



## Nanchang Q/A-5 Nato Reporting name «Fantan»

Even though it is often mislabeled as “a Chinese copy of the MiG-19”, the Nanchang Q-5 should be credited as the first indigenous Chinese jet combat aircraft.

The Chinese license version of the MiG-19, the Shenyang J-6 (Jian-6 also known as F-6), was extremely popular with the People’s Liberation Army Air Force, so when Air Force leaders called for a new ground attack aircraft for close air support, it was a logical choice for the young Chinese aircraft industry to base the design on the proven J-6.

Even though the Q-5 still bears a strong resemblance to the J-6, aside from its nose and intake sections, most

of the plane is redesigned, except for the rear section of the fuselage with the same engines and horizontal stabilizers as the J-6. The rest of the fuselage has been redesigned to allow better control at transonic speeds, and the wings and tail were completely redesigned, with reduced sweep angle on the wings. The Q-5 design also included an internal weapons bay and the installation of a radar in the nose. The weapons bay was only used as such in the early operational versions, and is now used to store additional fuel, raising the fuel capacity by 70%. The nose was not actually fitted with a radar except for the navy versions.

Even though the Q-5’s first prototype had been finished by 1960, the project was officially cancelled in 1961. The project was secretly kept alive, and was revived in 1963, leading to the successful maiden flight on June 4th 1965. Production began four years later in Nanchang City, with the production place doubling as name of the production company. The first Q-5’s were delivered to operational squadrons in 1970. The aircraft received a number of upgrades over the years. In the 1980’s, the export versions, called A-5 – The Chinese Q for Qiang (attack) had been replaced by an international A for Attack – came out and were sold to

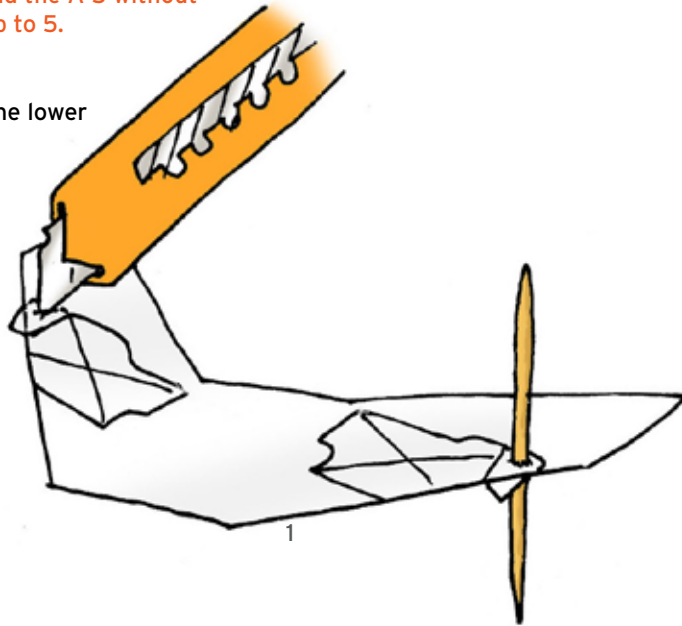
the Air Forces of Pakistan, Bangladesh, North Korea and Myanmar. Both Q-5’s and A-5’s are also known under the NATO reporting name “Fantan”, inspired by a Chinese game similar to Roulette.

Even though the Q-5’s main mission in Chinese operation is close air support, it has been modified to fill a number of roles. A small number of Q-5’s were modified to carry a single nuclear bomb under their belly. All of them have been retired and one is on display in the Chinese Aviation Museum in Beijing. Another version was the torpedo bomber version. It featured a modified nose for improved downward vision, similar to that of the MiG-27, which housed a fire-control radar and could carry two torpedoes under the main wing pylons. Even though this version proved highly satisfying during its evaluation, it entered service in only small numbers and was retired early, since the use of torpedoes in modern naval warfare was considered to be pointless. It was replaced by a navy version, which retained a radar in the nose and had the capability to carry air-to-ship missiles. This navy version shared its predecessors’ fate.

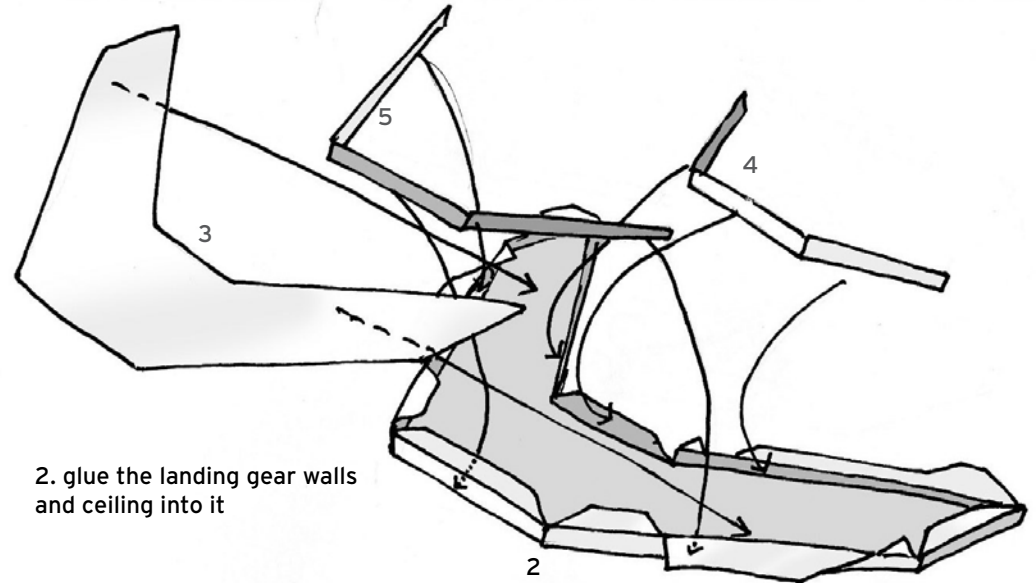
To upgrade the Q-5’s abilities, the remaining aircraft were retrofitted with GPS systems and a laser guidance system, allowing the usage of Laser Guided bombs. Since the Laser guided bombs had to be carried under the main wing pylons, a conformal fuel tank was fitted on the belly to compensate the unavailability of wing pylons to carry drop tanks. The latest version of the Q-5 is the two-seater, which can be used as a Trainer with double control or as a forward air controller with an observer/ weapon controller in the backseat.

If you want to build the A-5 without landing gear, jump to 5.

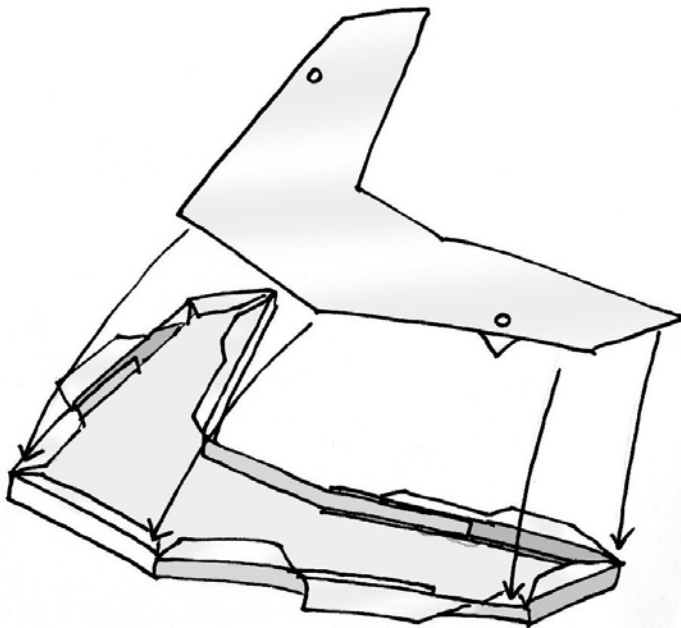
1. make holes in the lower stabilizer part



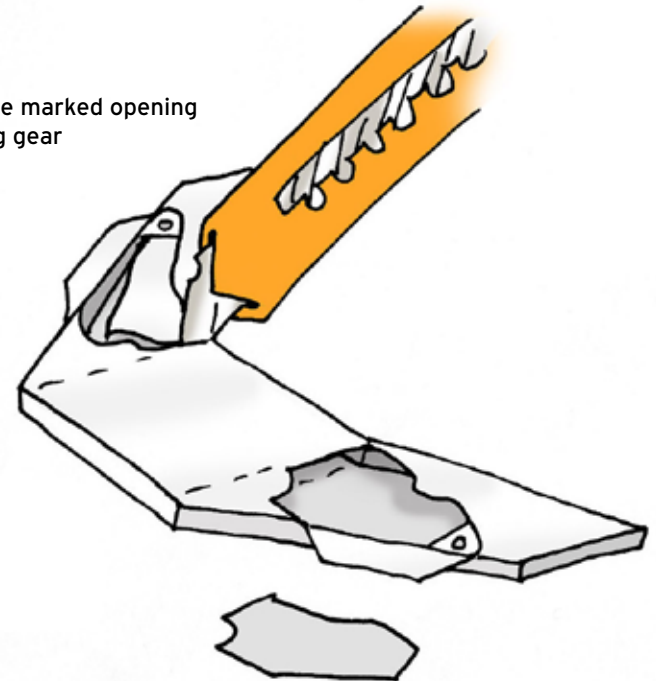
2. glue the landing gear walls and ceiling into it



3. glue the stabilizer together



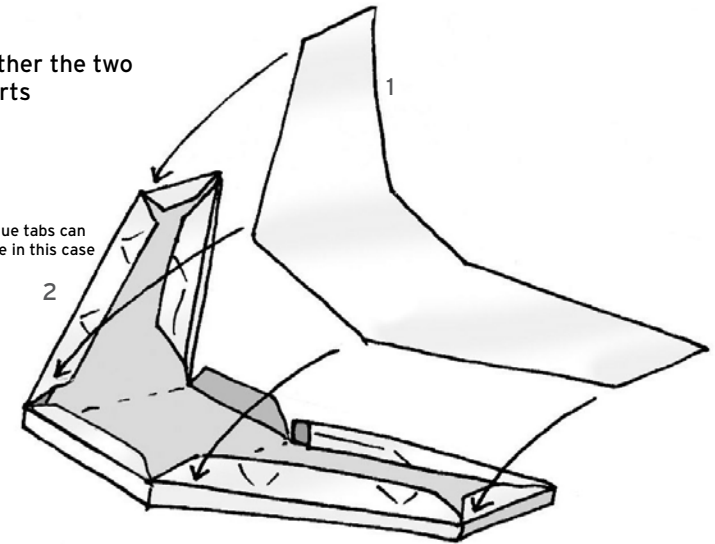
4. cut away the marked opening for the landing gear



If you are building the A-5 with landing gear, jump to 6 (below)

