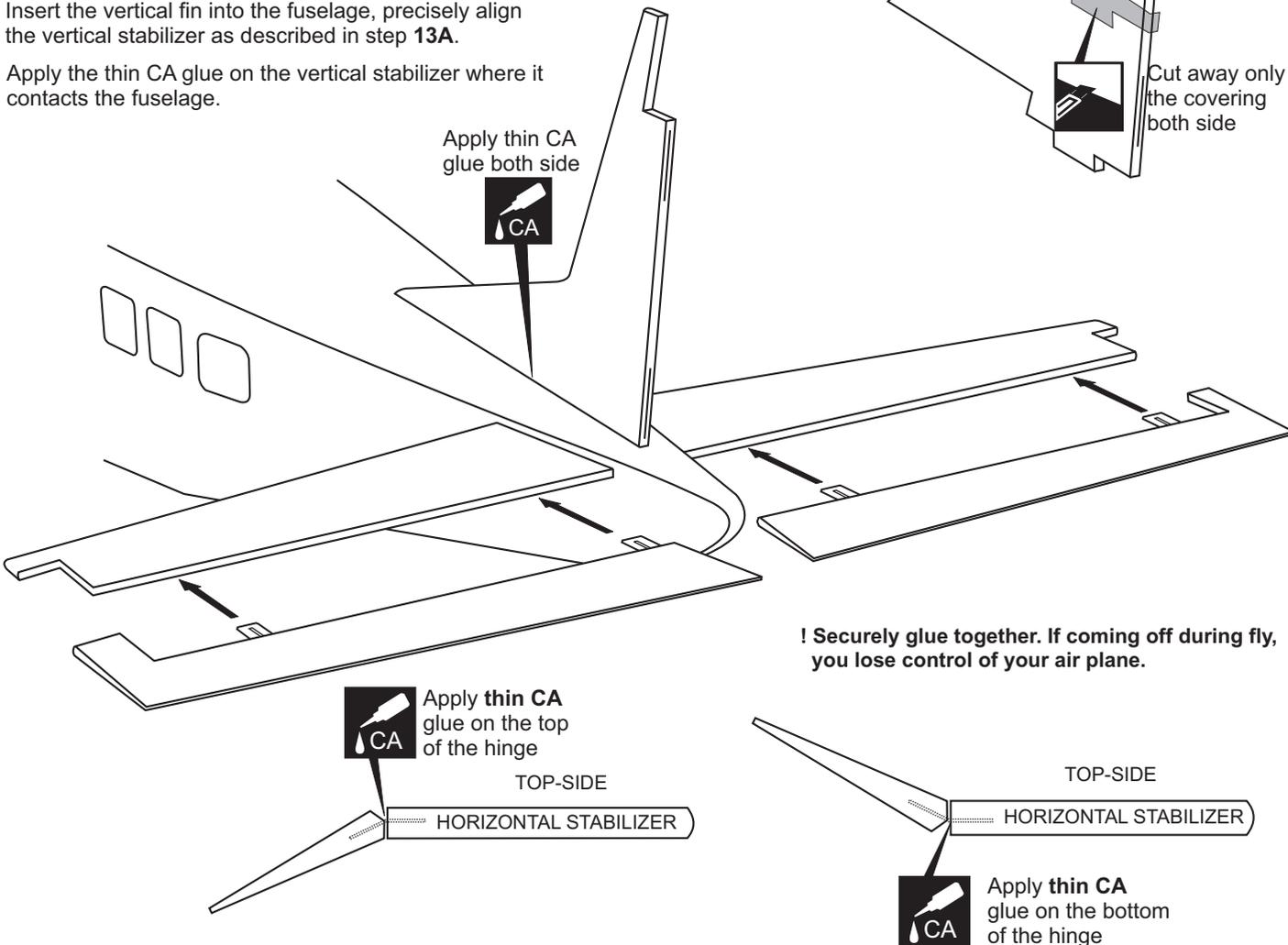
Using a pencil, trace around the vertical stabilizer where it meets the fuselage. Remove the vertical stabilizer from the fuselage.

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.

Insert the vertical fin into the fuselage, precisely align the vertical stabilizer as described in step 13A.

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

Apply thin CA glue both side



Apply **thin CA** glue on the top of the hinge



TOP-SIDE

HORIZONTAL STABILIZER

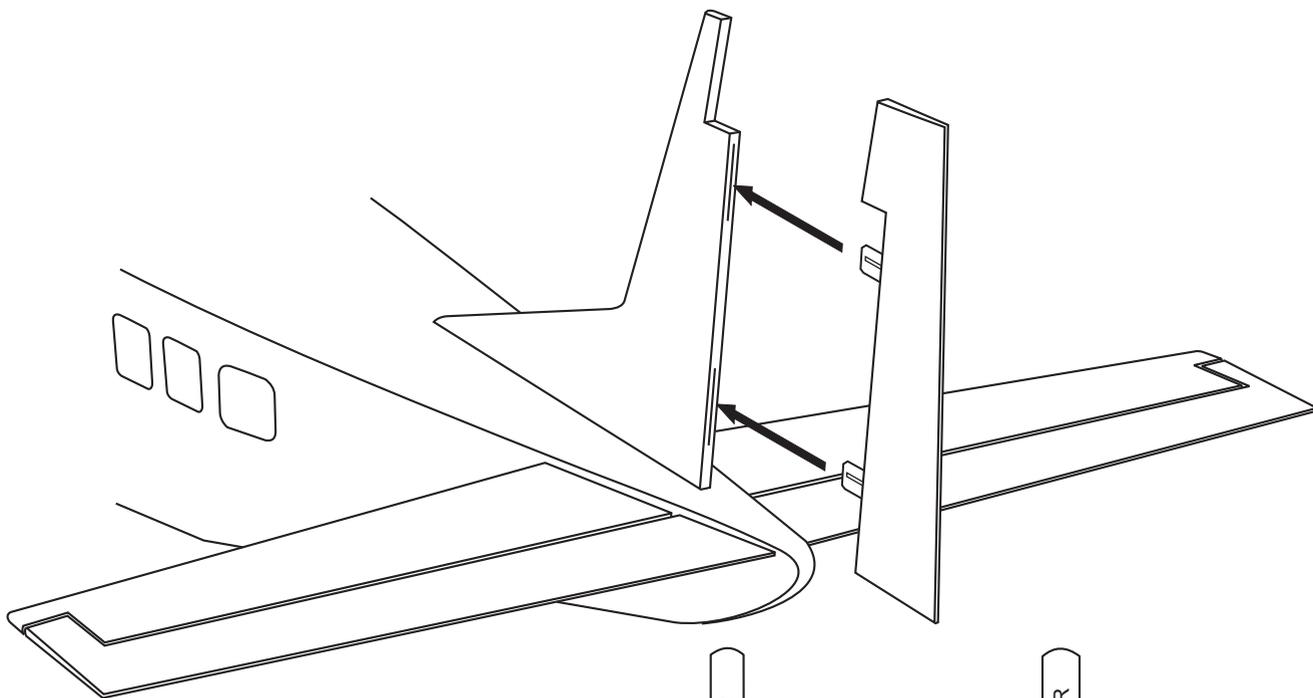
TOP-SIDE

HORIZONTAL STABILIZER

Apply **thin CA** glue on the bottom of the hinge



CESSNA 208 14-Horizontal stabilizer



RIGHT-SIDE

VERTICAL STABILIZER

Apply **thin CA**
glue on the right
of the hinge



LEFT-SIDE

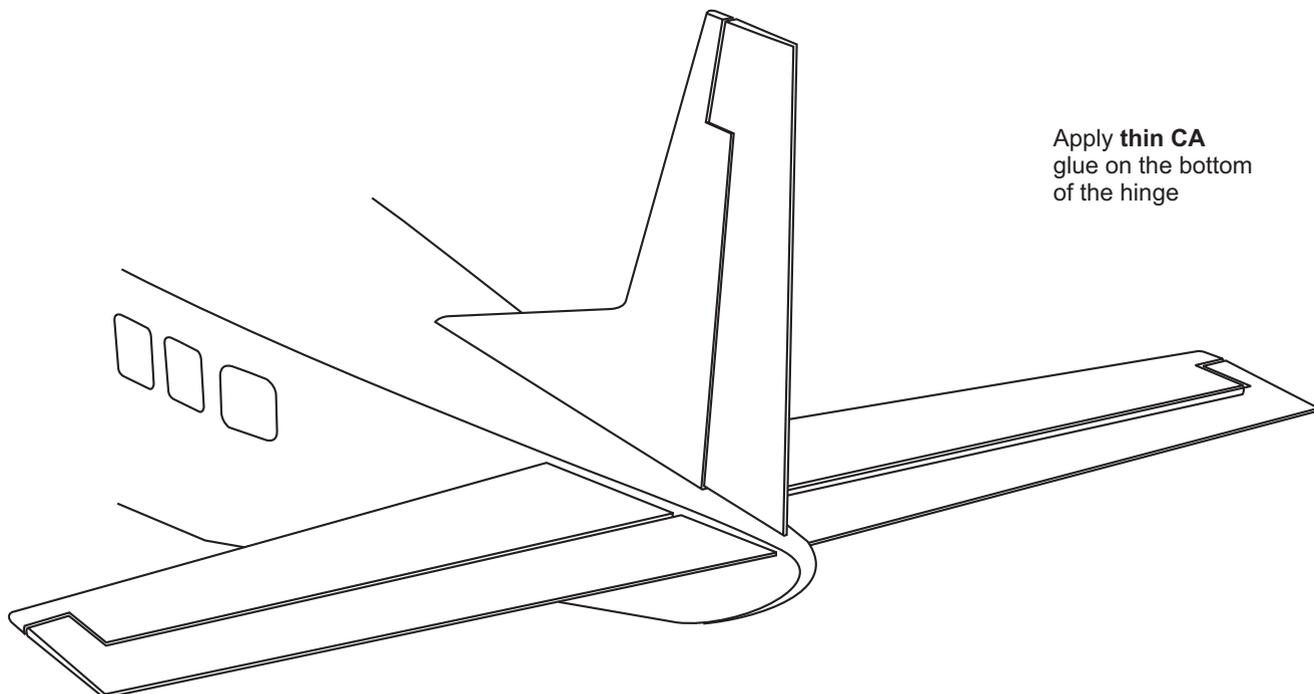
VERTICAL STABILIZER

Apply **thin CA**
glue on the LEFT
of the hinge



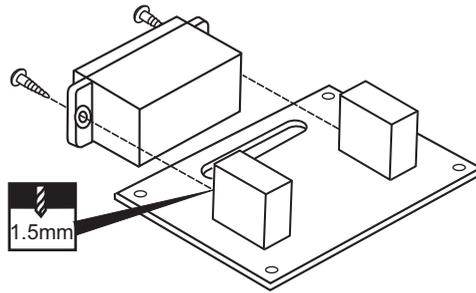
**! Securely glue together. If coming off during fly,
you lose control of your air plane.**

