Radio control model / Flugmodel

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

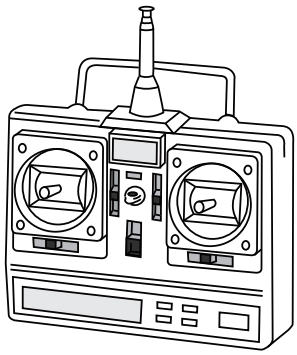
Spannweite:.....1700mm
Länge:.....1175mm
Elektroantrieb.....(siehe nächste Seite)
Verbrennerantrieb:.....7.45cc - 11.5cc
Fluggewicht:.....3.2Kg
Fernsteuerung.....6 Kanal / 6-7 Servos

RADIO CONTROL MODEL®

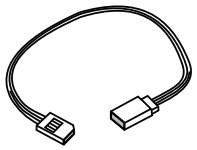
WARNING! This radio controlled model is NOT a toy. If modified or flown carelessly it could go out of controll and cause serious human injury or property damage. Before flying your airplane, ensure the air field is spacious enough. Always fly it outdoors in safe areas and seek professional advice if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

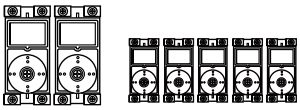
REQUIRED FOR OPERATION (Purchase separately) More info: www.pichler-modellbau.de



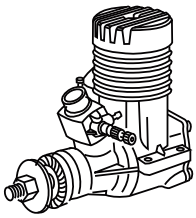
11x6 for .46 - 2 cycle engine
12x6 for .60 - 4 cycle engine
12x7 for .70 - 4 cycle engine
13x7 for electric motor



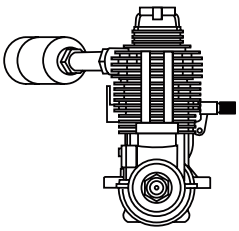
Extension for aileron servo, retract servo and Rx battery pack.



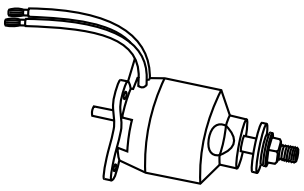
Minimum 6 channel radio
for airplane with 2 standard servos
and four servo mini. (five in case of GP)
.Motor control x1(for GP) .Elevator x1 . Rudder x1 (standard servo)
.Aileron and Flapx2 (mini servo)



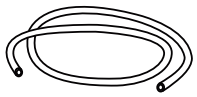
.46 ~ .50 - 2 cycle



.60 ~.70 - 4 cycle

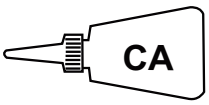


700Watt

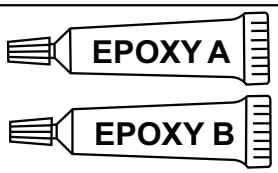


Silicone tube

GLUE (Purchase separately)



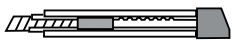
Cyanoacrylate Glue



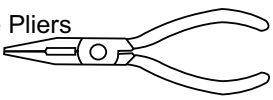
Epoxy Glue (5 minute type)
Epoxy Glue (30 minute type)

TOLLS REQUIRED (Purchase separately)

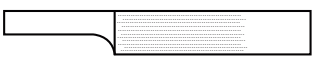
Hobby knife



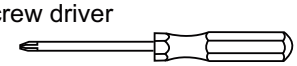
Needle nose Pliers



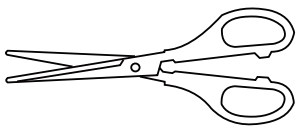
Sander



Phillip screw driver



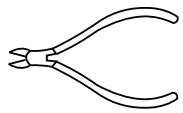
Scissors



Hex Wrench

Awl

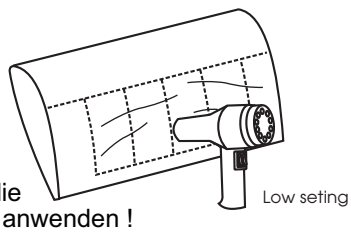
Wire Cutters



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

If exposed to direct sunlight and/or heat, wrinkels 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 Warumluftgebläse (Haartrockner) um evtl. Falten aus der Folie zu bekommen. Die Kanten können Sie mit einem Bügeleisen behandeln. Nicht zuviel Hitze anwenden !



Symbols used throughout this instruction manual, comprise:

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

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 zusammengebaut

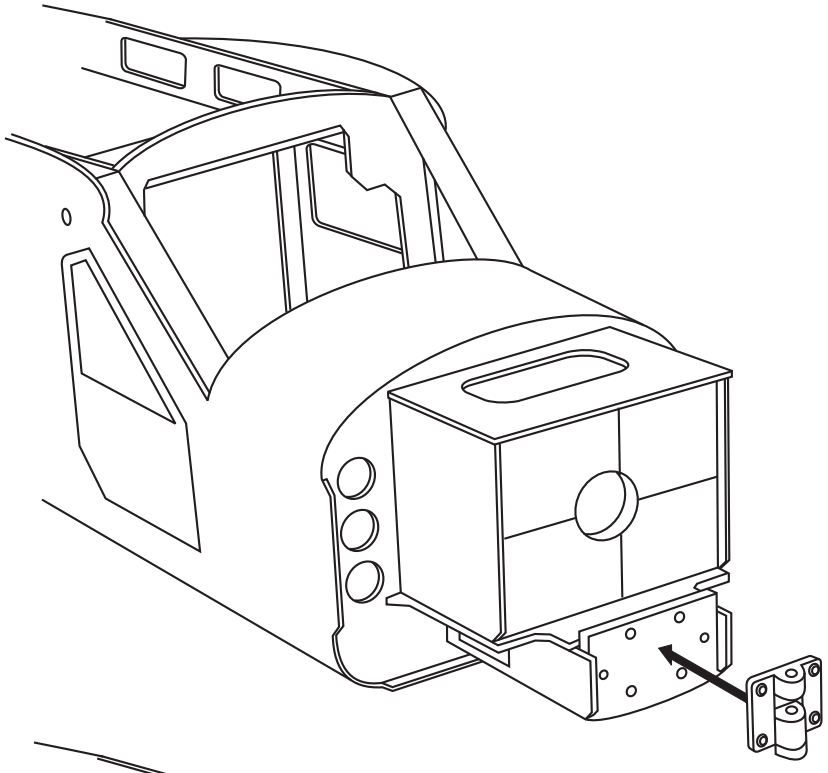
Nicht enthalten. Teile müssen separat gekauft werden.

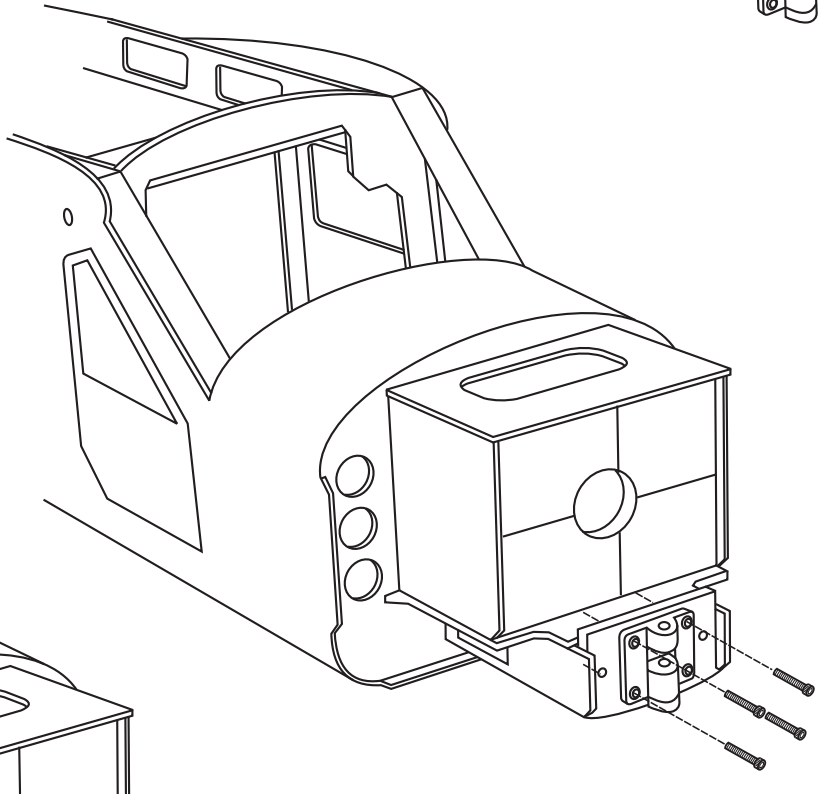
Read through the manual before you begin, so you will have an overall idea of what to do.

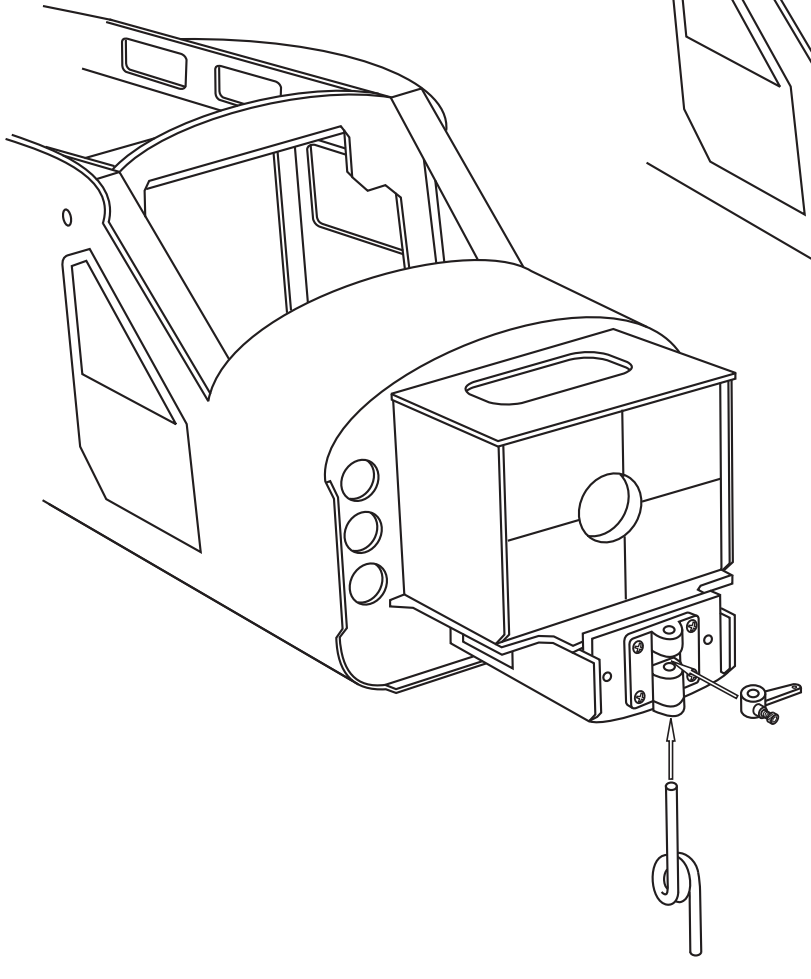
CONVERSION TABLE

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

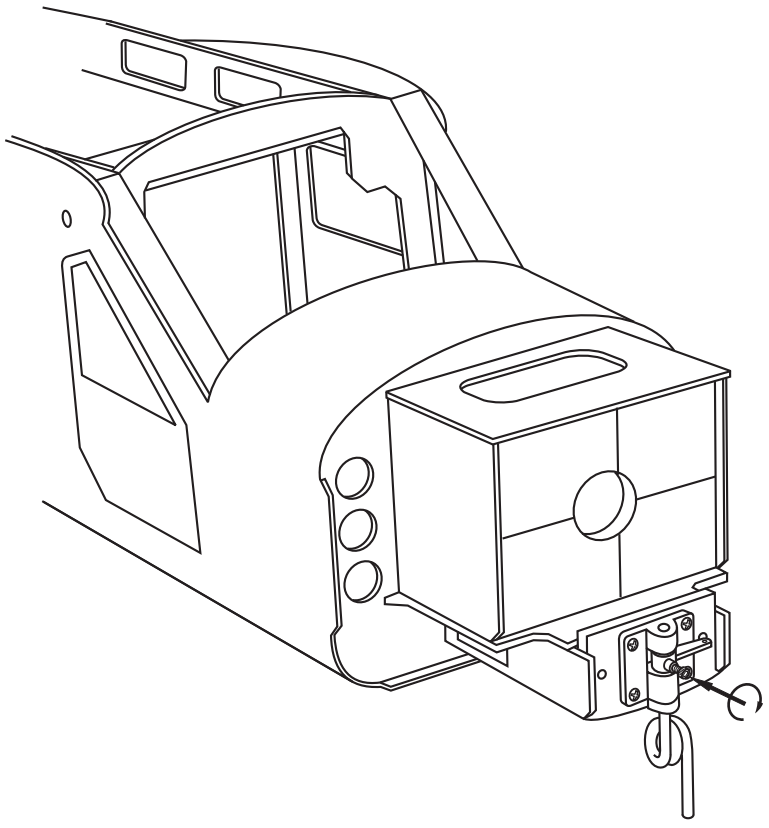






3x20mm screw ...4

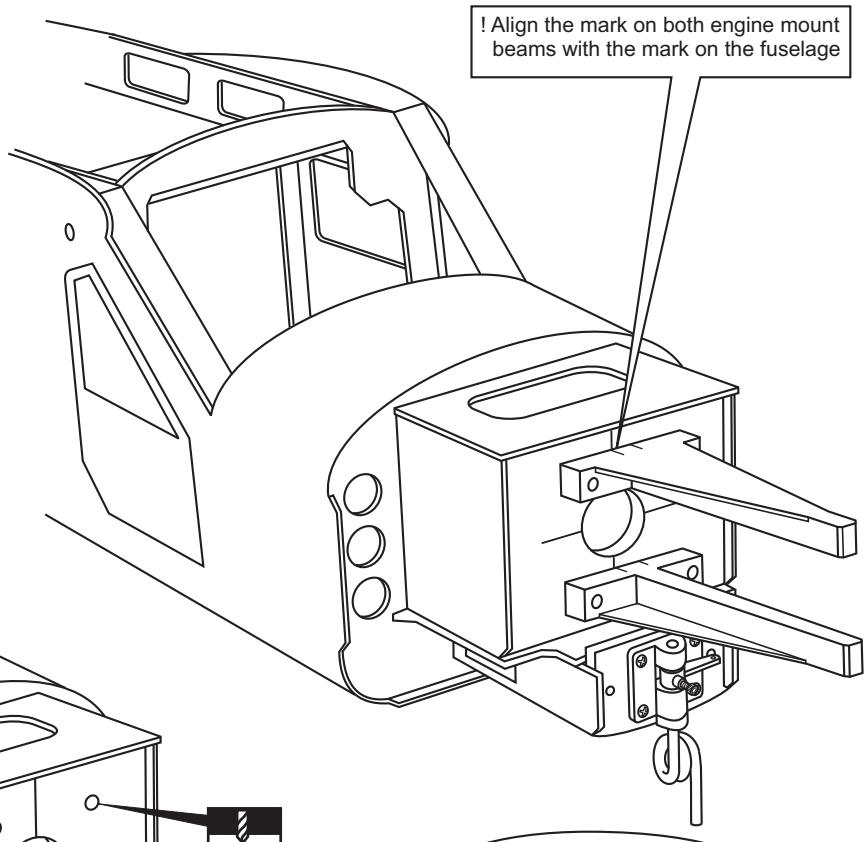
CESSNA 208 2-Nose gear

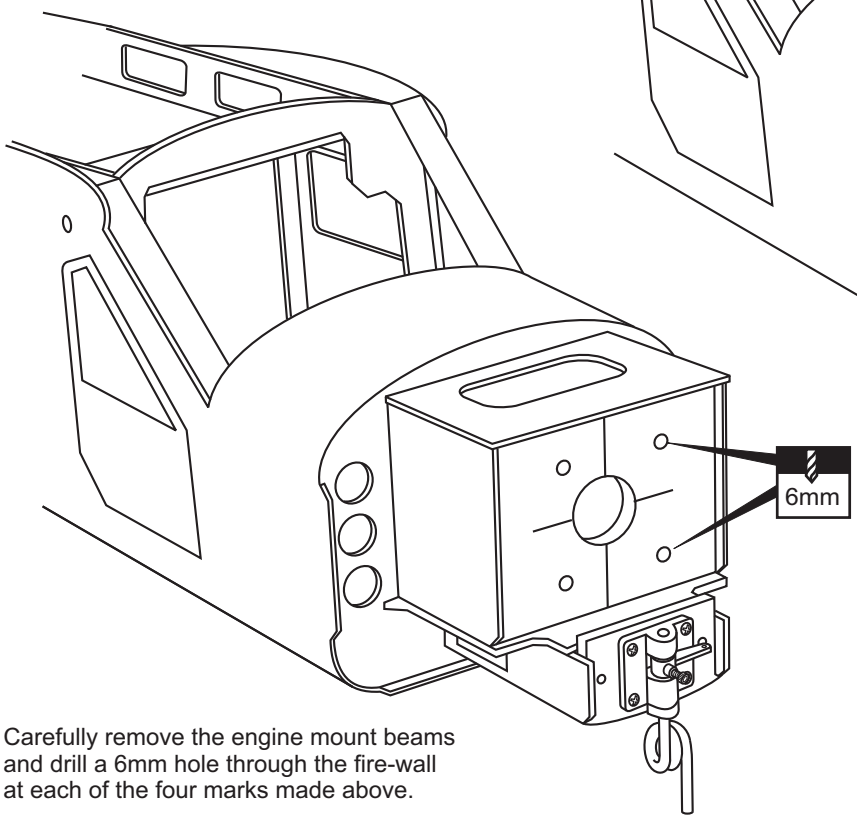


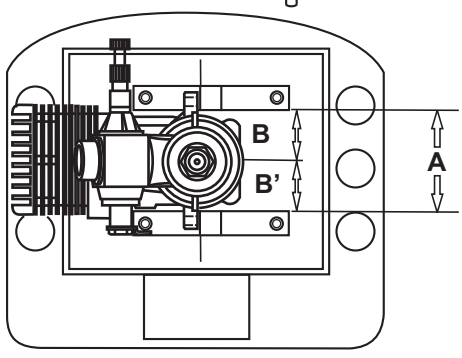
CESSNA 208 3-Engine mount

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.