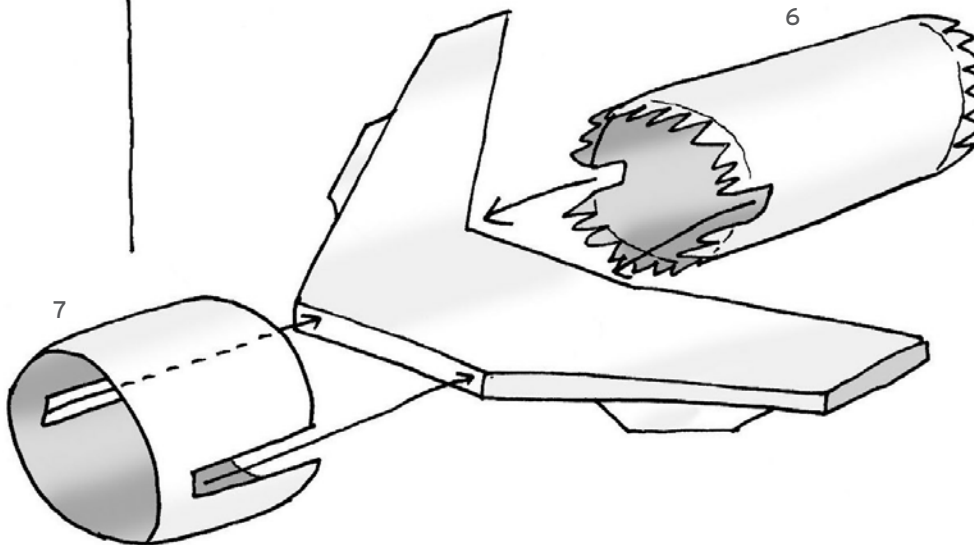
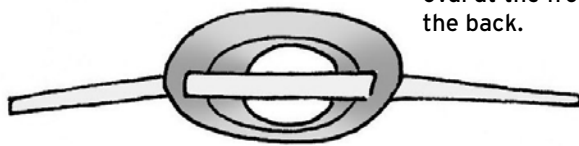
5. Glue together the two stabilizer parts

The upper glue tabs can be cut as one in this case

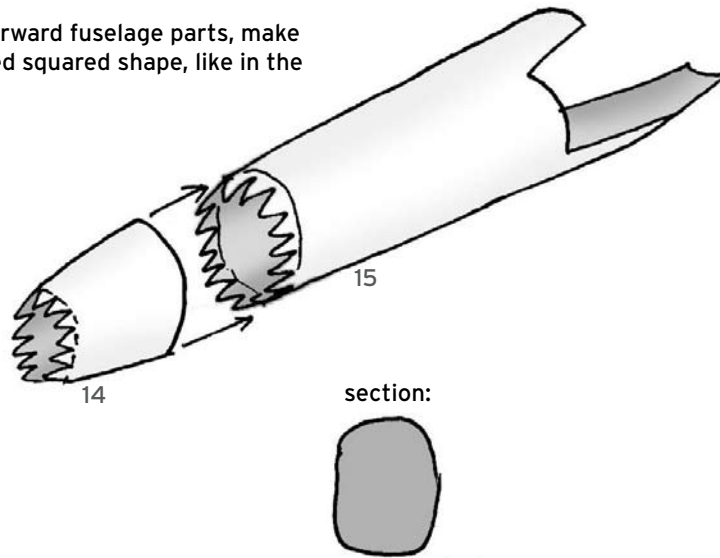


6. glue the middle fuselage parts together, with the stabilizer between them.

The fuselage shape should be oval at the front, and round at the back.

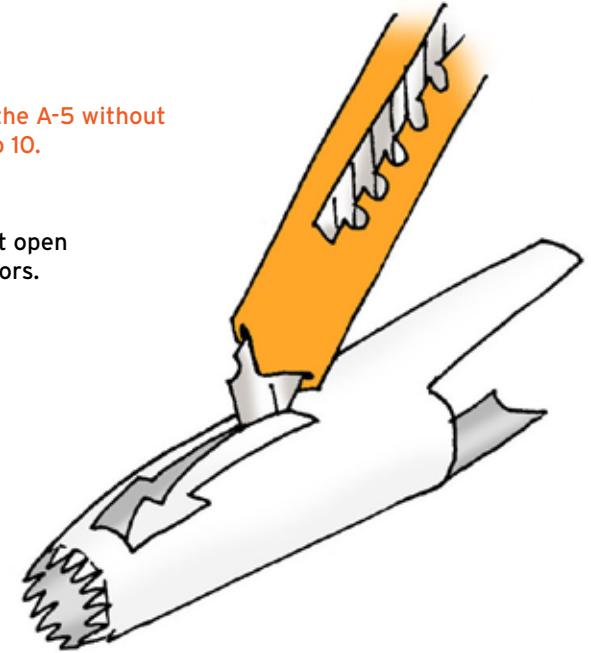


7. glue together the forward fuselage parts, make sure to make a rounded squared shape, like in the section drawn below

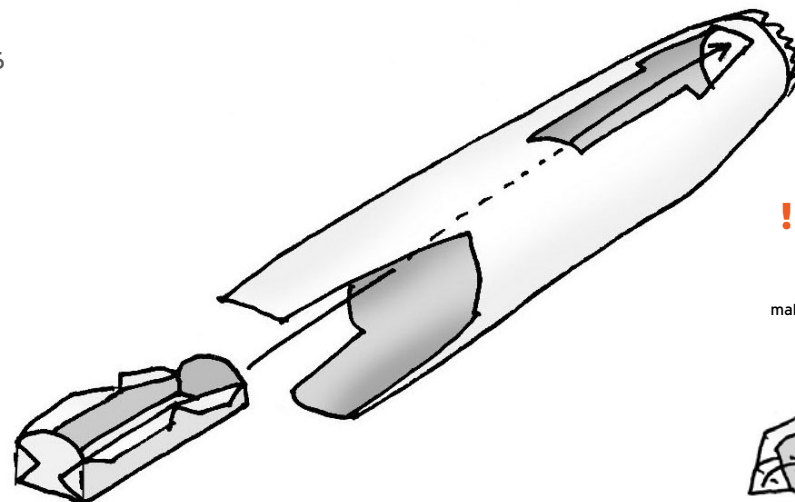
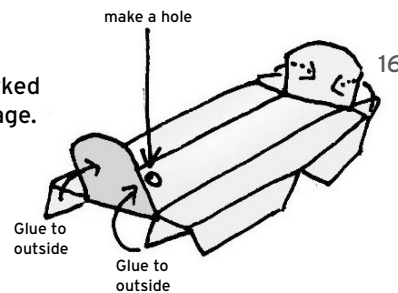


If you want to build the A-5 without landing gear, jump to 10.

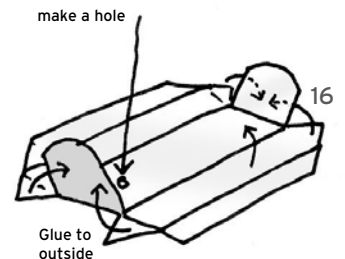
8. Use a knife to cut open the landing gear doors.



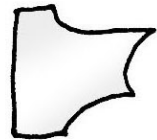
9. Assemble the wheel well; glue the tabs to the outside at the corners and make a hole in the marked position, then glue it into the fuselage.



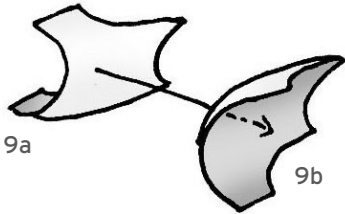
! The **Torpedo-Bomber** has a slightly different wheel well, but it's installed the same way



10. Glue together the engine divider. Make sure only the middle and the pointed ends are together, but top and bottom bend outward.

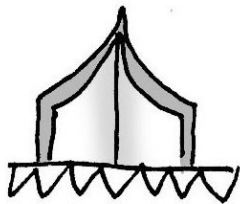


9a

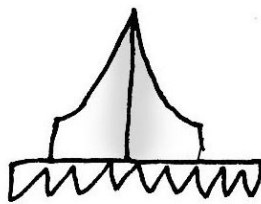


9a

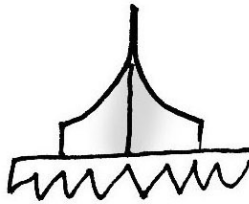
9b



bottom view  
CORRECT

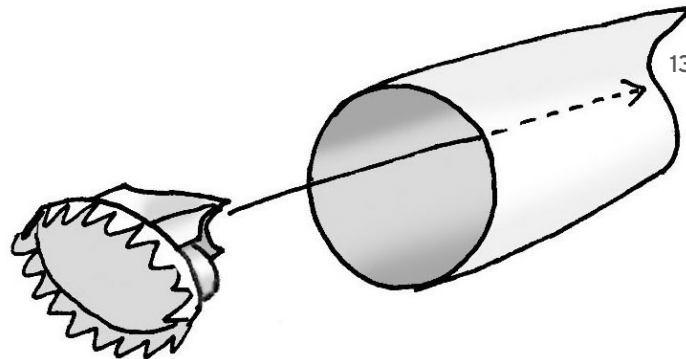


top view  
CORRECT



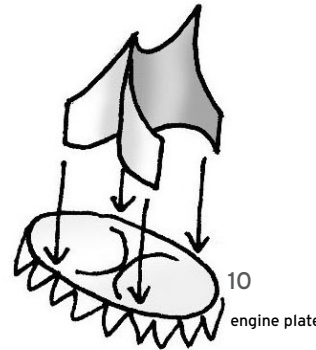
FALSE!

12. Glue this assembly into the fuselage end part. Shape the fuselage part to fit with the engine plate in the back, shape it to be circular in the front.

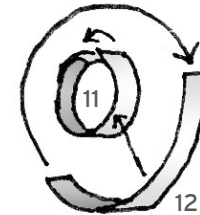


13

11. Glue the divider on the engine plate in the marked position. Build the exhaust rings from outer and inner parts and glue them onto the engine plate.

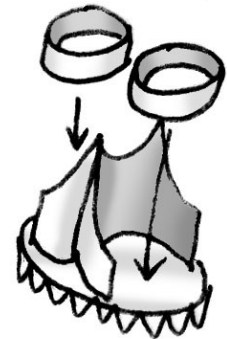


10  
engine plate

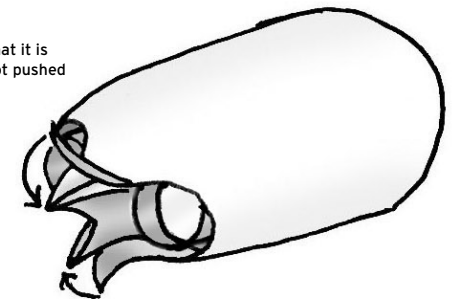


11

12



make sure that it is round and not pushed down.



13. wrap the protruding ends around the divider



The early versions of the Q-5 have a weapons bay.  
If you are building one of those versions, and want to  
build the weapons bay open, continue here,  
otherwise jump to 17

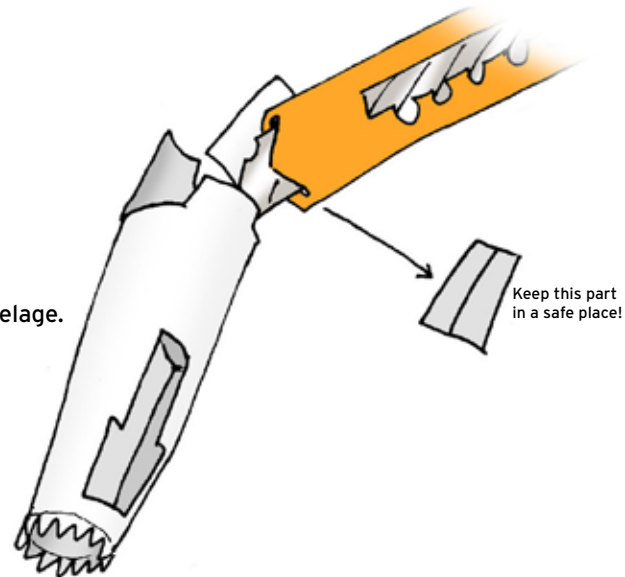
14. Cut out the weapon bay doors.

Keep the part you cut out in a safe place.