Apply **thin CA**
glue on the bottom
of the hinge

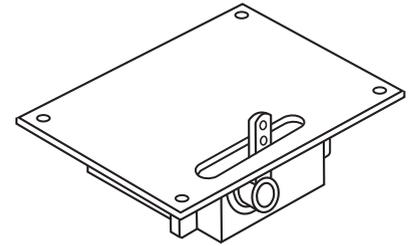


CESSNA 208 15-Wing: Flap and Aileron servo

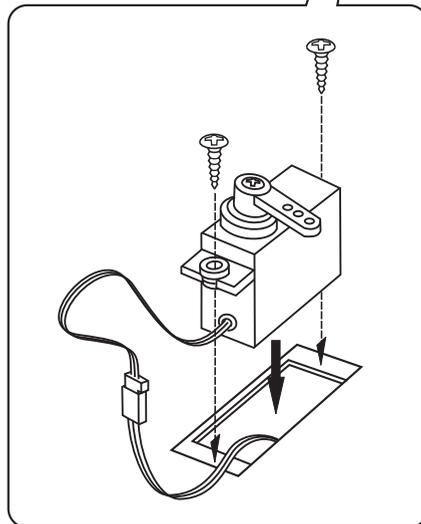
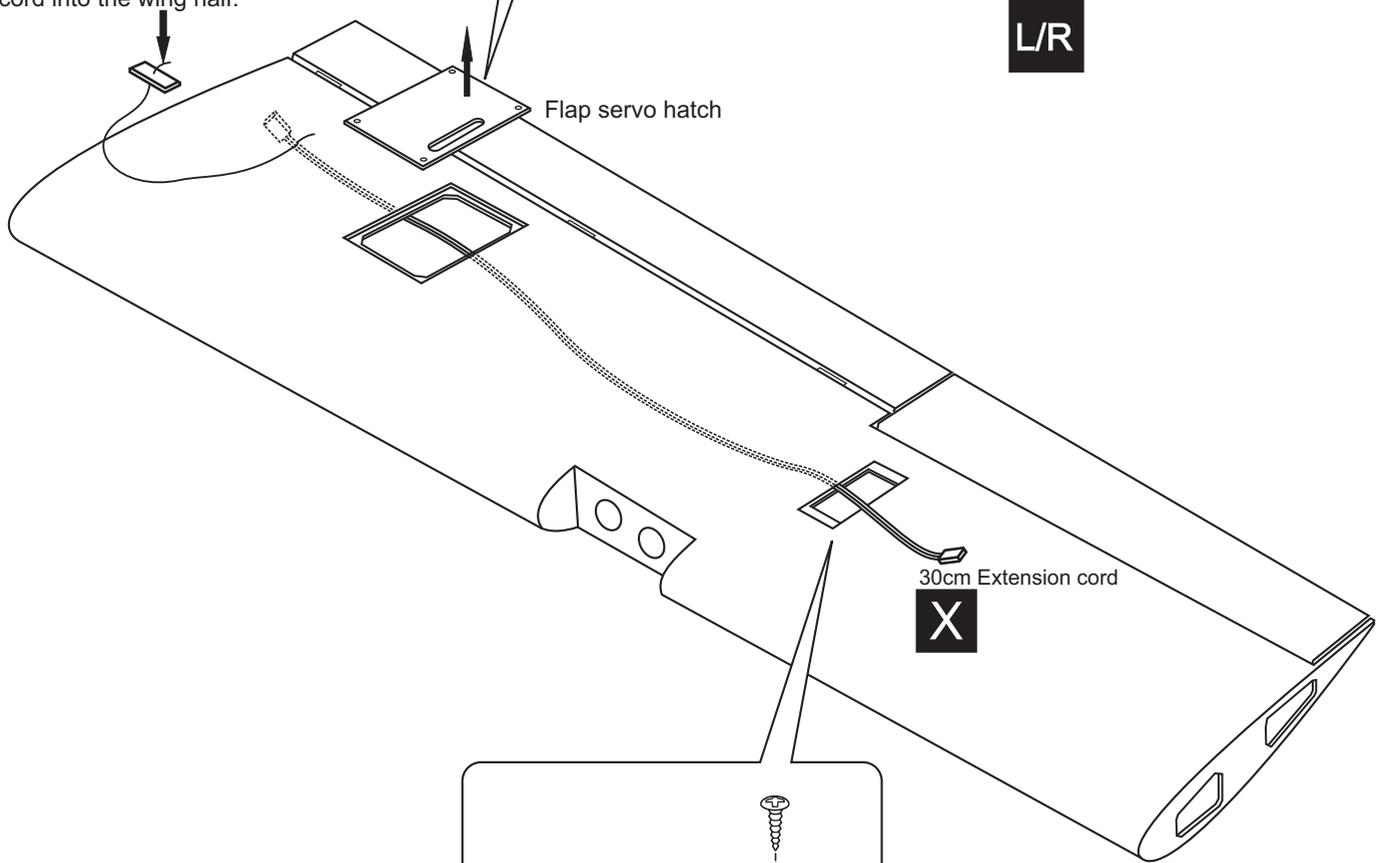
FLAP SERVO HATCH - BOTTOM VIEW



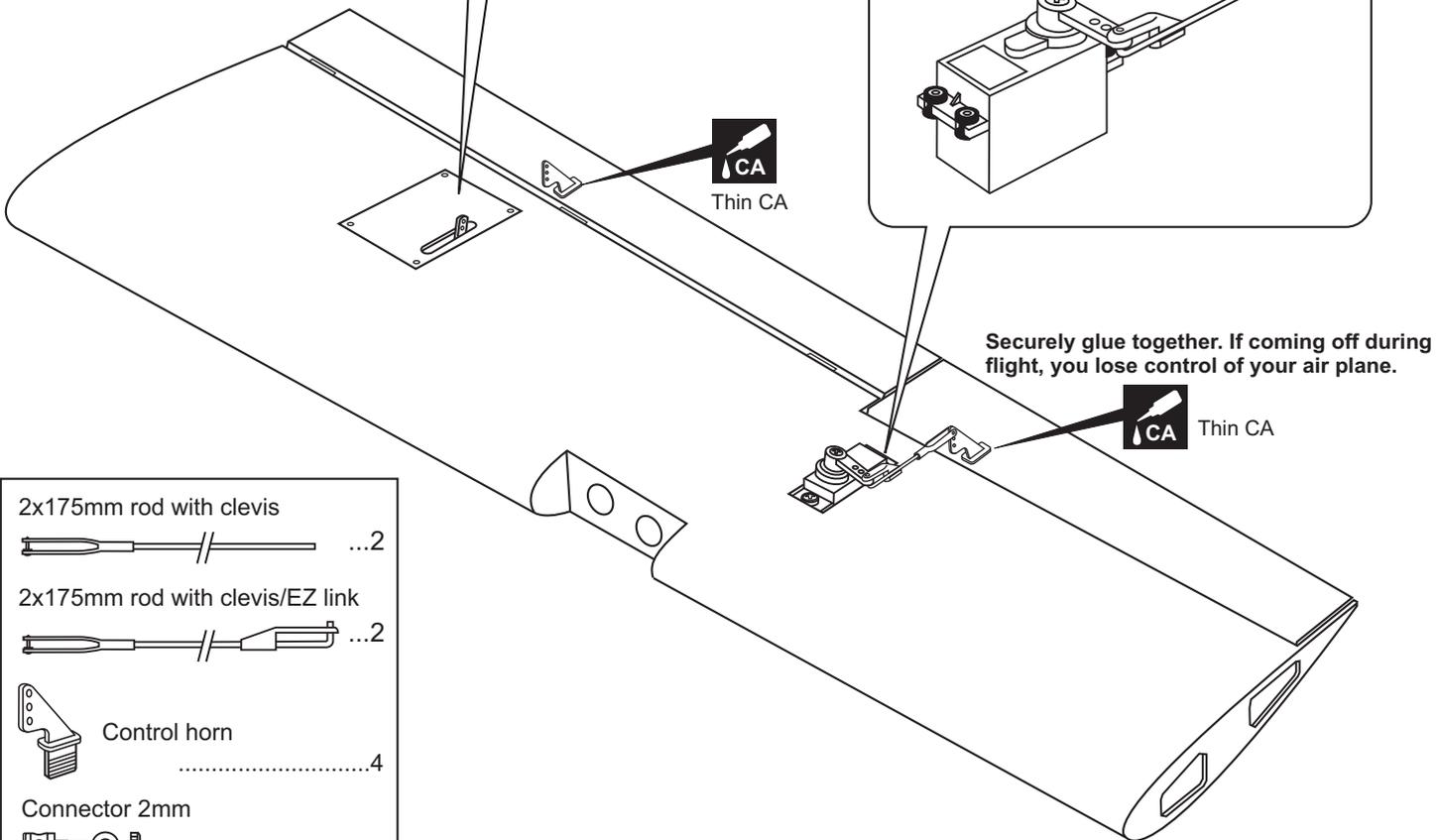
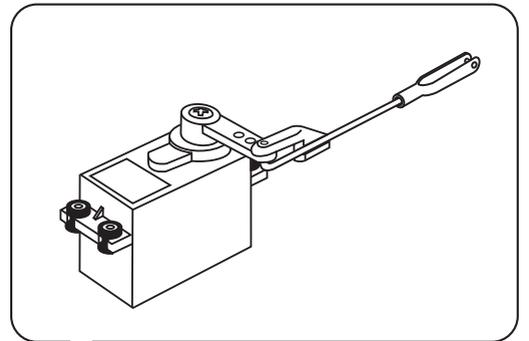
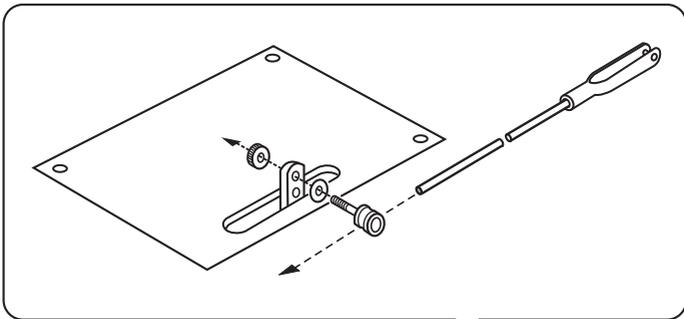
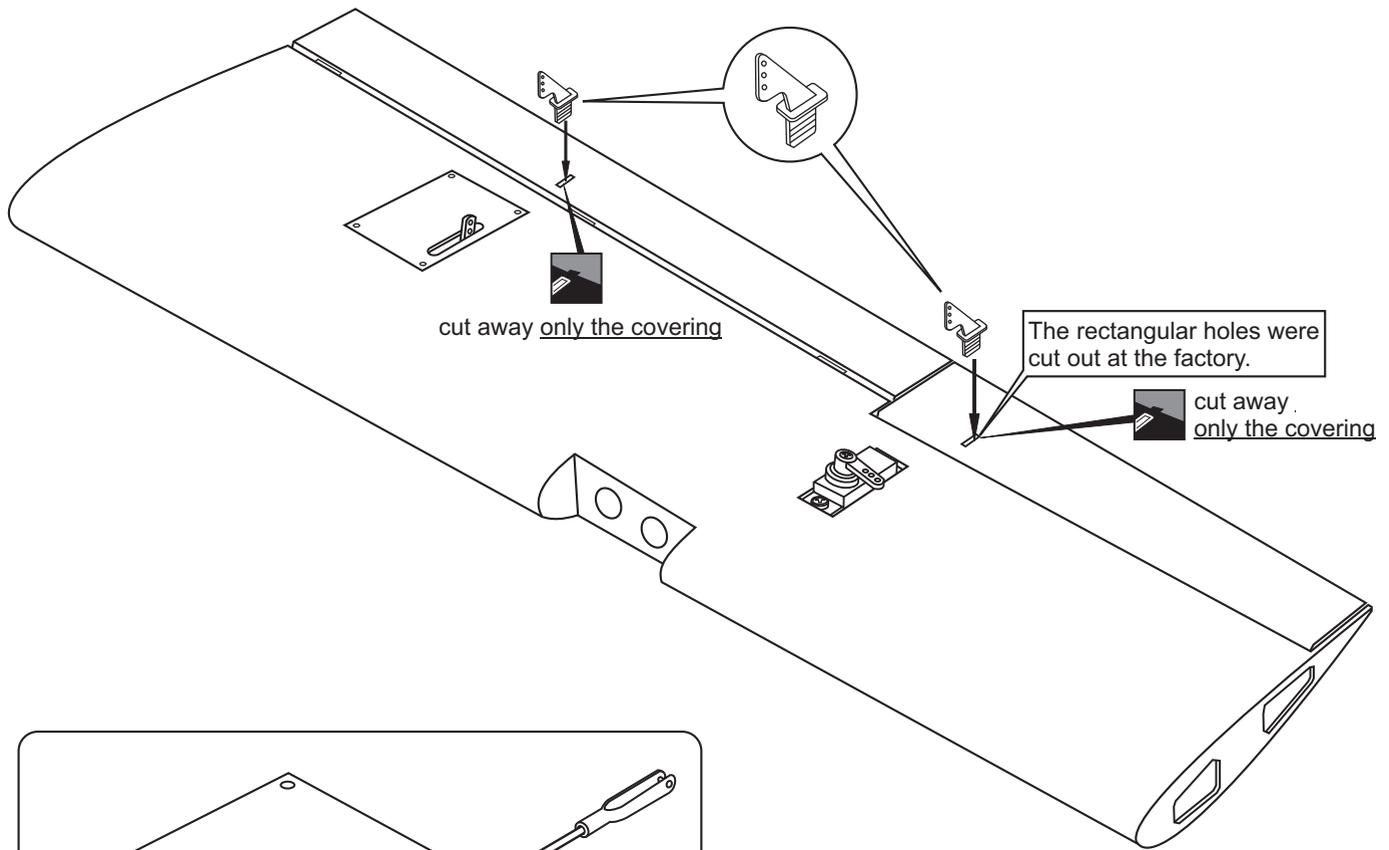
FLAP SERVO HATCH - TOP VIEW



Using the thread (pre-installed at factory) to slide the aileron extension cord into the wing half.