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

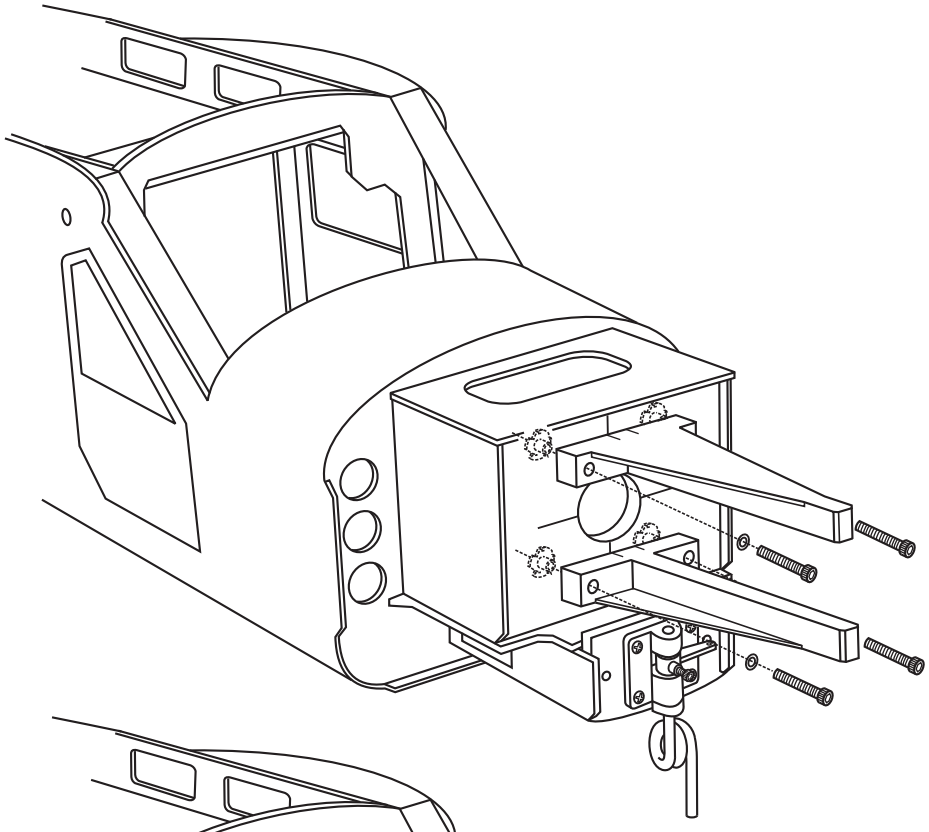
CESSNA 208 4-Engine mount

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

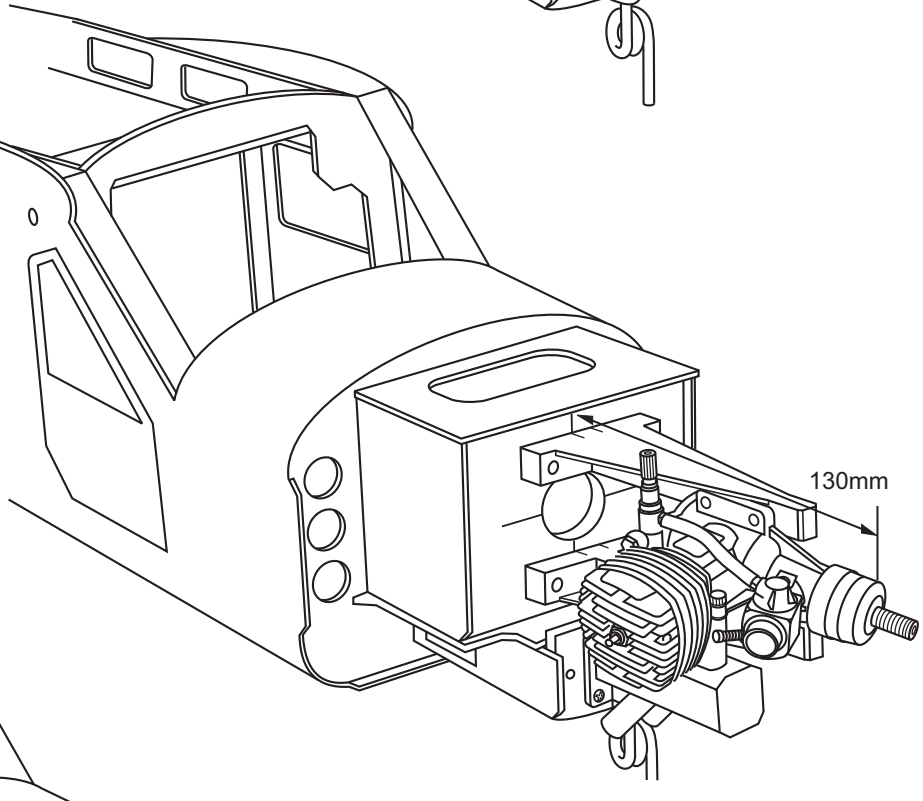
Reposition the engine mount beams on to the fire-wall and secure them with four 4x25mm screws.

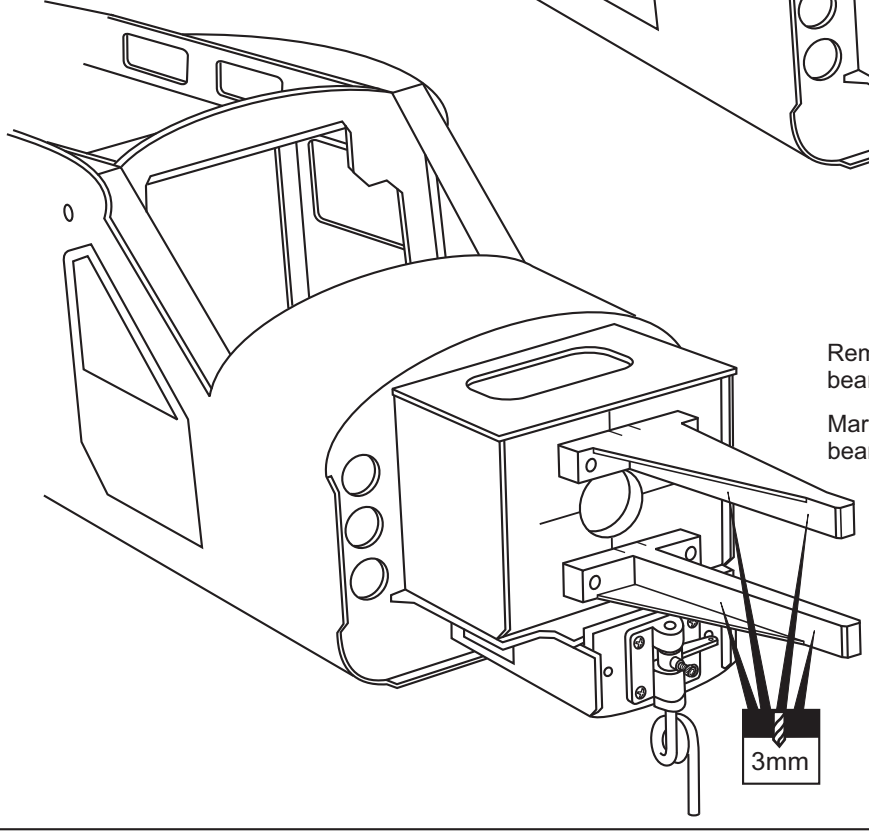
4x25mm screw - washer 4

Blind-nut 4



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.

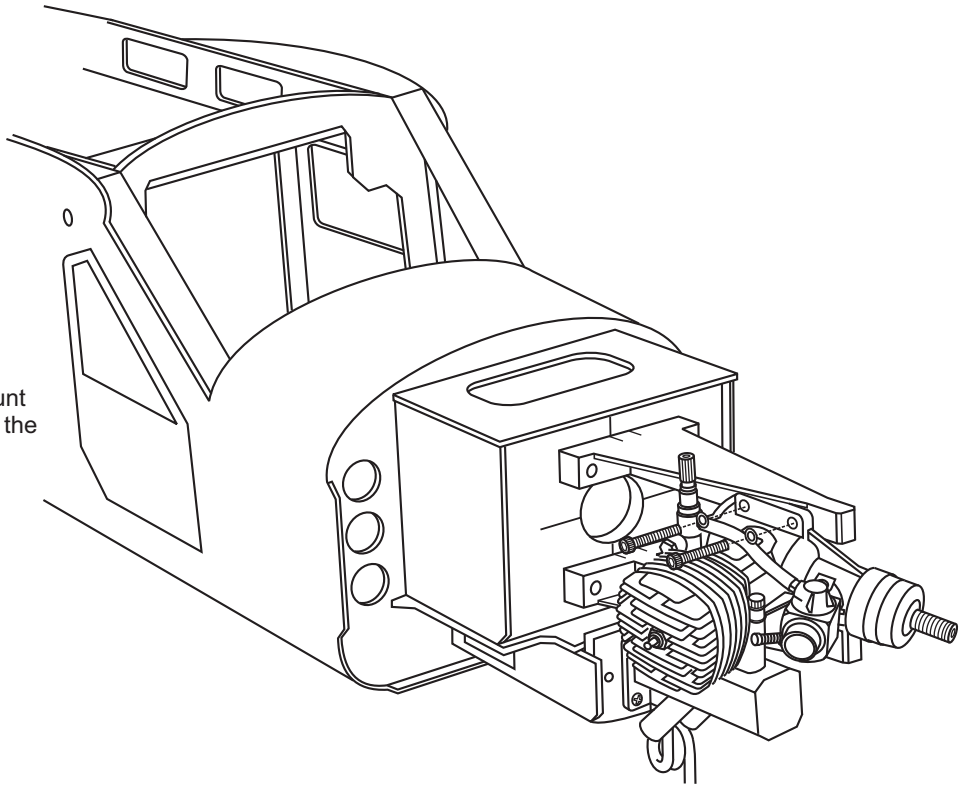




Remove the engine and drill a 3mm holes through the beam at each of the four marks made above.

Marking sure that you drill the hole perpendicular to the beam of the engine mount.

CESSNA 208 4-Engine installation

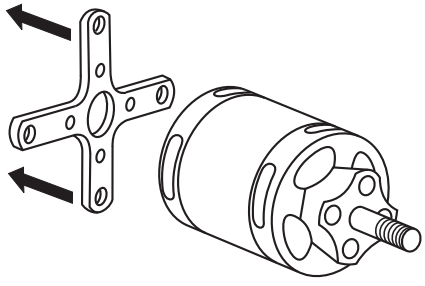


Reposition the engine on the engine mount beams, aligning it with the holes. Secure the engine to the engine mount using four 3x25mm screws.

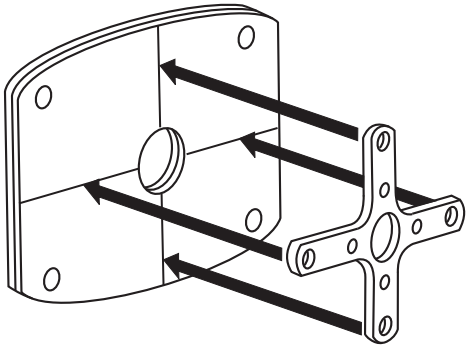
Note: Apply Silicon sealer to each of the 3x25mm screw and nut.

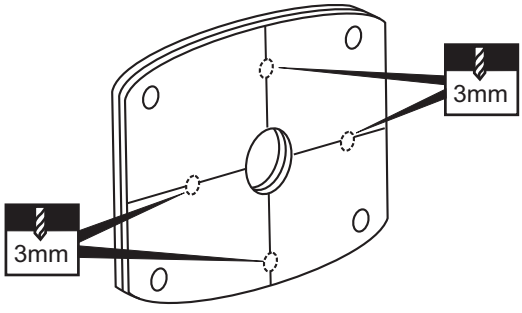
3x25mm screw	4
Washer	4

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.

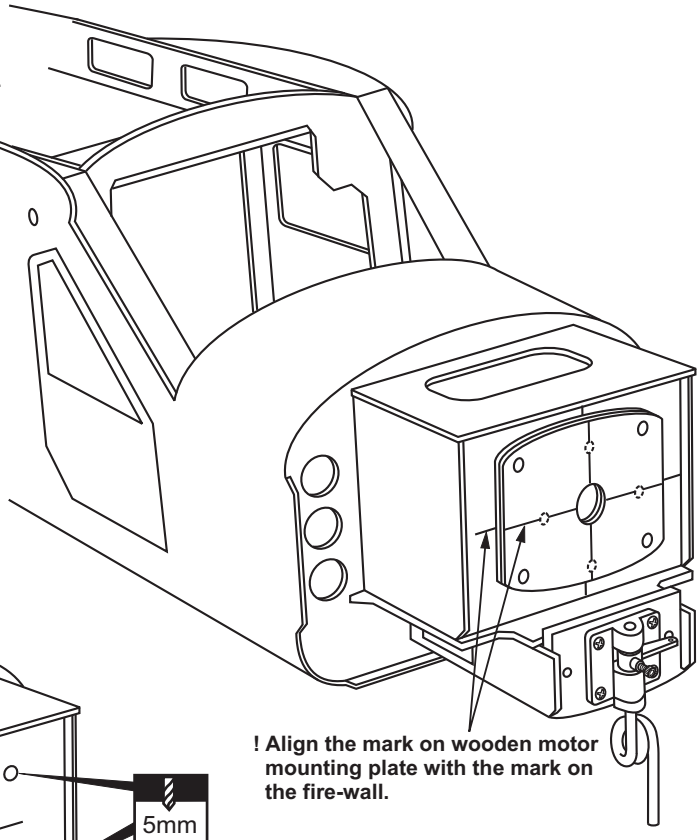




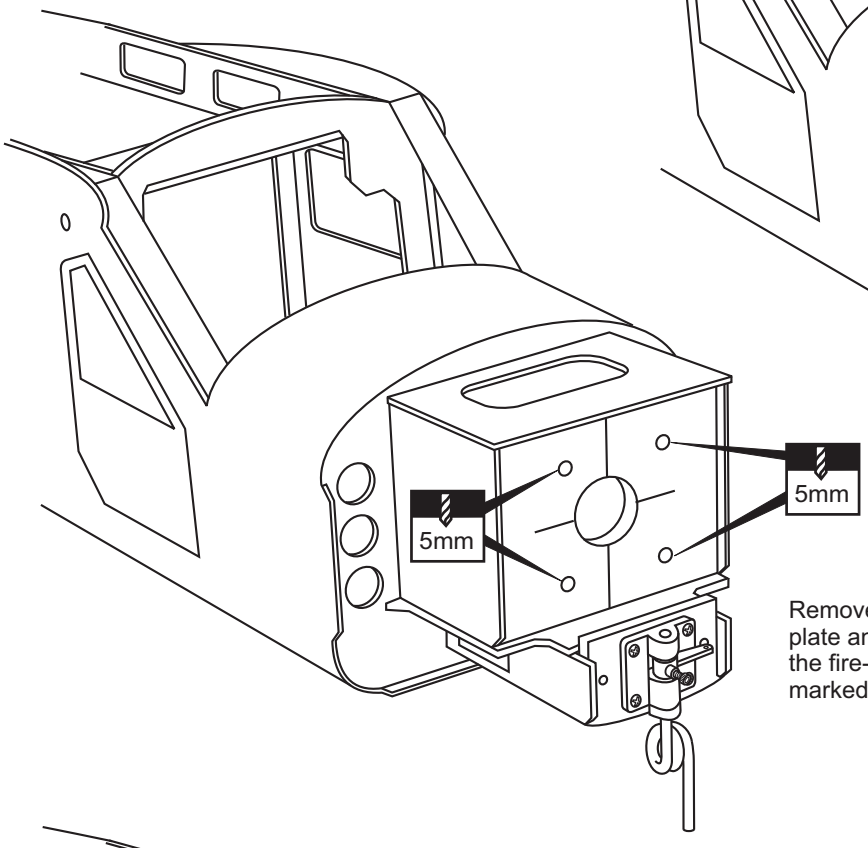
Remove the aluminum motor mounting plate and drill a 3mm hole through the plywood at each of the four marks marked .

CESSNA 208 6-Electric motor mount

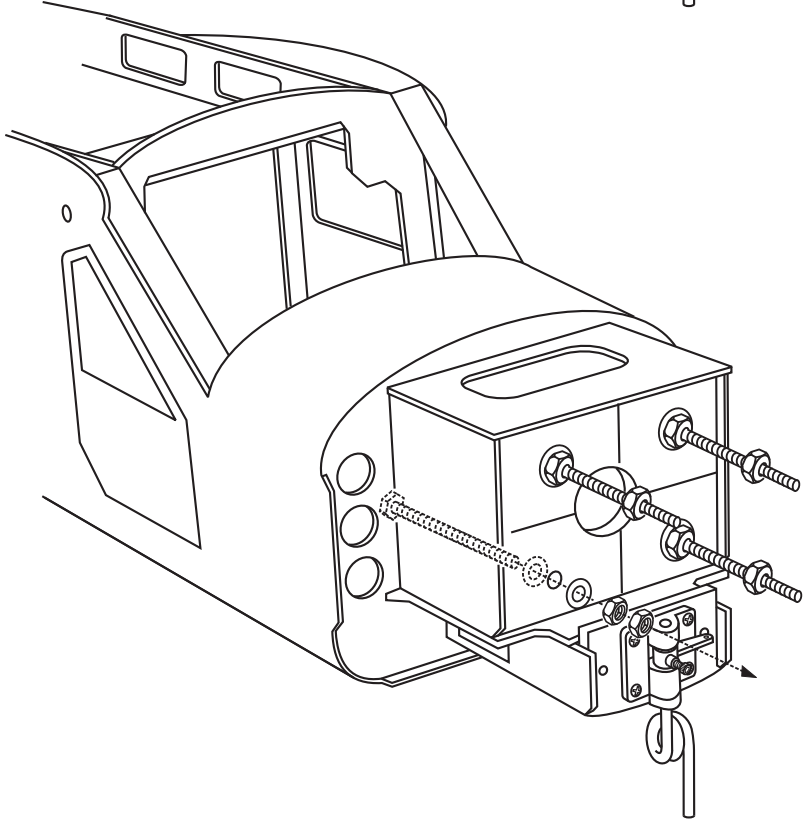
Using a wooden motor mounting plate as a template, mark the fire-wall where the four holes are to be drilled.

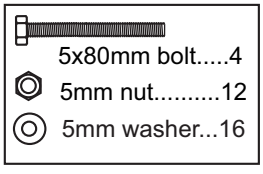


! Align the mark on wooden motor mounting plate with the mark on the fire-wall.



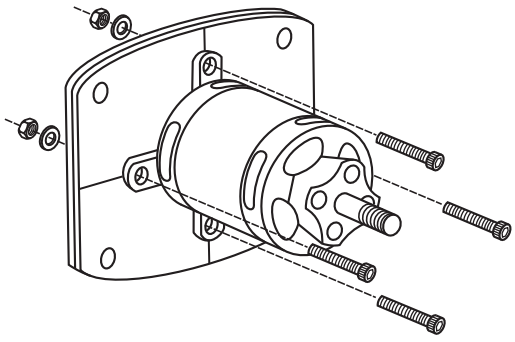
Remove the wooden motor mounting plate and drill a 5mm hole through the fire-wall at each of the four marks marked .