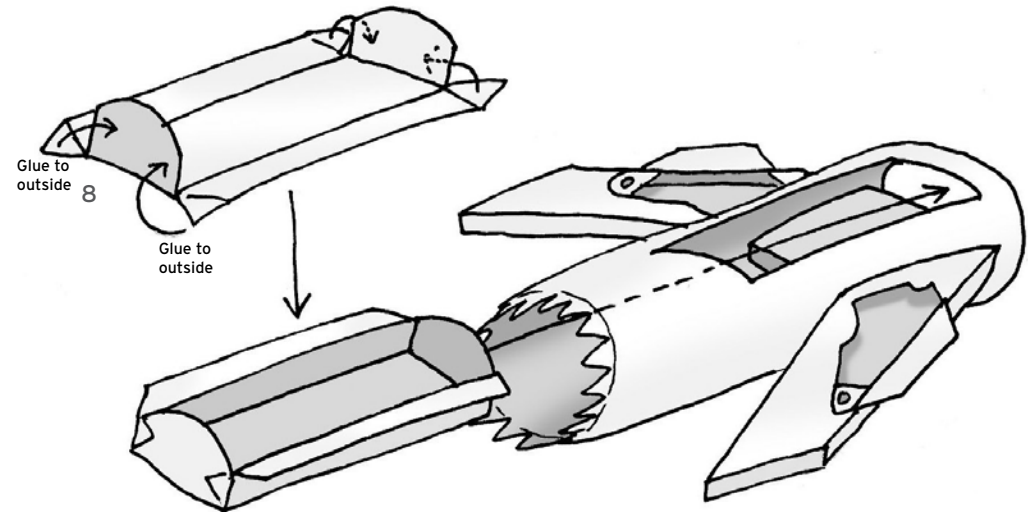


16. Cut away the rear end of the forward fuselage.

Keep the part you cut away in a safe place.



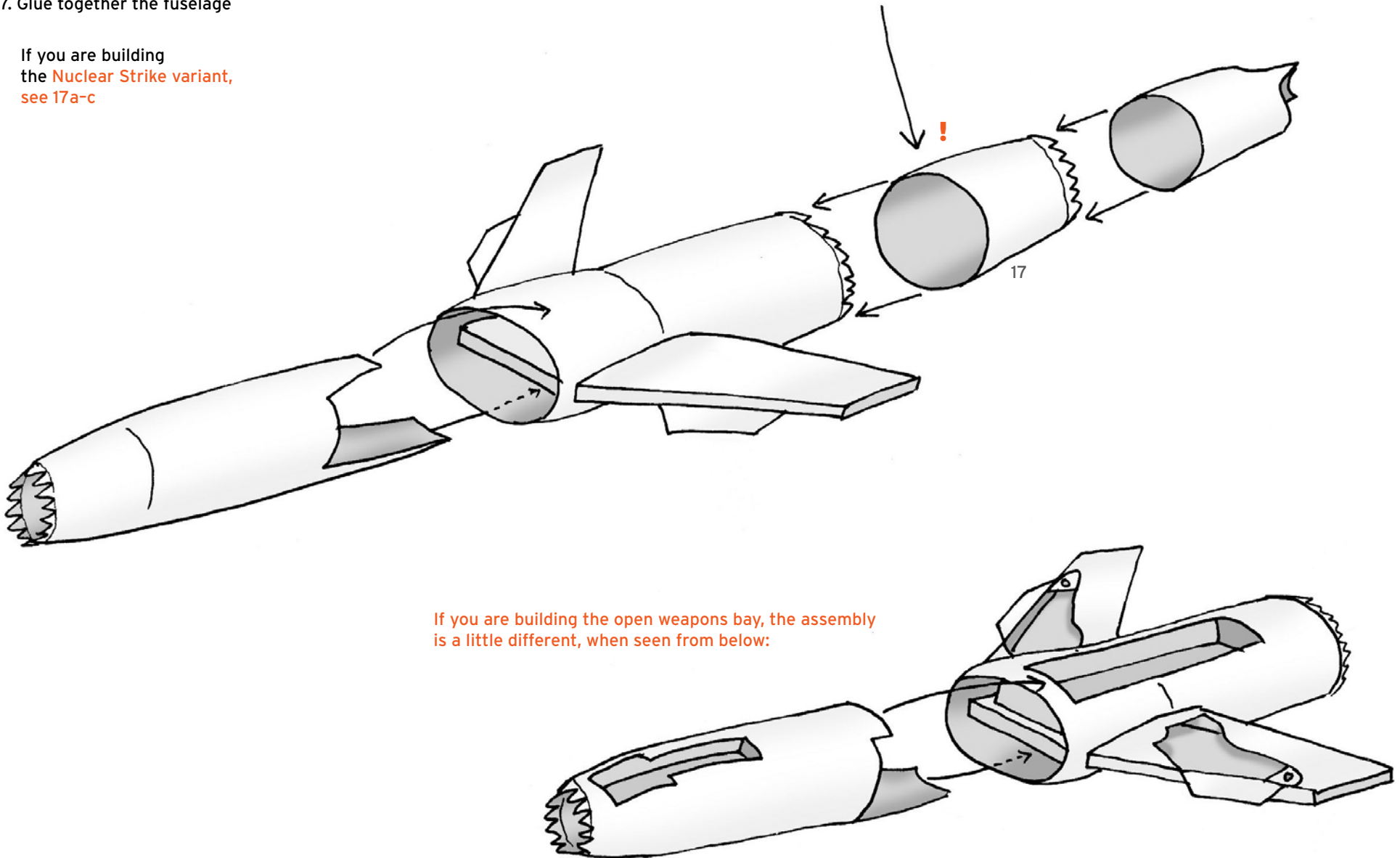
15. Build the weapons bay, glueing the tabs to the outside at the corners.



## 17. Glue together the fuselage

If you are building the **Nuclear Strike** variant, see 17a-c

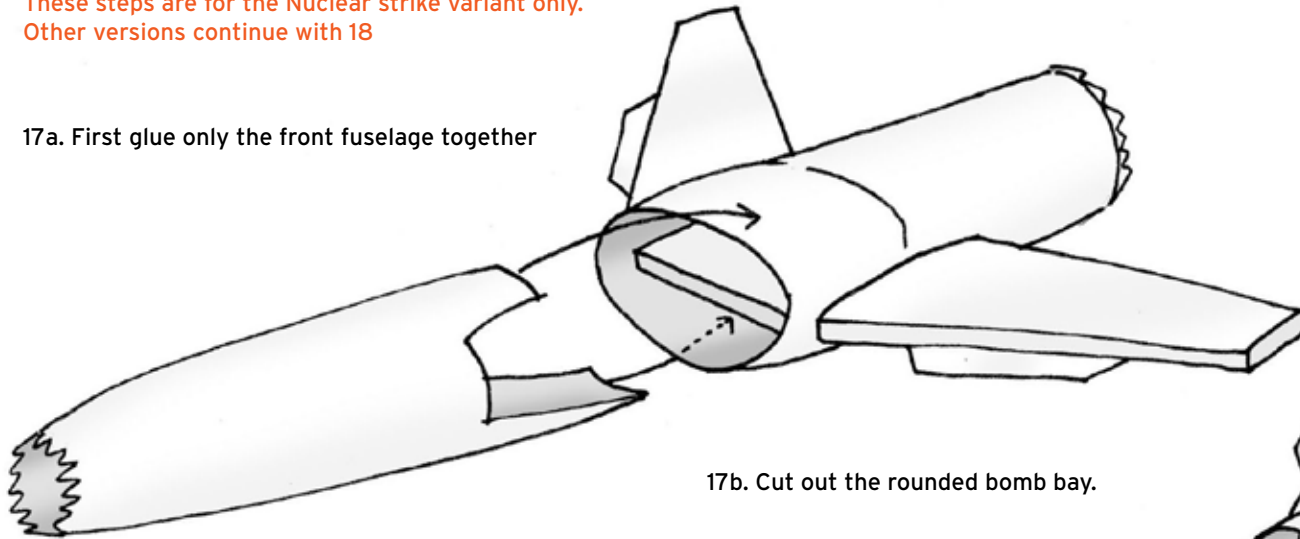
! If you want to build open speedbrakes, ignore the rear fuselage assembly and jump to 18.



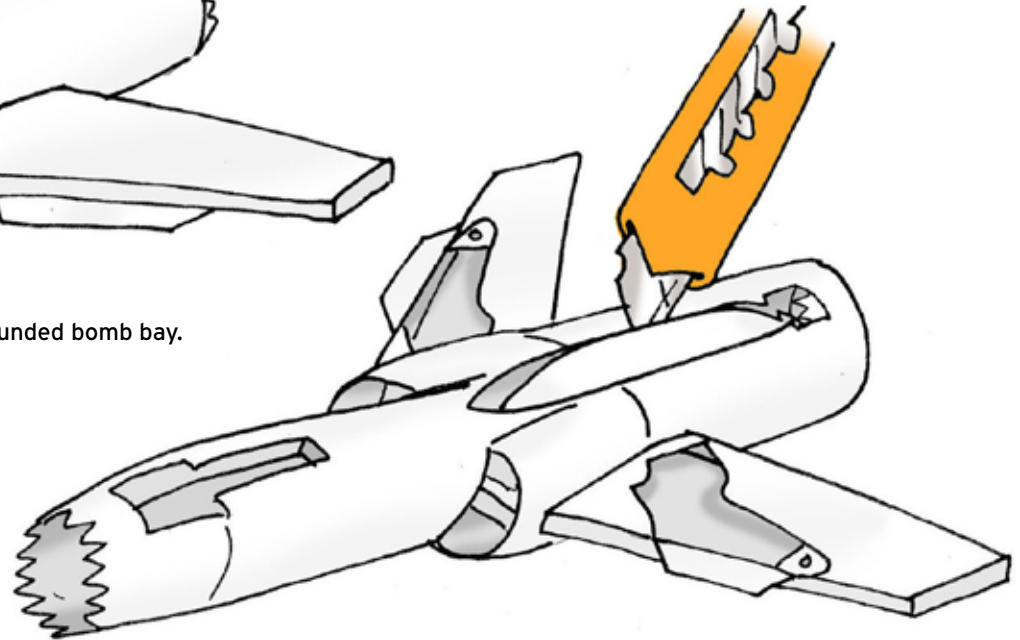
If you are building the open weapons bay, the assembly is a little different, when seen from below:

These steps are for the Nuclear strike variant only.  
Other versions continue with 18

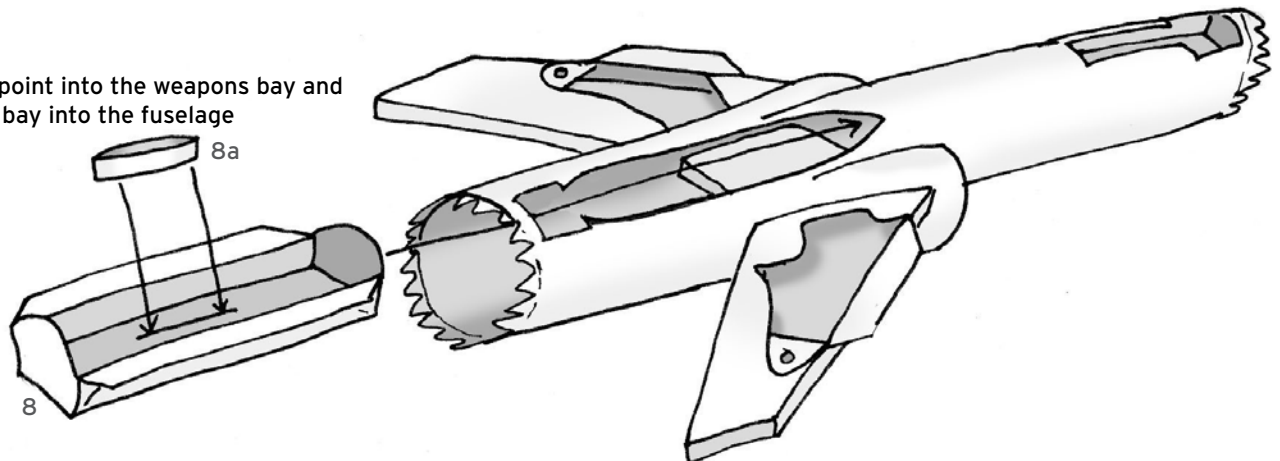
17a. First glue only the front fuselage together



17b. Cut out the rounded bomb bay.