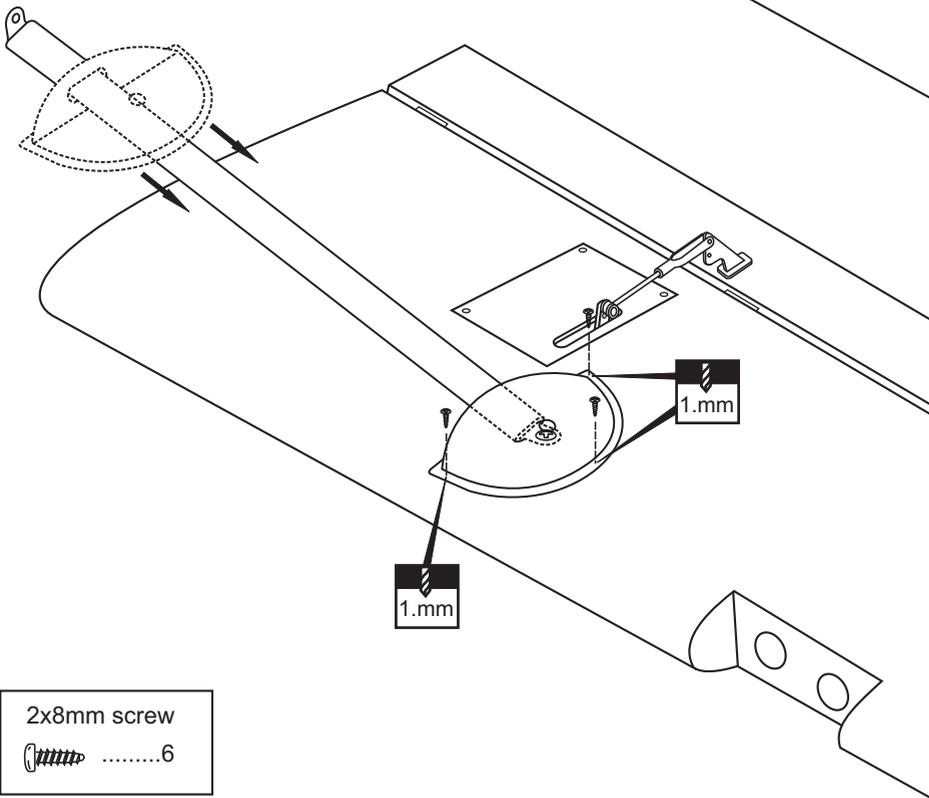
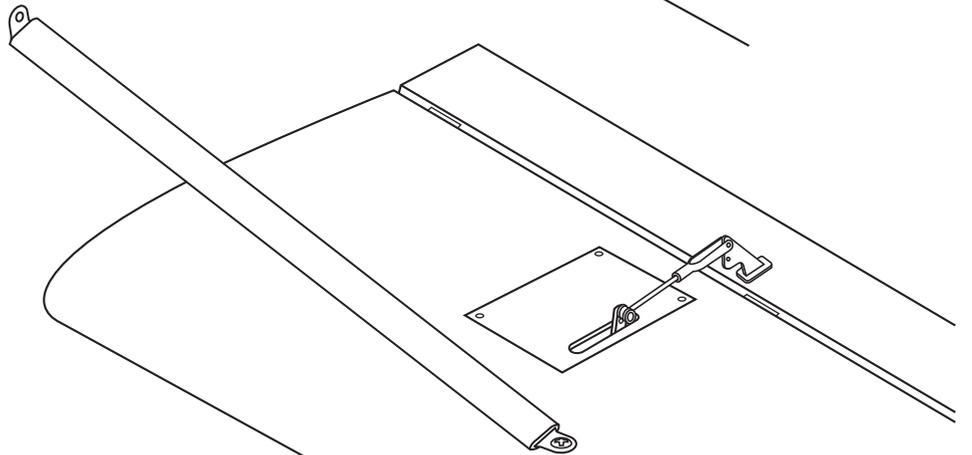
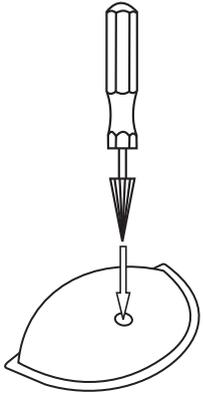
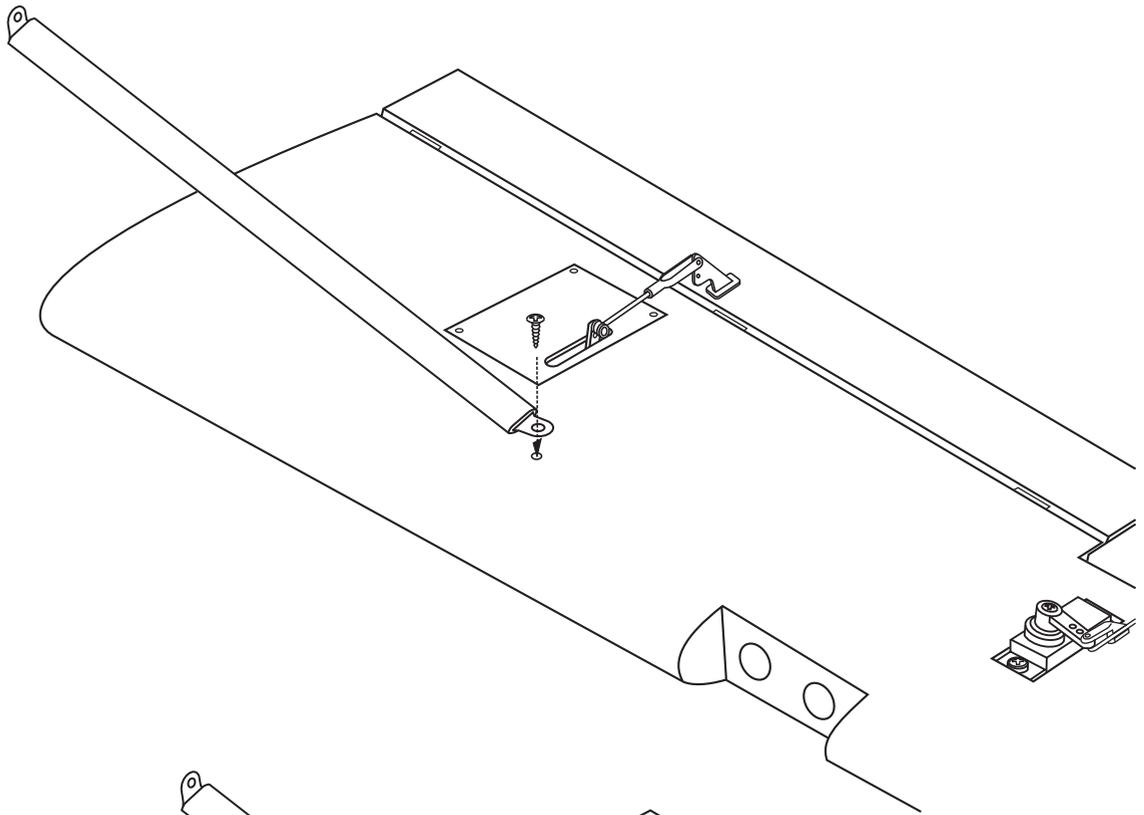
CESSNA 208 16-Wing: Flap and Aileron linkages



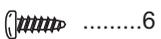
- 2x175mm rod with clevis ...2
- 2x175mm rod with clevis/EZ link ...2
- Control horn4
- Connector 2mm2

CESSNA 208 17-Wing: wing brace

3X12mm screw

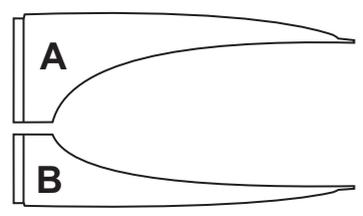


2x8mm screw

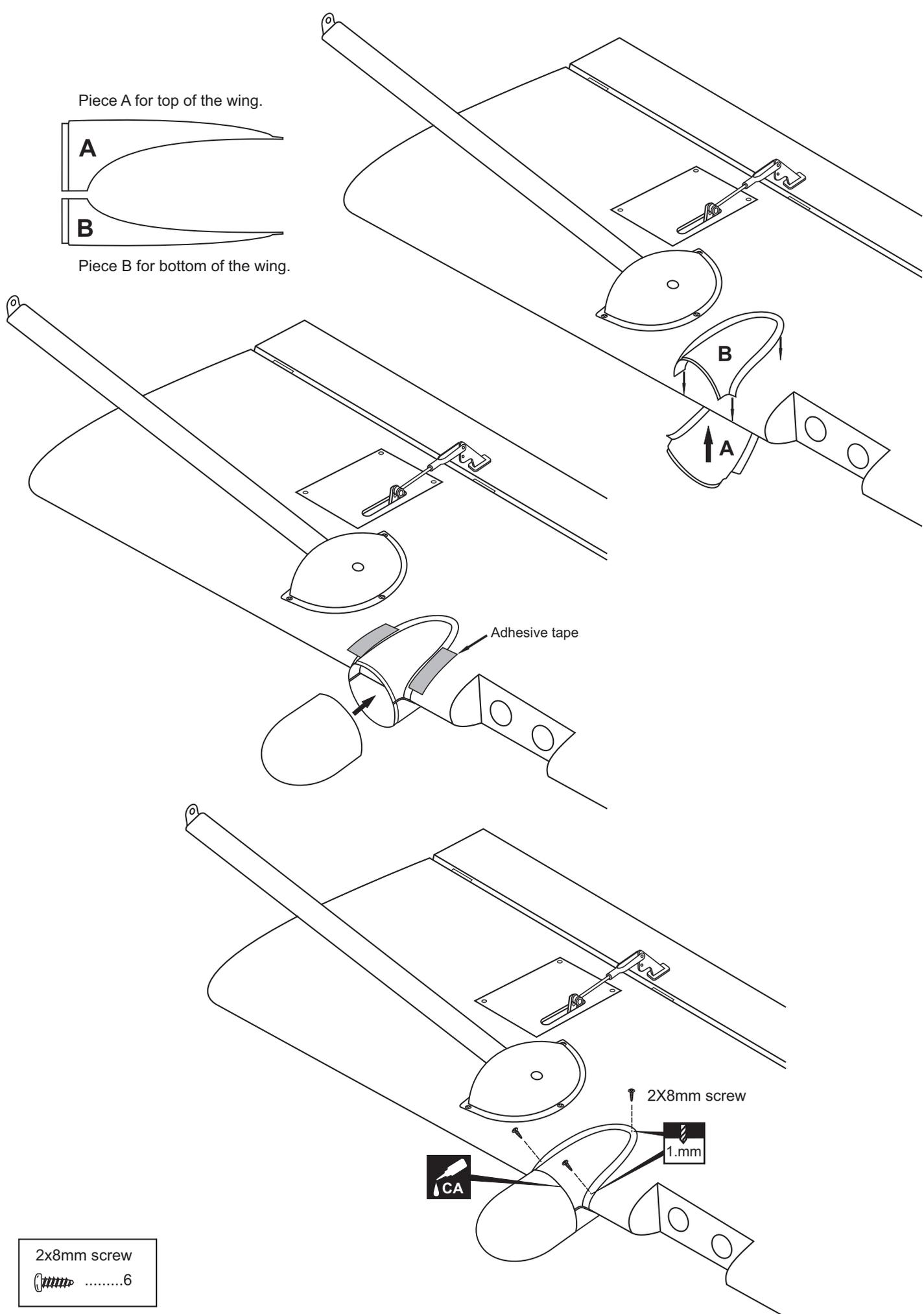


CESSNA 208 18-Wing:

Piece A for top of the wing.