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

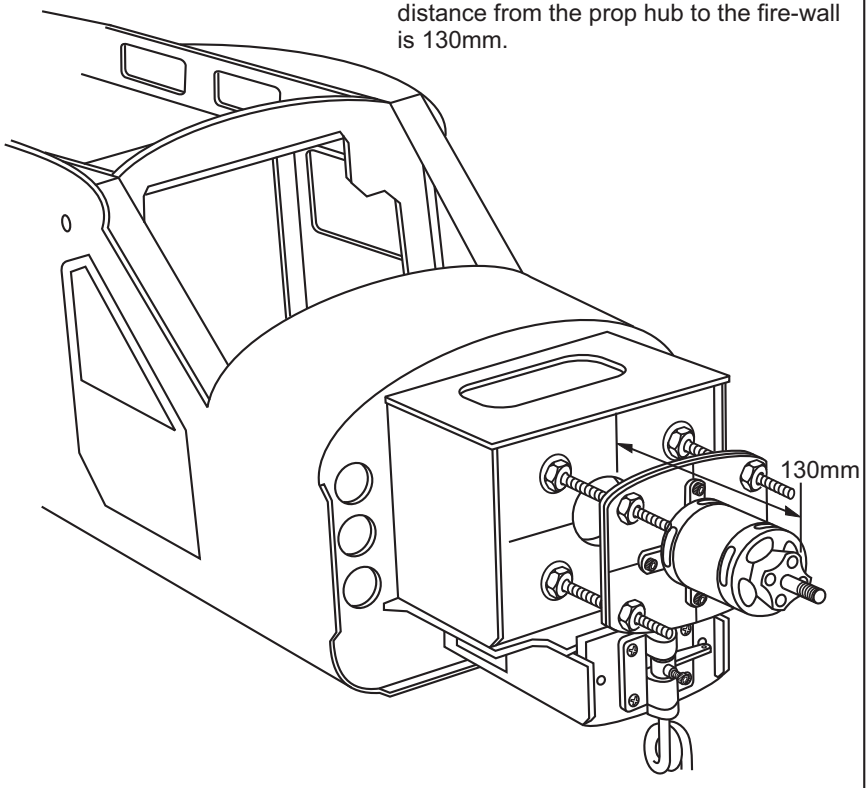
CESSNA 208 6-Electric motor mount



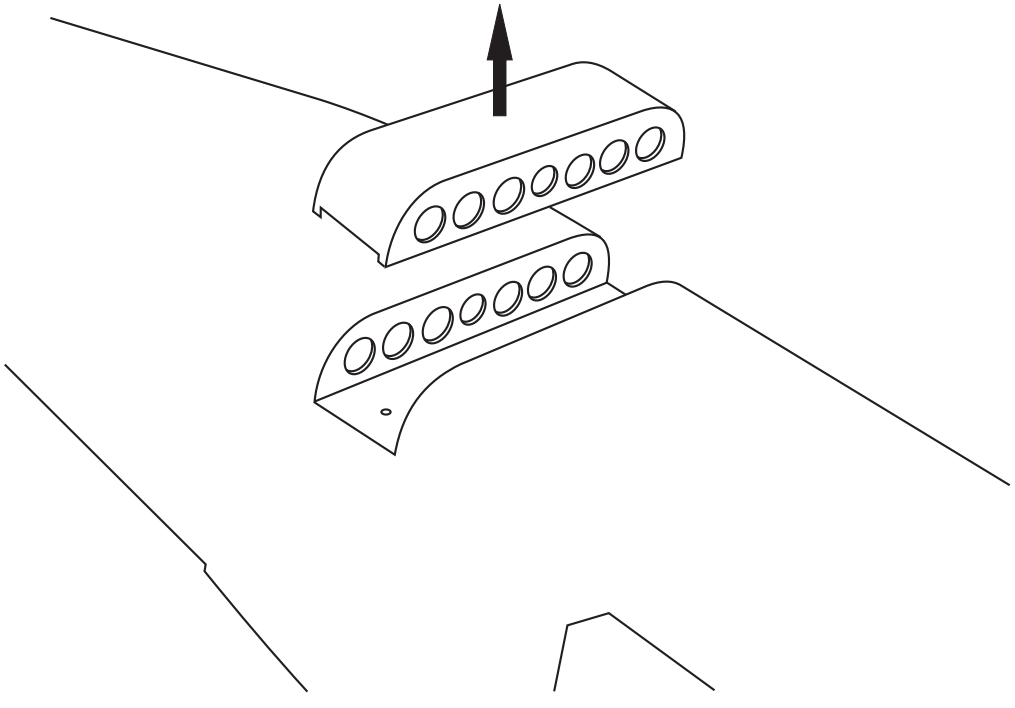
3mm bolt / nut...4

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

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

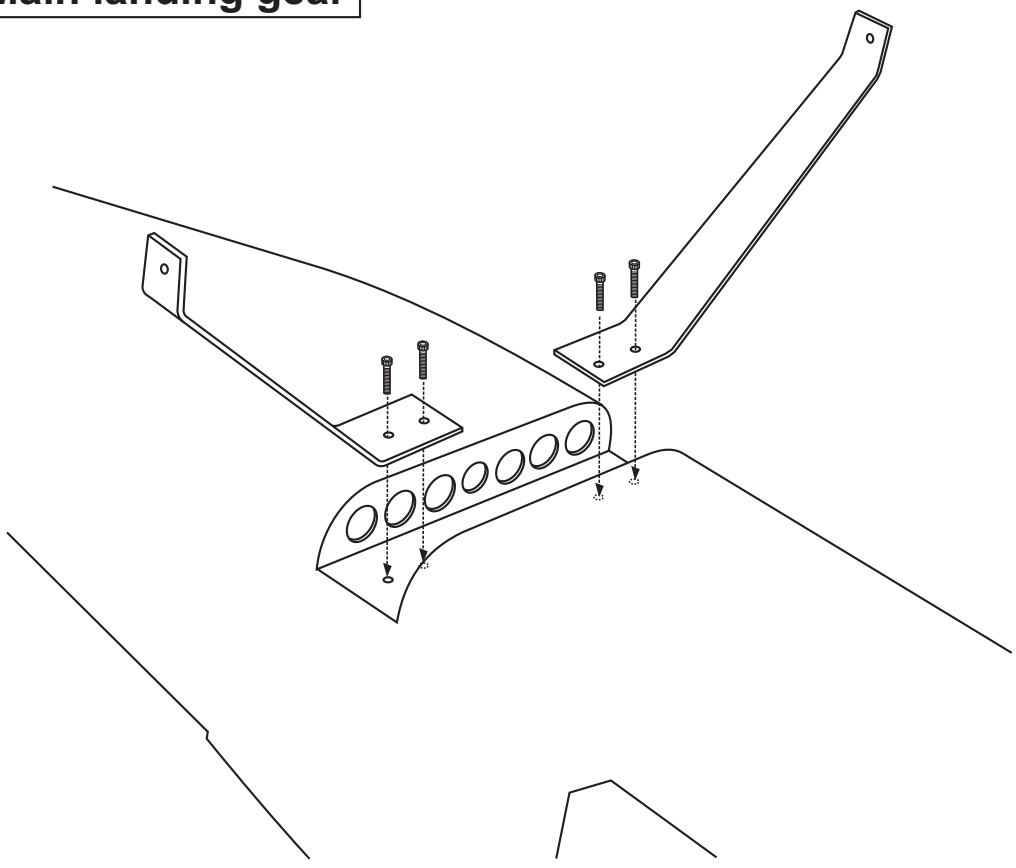


CESSNA 208 7-Main landing gear

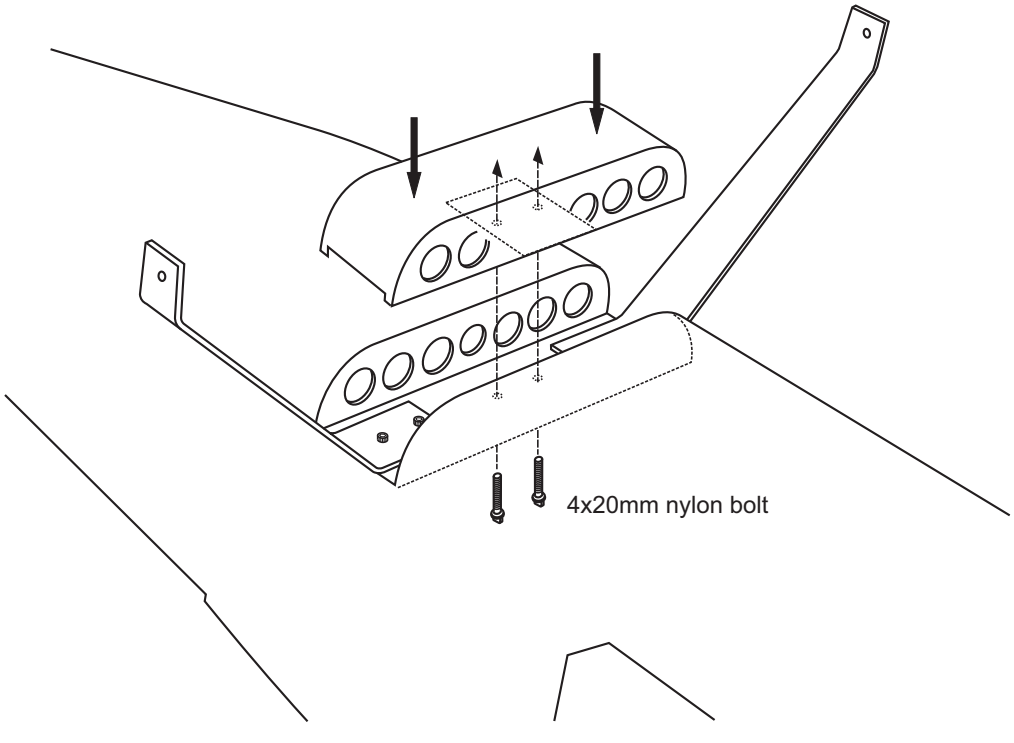


CESSNA 208 8-Main landing gear

3x15mm screw 4

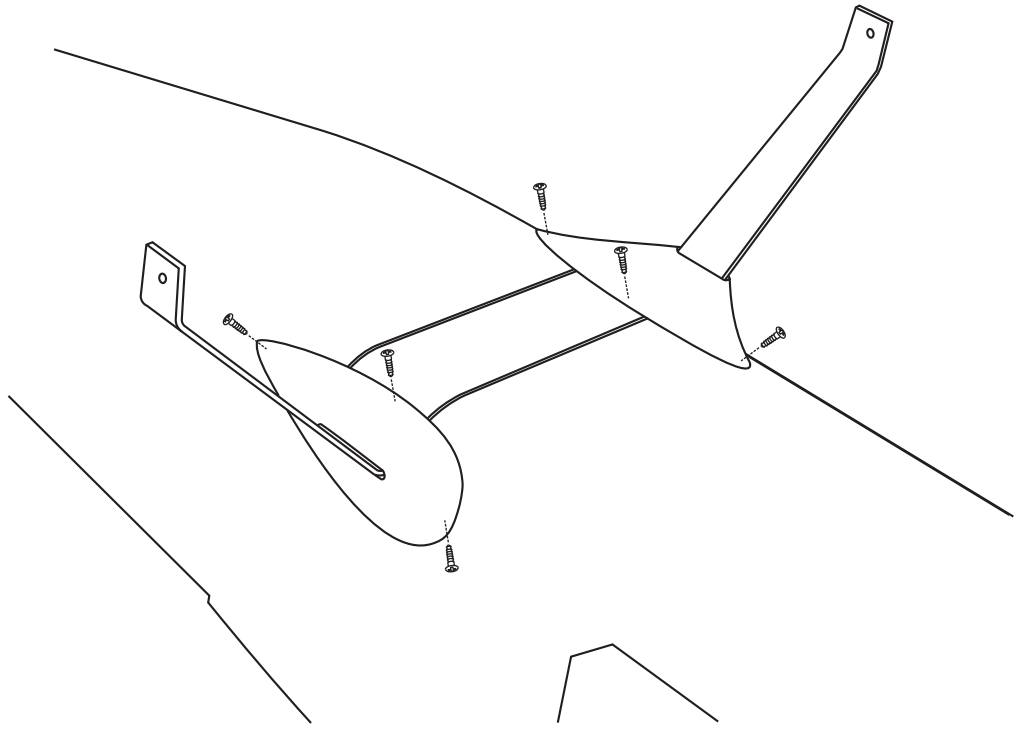


4x20mm nylon bolt 2

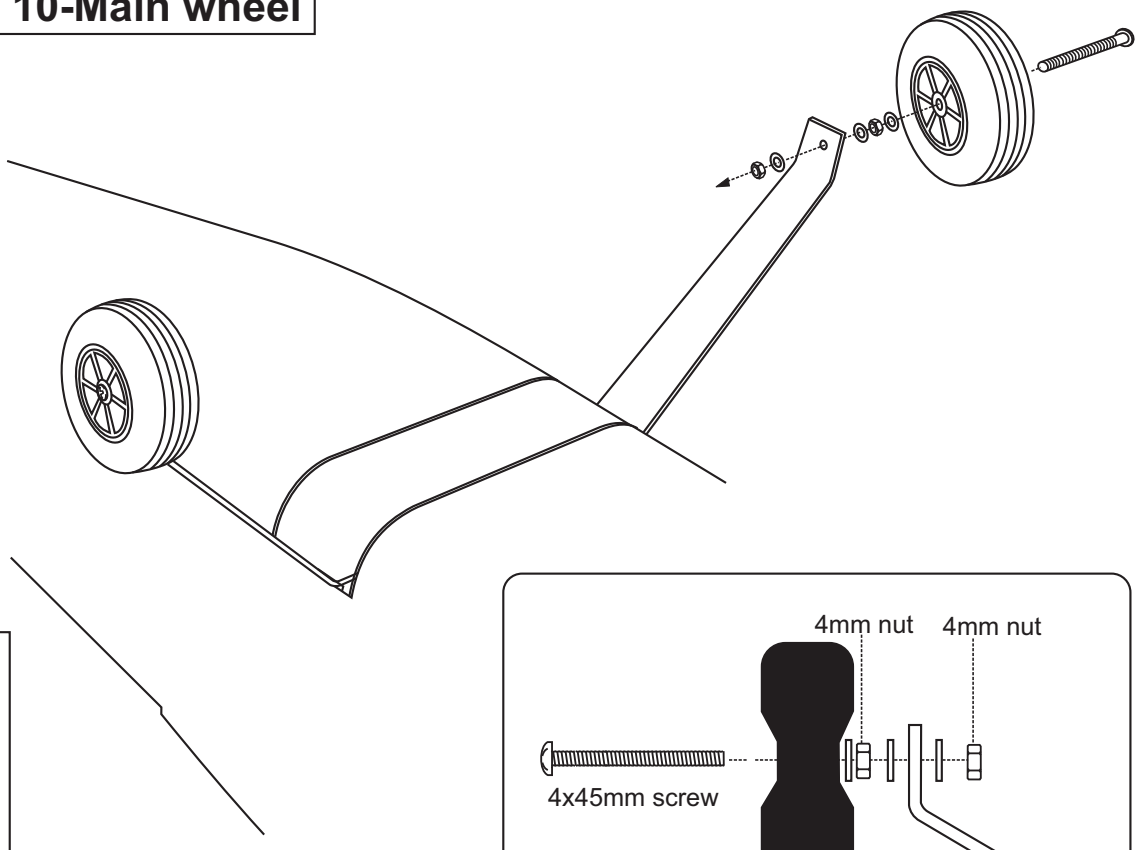


CESSNA 208 9-Main landing gear

2x8mm screw



CESSNA 208 10-Main wheel



75mm wheel ...2

4X45mm screw ...2

4mm nut 4

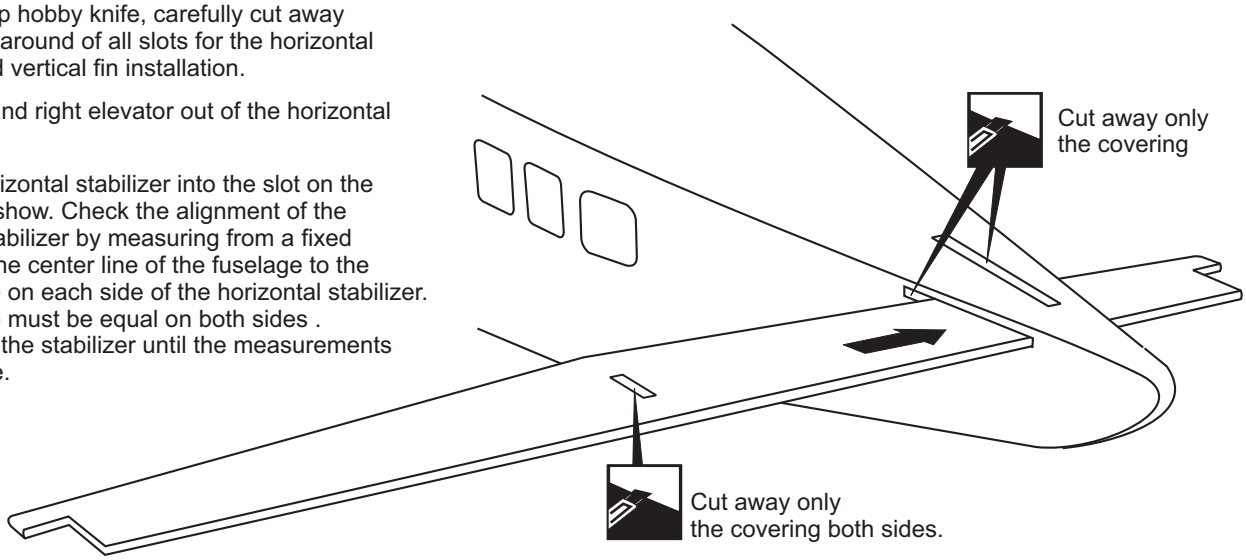
4mm washer 6

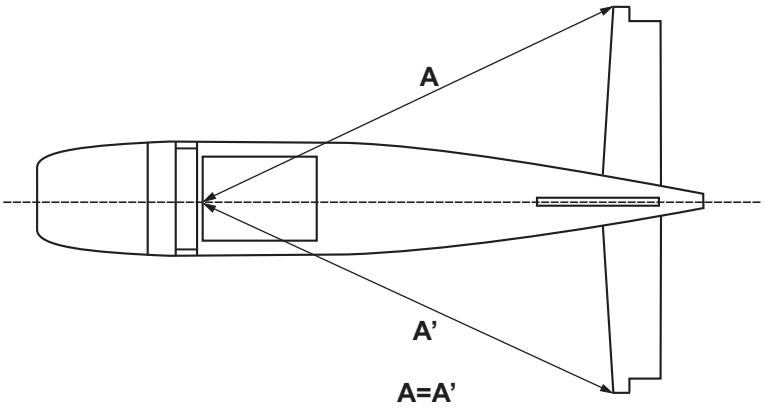
CESSNA 208 11-Horizontal stabilizer

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

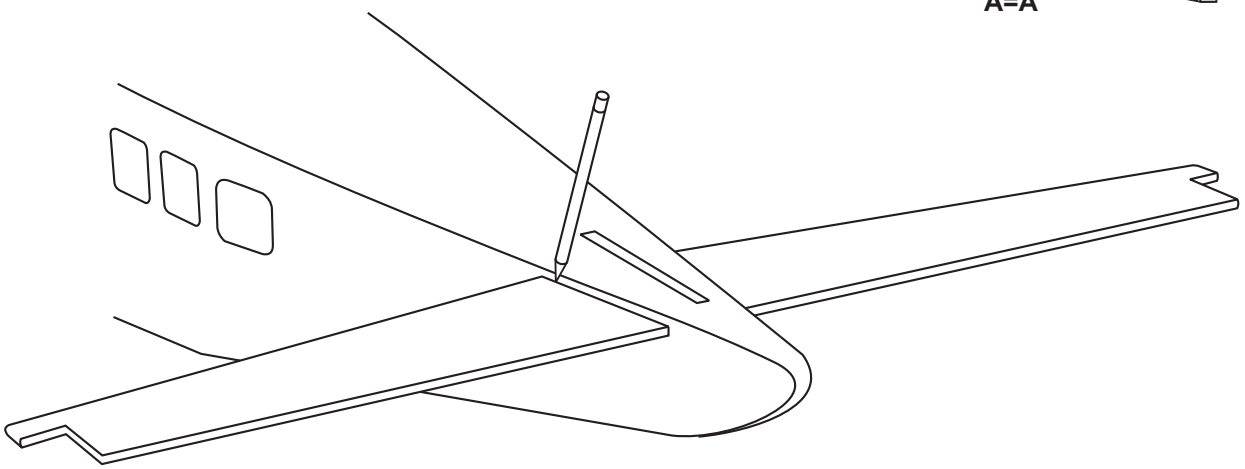
Pull the left and right elevator out of the horizontal stabilizer.

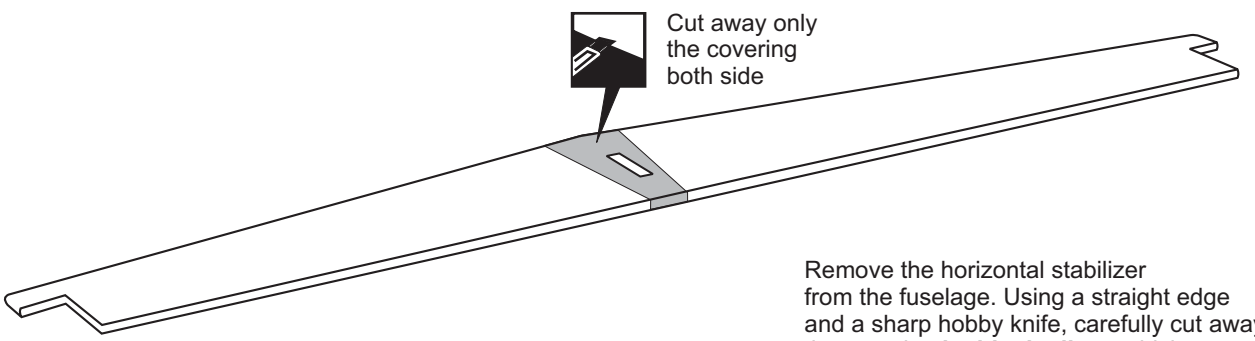
Push the horizontal stabilizer into the slot on the fuselage as show. Check the alignment of the horizontal stabilizer by measuring from a fixed point along the center line of the fuselage to the leading edge on each side of the horizontal stabilizer. The distance must be equal on both sides .
If not, 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.