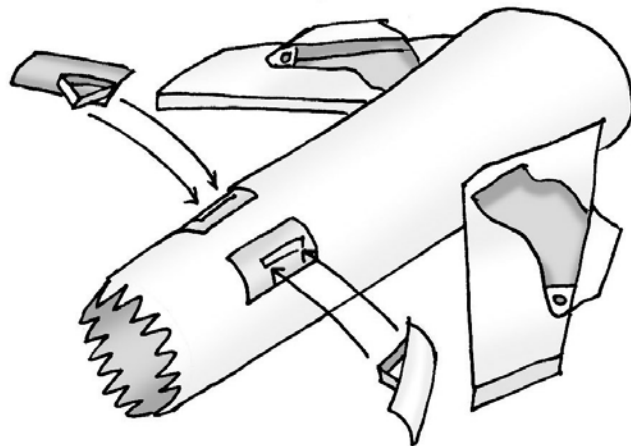
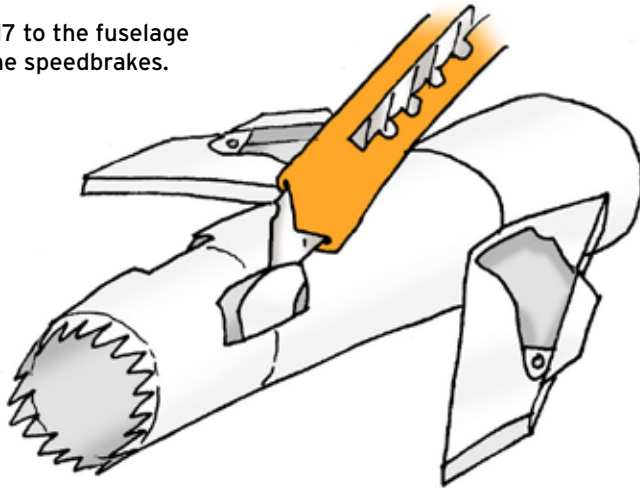
17c. Install the hardpoint into the weapons bay and  
install the weapons bay into the fuselage





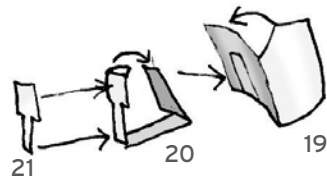
If you don't want to build open speedbrakes, jump to 22

18. Glue part 17 to the fuselage and cut out the speedbrakes.

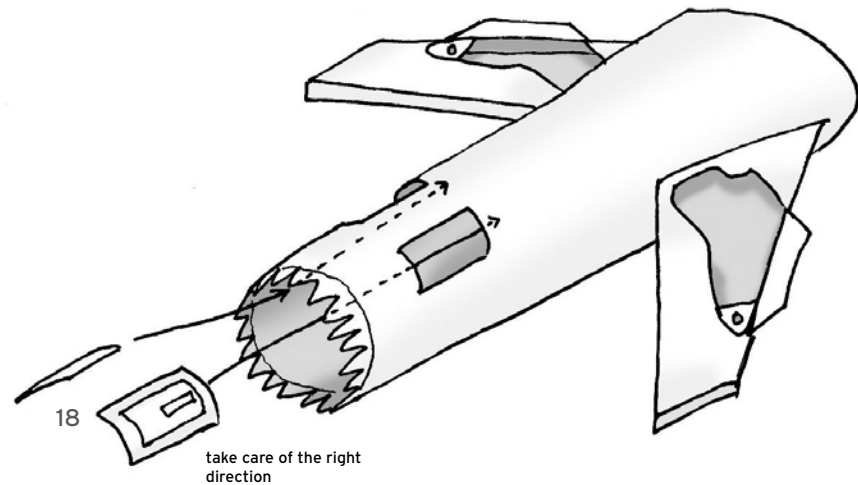


20. Build the speedbrake

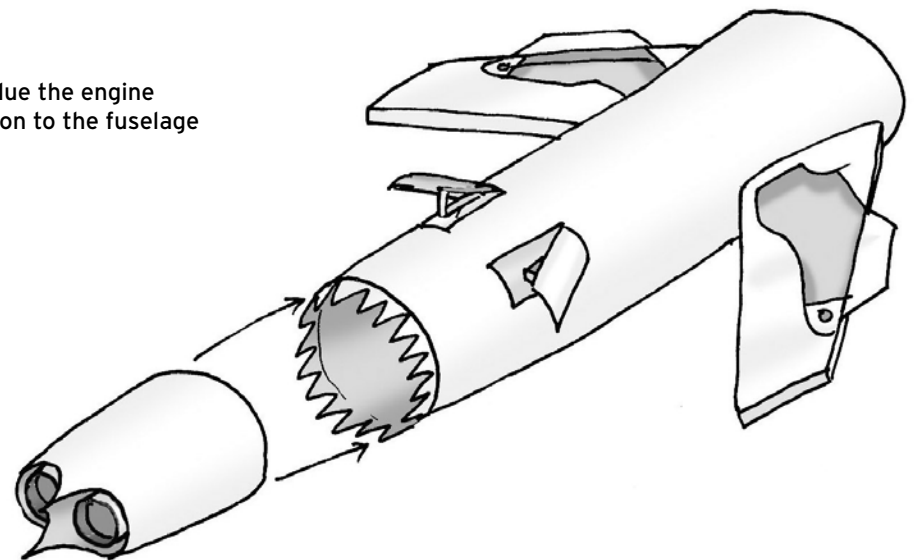
You can attach it later, to avoid it from getting damaged during further works.



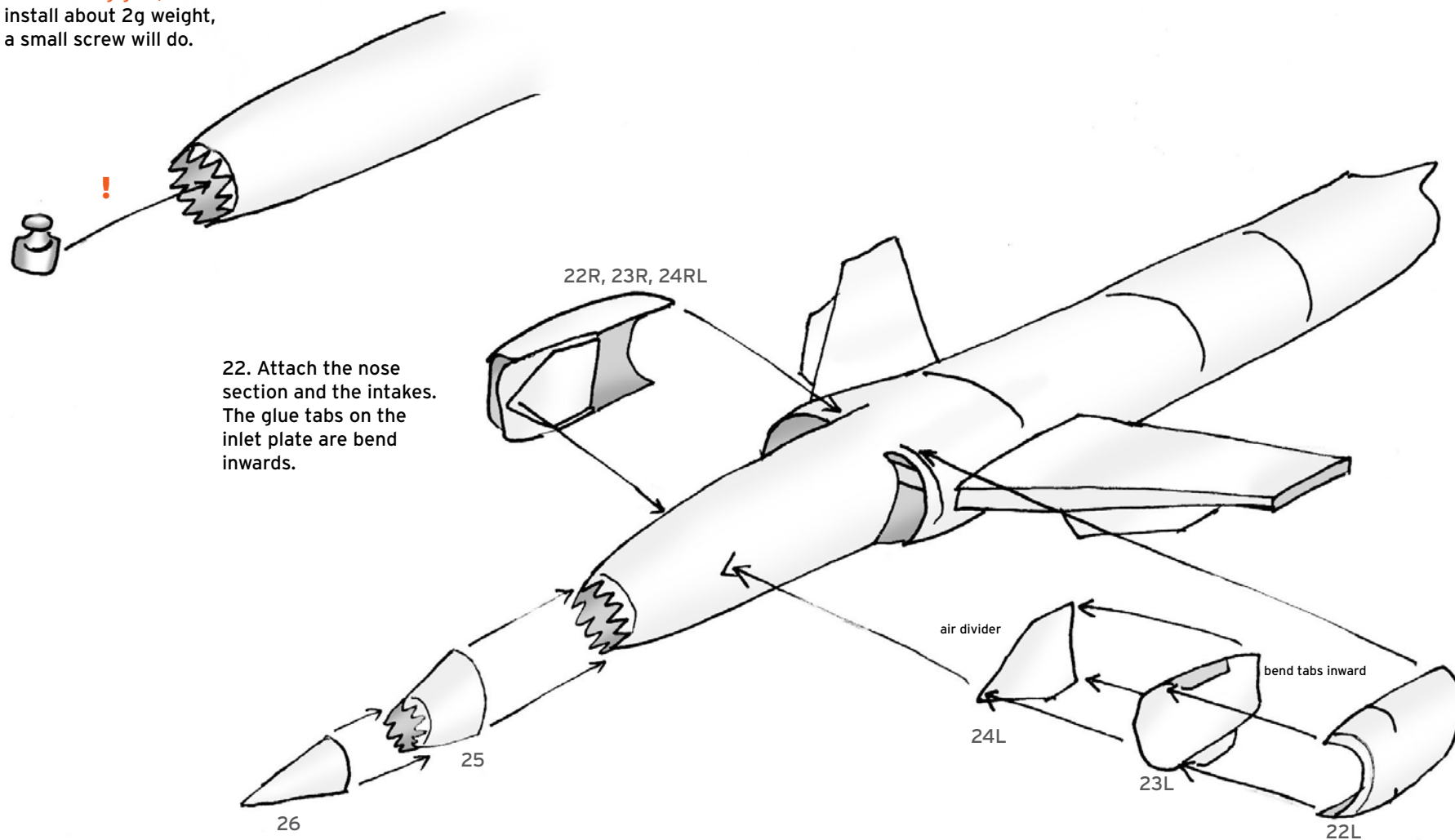
19. Glue the speedbrakes' inner part into the holes.



21. Glue the engine section to the fuselage



! For the version  
with landing gear,  
install about 2g weight,  
a small screw will do.



22. Attach the nose section and the intakes. The glue tabs on the inlet plate are bend inwards.

For the Torpedo Bomber's nose, see 24.