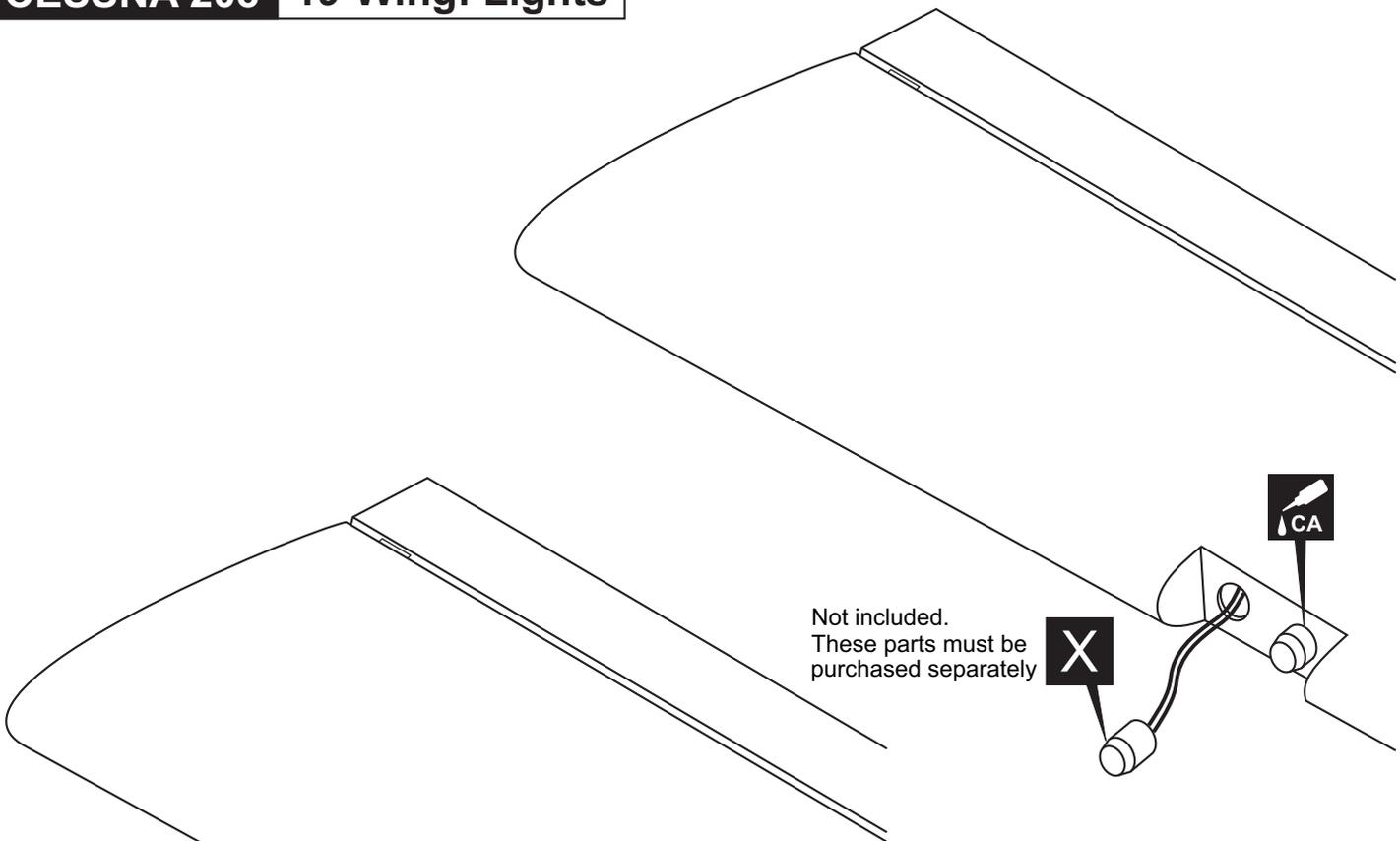


Piece B for bottom of the wing.

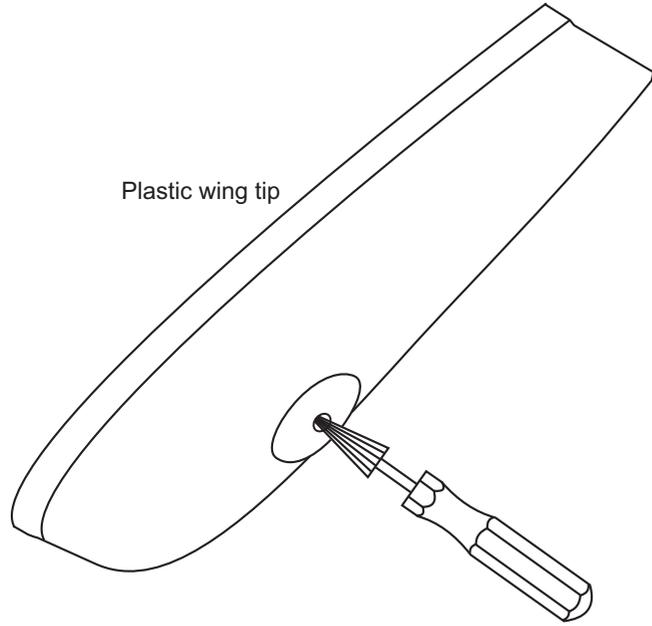
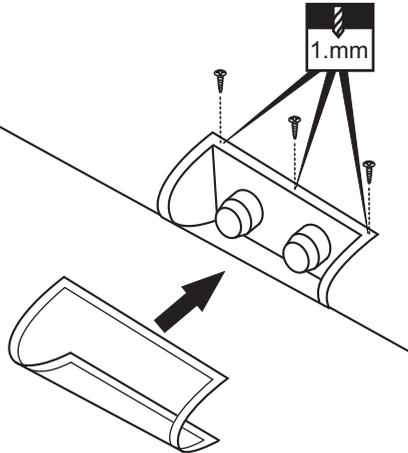


2x8mm screw
6

CESSNA 208 19-Wing: Lights

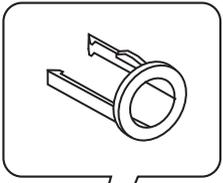


2x8mm screw
6

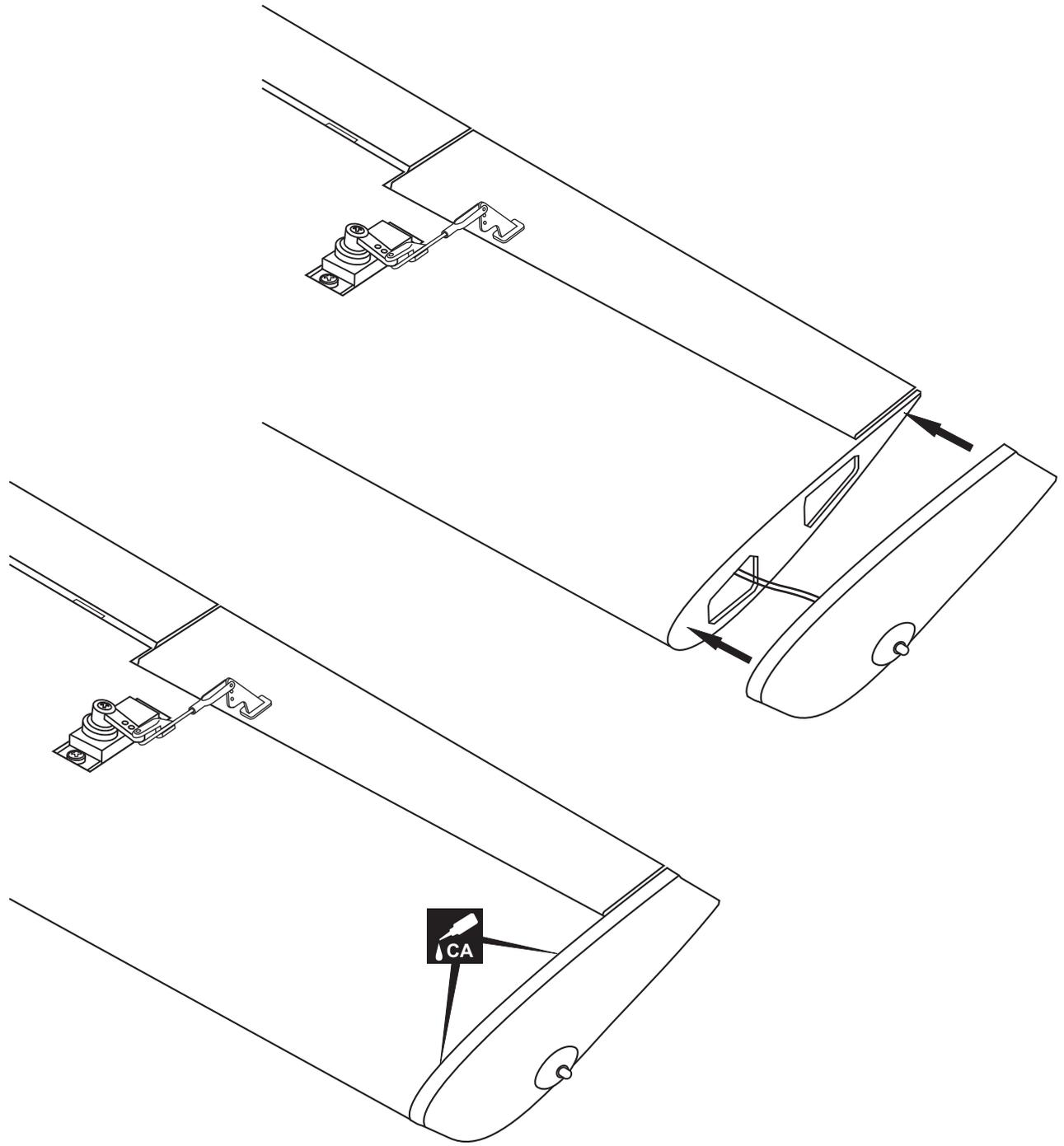
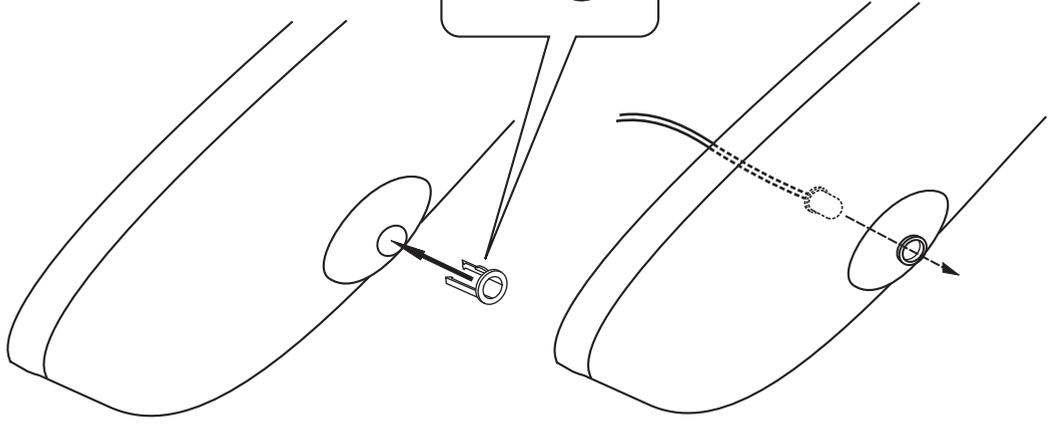