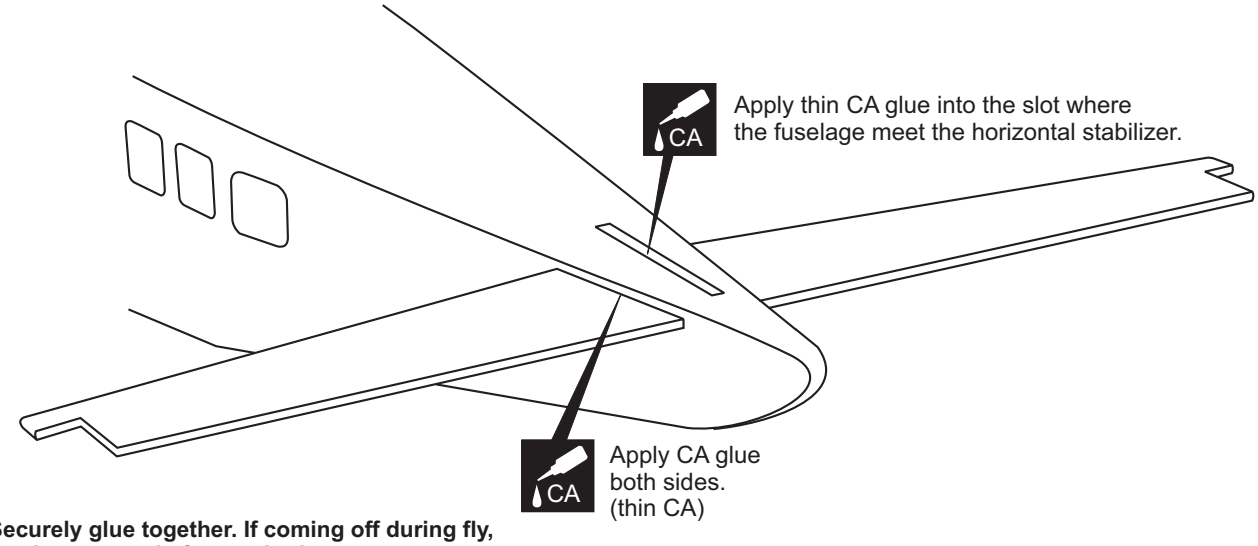




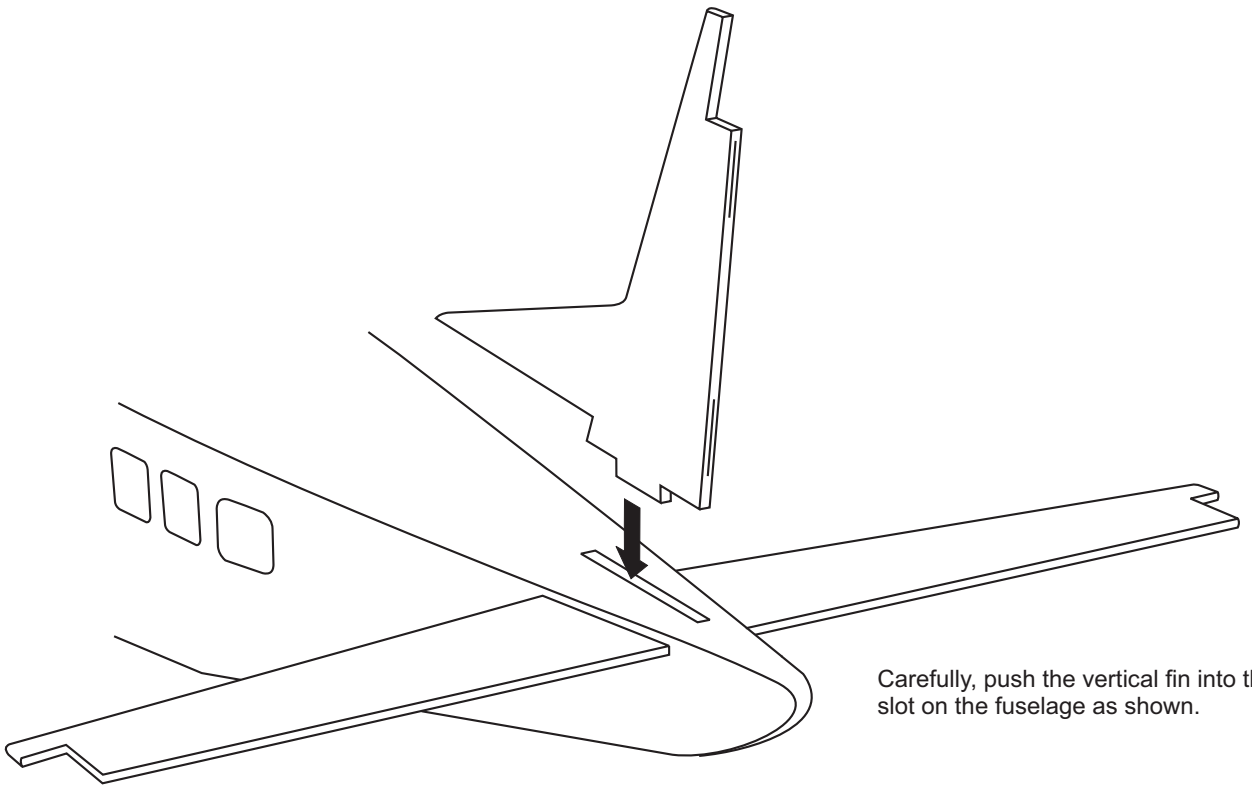
Remove the horizontal stabilizer from the fuselage. Using a straight edge and a sharp hobby knife, carefully cut away the covering **inside the lines** which were marked above. Be cautious **not to cut into the wood**-this will weaken the structure**.**

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 .

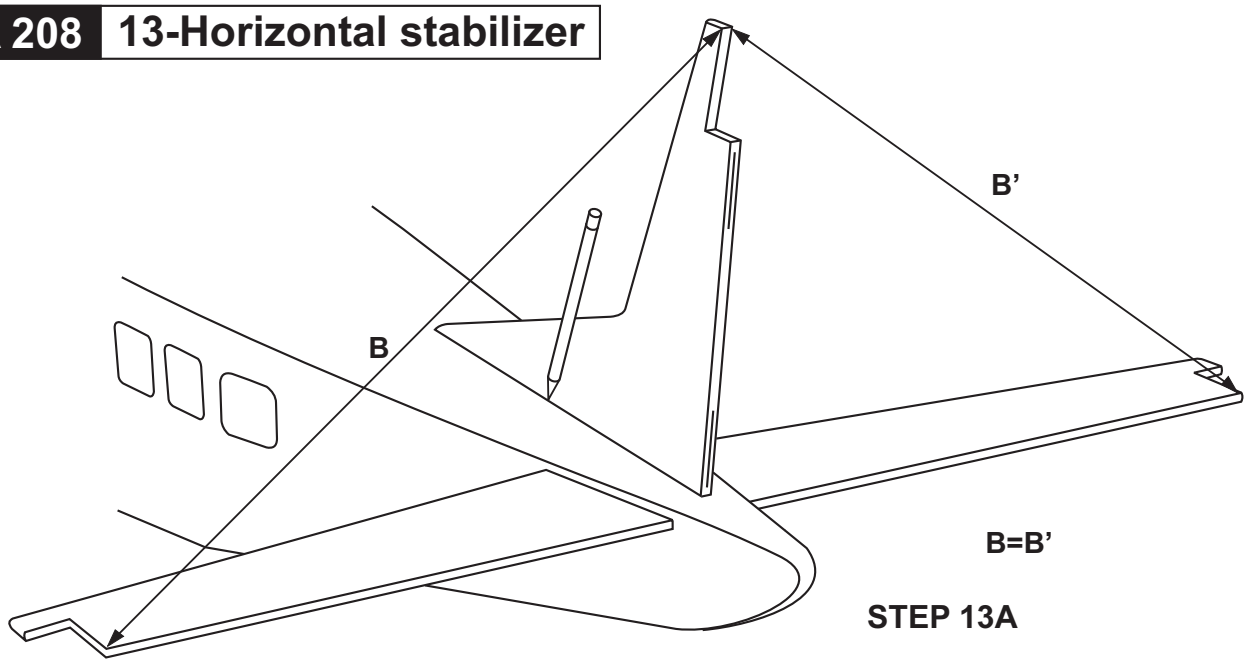


! Securely glue together. If coming off during fly, you lose control of your air plane.



Carefully, push the vertical fin into the slot on the fuselage as shown.

CESSNA 208 13-Horizontal stabilizer

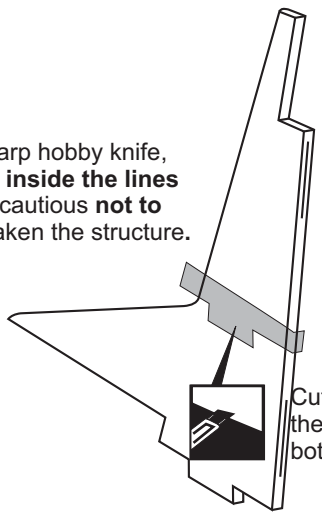


STEP 13A

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.

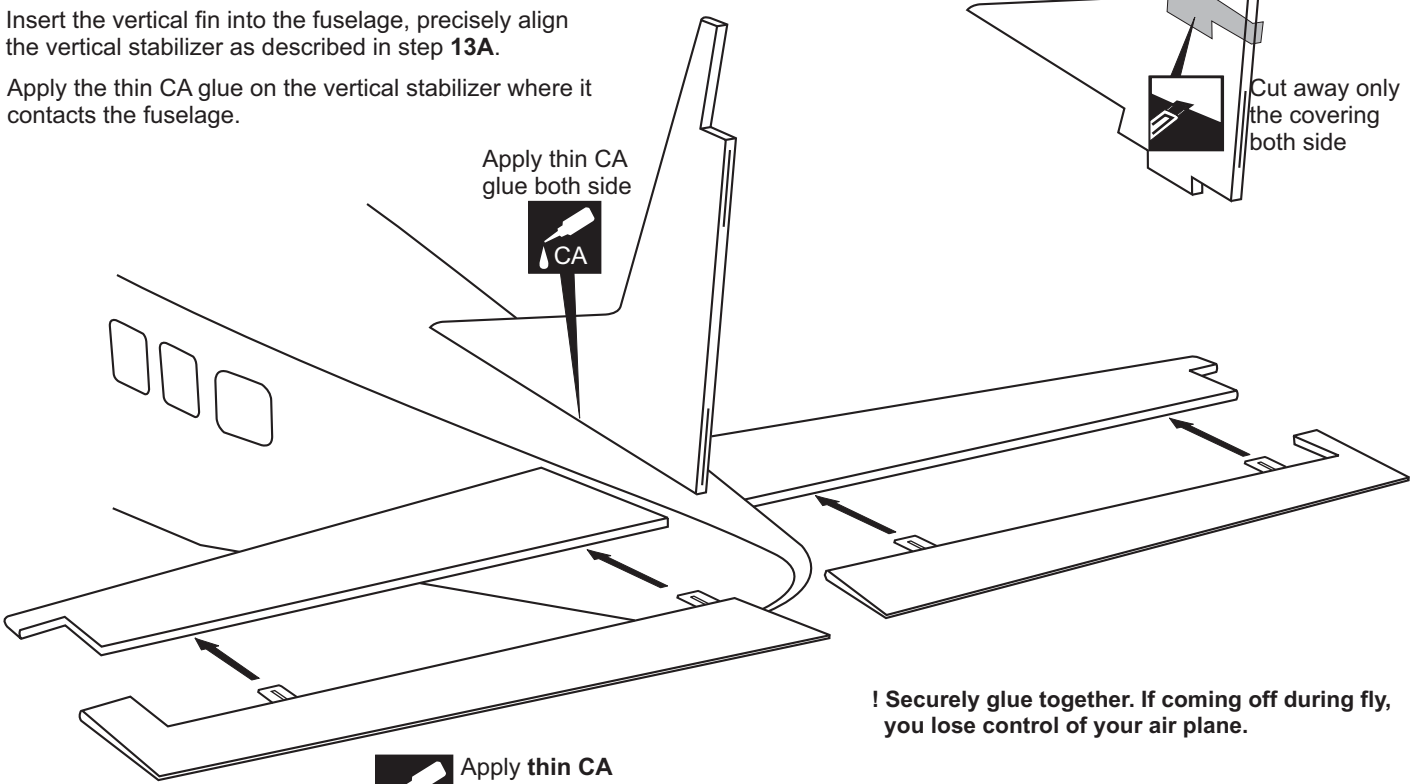
Using a pencil, trace around the vertical stabilizer where it meets the fuselage. Remove the vertical stabilizer from the fuselage.

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**.**

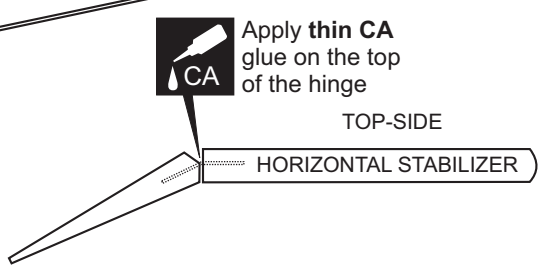


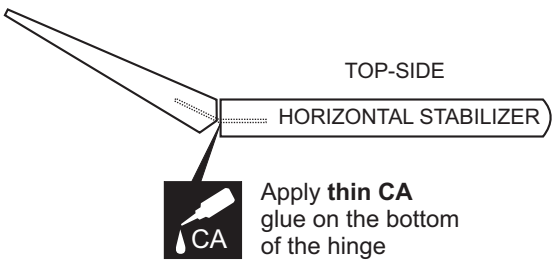
Insert the vertical fin into the fuselage, precisely align the vertical stabilizer as described in step **13A**.

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

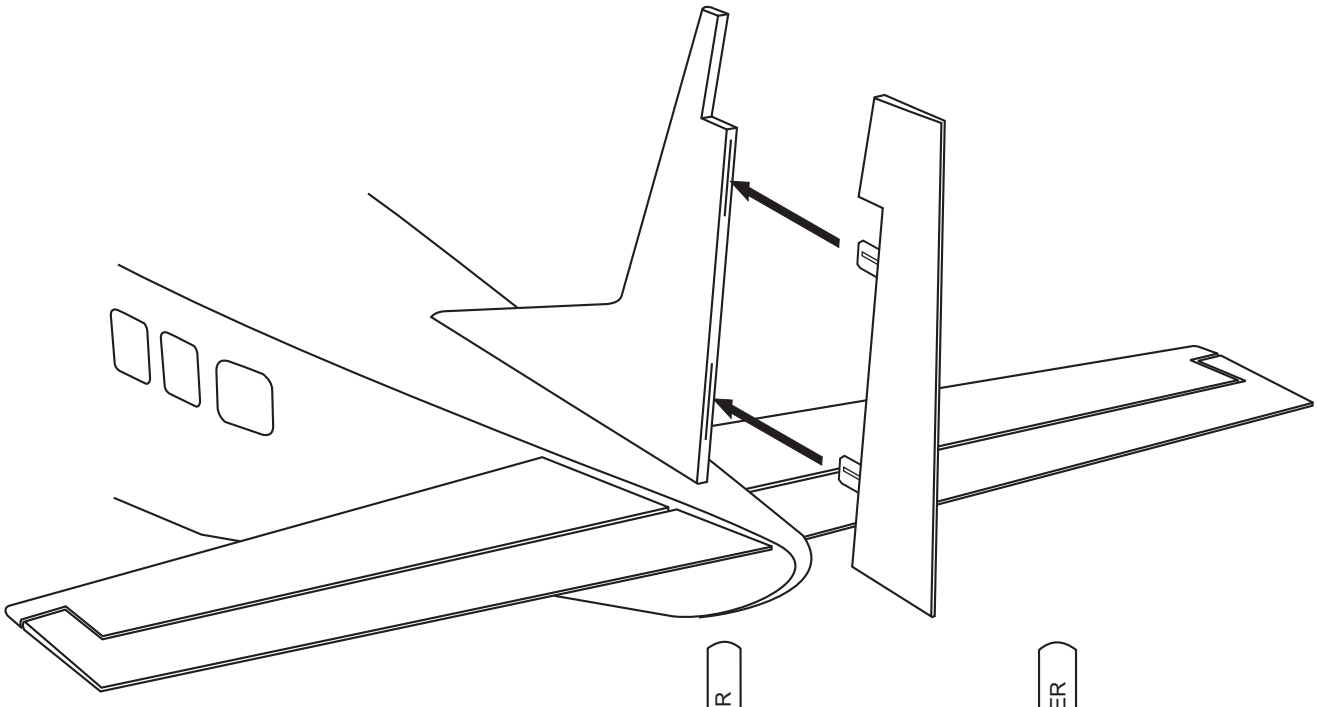


! Securely glue together. If coming off during fly, you lose control of your air plane.

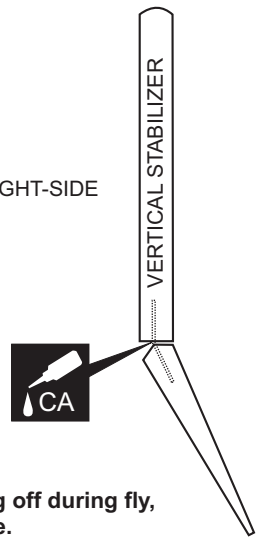




CESSNA 208 14-Horizontal stabilizer

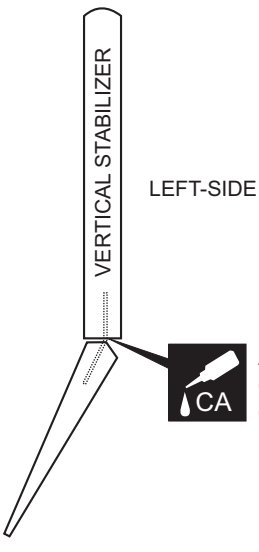


RIGHT-SIDE



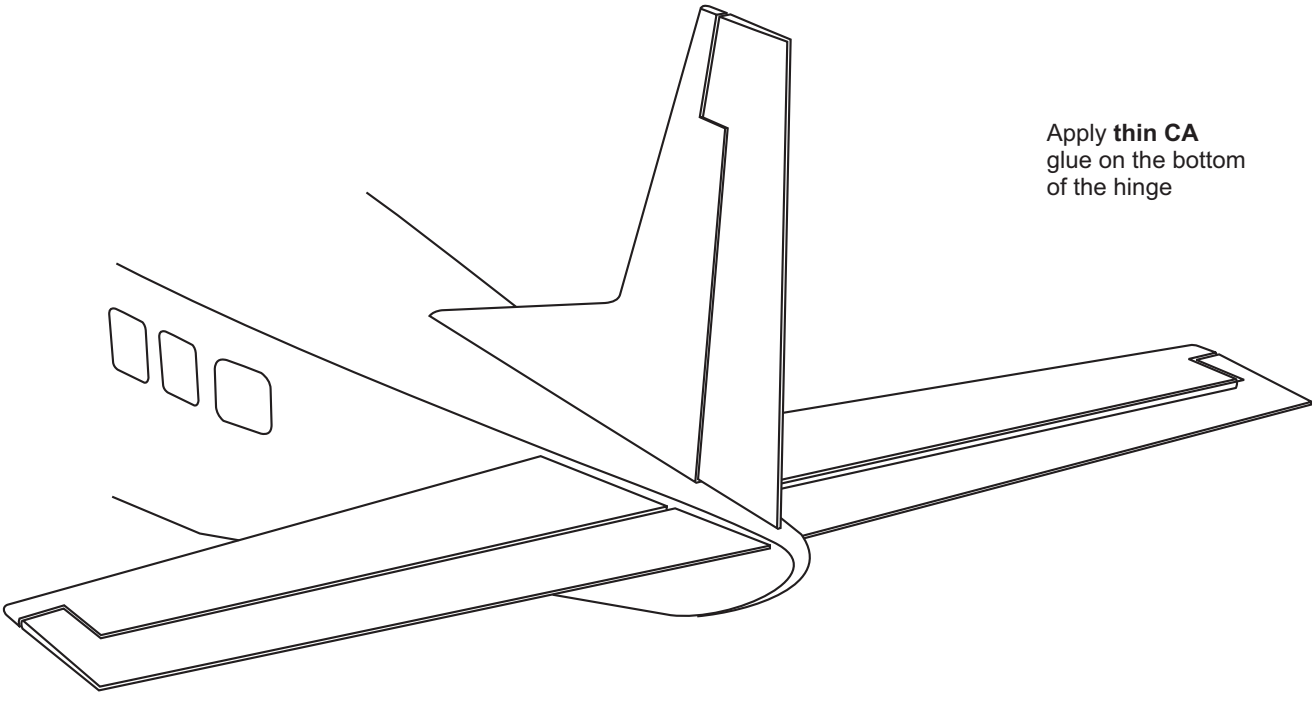
Apply **thin CA** glue on the right of the hinge

LEFT-SIDE



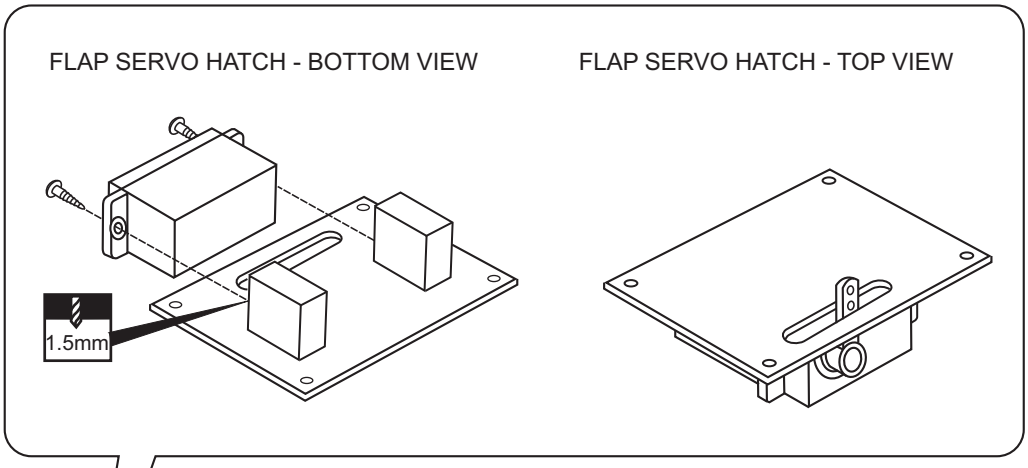
Apply **thin CA** glue on the LEFT of the hinge

! 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



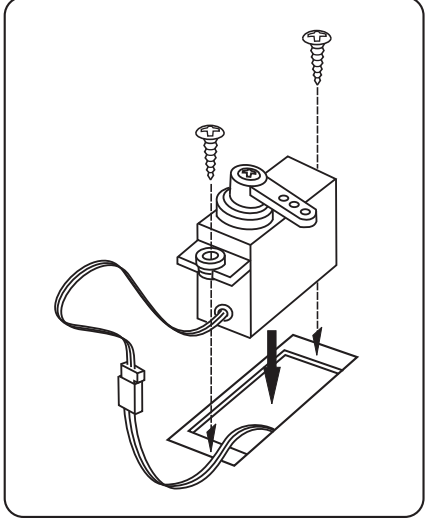
Using the thread (pre-installed at factory) to slide the aileron extension cord into the wing half.