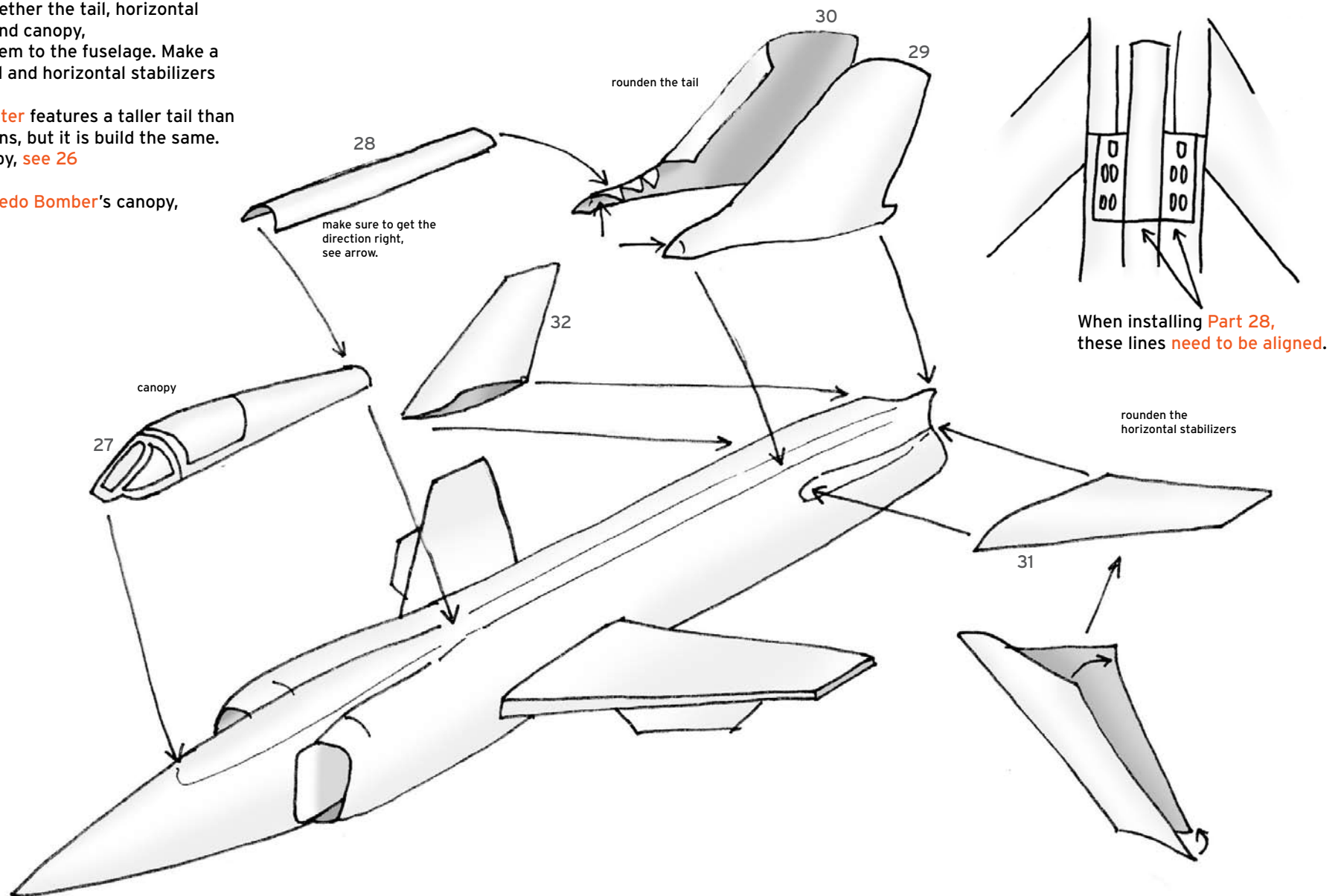
Shape the intakes after this section:



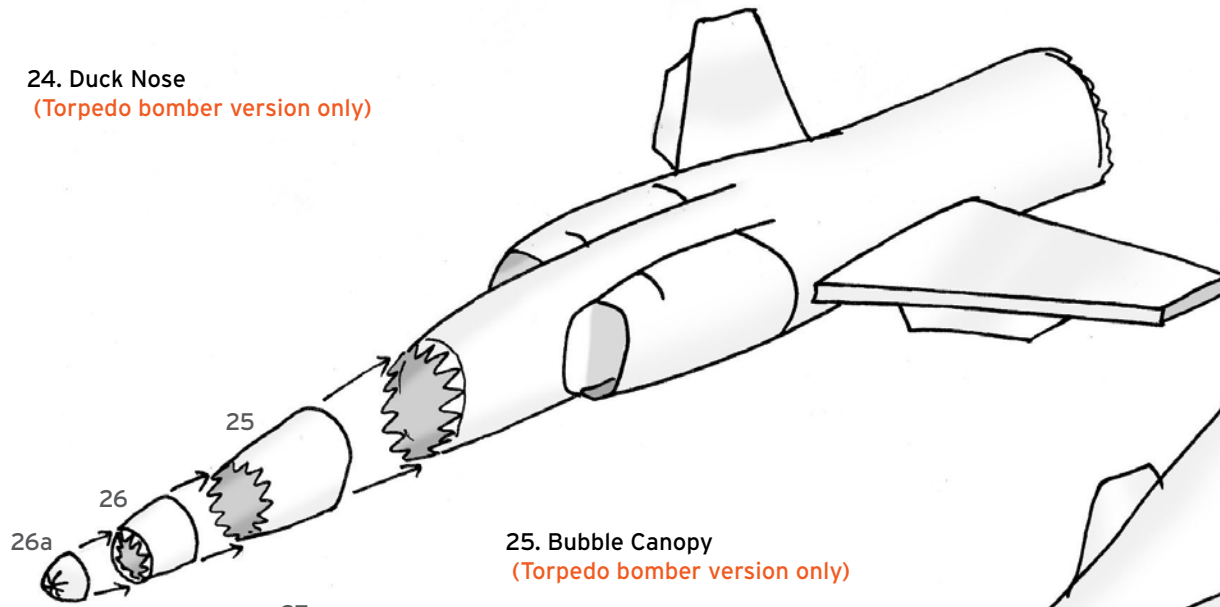
23. Glue together the tail, horizontal stabilizers and canopy, then glue them to the fuselage. Make a airfoil on tail and horizontal stabilizers

The **Two-seater** features a taller tail than other versions, but it is build the same. For its canopy, [see 26](#)

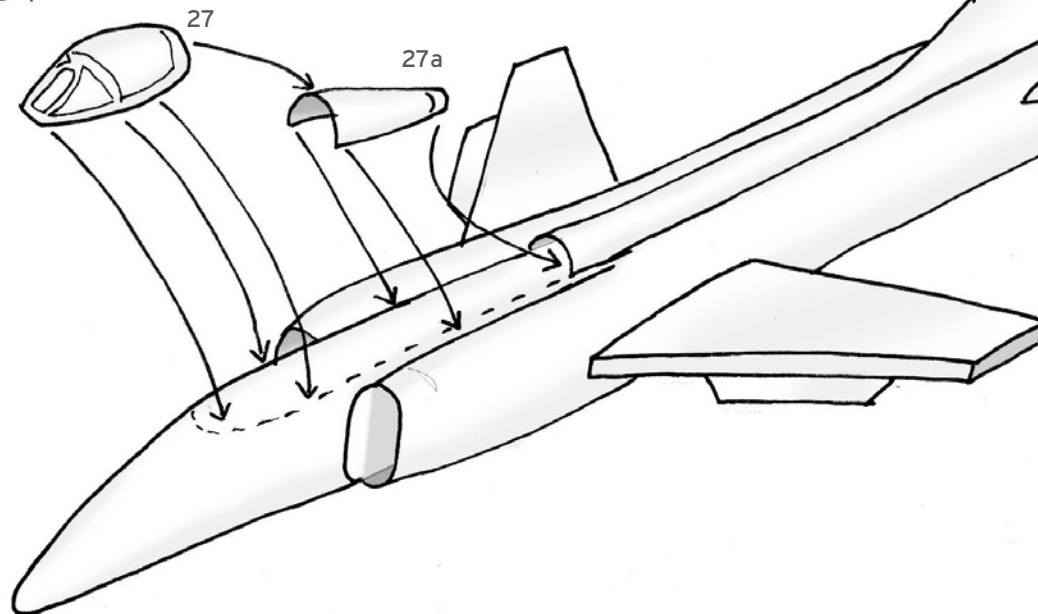
For the **Torpedo Bomber's** canopy, [see 25](#)



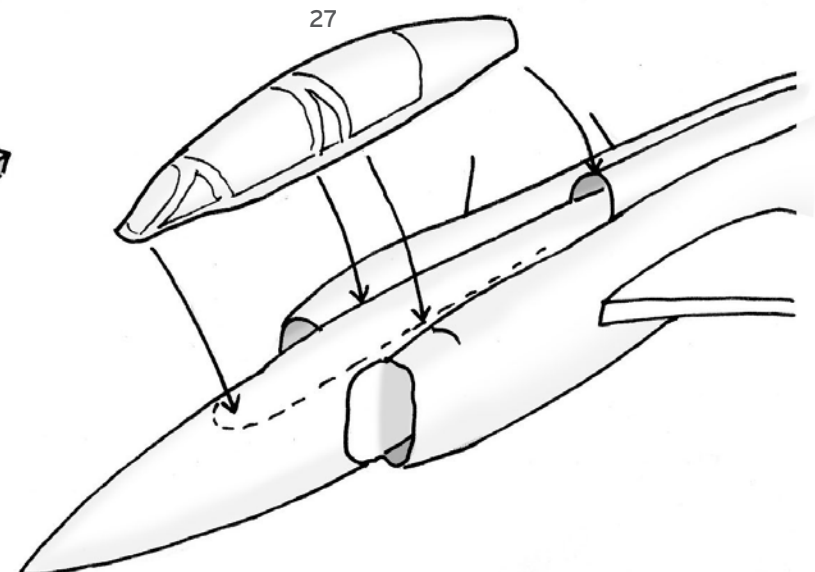
24. Duck Nose  
(Torpedo bomber version only)



25. Bubble Canopy  
(Torpedo bomber version only)



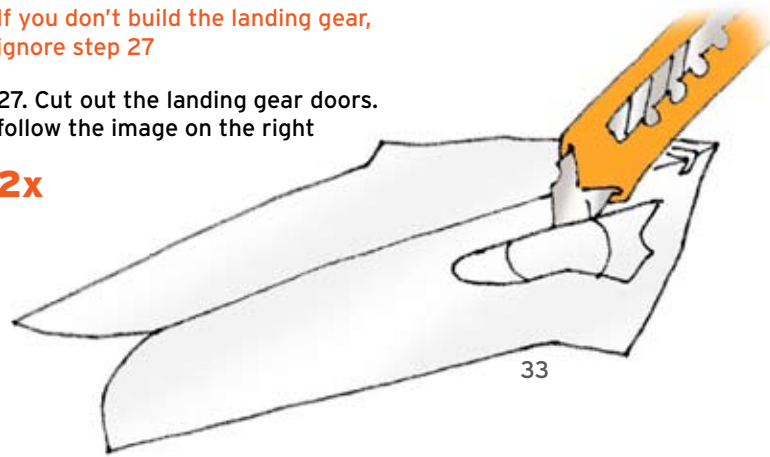
26. Bigger Canopy  
(Two-Seater version only)



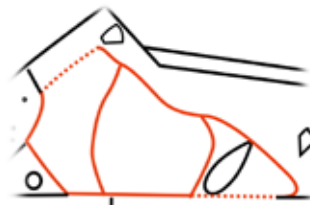
If you don't build the landing gear, ignore step 27