Plastic wing tip

CESSNA 208 20-Wing: Lights

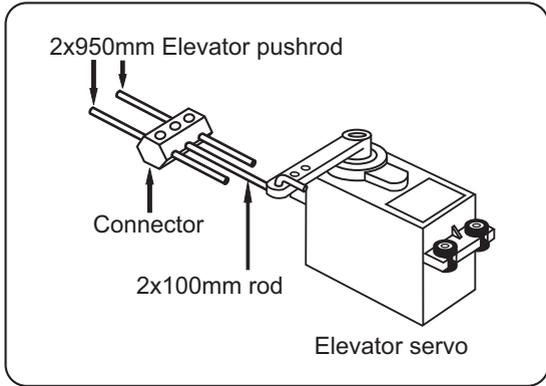


X Not included.
These parts must be purchased separately

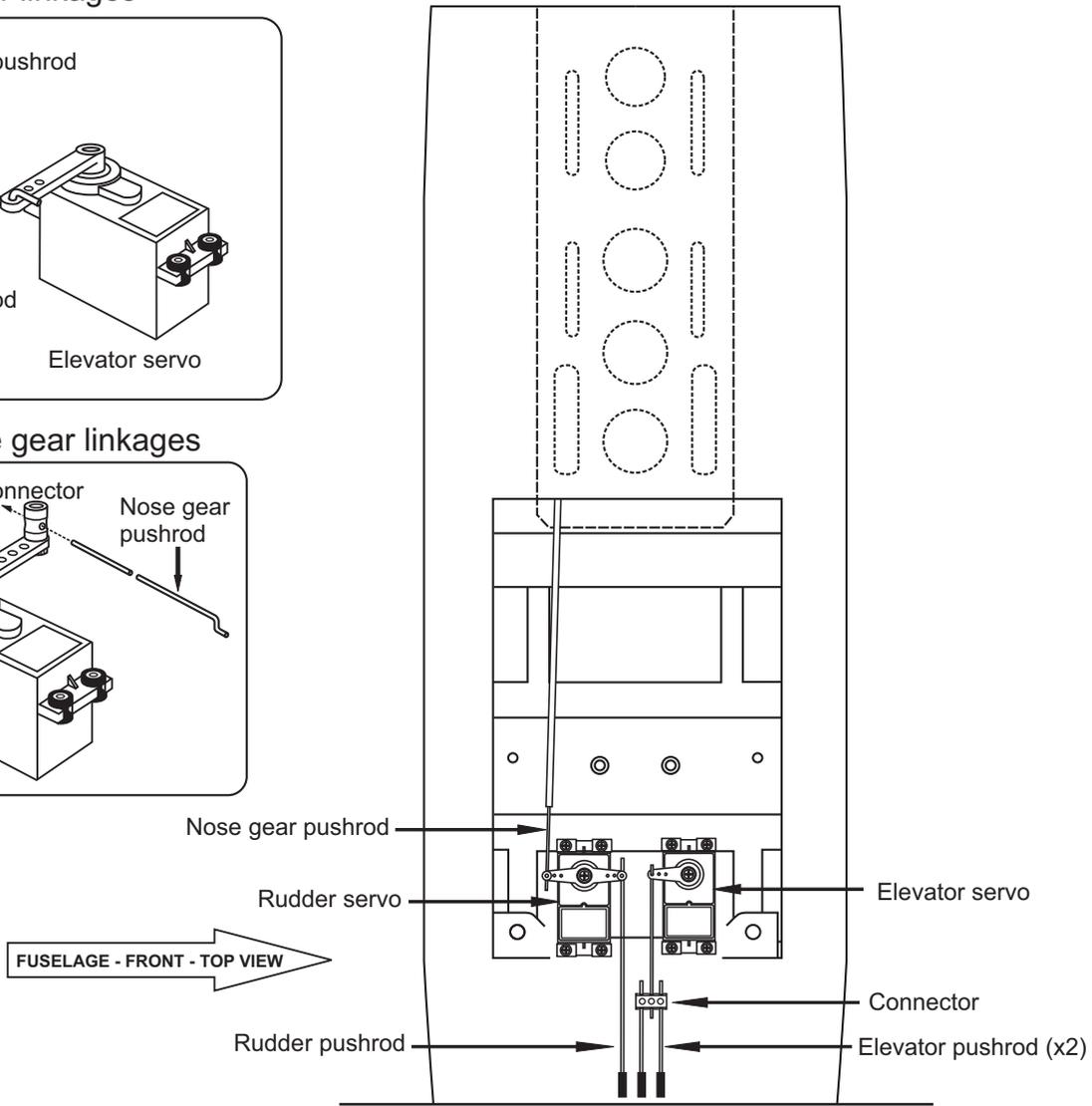
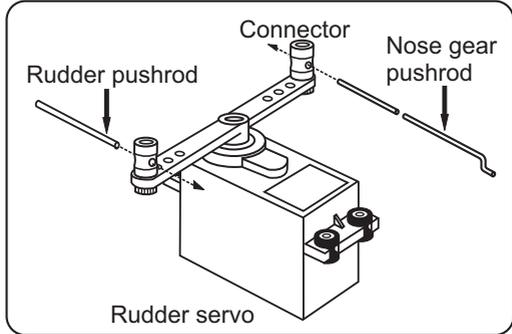


CESSNA 208 21-Elevator&Rudder servo - linkages

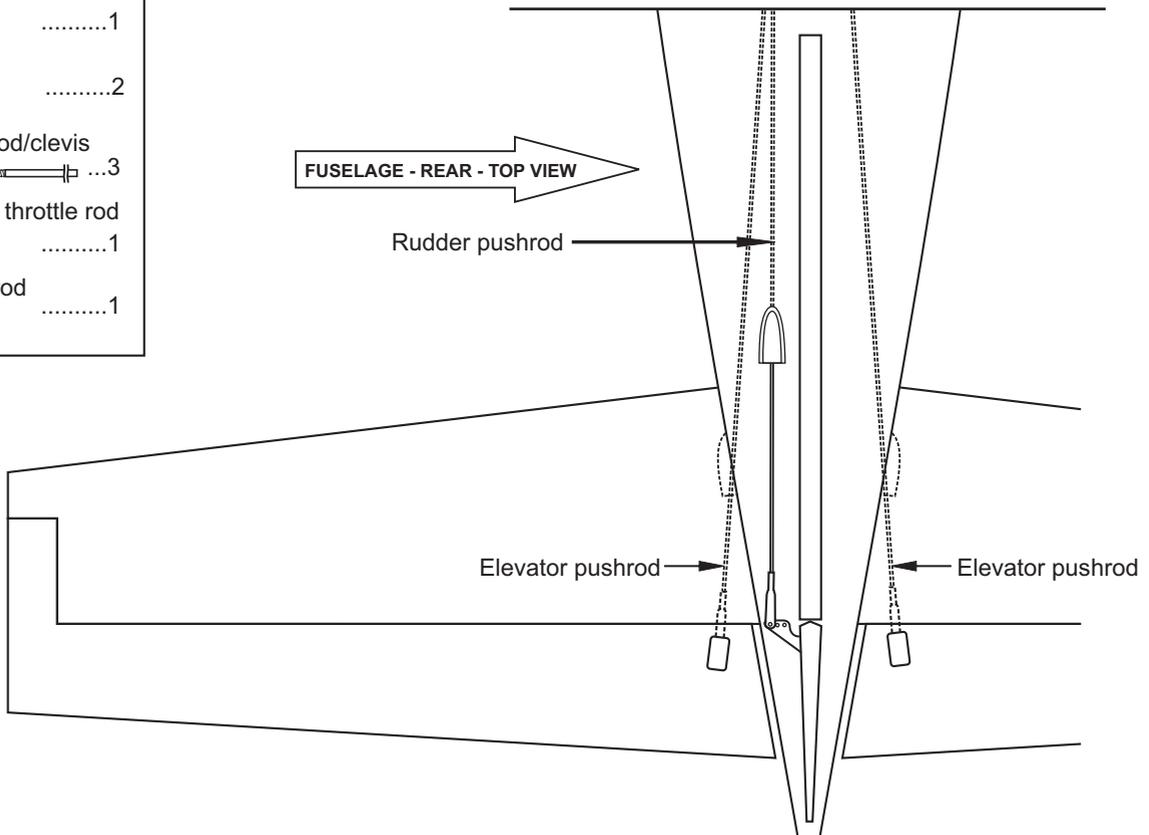
Elevator linkages



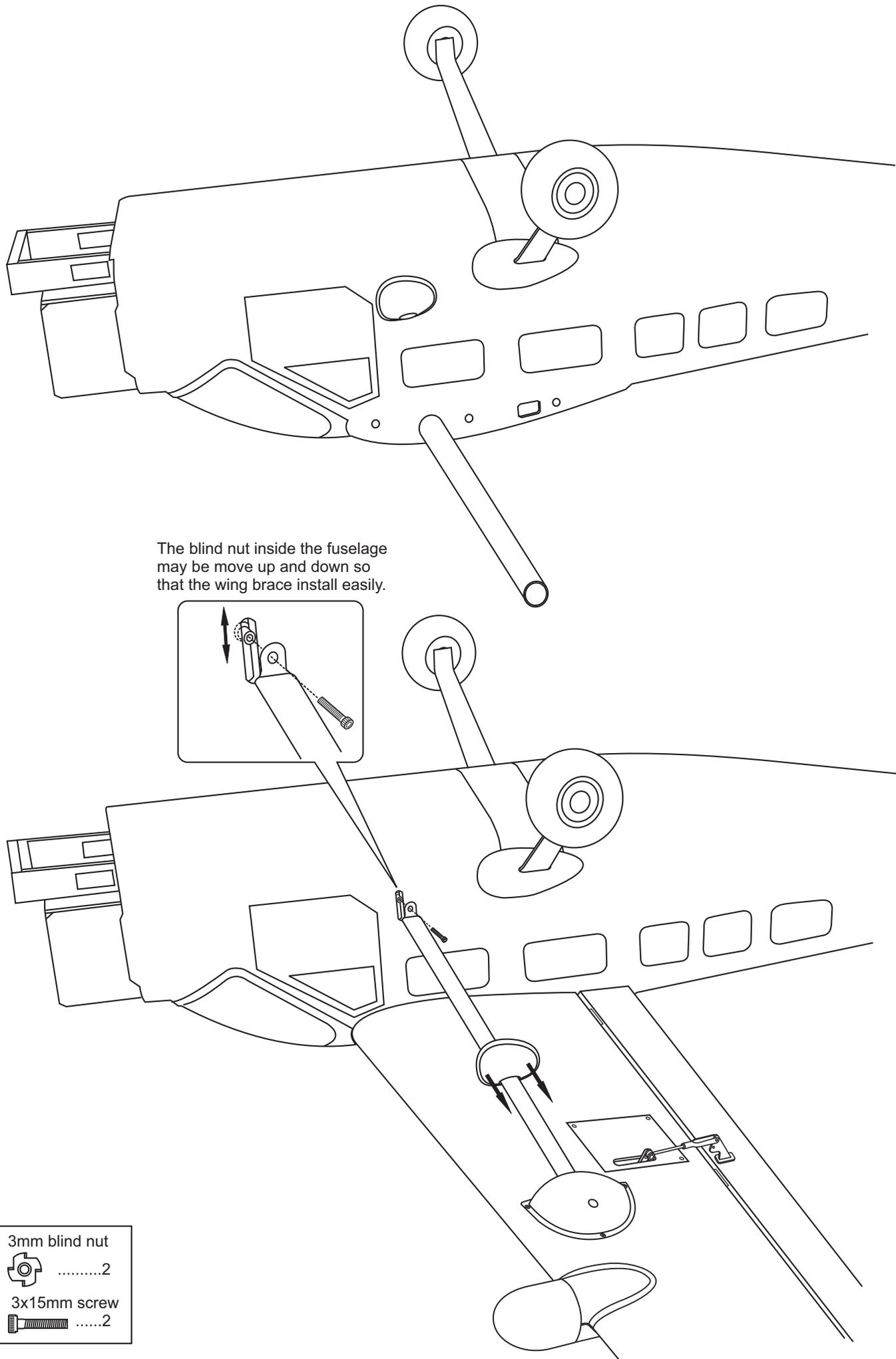
Rudder&Nose gear linkages



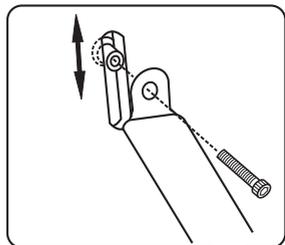
- | | | |
|------------------------|--|--------|
| Connector | |1 |
| Connector | |2 |
| 2x950mm rod/clevis | | ...3 |
| 1.2x550mm throttle rod | |1 |
| 2x100mm rod | |1 |



CESSNA 208 22-Joining the wings



The blind nut inside the fuselage may be move up and down so that the wing brace install easily.