L/R

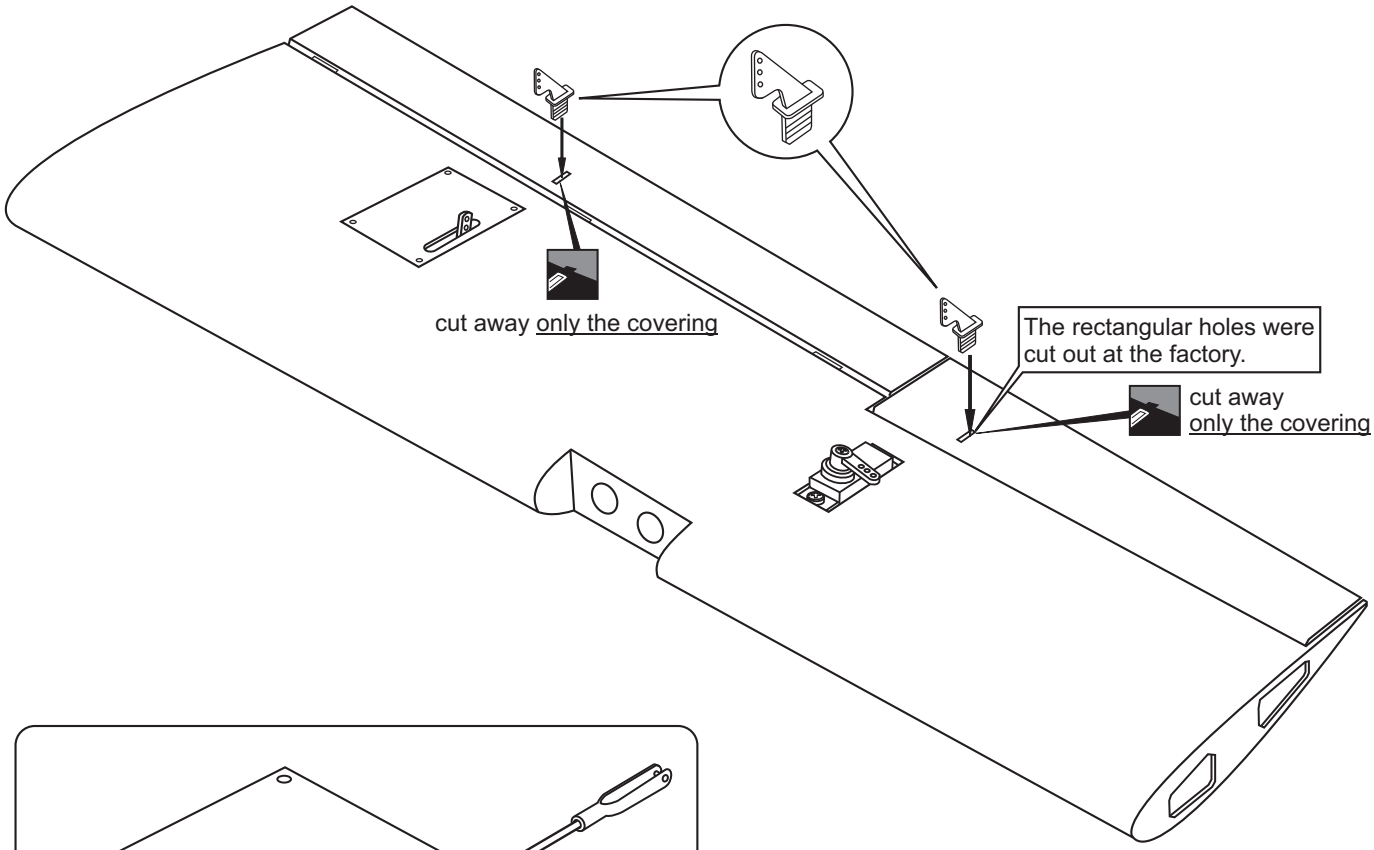
Flap servo hatch

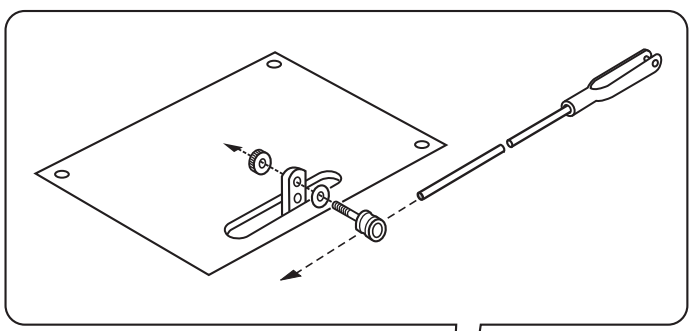
30cm Extension cord

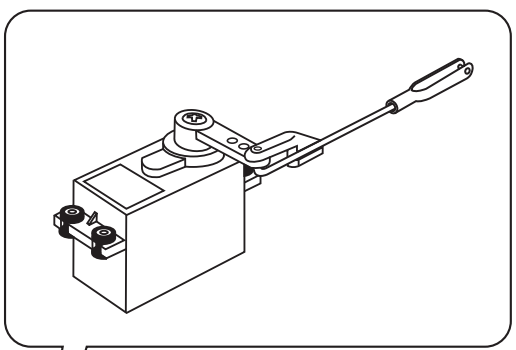
X



CESSNA 208 16-Wing: Flap and Aileron linkages







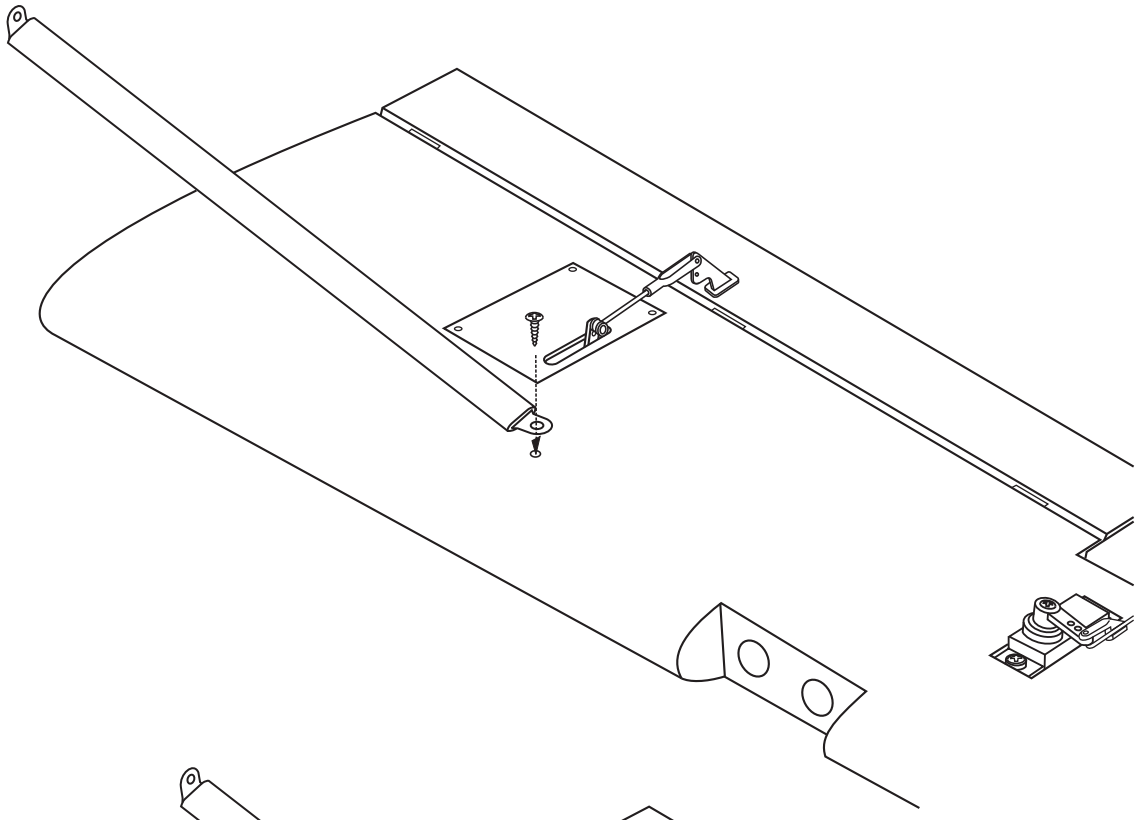
2x175mm rod with clevis ...2

2x175mm rod with clevis/EZ link ...2

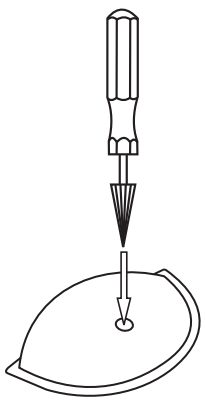
Control horn 4

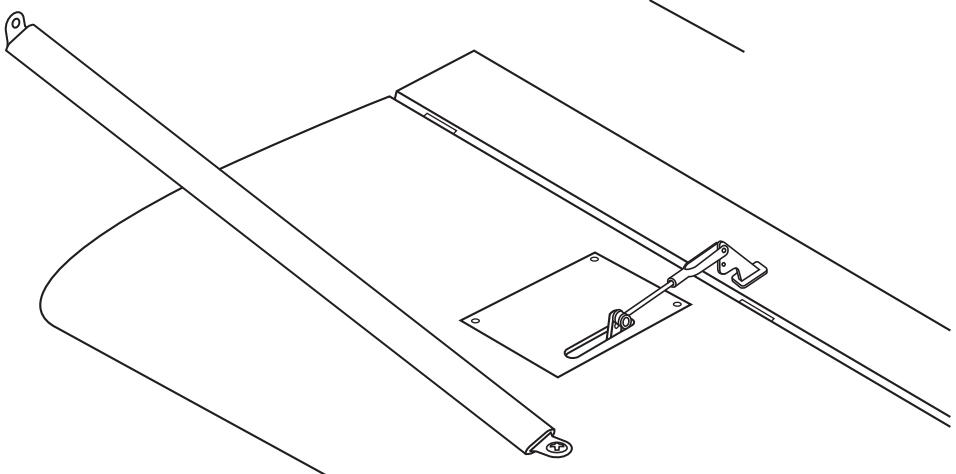
Connector 2mm 2

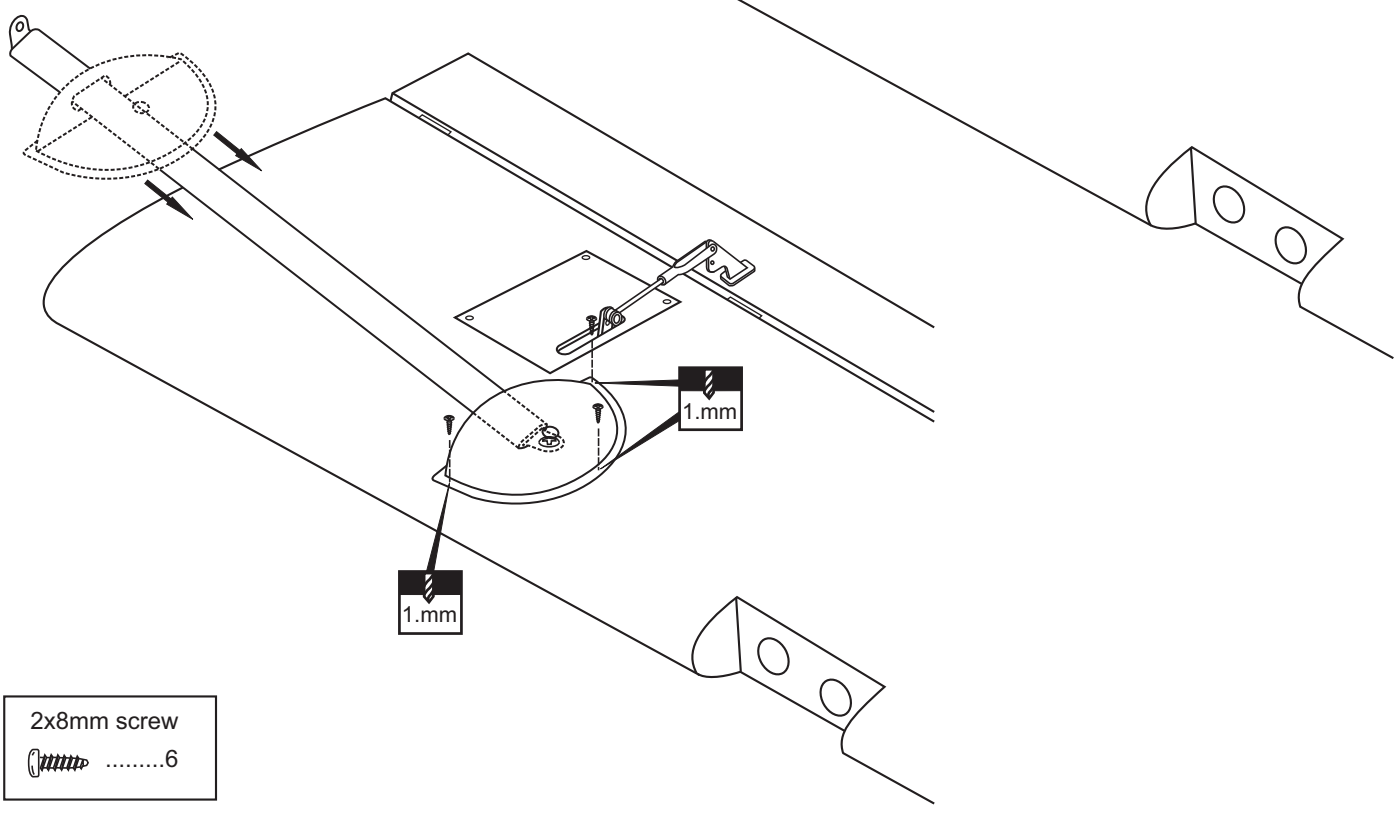
CESSNA 208 17-Wing: wing brace



3X12mm screw
.....2



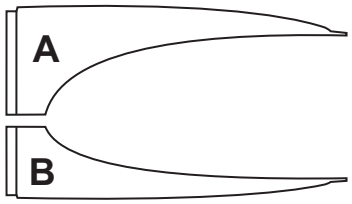




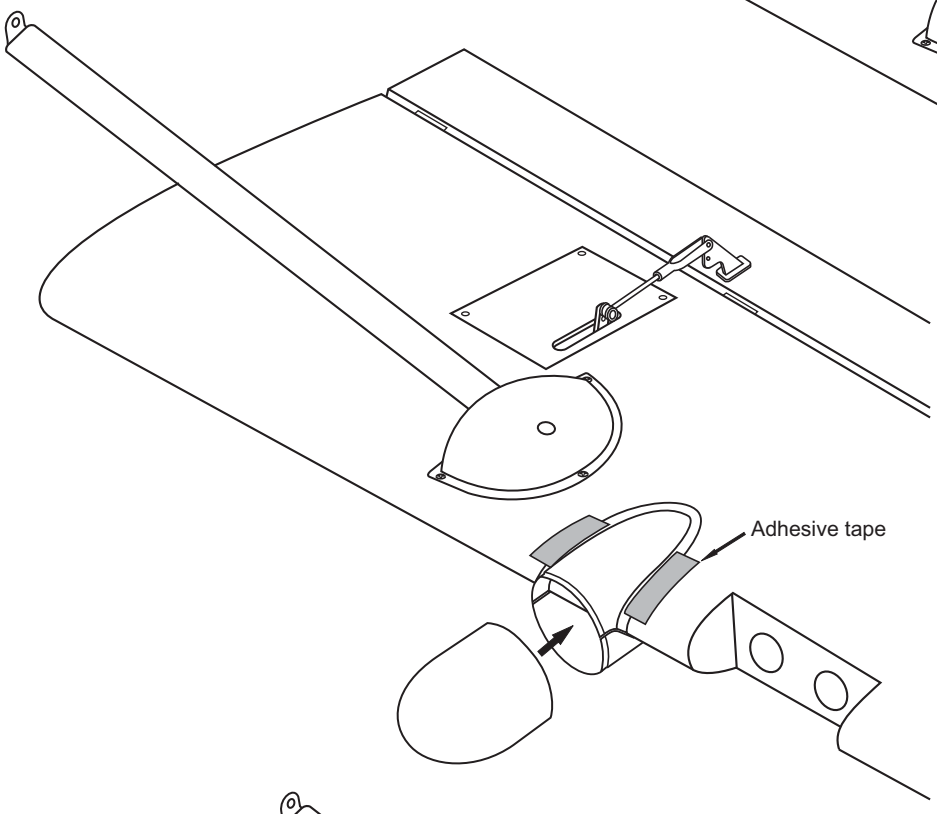
2x8mm screw
.....6

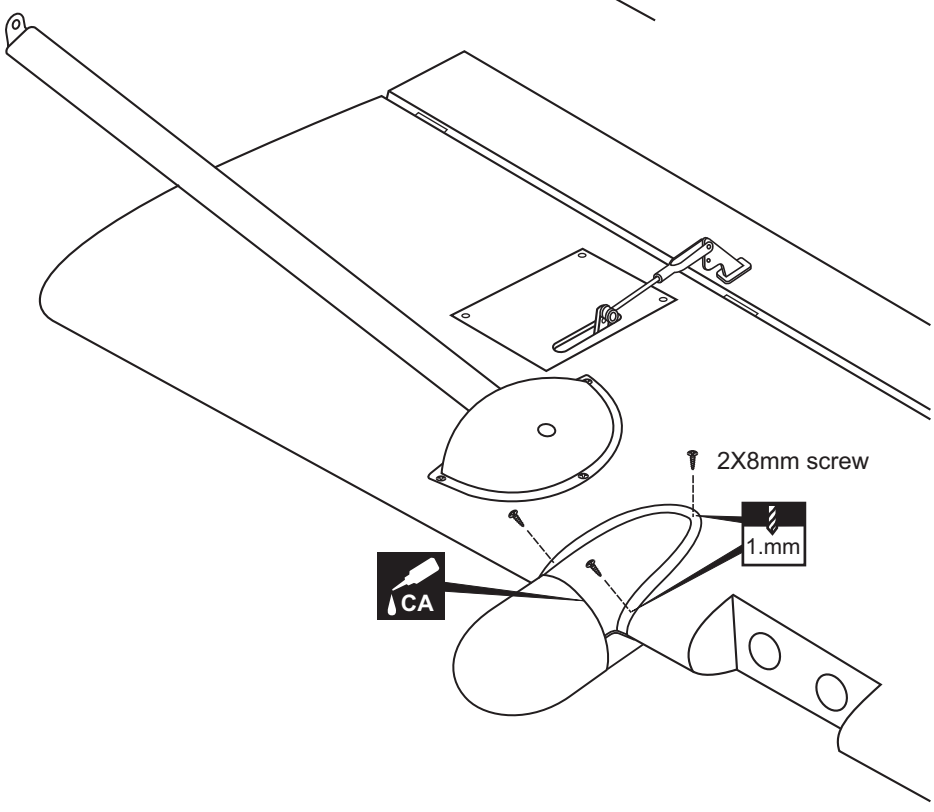
CESSNA 208 18-Wing:

Piece A for top of the wing.



Piece B for bottom of the wing.