27. Cut out the landing gear doors. follow the image on the right

2x

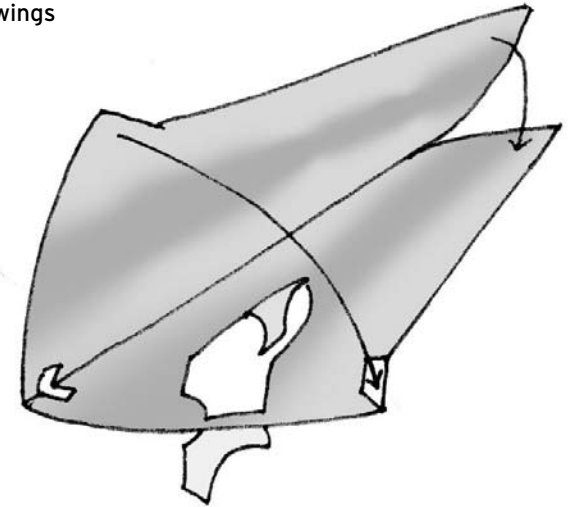


Keep the middle part in a safe place



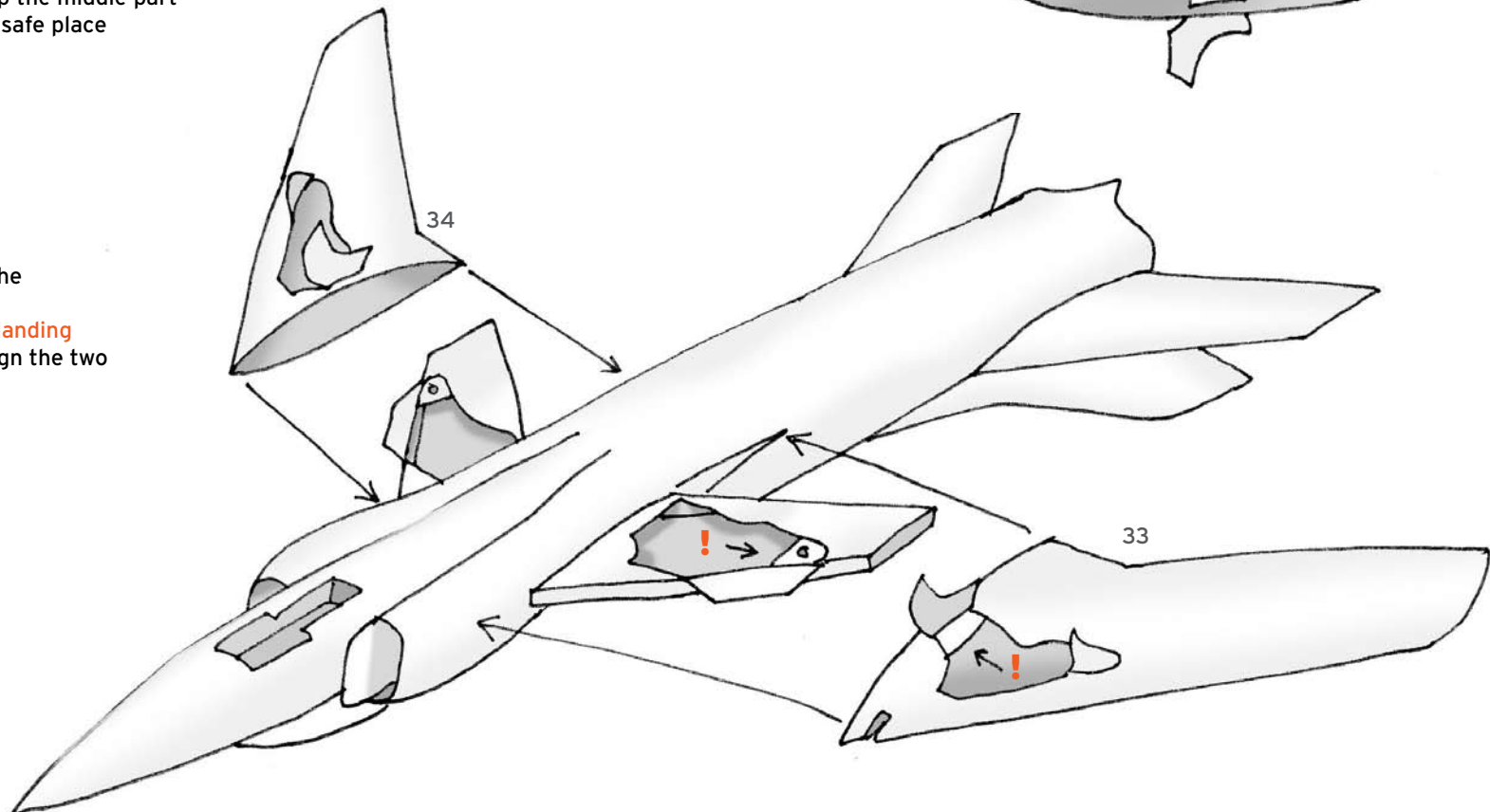
score red dotted lines, cut red lines

28. Glue together the wings



29. Glue the wings to the fuselage.

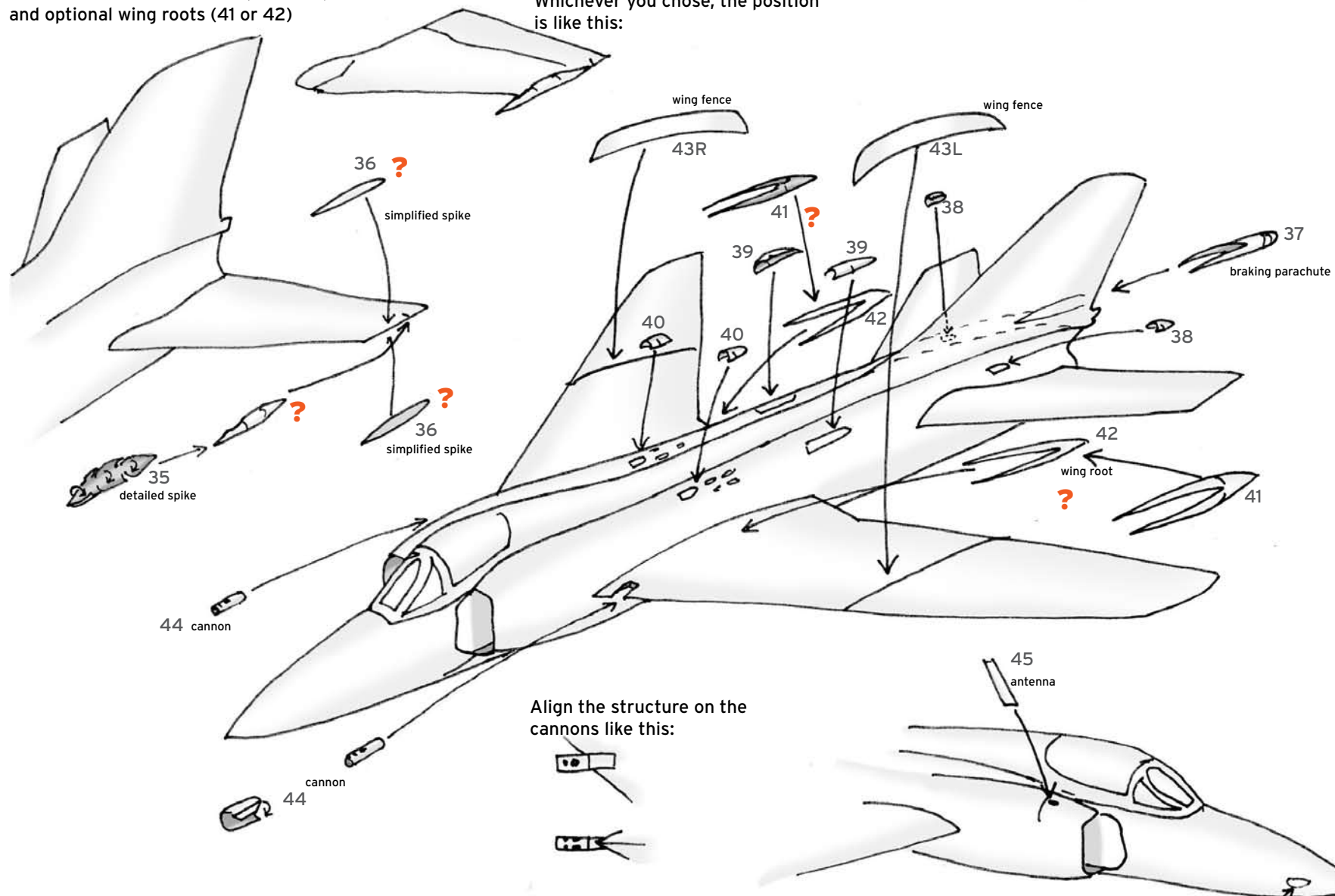
If you are building the landing gears, make sure to align the two holes correctly.





30. There are optional spikes for the tips of the horizontal stabilizers (35 or 36) and optional wing roots (41 or 42)

Whichever you chose, the position is like this:

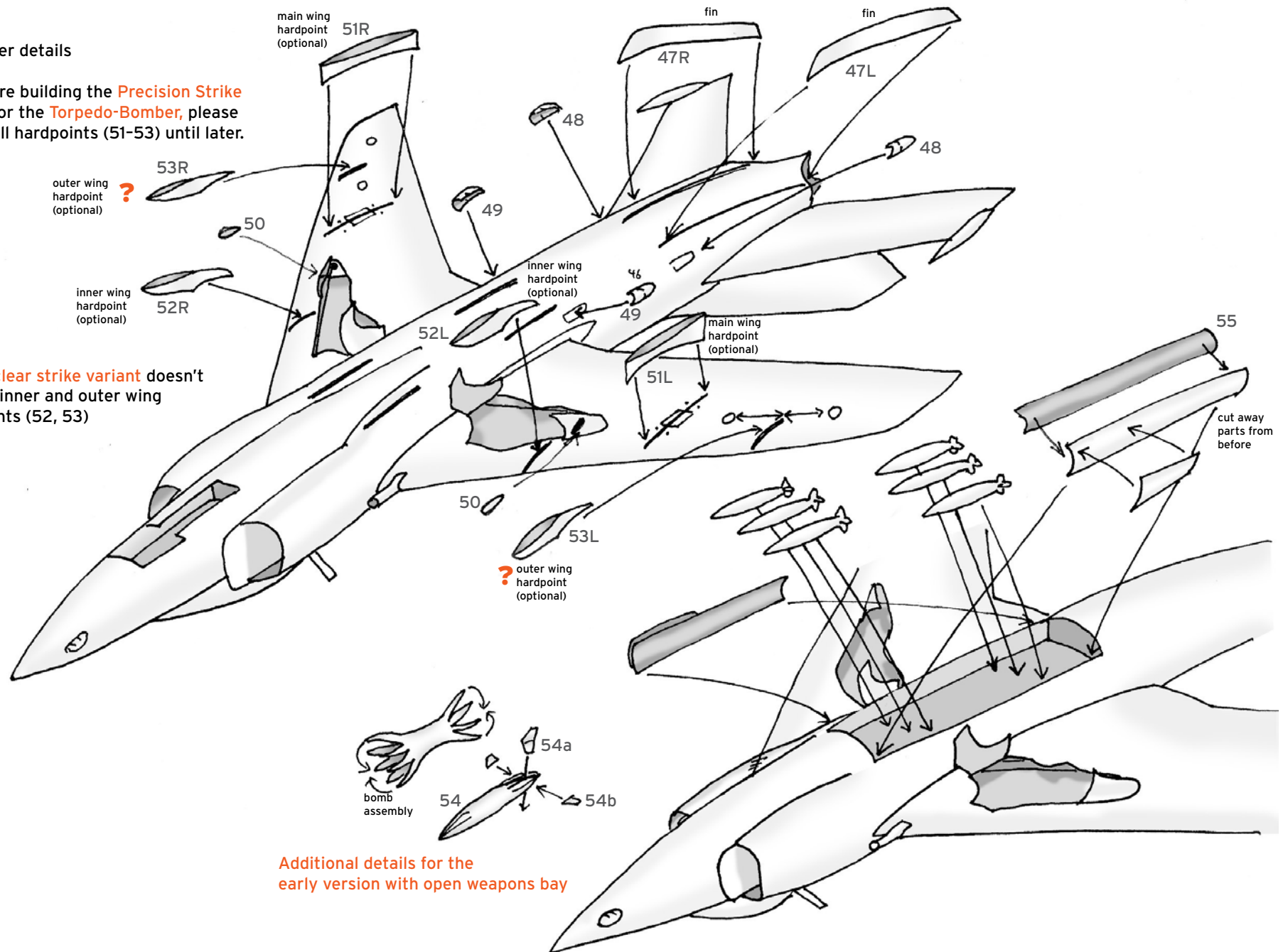


31. Upper details

## 32. Lower details

if you are building the **Precision Strike variant** or the **Torpedo-Bomber**, please ignore all hardpoints (51-53) until later.