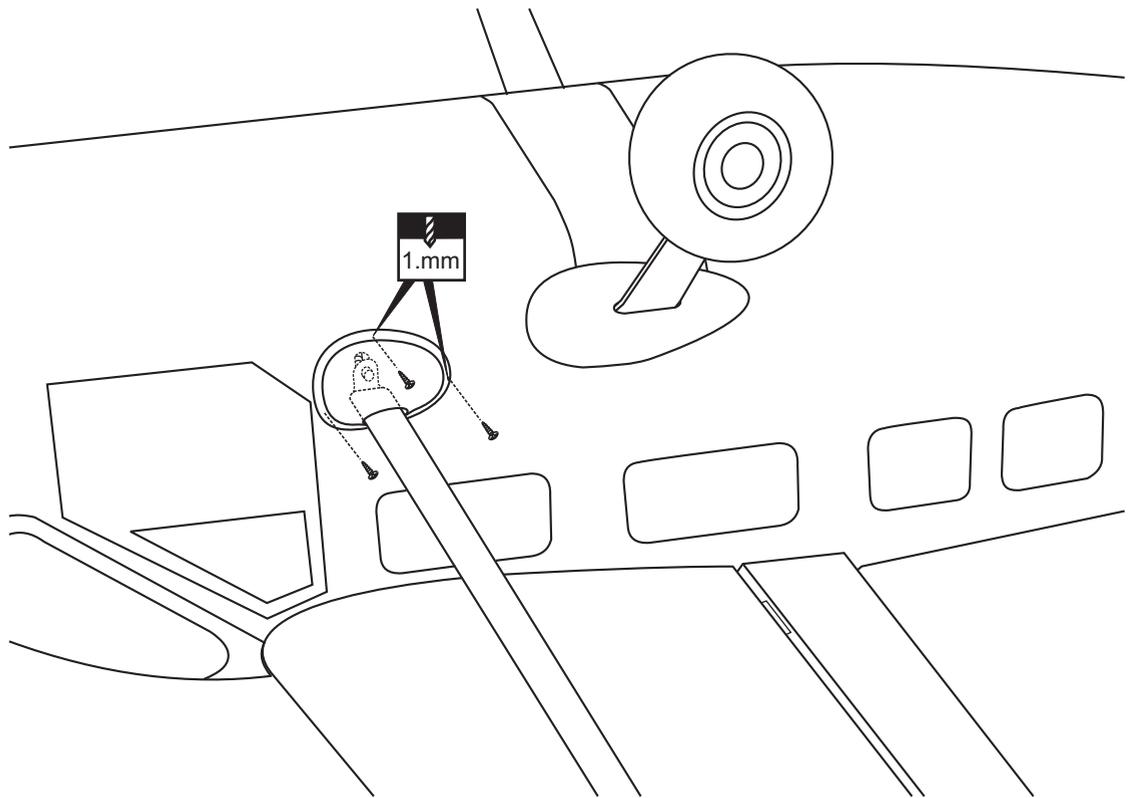
3mm blind nut



3x15mm screw



CESSNA 208 23-Joining the wings

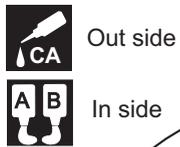


2x8mm screw

6

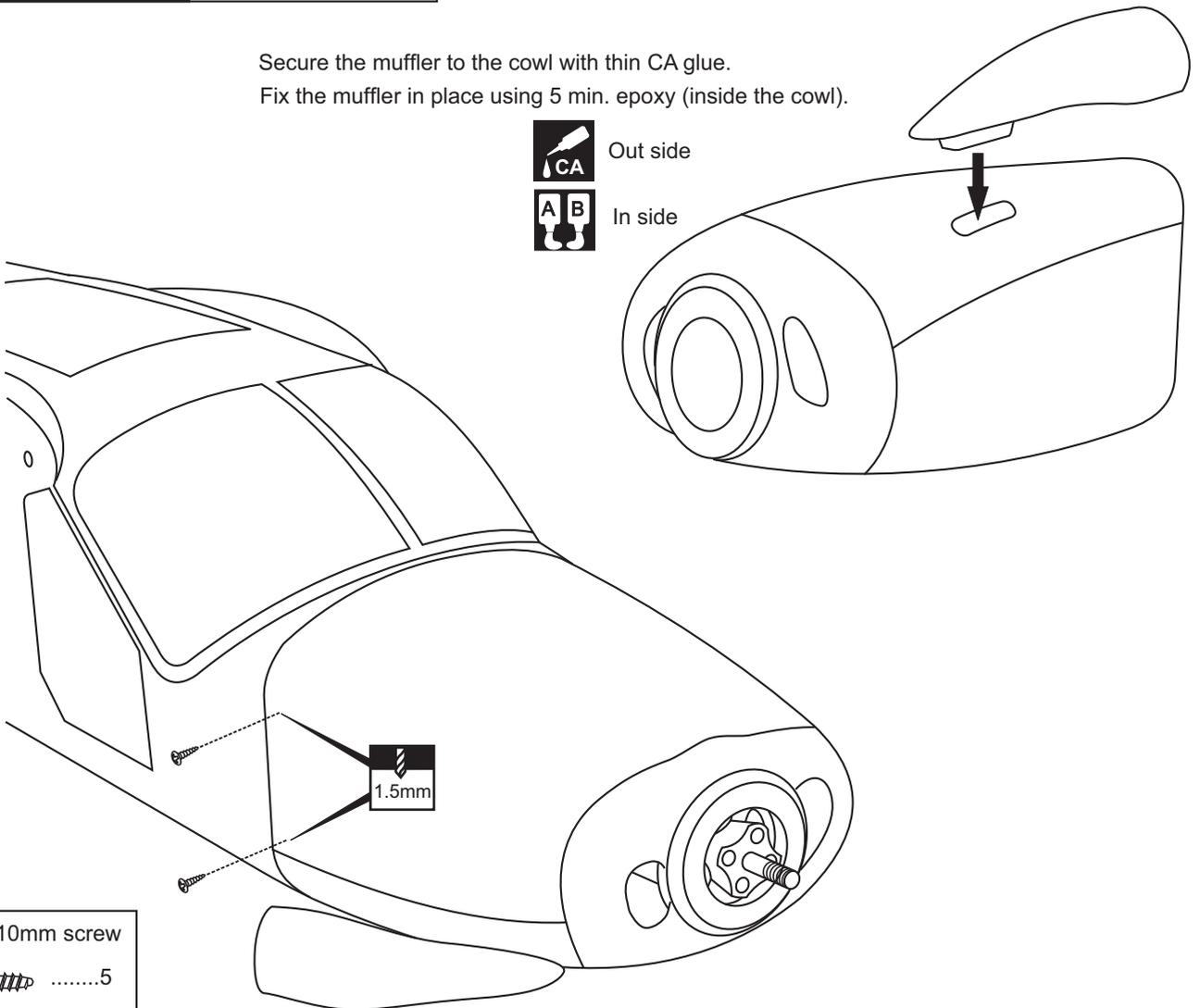
CESSNA 208 24-Cowling

Secure the muffler to the cowl with thin CA glue.
Fix the muffler in place using 5 min. epoxy (inside the cowl).



Out side

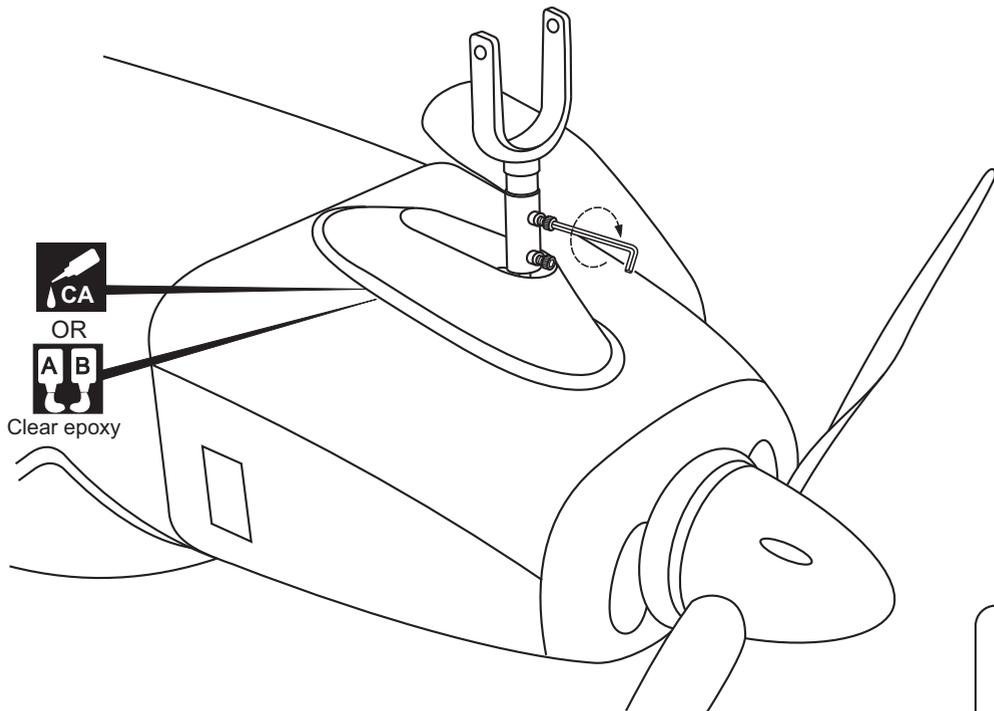
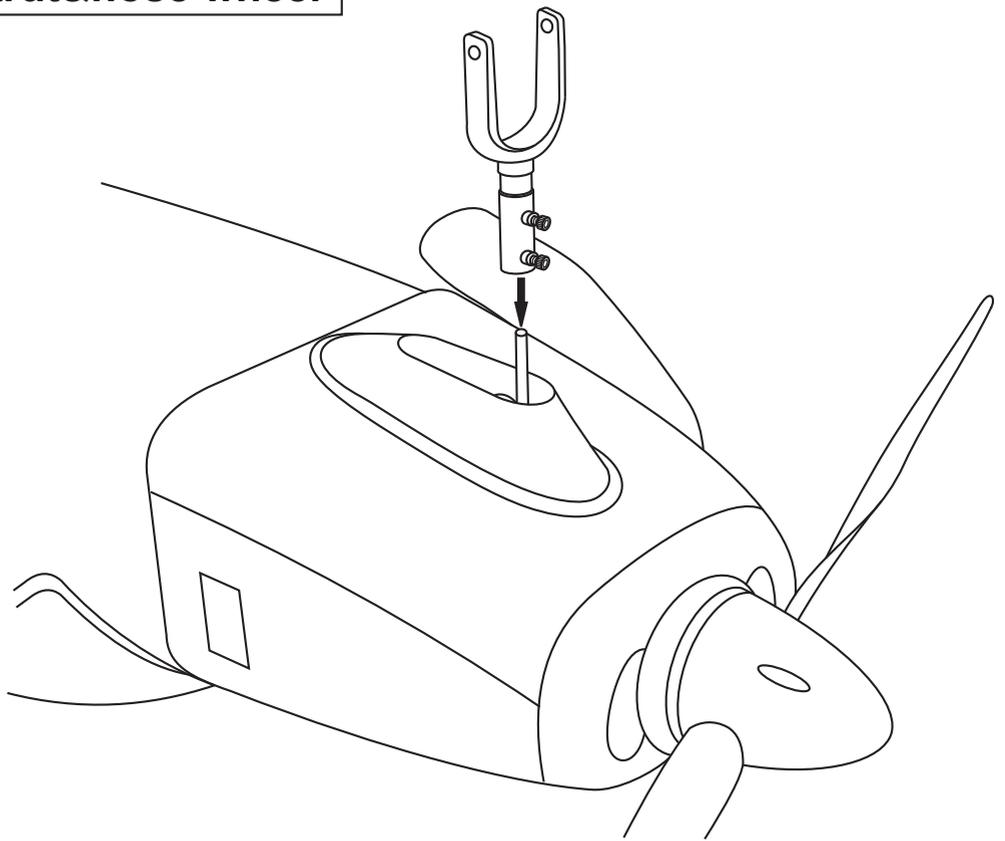
In side