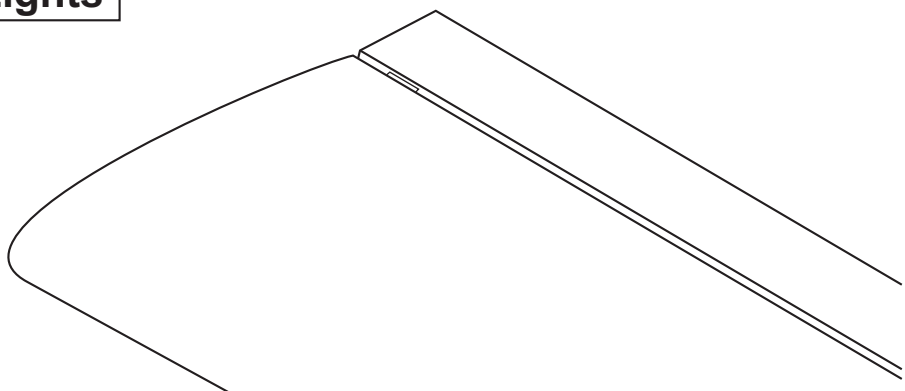


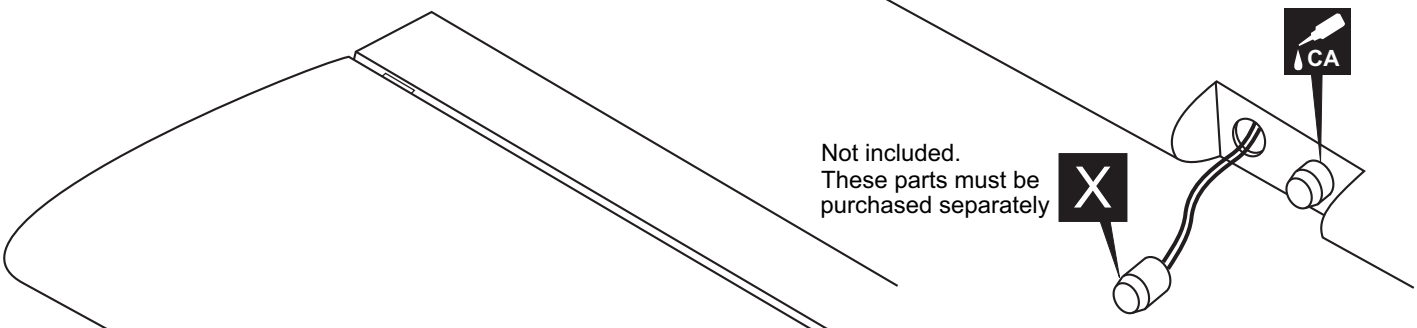


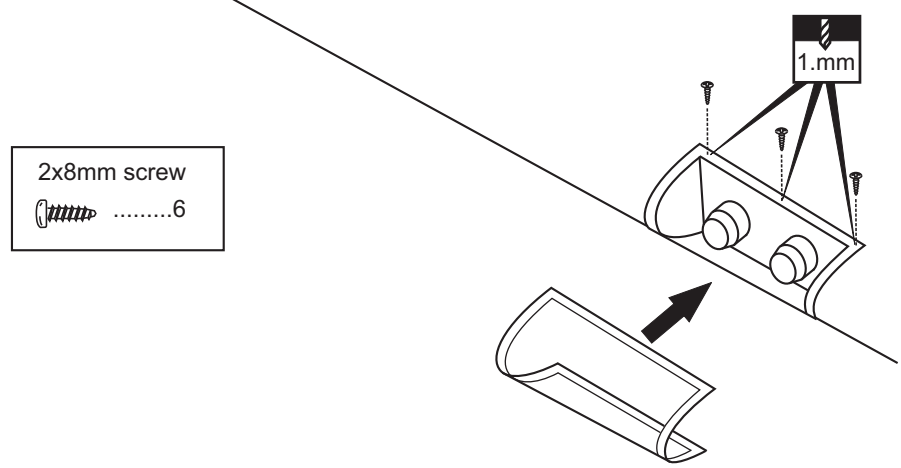
2x8mm screw

 6

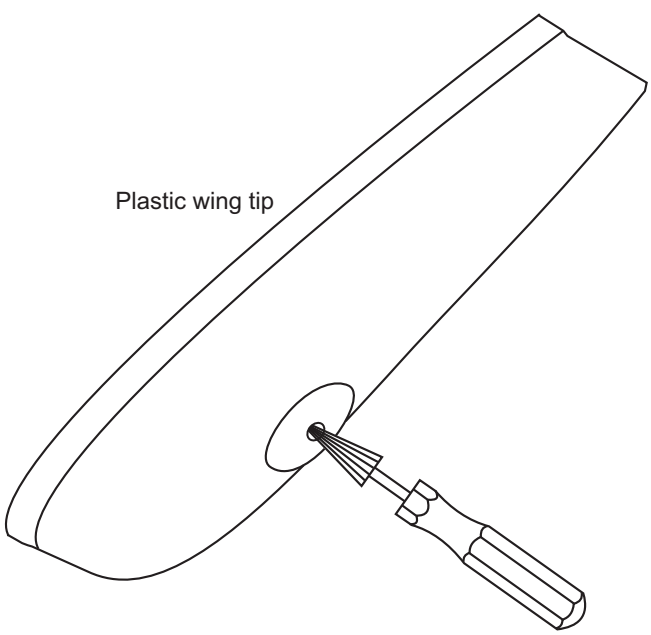
CESSNA 208 19-Wing: Lights



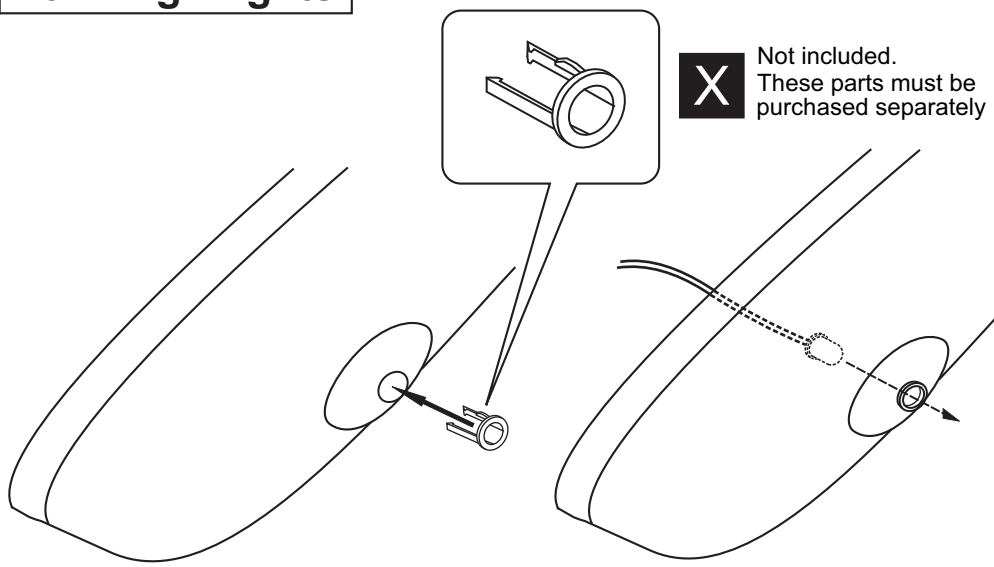




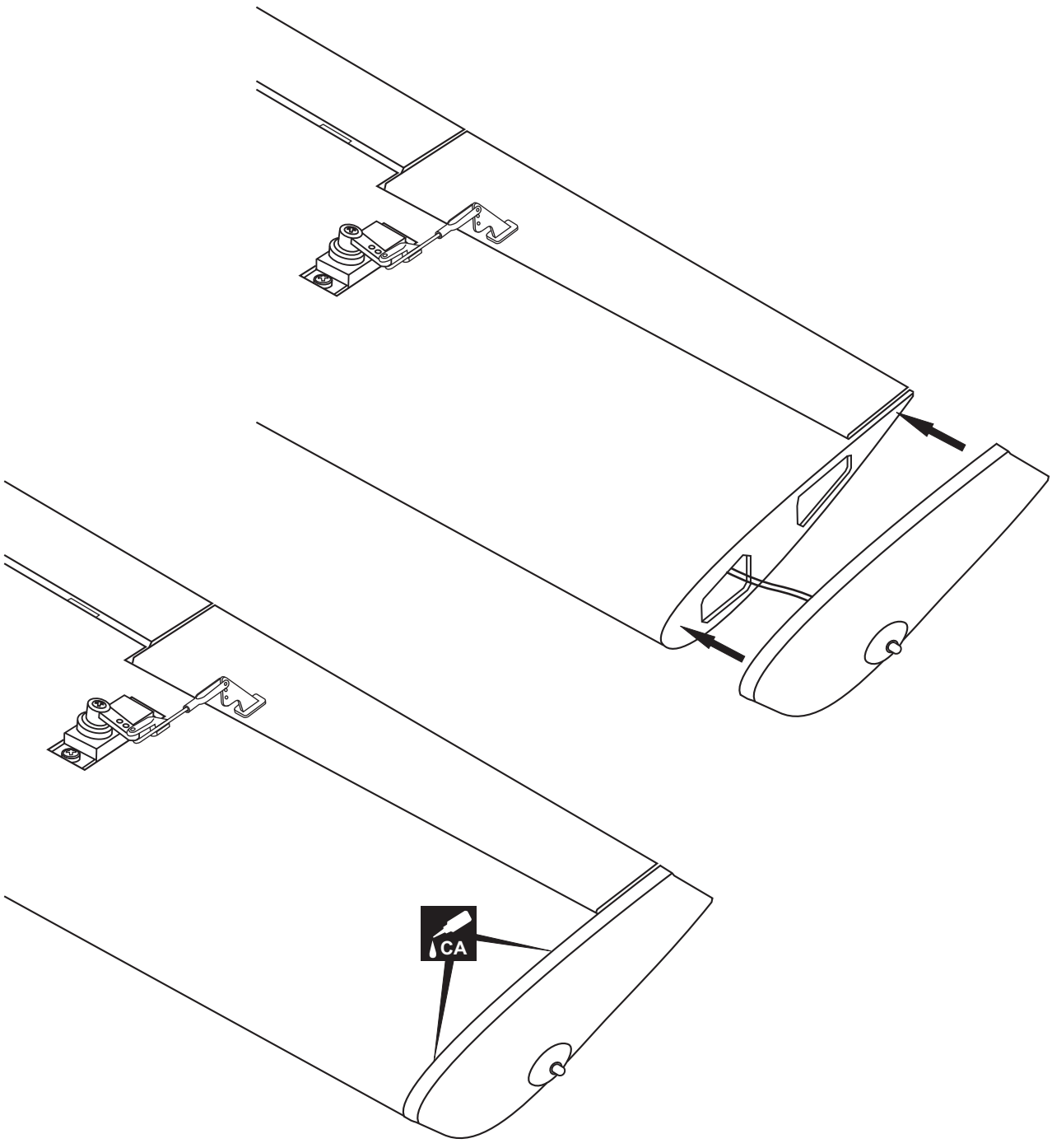
2x8mm screw
.....6



CESSNA 208 20-Wing: Lights

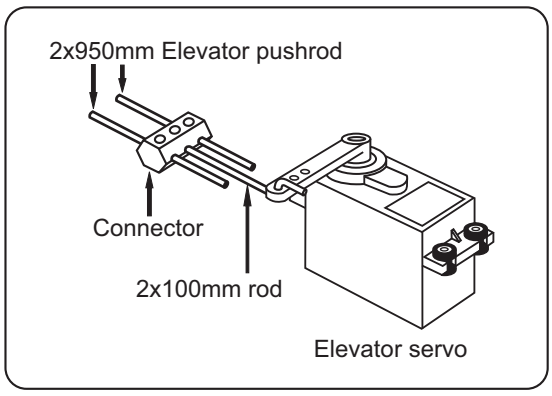


X Not included.
These parts must be
purchased separately

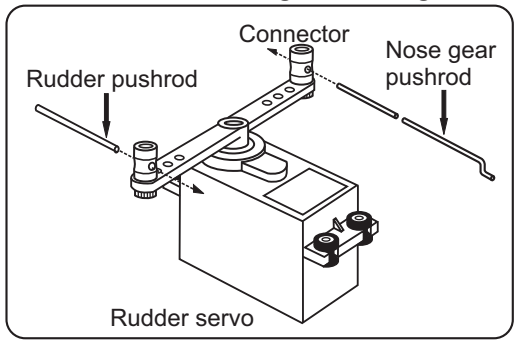


CESSNA 208 21-Elevator&Rudder servo - linkages

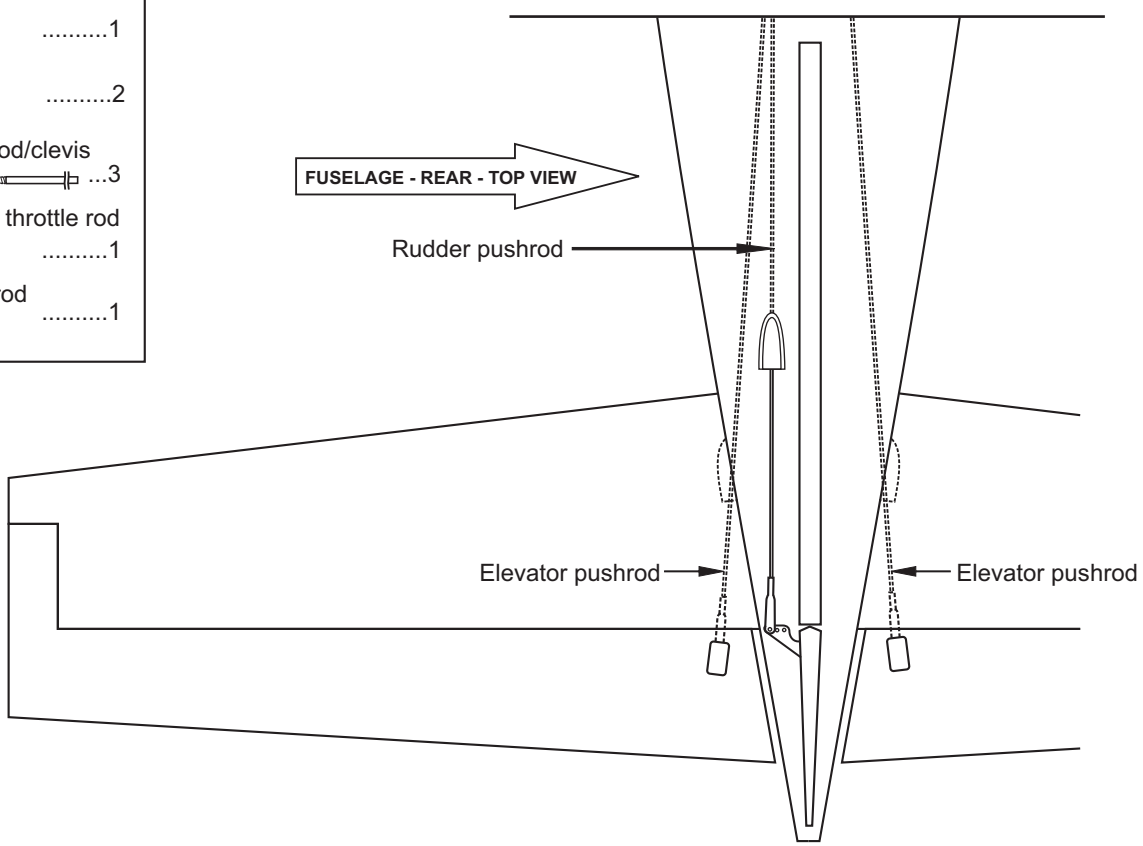
Elevator linkages



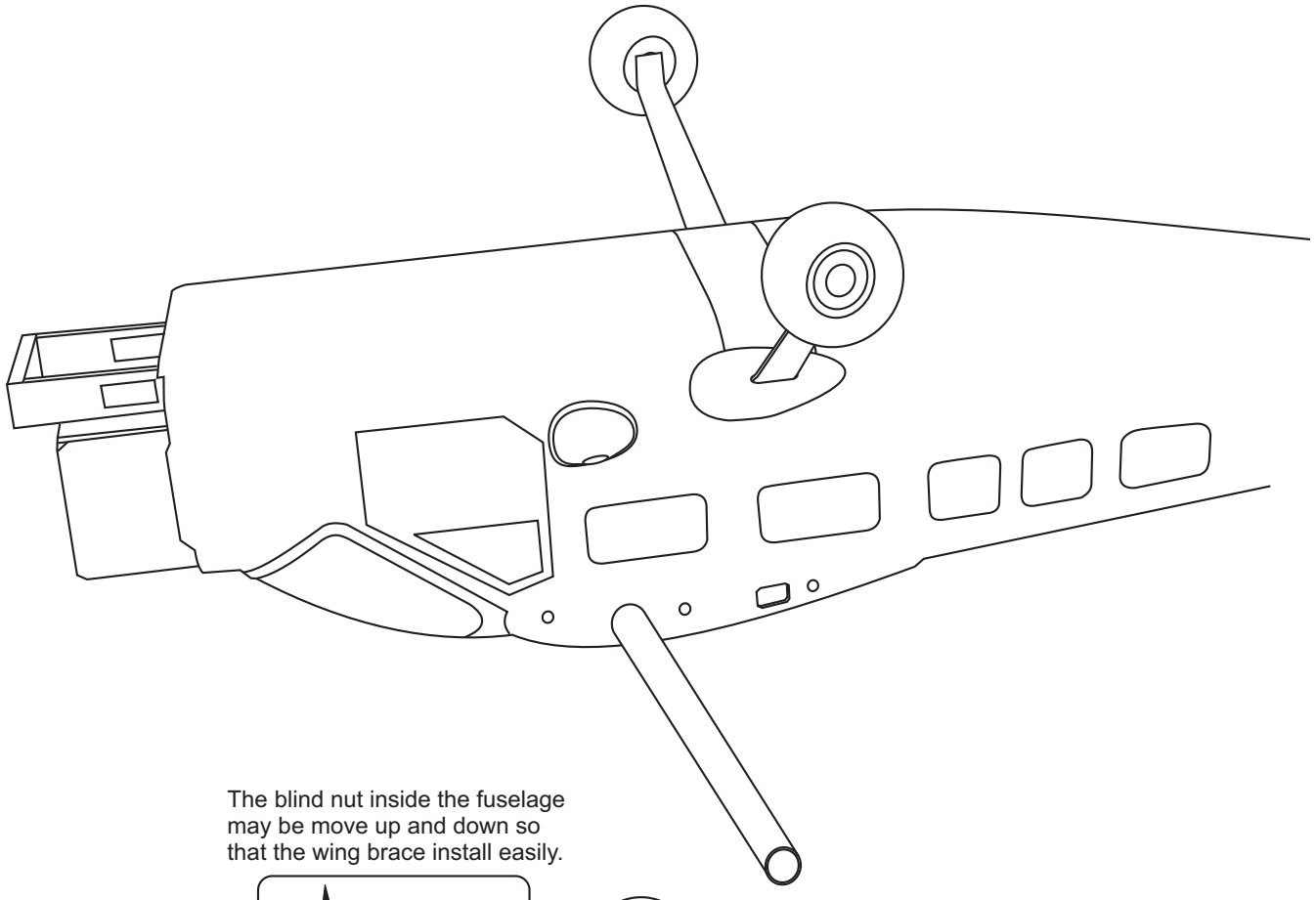
Rudder&Nose gear linkages



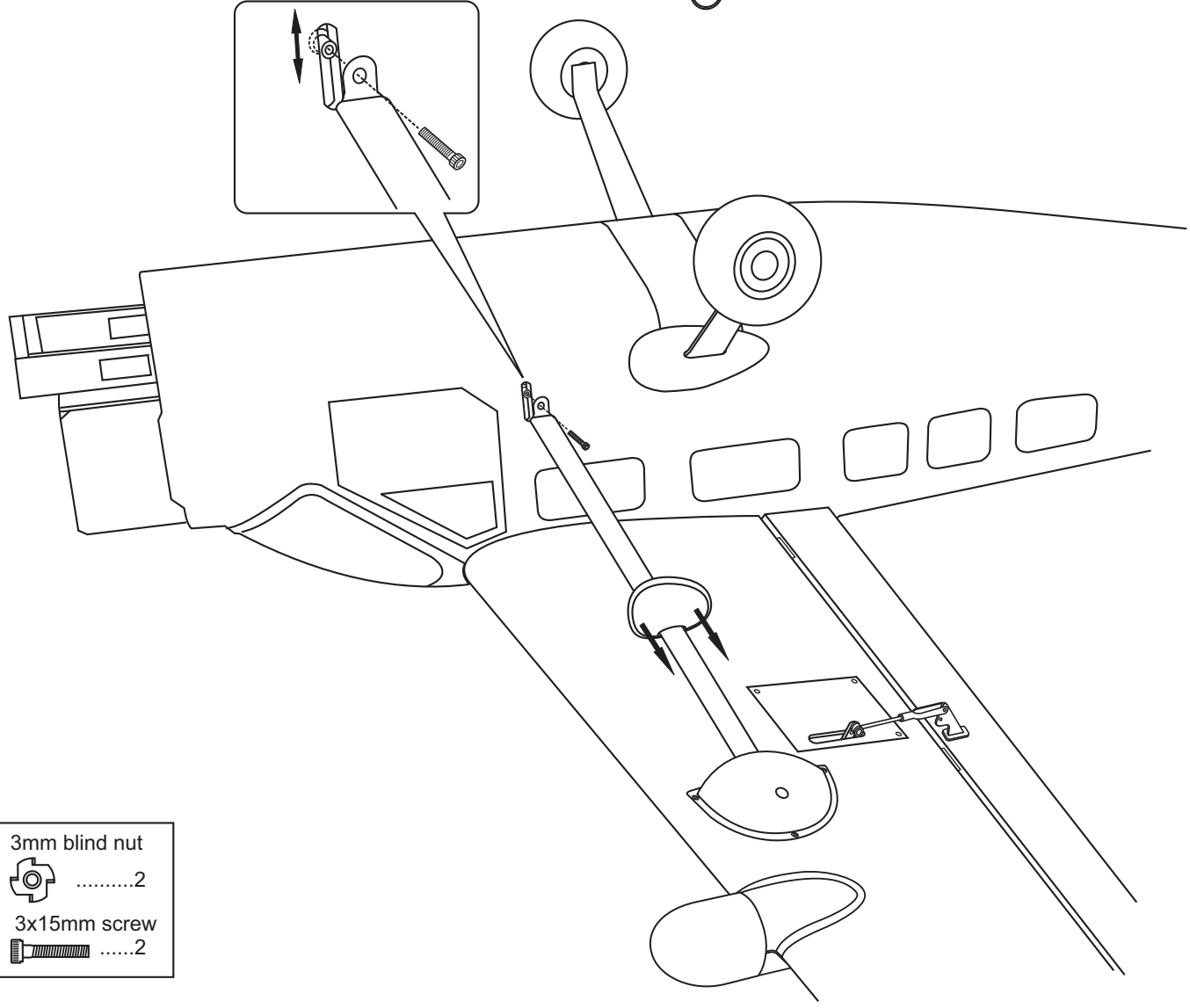
- Connector 1
- Connector 2
- 2x950mm rod/clevis ...3
- 1.2x550mm throttle rod 1
- 2x100mm rod 1



CESSNA 208 22-Joining the wings



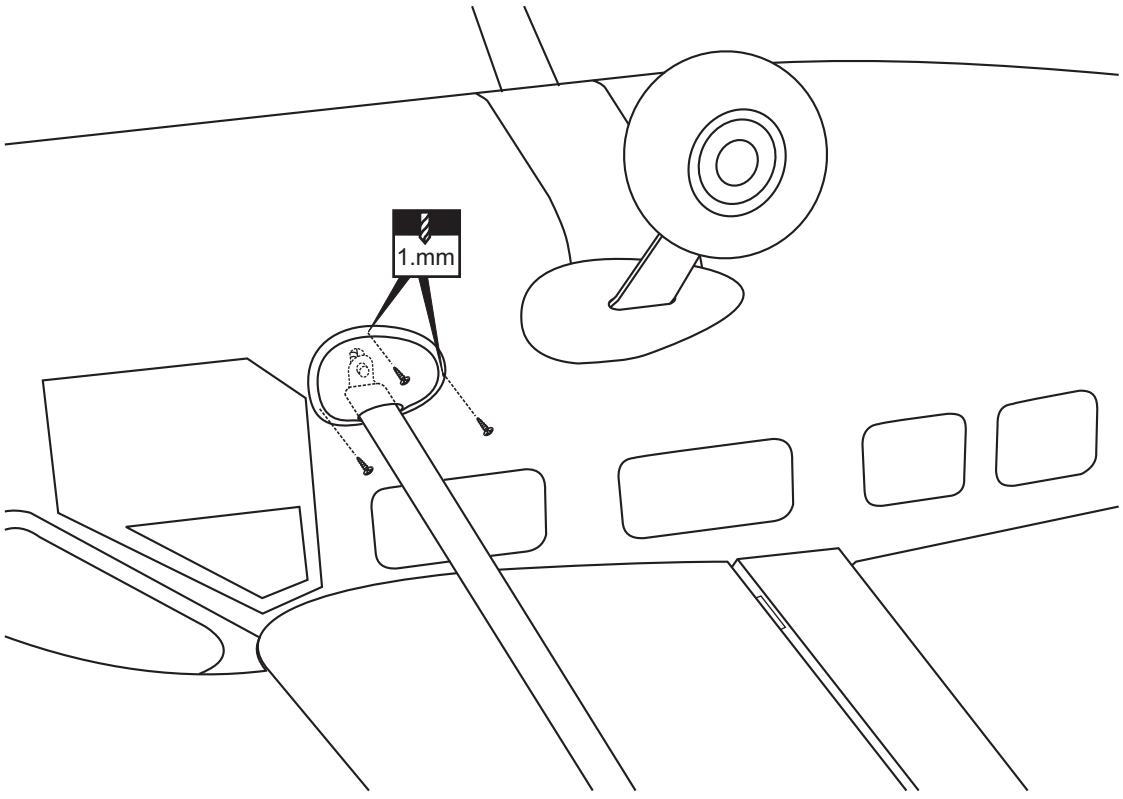
The blind nut inside the fuselage may be move up and down so that the wing brace install easily.



3mm blind nut 2

3x15mm screw 2

CESSNA 208 23-Joining the wings



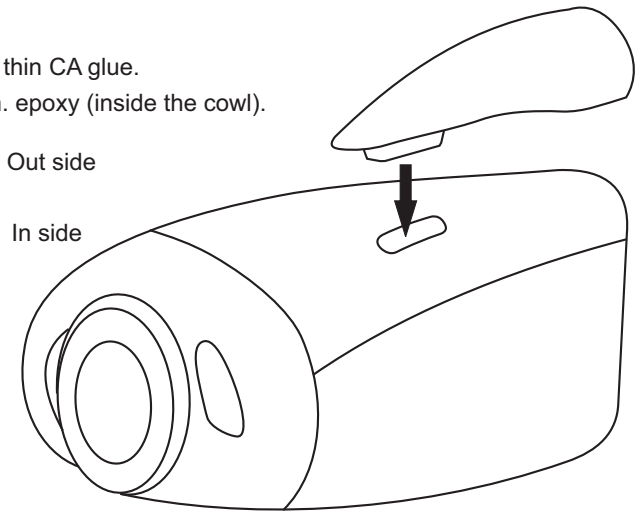
2x8mm screw 6

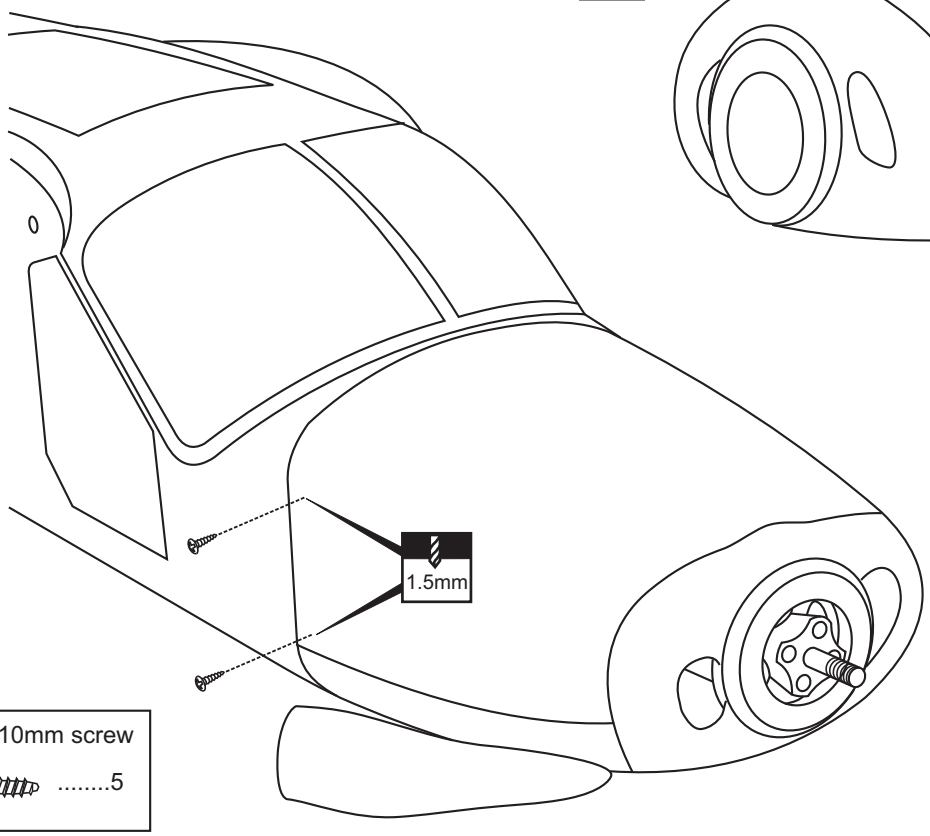
CESSNA 208 24-Cowling

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

CA Out side

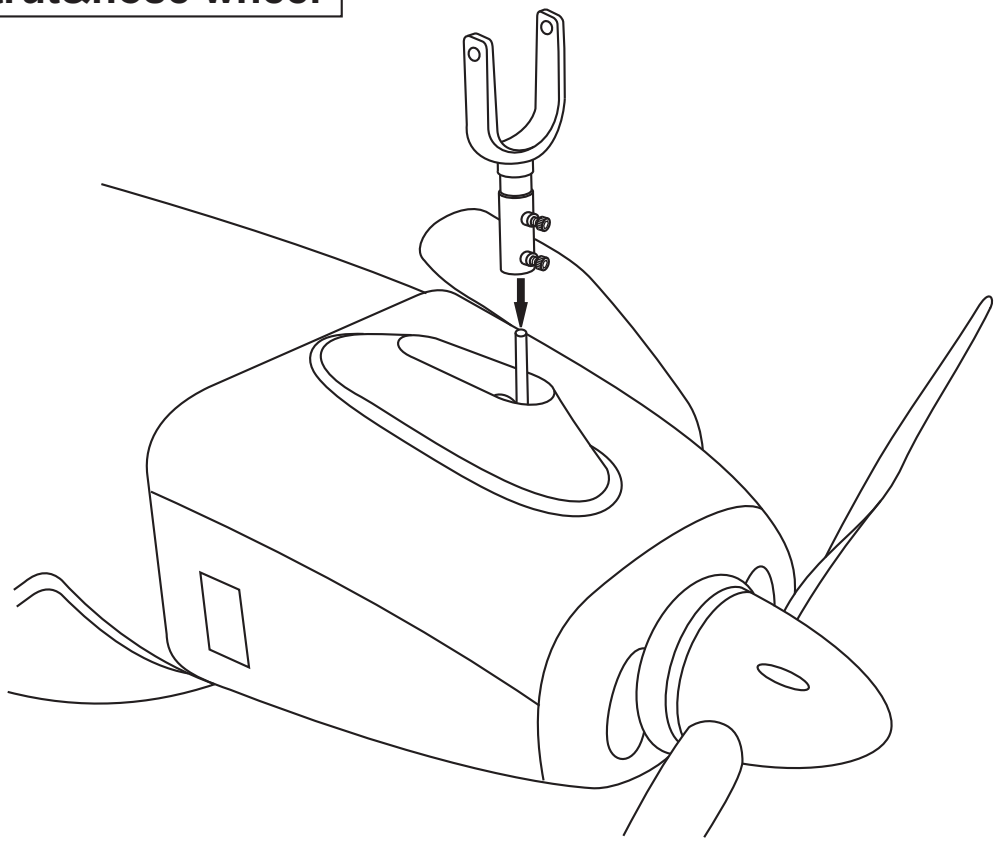
A B In side

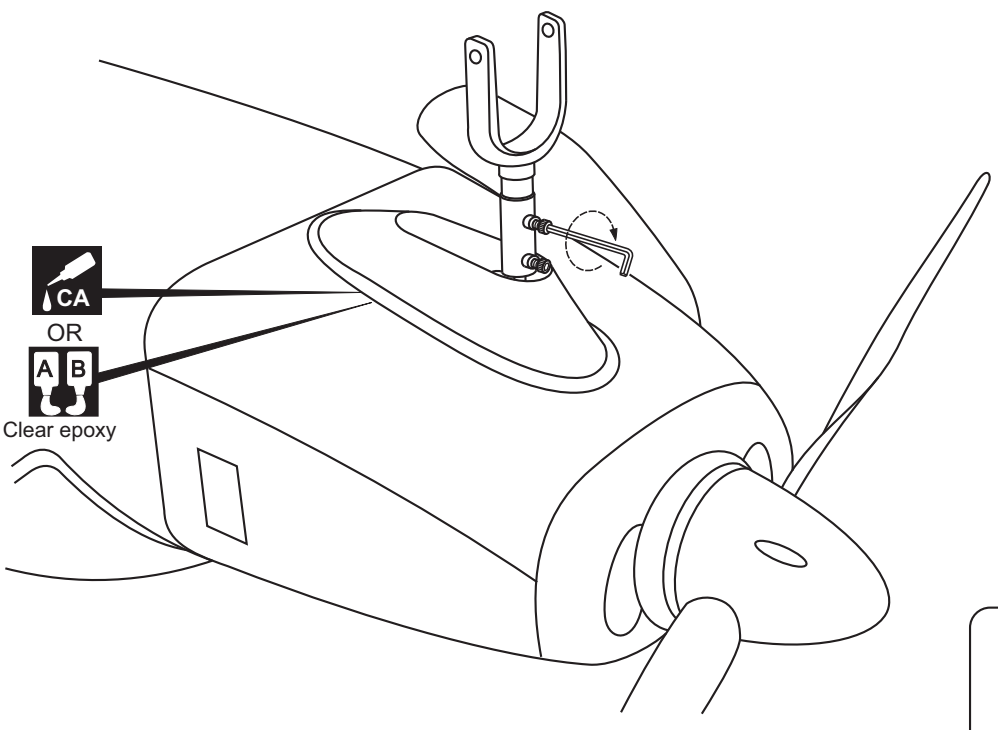




2.5x10mm screw 5

CESSNA 208 25-Strut&nose wheel

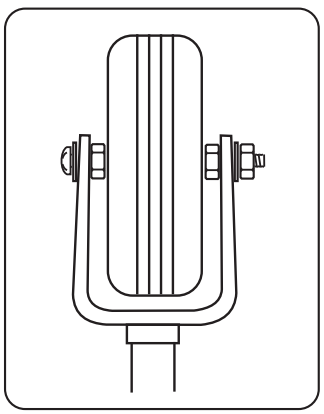




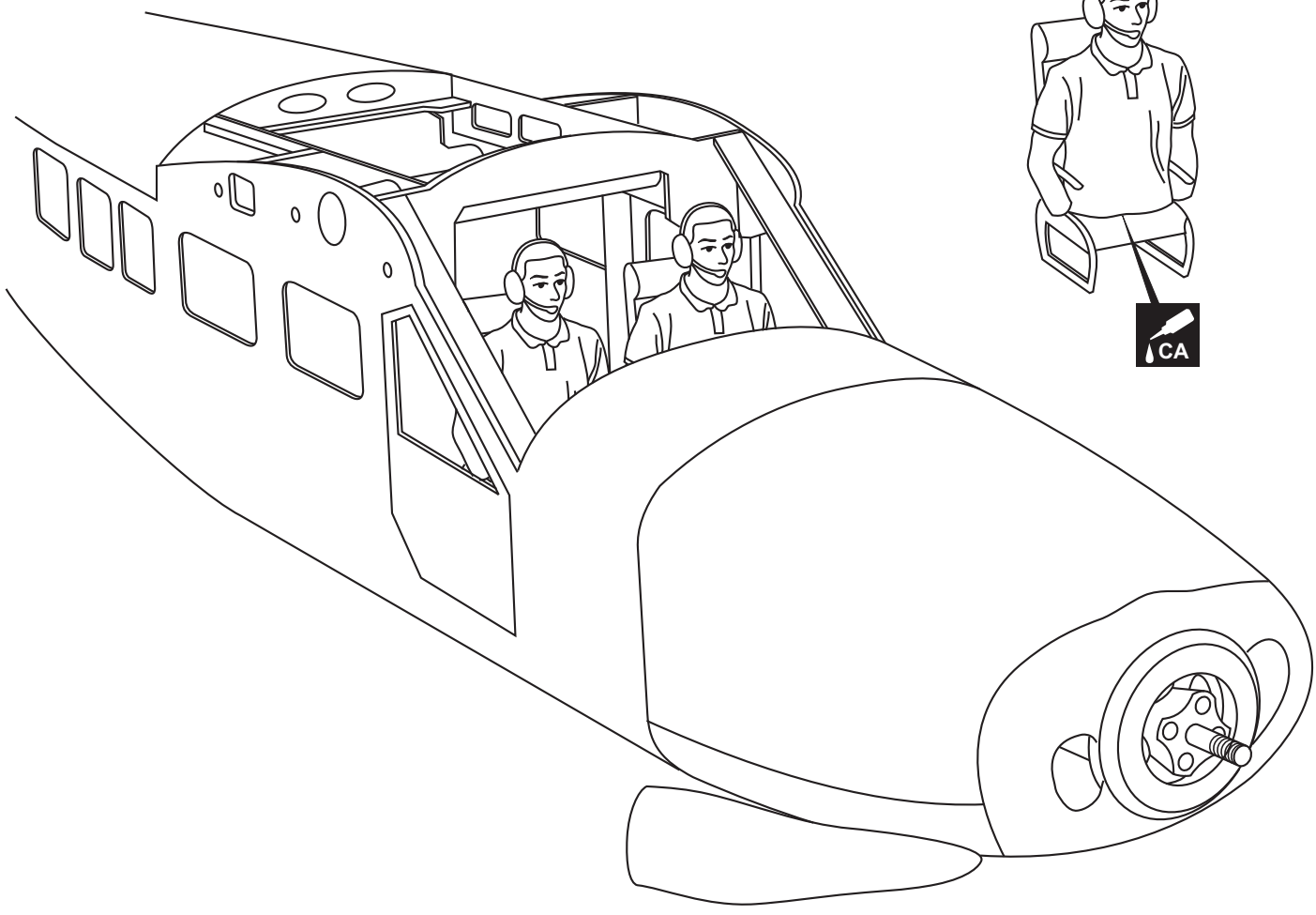
4x40mm screw ...1

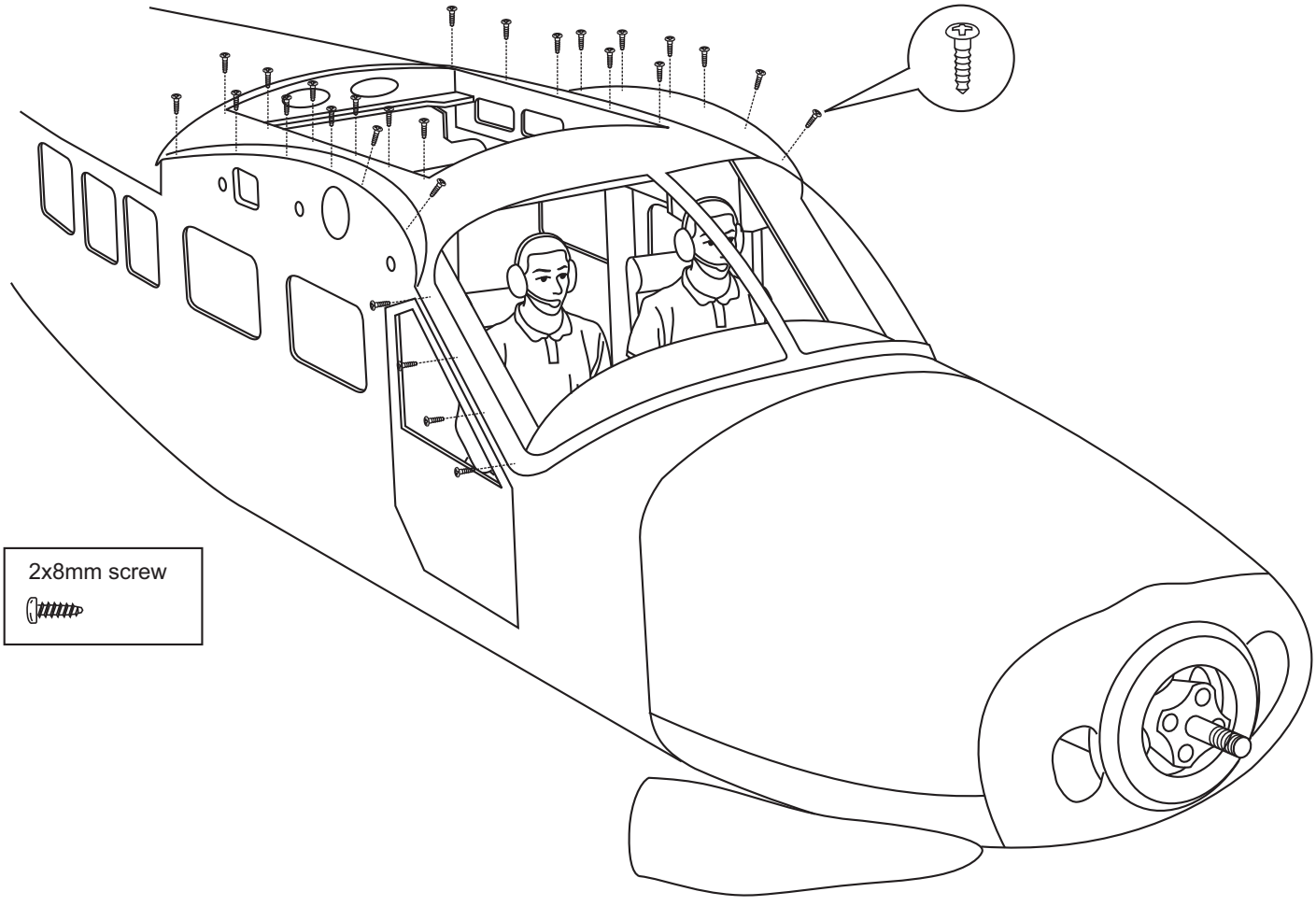
4mm washer ...2

4mm nut ...3



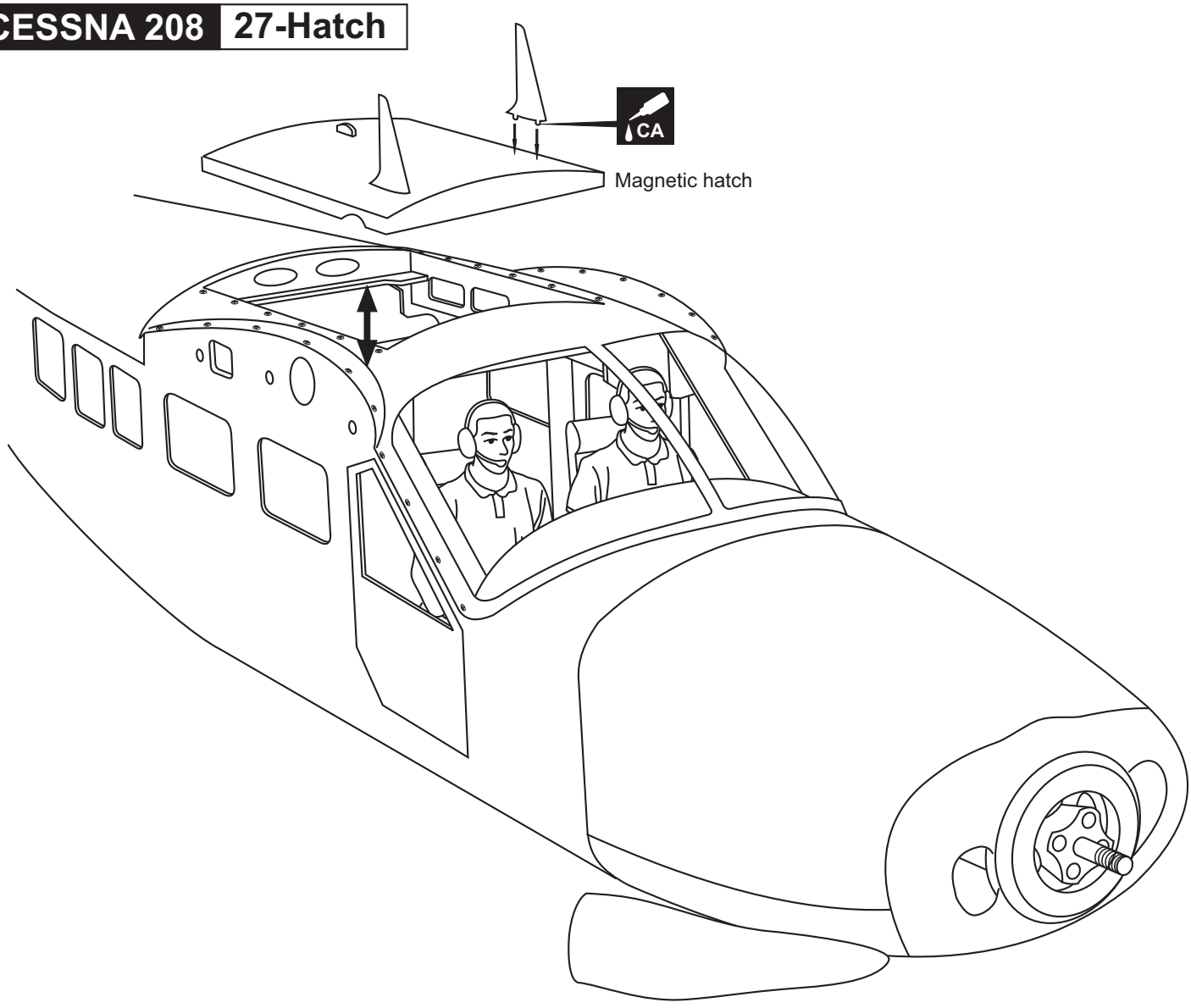
CESSNA 208 26-Pilot figure&Plastic cover



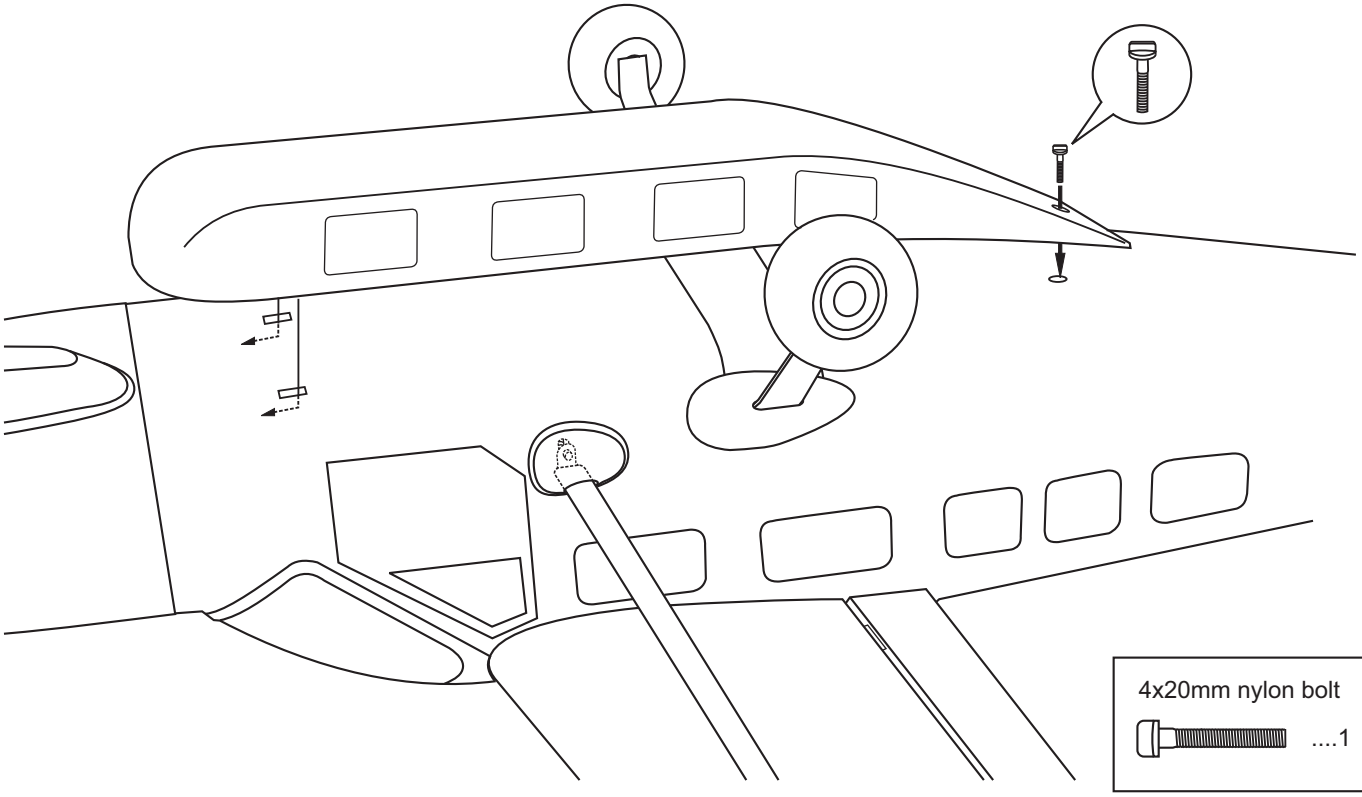


2x8mm screw

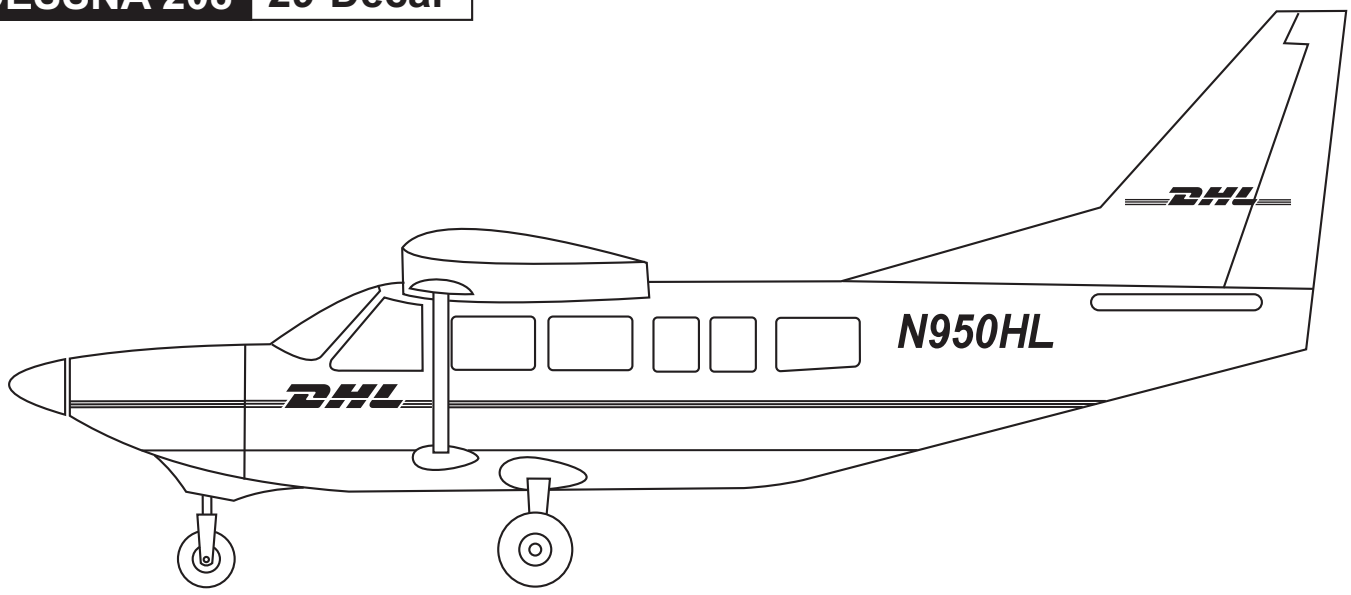
CESSNA 208 27-Hatch

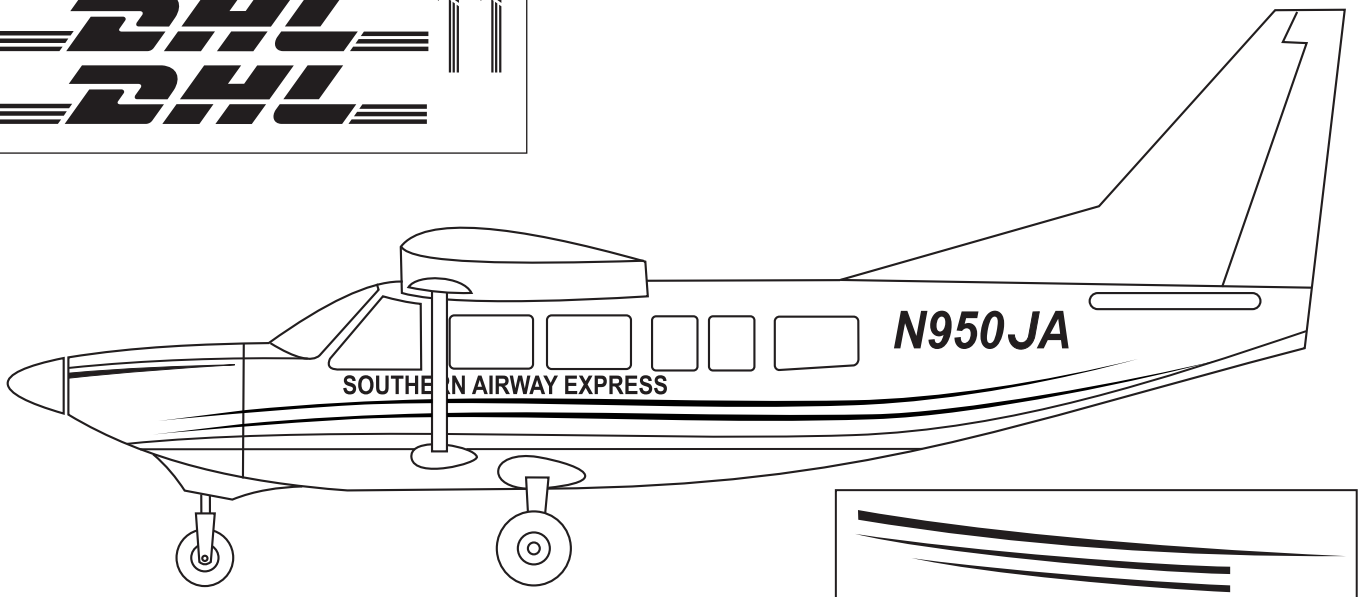


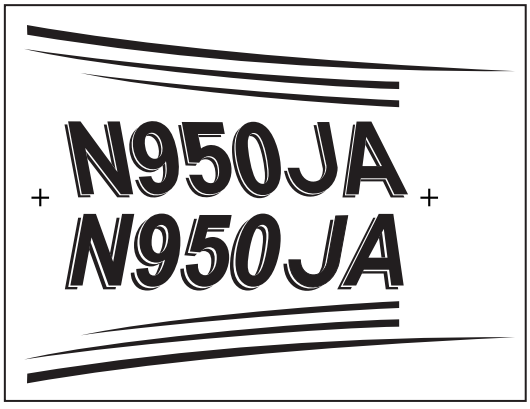
CESSNA 208 28-Cargo drilling



CESSNA 208 29-Decal







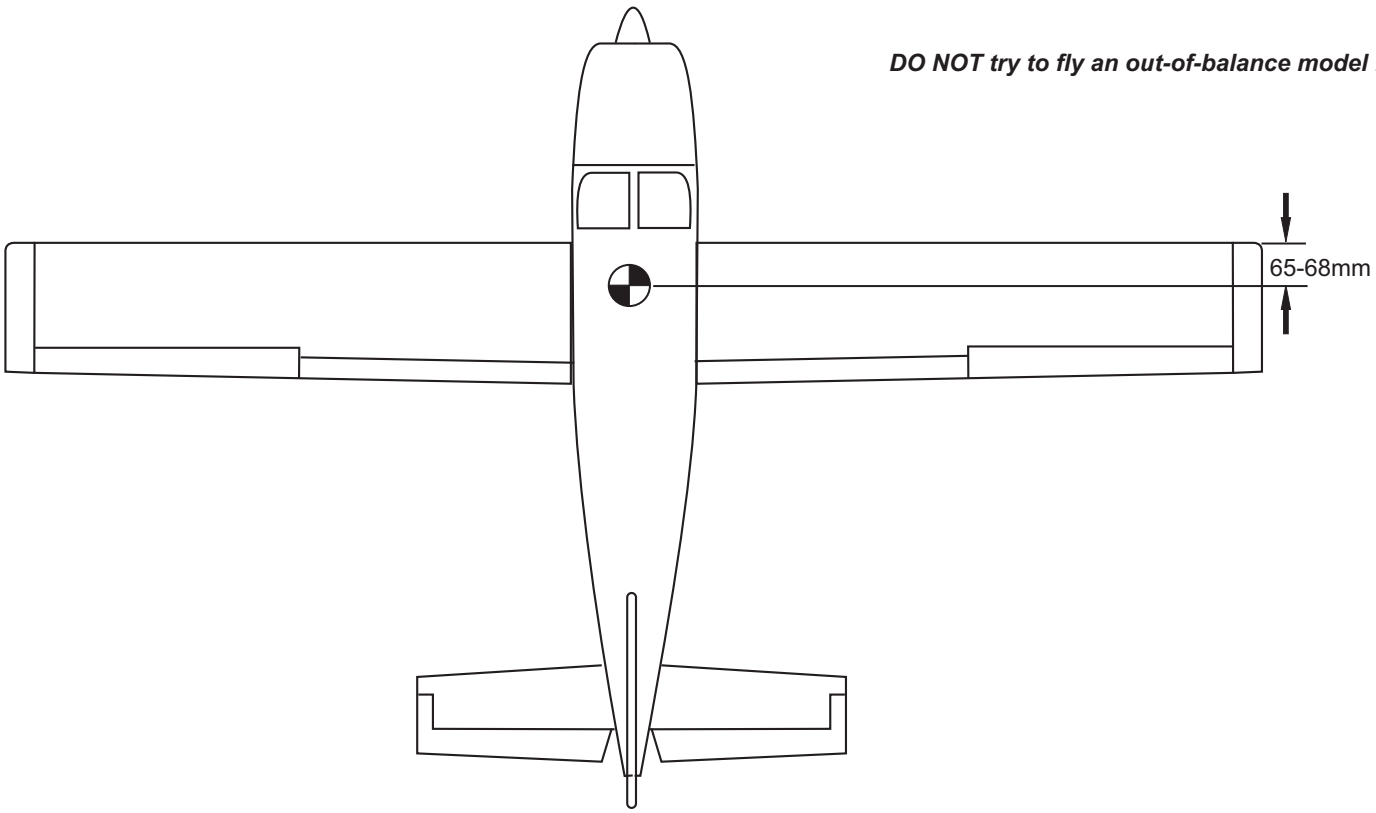
Note: Cut out the stickers and apply them in the proper area. Do not peel the backing paper off all at once.
Peel off one corner of the backing and cut off with scissors.
Arrange sticker on model and when satisfied adhere the corner without backing.
Carefully peel back the rest of the backing while at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

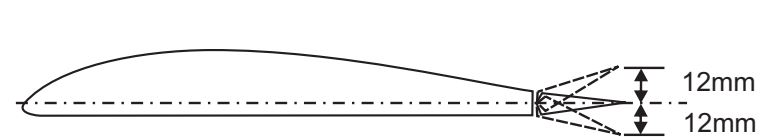
CESSNA 208 30-Balance

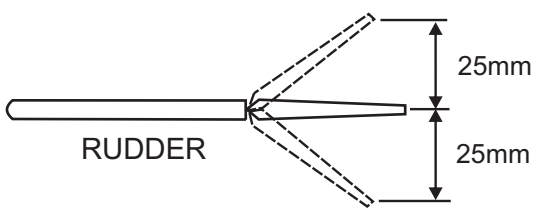
THE CENTER OF GRAVITY IS LOCATED 65 - 68mm BACK FROM THE LEADING EDGE OF THE WING, AT THE FUSELAGE. BALANCE A PLANE UPSIDE DOWN WITH THE FUEL TANK EMPTY.

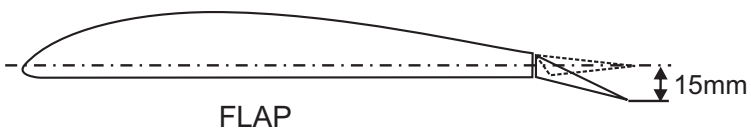
DO NOT try to fly an out-of-balance model !

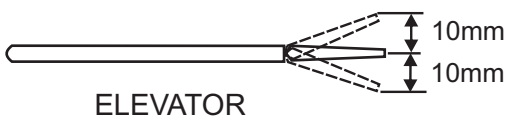


CESSNA 208 31-Control surface









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.