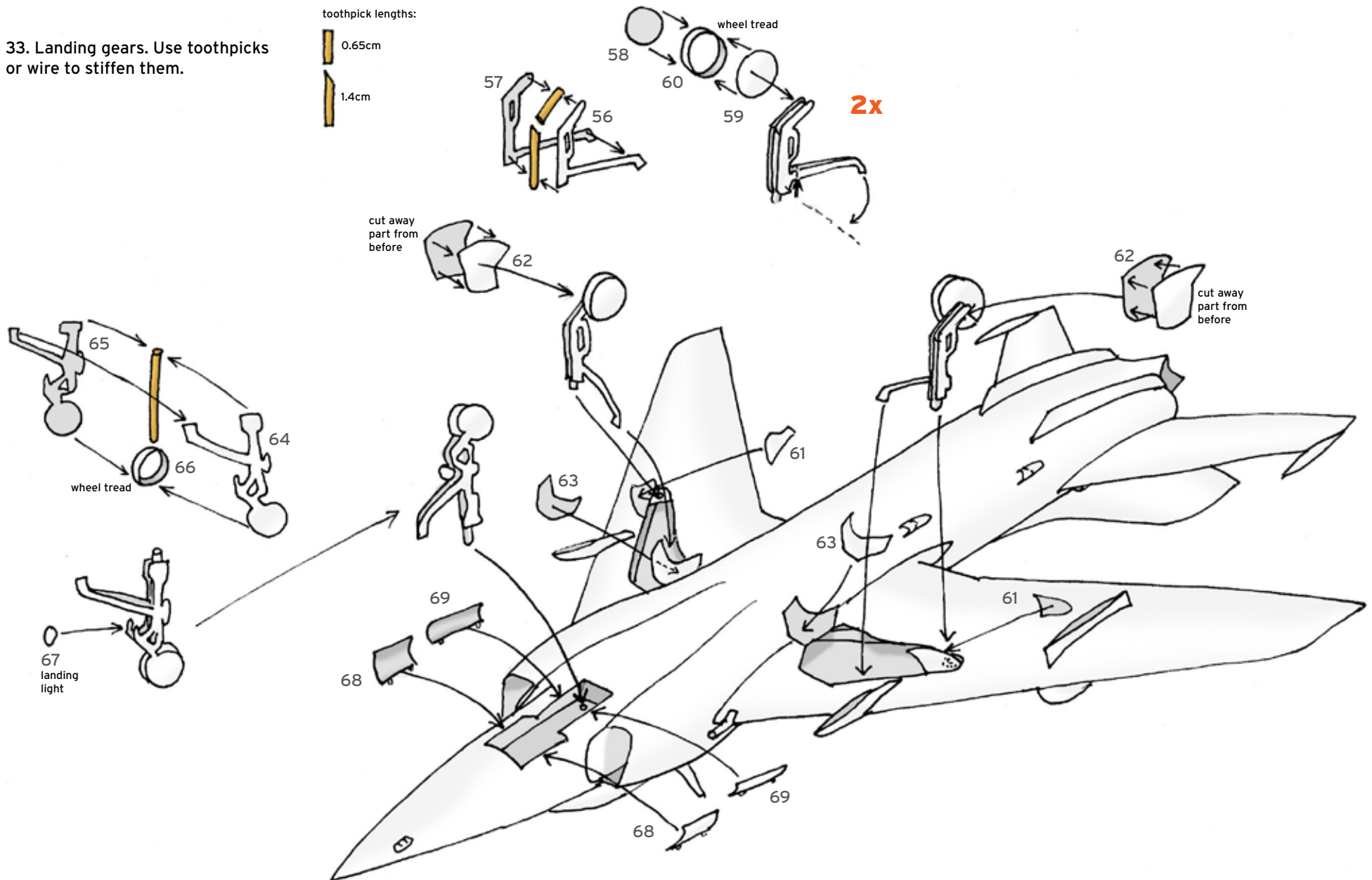
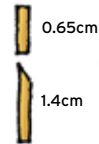
The **Nuclear strike variant** doesn't use the inner and outer wing hardpoints (52, 53)



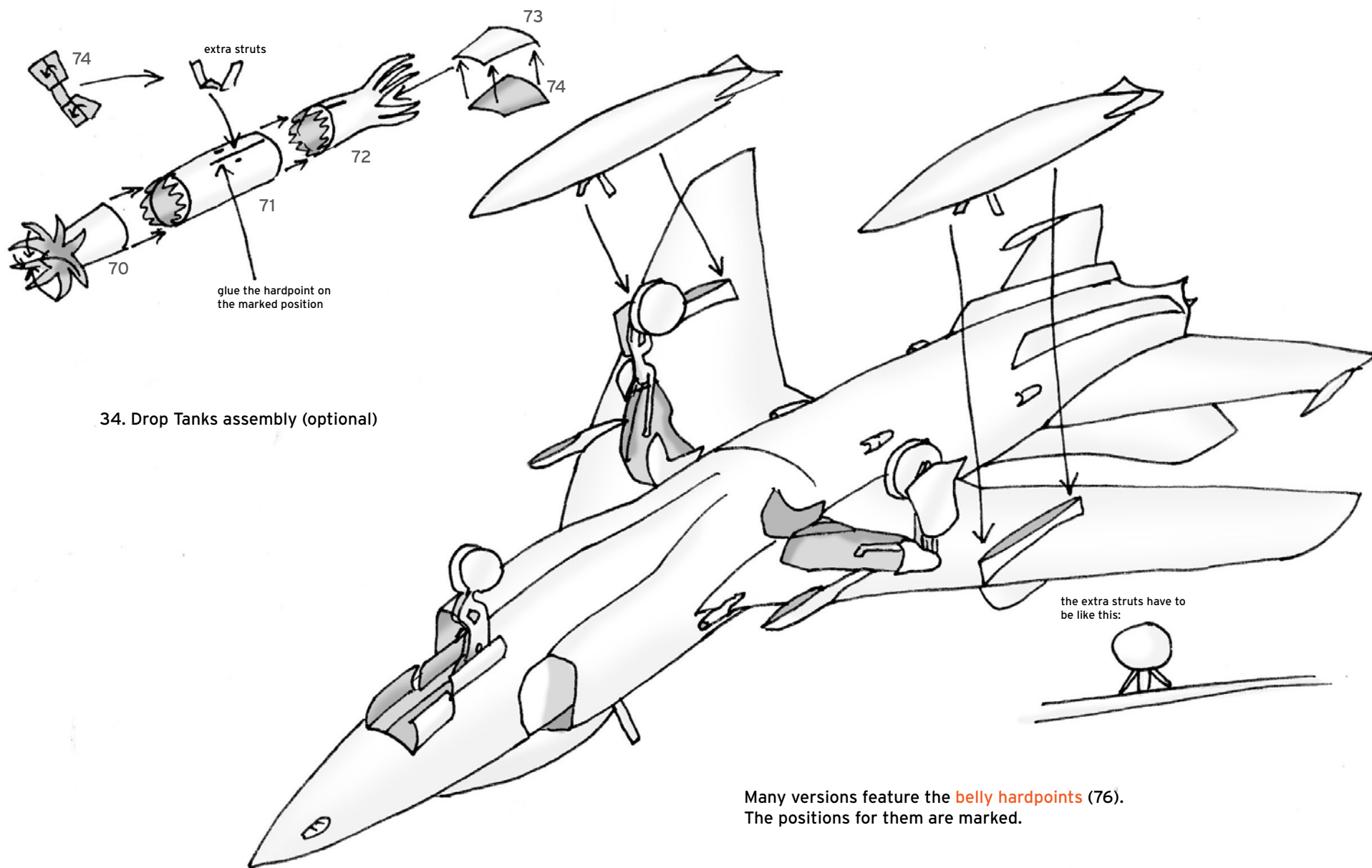
Additional details for the early version with open weapons bay

33. Landing gears. Use toothpicks or wire to stiffen them.

toothpick lengths:



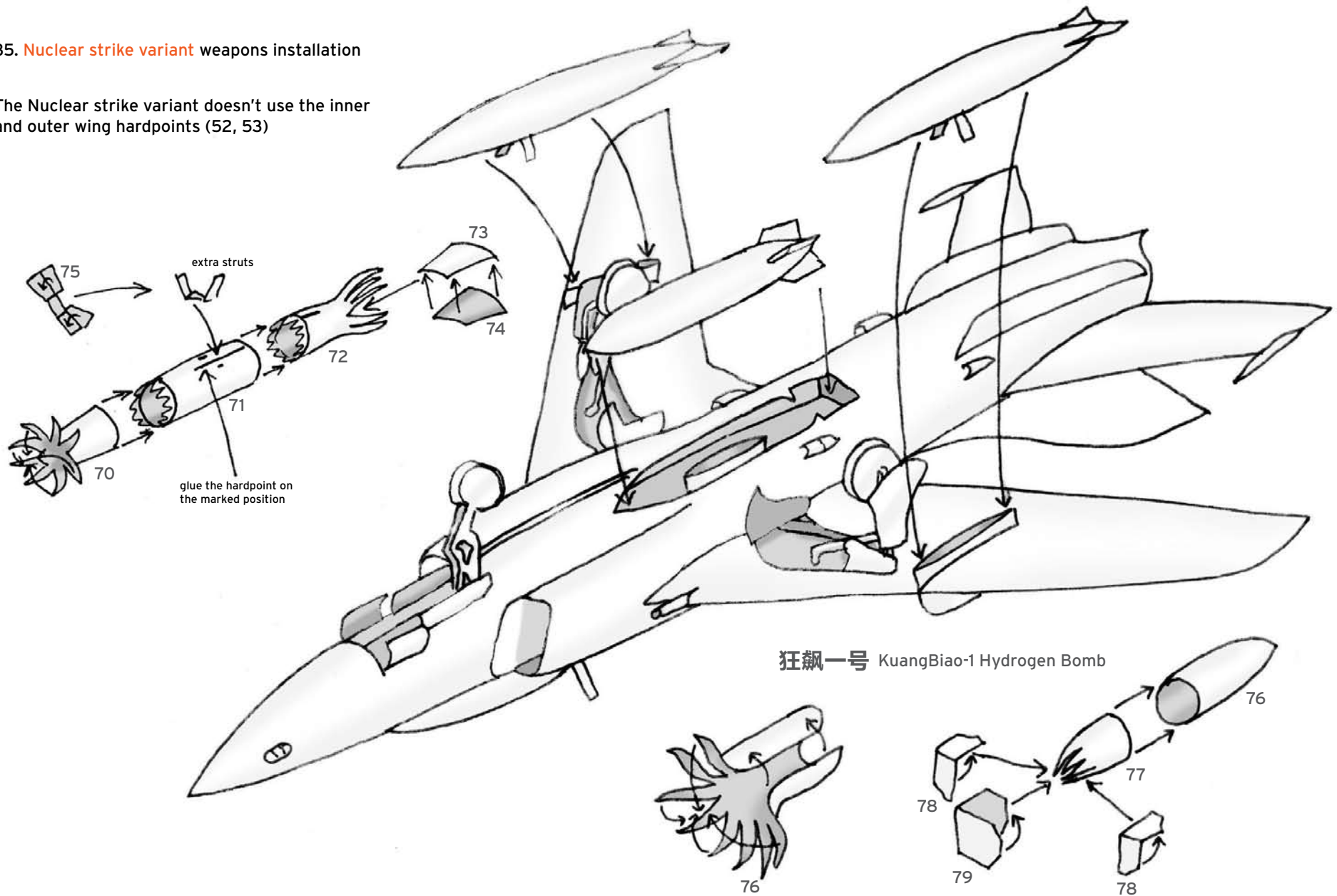
For the **Nuclear strike version**, jump to **35**,  
for the **Torpedo Bomber**, jump to **36**  
and for the **Precision strike version**, jump to **37**