2.5x10mm screw

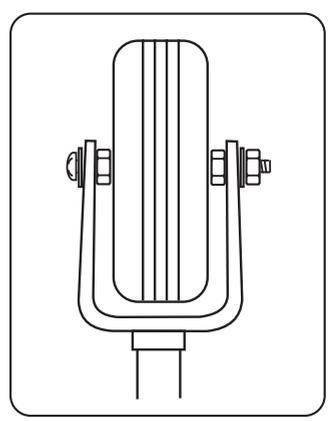
5

CESSNA 208 25-Strut&nose wheel

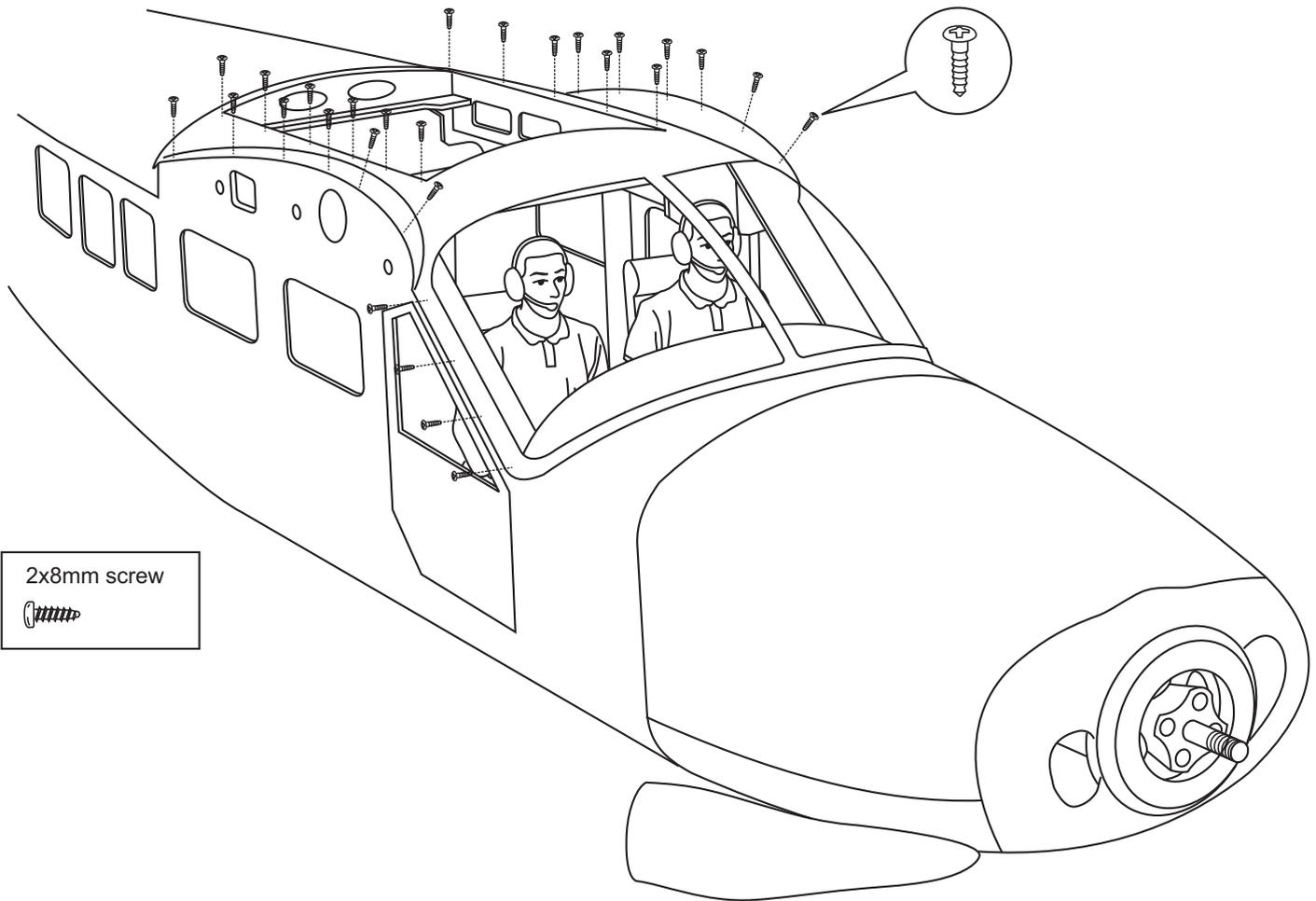
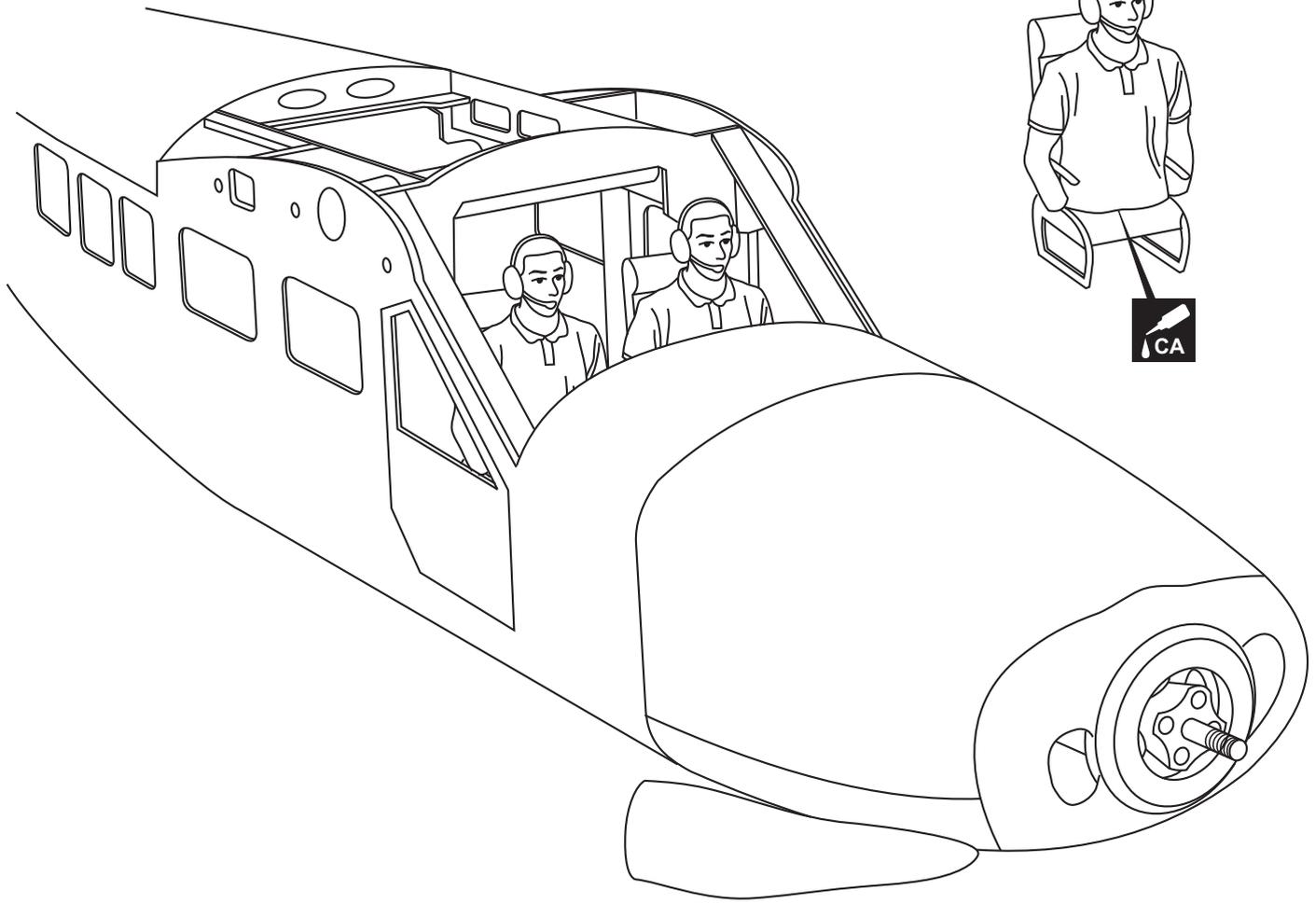


CA
OR
A B
Clear epoxy

- 4x40mm screw ...1
- 4mm washer ...2
- 4mm nut ...3



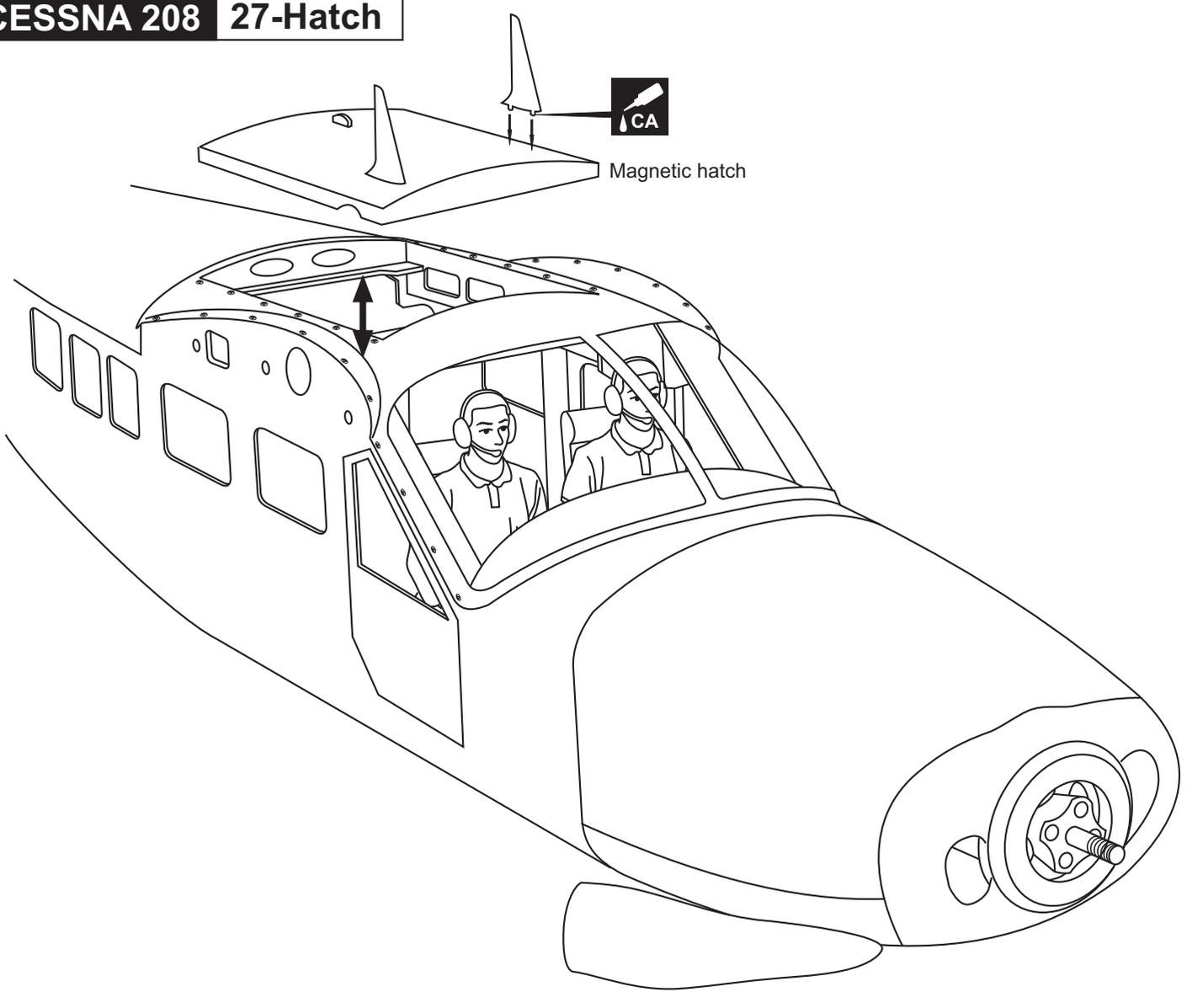
CESSNA 208 26-Pilot figure&Plastic cover



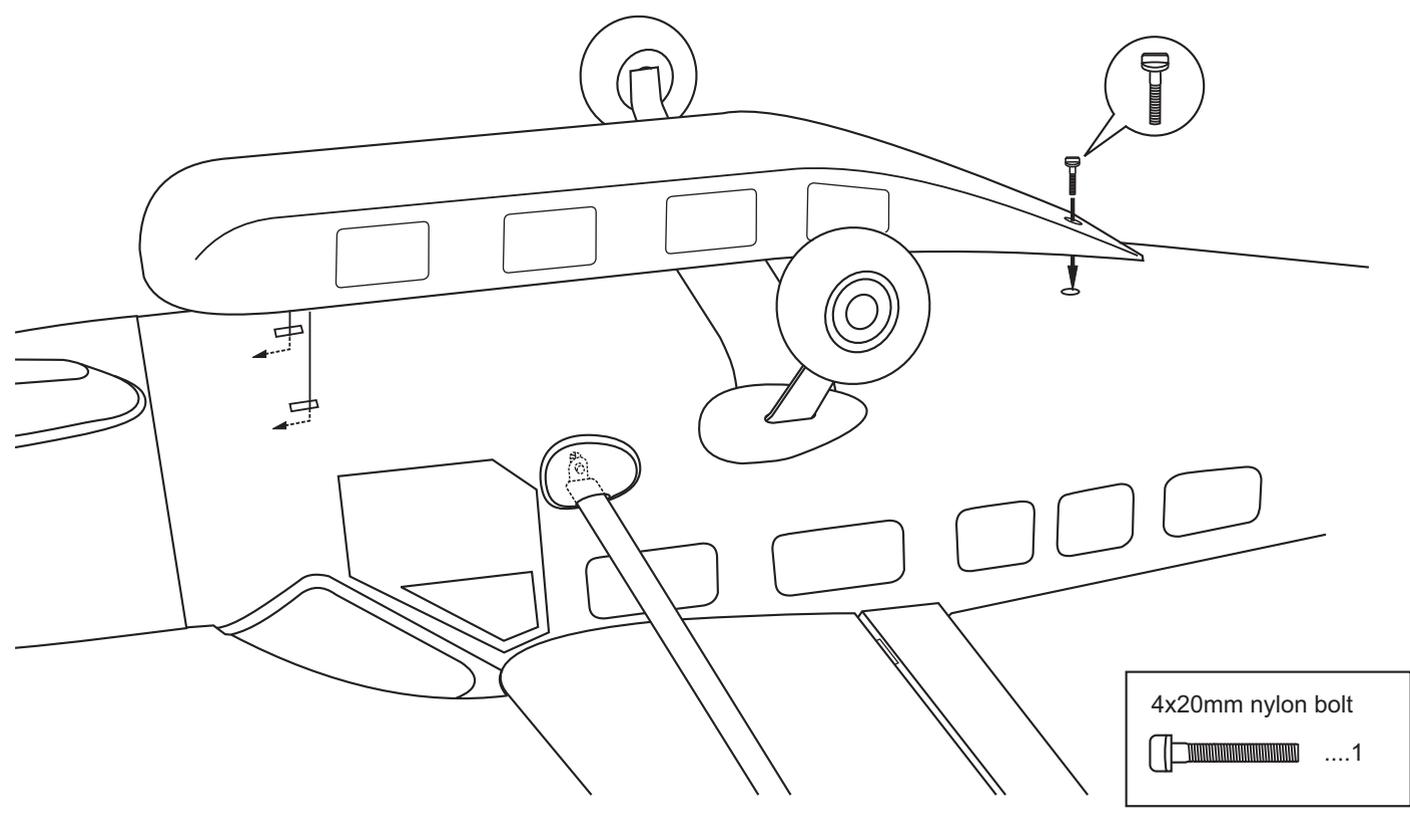
2x8mm screw

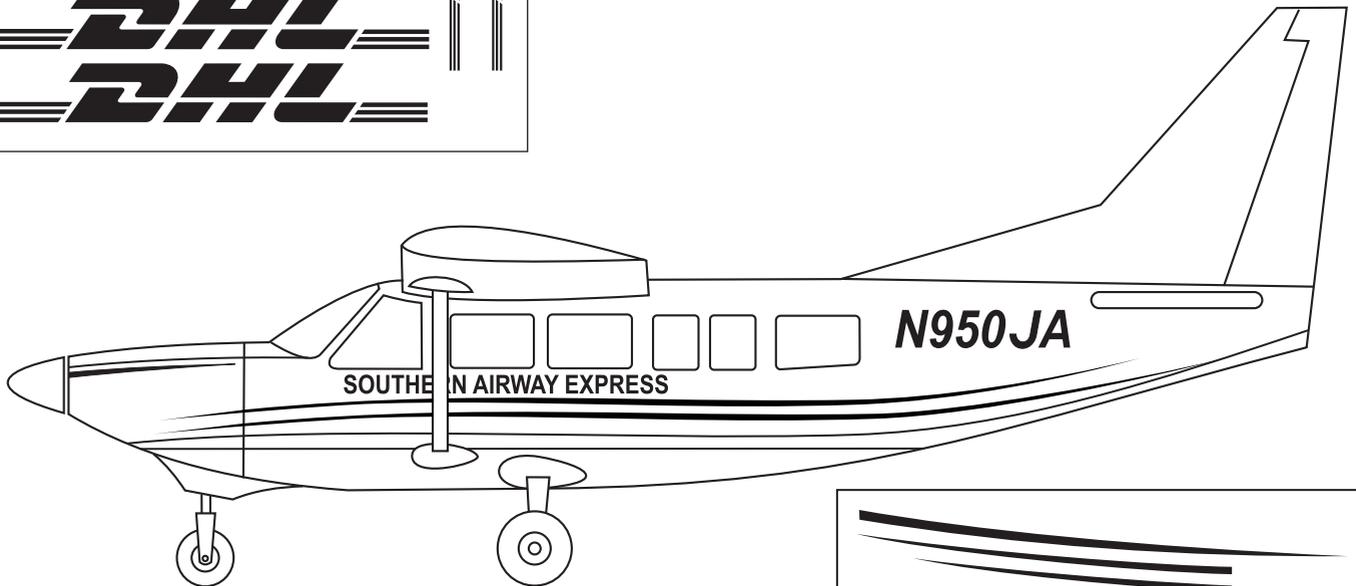
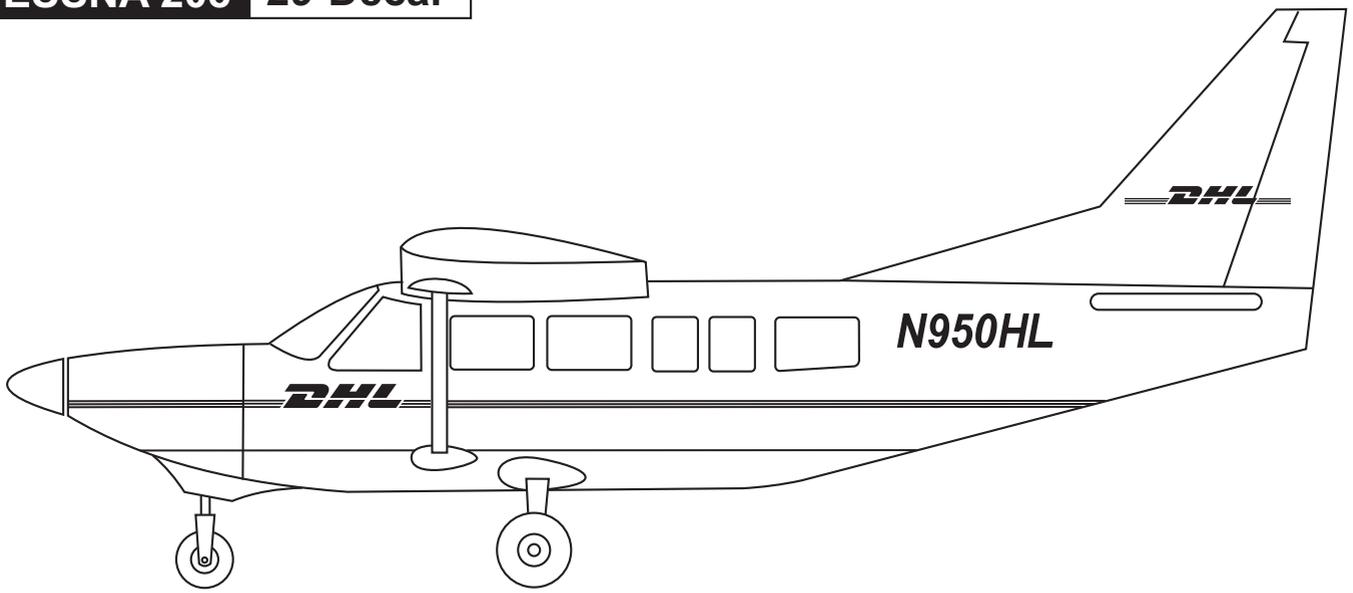


CESSNA 208 27-Hatch



CESSNA 208 28-Cargo drilling





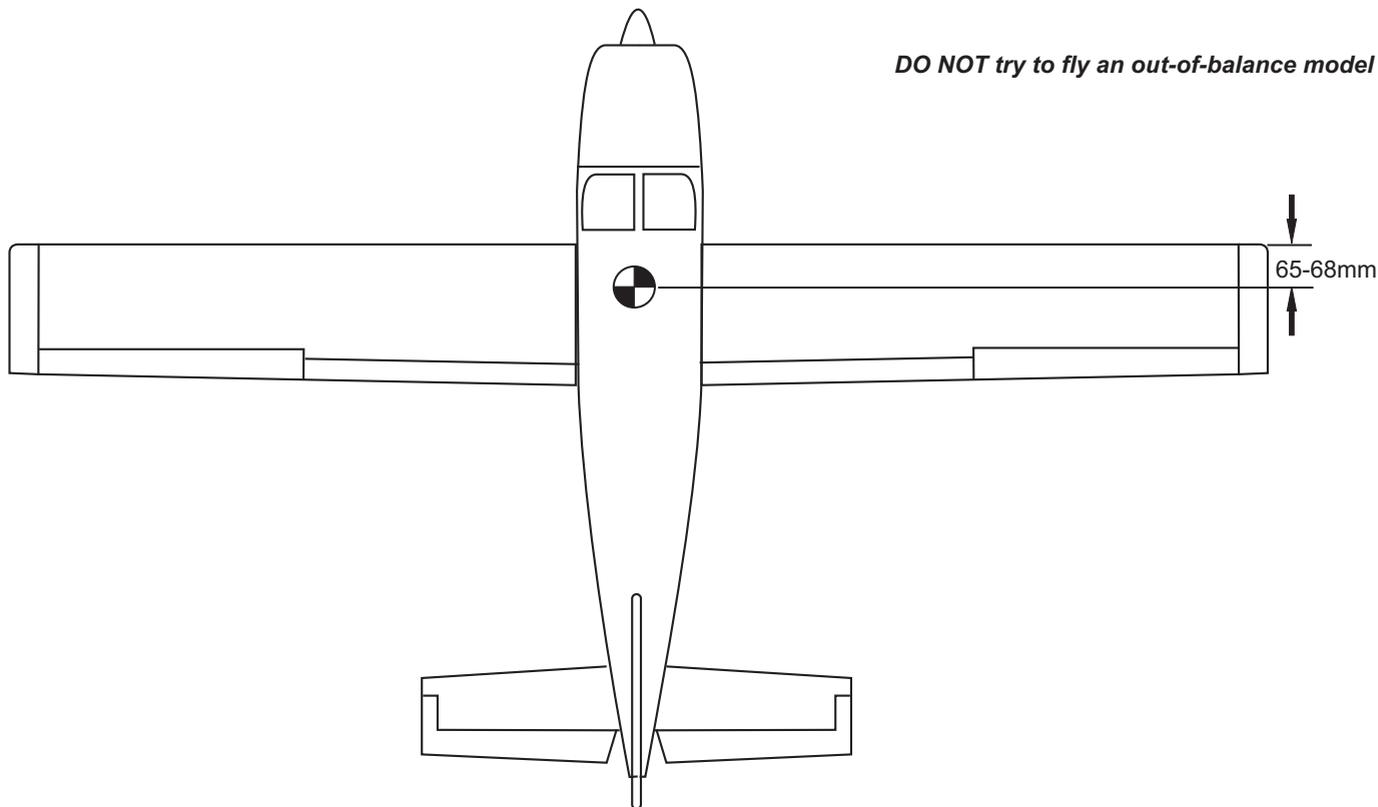
Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once. Peel off one corner of the backing and cut off with scissors. Arrange sticker on model and when satisfied adhere the corner without backing. Carefully peel back the rest of the backing while at 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.

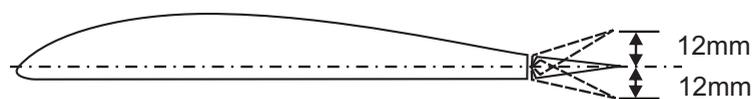
CESSNA 208 30-Balance

THE CENTER OF GRAVITY IS LOCATED 65 - 68mm BACK FROM THE LEADING EDGE OF THE WING, AT THE FUSELAGE. BALANCE A PLANE UPSIDE DOWN WITH THE FUEL TANK EMPTY.

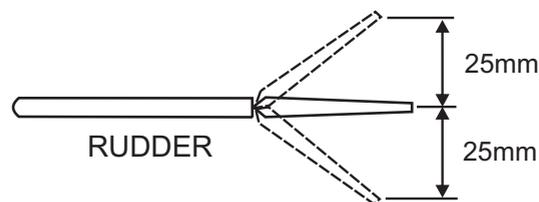
DO NOT try to fly an out-of-balance model !



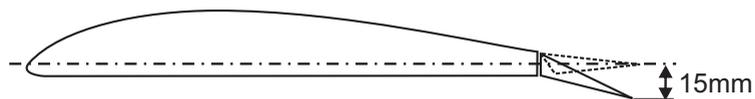
CESSNA 208 31-Control surface



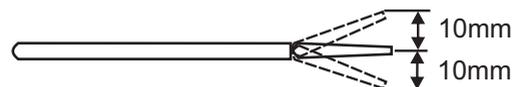
AILERON



RUDDER



FLAP



ELEVATOR

IMPORTANT: Flying your model at these throws will provide you with the greatest chance for successful first flights. If, after you have become accustomed to the way the Cessna 208 flies, you would like to change the throws to suit your taste that is fine. However, too much control throw could make the model difficult to control, so remember, "more is not always better".

BEFORE FLYING CHECK EVERYTHING

Before each flight, inspect the airplane for any loose parts. Check the hinges, make sure the pushrods are still firmly attached, and check the engine mounting bolts. In general, check everything on the plane that might possibly come loose.