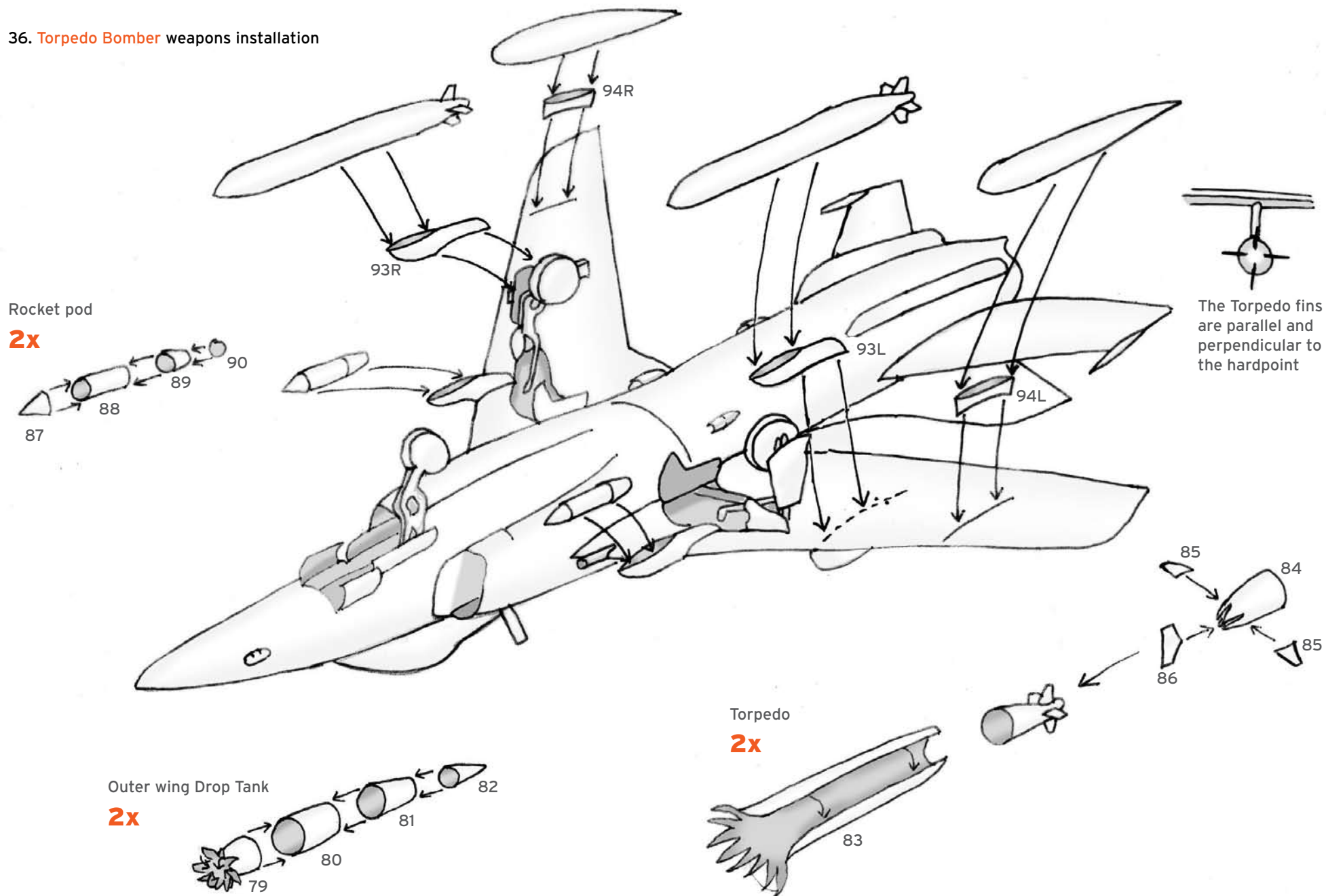
## 35. Nuclear strike variant weapons installation

The Nuclear strike variant doesn't use the inner and outer wing hardpoints (52, 53)





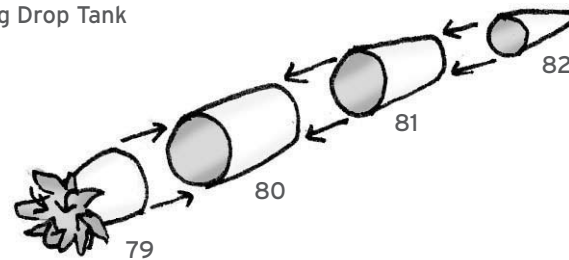
## 36. Torpedo Bomber weapons installation



## 37. Precision strike variant wing load assembly

Outer wing Drop Tank

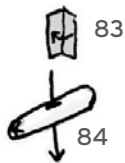
**2x**



Laser Guided Bombs (LGB's)

**2x**

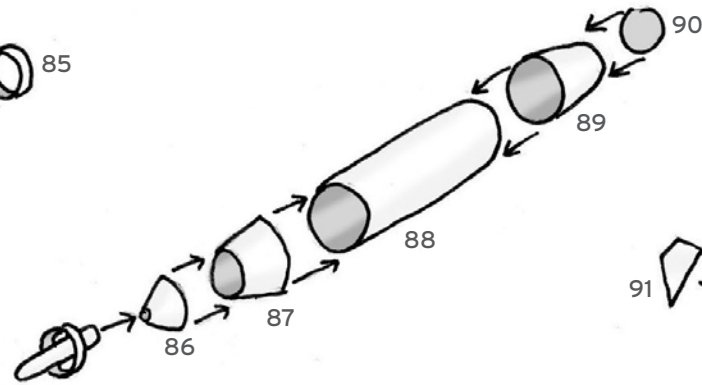
Push the ring distancer through the guidance unit part and glue.



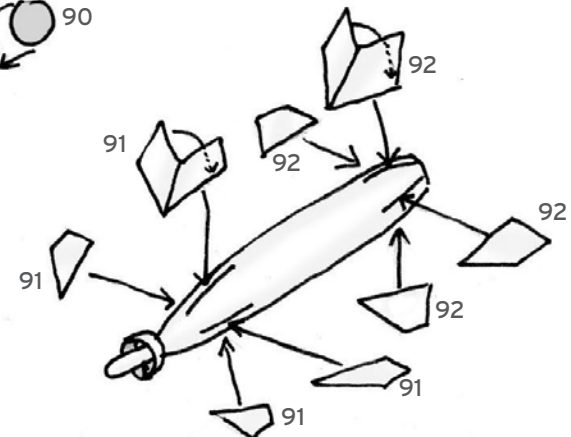
Then glue the ring on it.



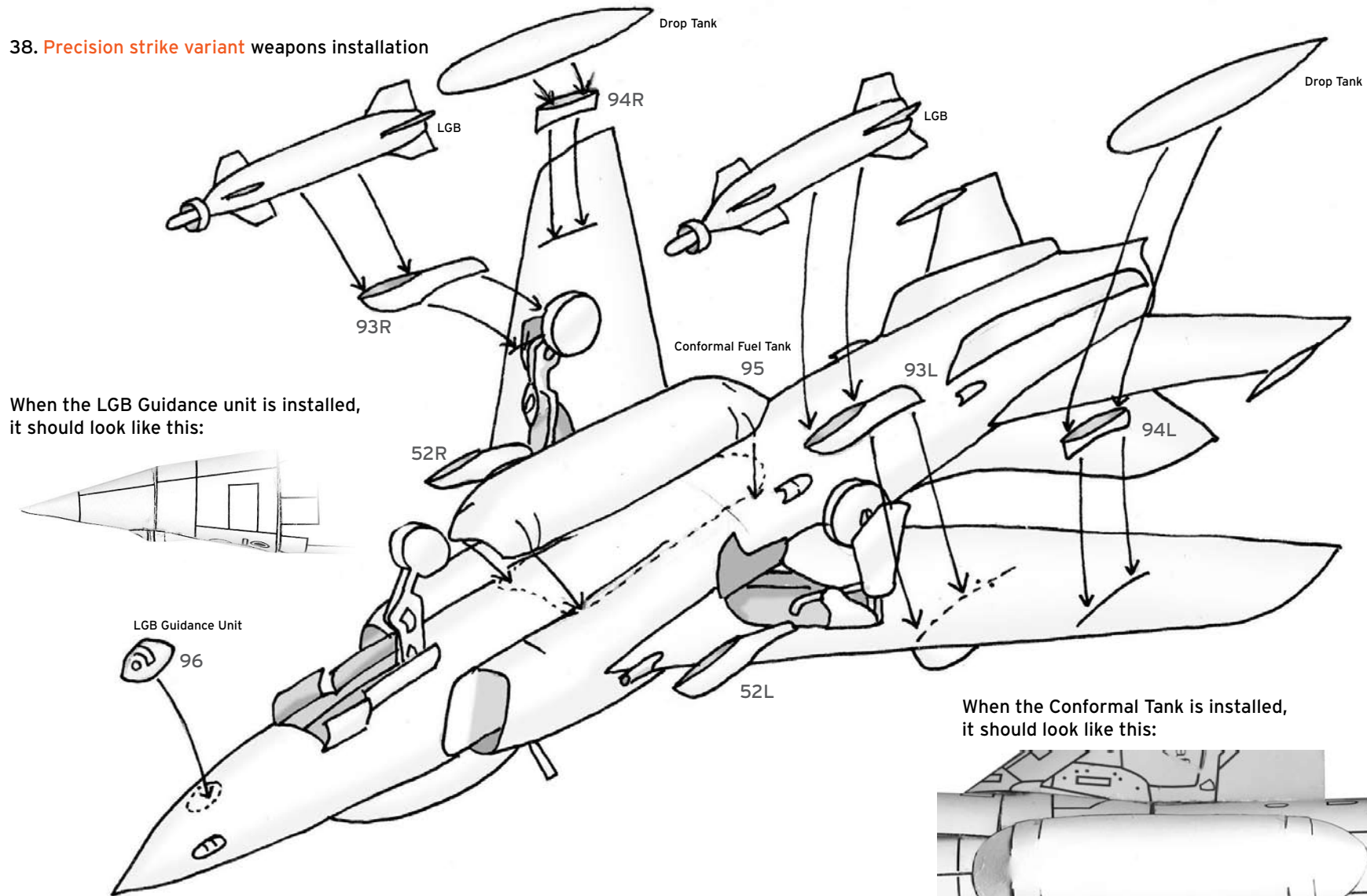
Glue the fuselage together



Attach the wings



## 38. Precision strike variant weapons installation



When the LGB Guidance unit is installed, it should look like this:

When the Conformal Tank is installed, it should look like this:

