

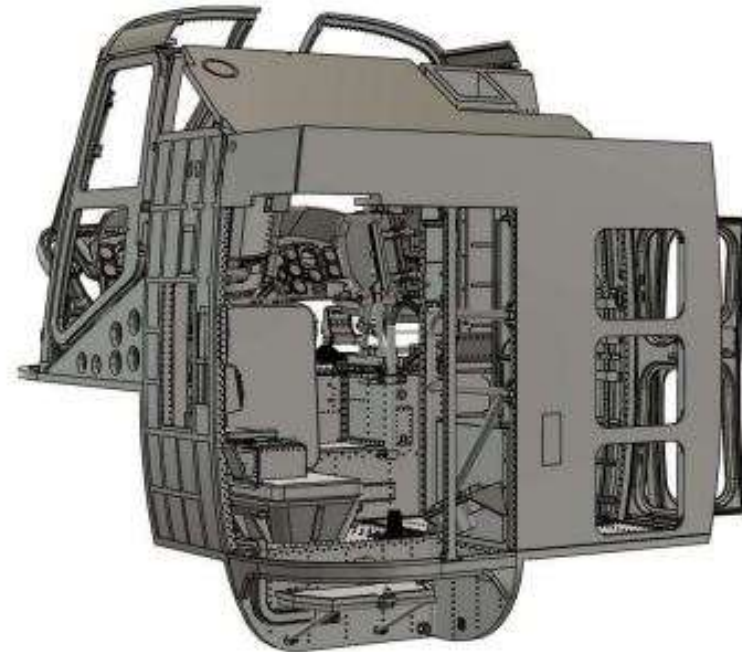
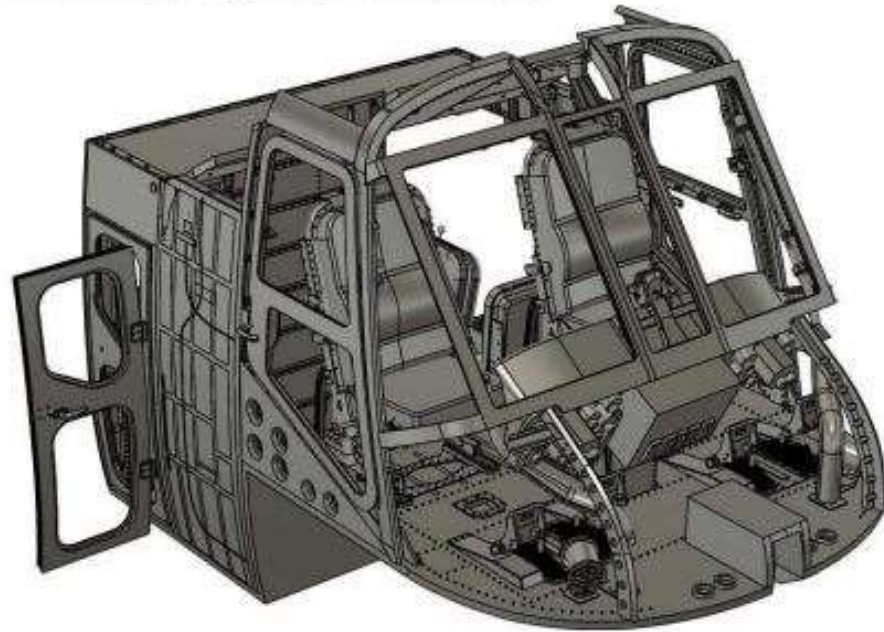
SCREAMING TOAD MODELS

STM35003



1/35 CH-54A Cockpit Upgrade

3D Printed parts for advanced modellers



facebook.com/screamingtoadmodels

Precautions:

These components are 3D printed using a UV curing resin.

They are intended for use by experienced adult modellers only.

Use appropriate eye protection whenever cutting or trimming, as parts can be brittle.

Take care when using any sharp tools such as scalpels or sprue cutters.

Any sanding should be wet to prevent airborne dust.

Keep items out of reach of children or pets.

Keep items out of direct sunlight until primed/painted.

PLEASE NOTE: Seat belts / Harnesses are not included and are to be provided by the modeller.

These can be scratch built using paper or foil.

Alternatively Eduard sell a photo-etched set either individually (33348) or within their SPACE set (3DL32015).

Belts are also provided as 3D printed decals in Kelik set K35009.

Tools required:

Pointed tweezers for handling of small parts

Fine sprue cutters for trimming of supports

Scalpel

Needle files or small sanding sticks for clean up

Sanding Foam pads

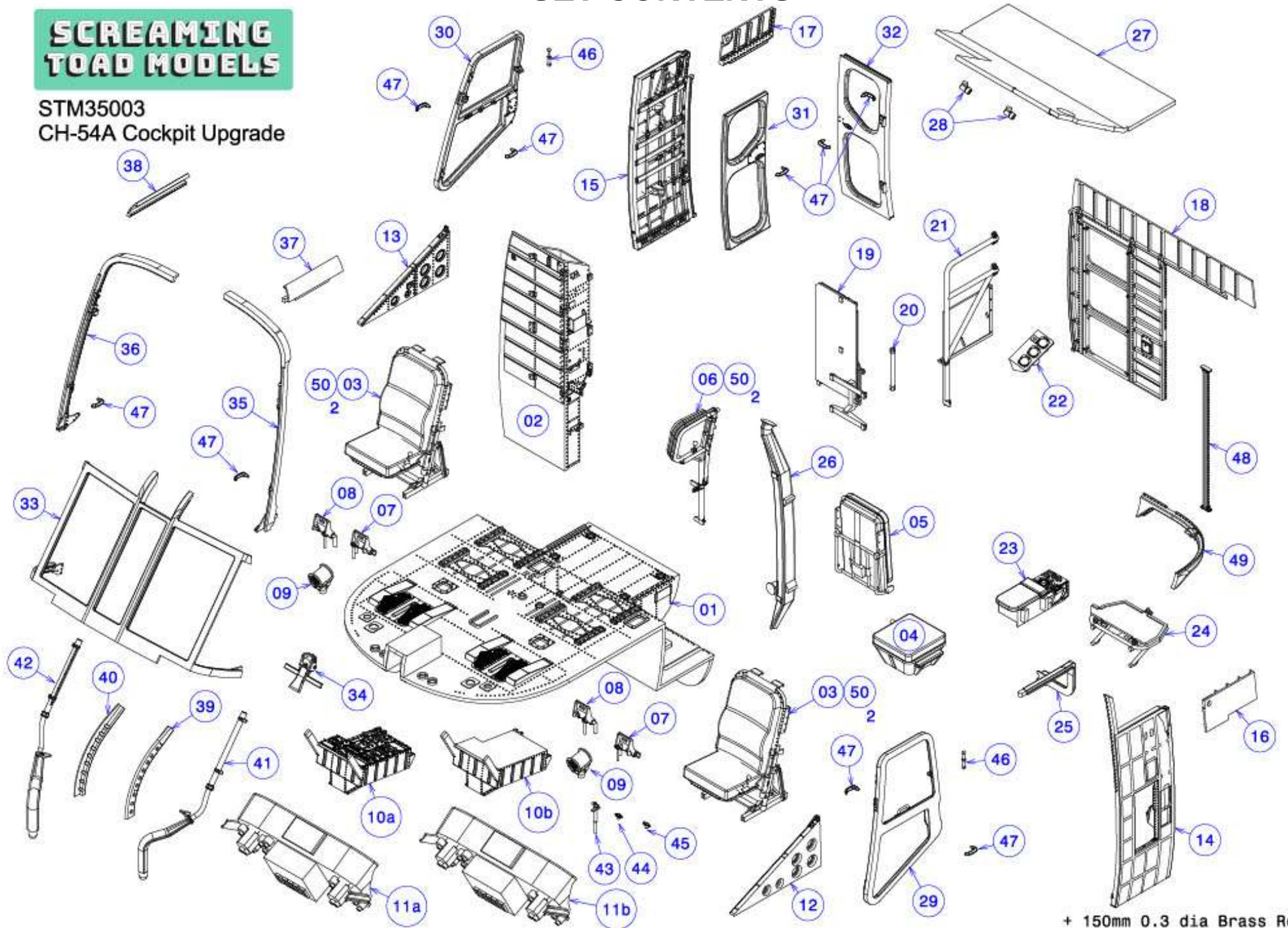
0.4, 0.8 and 1.5 mm drill bits mounted in a pin vise

Please read through instructions carefully before starting work

SET CONTENTS

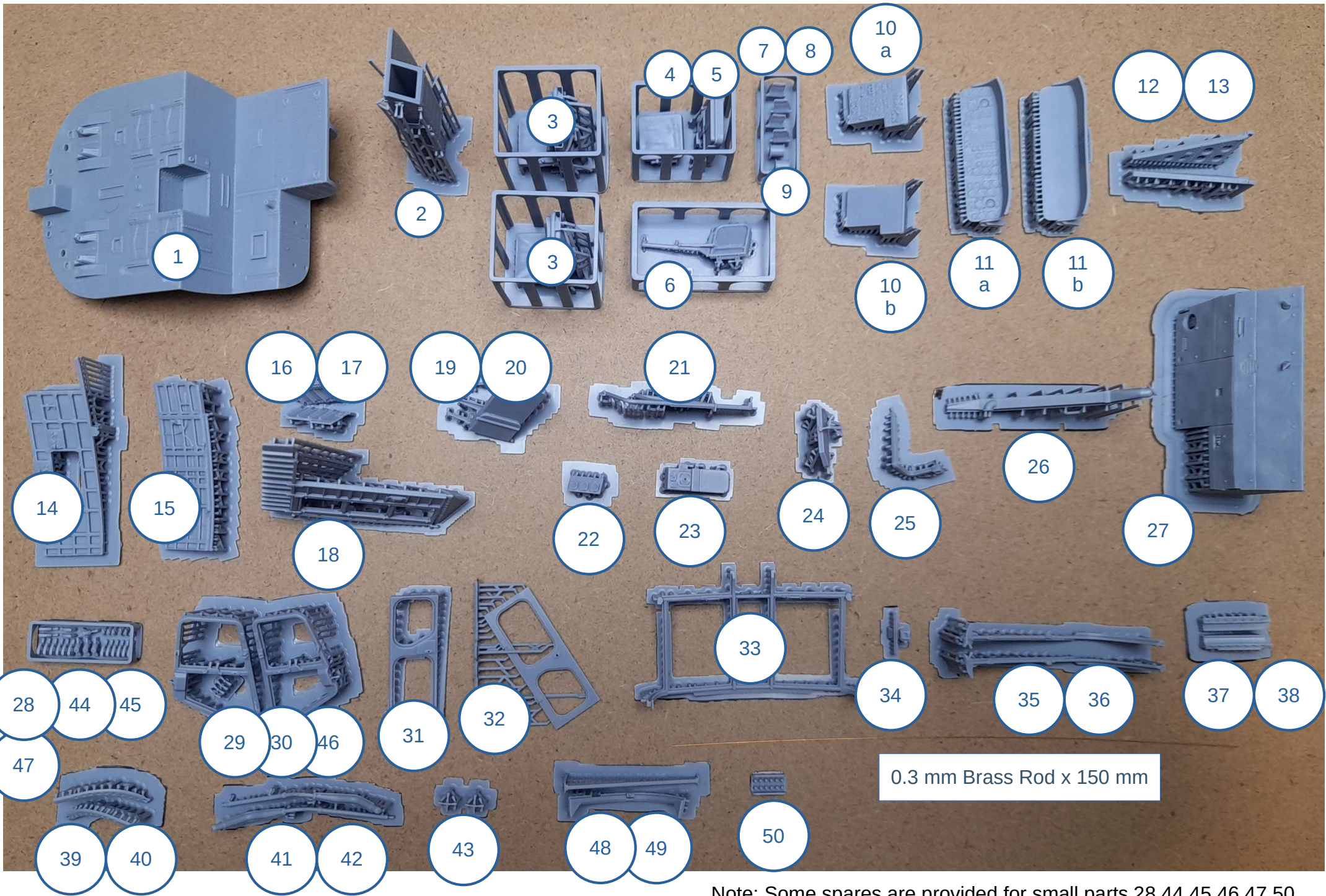
**SCREAMING
TOAD MODELS**

STM35003
CH-54A Cockpit Upgrade



+ 150mm 0.3 dia Brass Rod

SET CONTENTS



Note: Some spares are provided for small parts 28,44,45,46,47,50

Painting

These parts can be painted using either enamel or acrylic hobby paints. It is recommended to apply a thin coat of primer beforehand such as Mr Surfacer.

Note: Vietnam era aircraft typically had a grey interior. FS36231 Dark gull grey is the correct colour but a lighter shade is recommended such as FS36440 Light Gull Grey, especially if weathering follows. Straight Mr Surfacer Grey with a wash of starship filth looks good to my eye! Cockpits were repainted black in later service.

Consult your references for colour information as many variations can be found.

Handles are typically painted yellow. Instrument panels and seat belt retractors are black. For the floor fans, a thin black wash and dry brushing is recommended to highlight the grill detail.



SYMBOL KEY



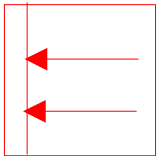
SEQUENCE



PART NUMBER



OPTION



ALIGN EDGES (FIT FLUSH)



OS OPPOSITE SIDE

NOTE: The following instructions describe the necessary deviations from the ICM kit instructions. These steps remain the same for kits 53054, 53055, 53056 and 53057 but may vary in future releases.

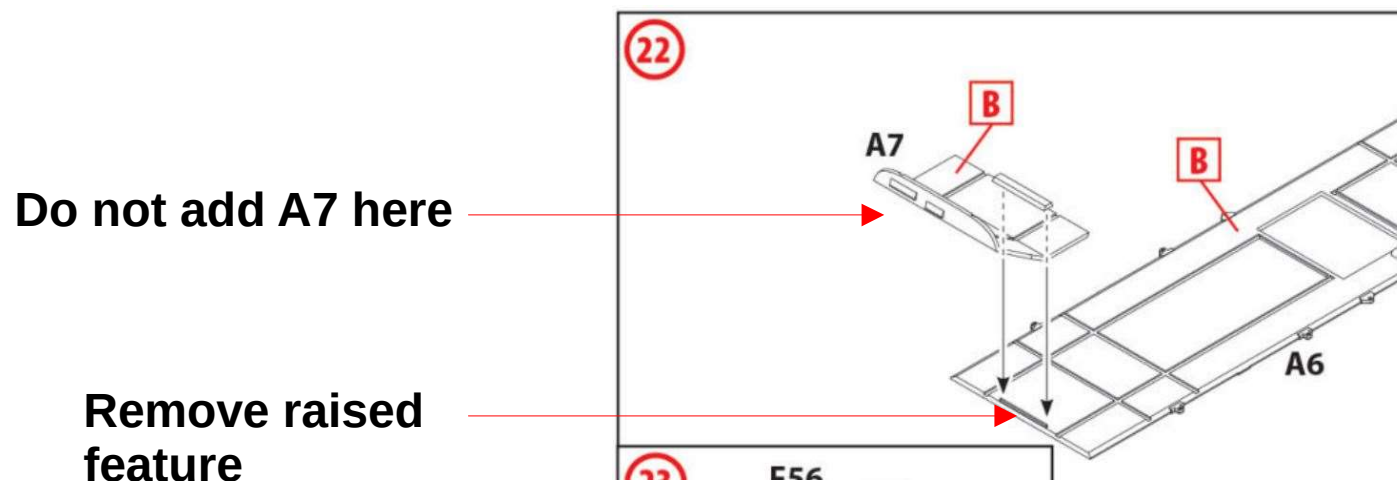
Fuselage Assembly

Skip kit instruction steps 01 to 19

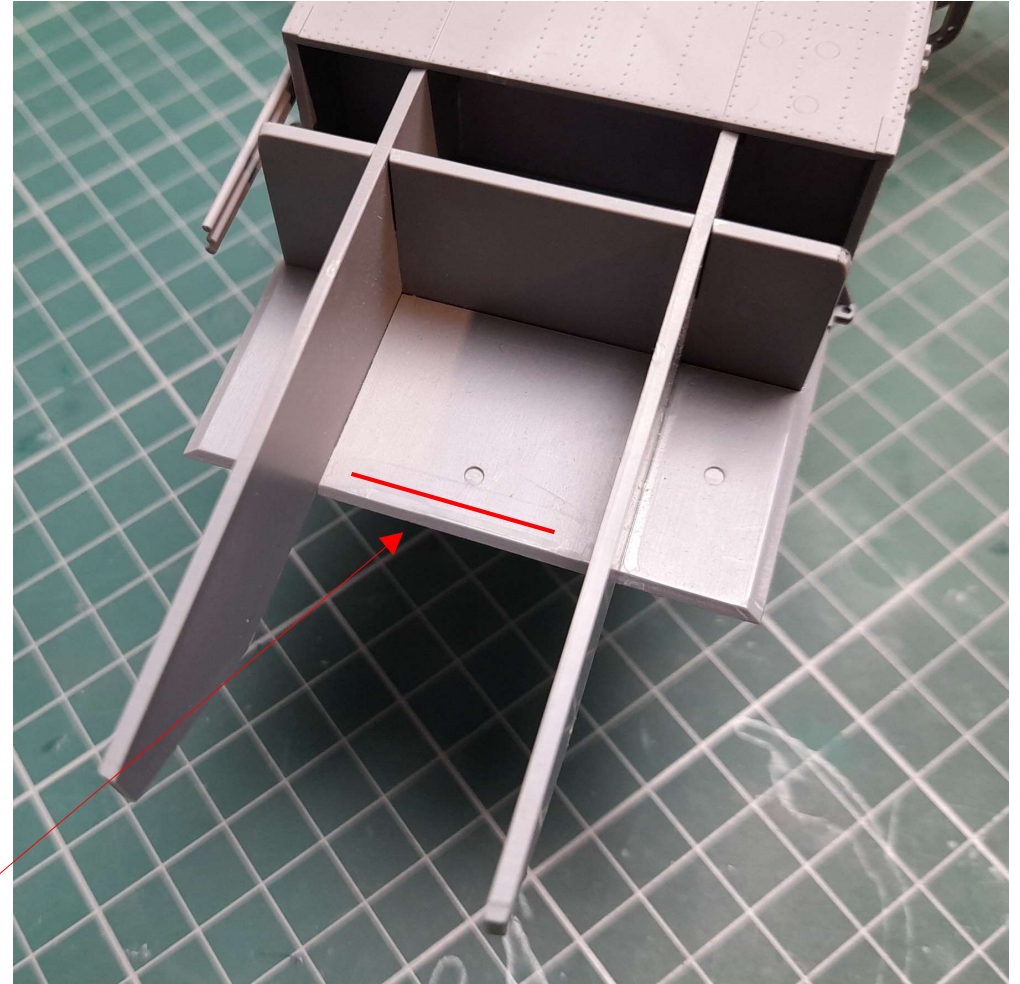
Assemble the rear fuselage from instruction steps 22 to step 34, as this assembly will help ensure correct alignment of the forward fuselage

For step 22 – **Do not fit the ceiling panel part A7 at this stage.** Remove the raised locating feature on part A6

See images on following page



Fuselage Assembly continued



Remove the raised locating feature

Fuselage Assembly continued

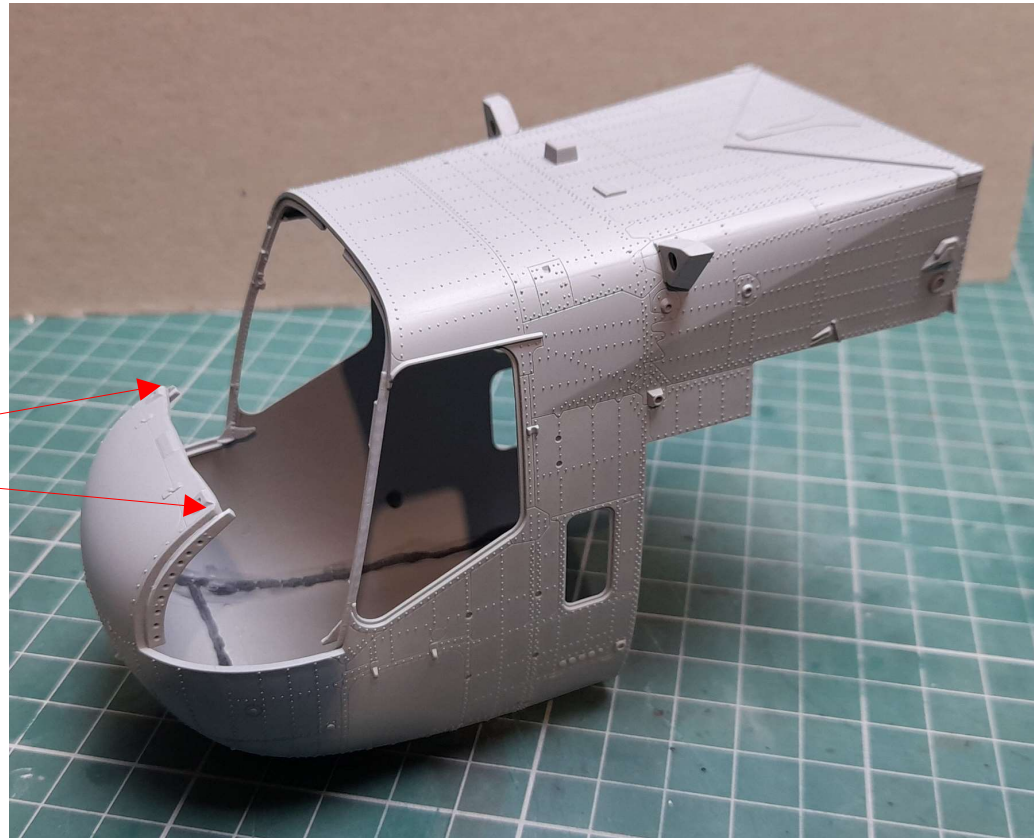
Assemble the forward fuselage from kit parts E1, E2, E3, E4 and E5

Ensure all seams are carefully aligned and trial fit (no glue) to the rear fuselage to ensure the assembly is square.

It is useful at this stage to clean up all seams and restore any lost rivet detail.

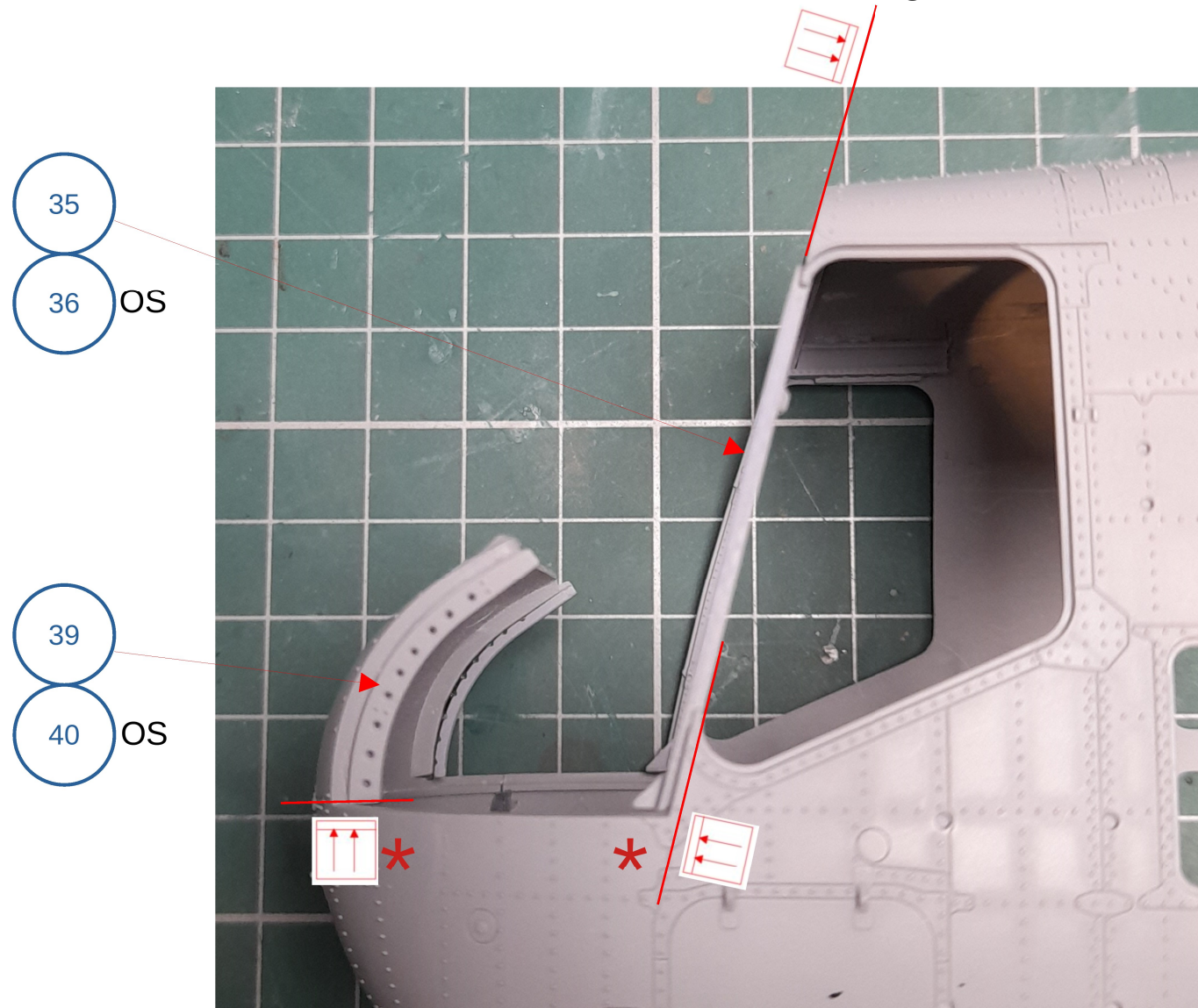
Test fit the kit forward canopy at this stage. The kit requires a small radius to be added at the corners shown for a good fit.

Round corners of kit part to ensure correct canopy fitment



Fuselage Assembly continued

Add parts 35, 36, 37, 38, 39 and 40 to the forward fuselage



Ensure parts clear the cockpit deck.
Insert part 01 or kit part A3 as a positioning aid.

Fuselage Assembly continued



View of inside above side door

Fuselage Assembly continued

Note: Add parts on both sides!

Add 6 mm length of
0.3 mm brass rod

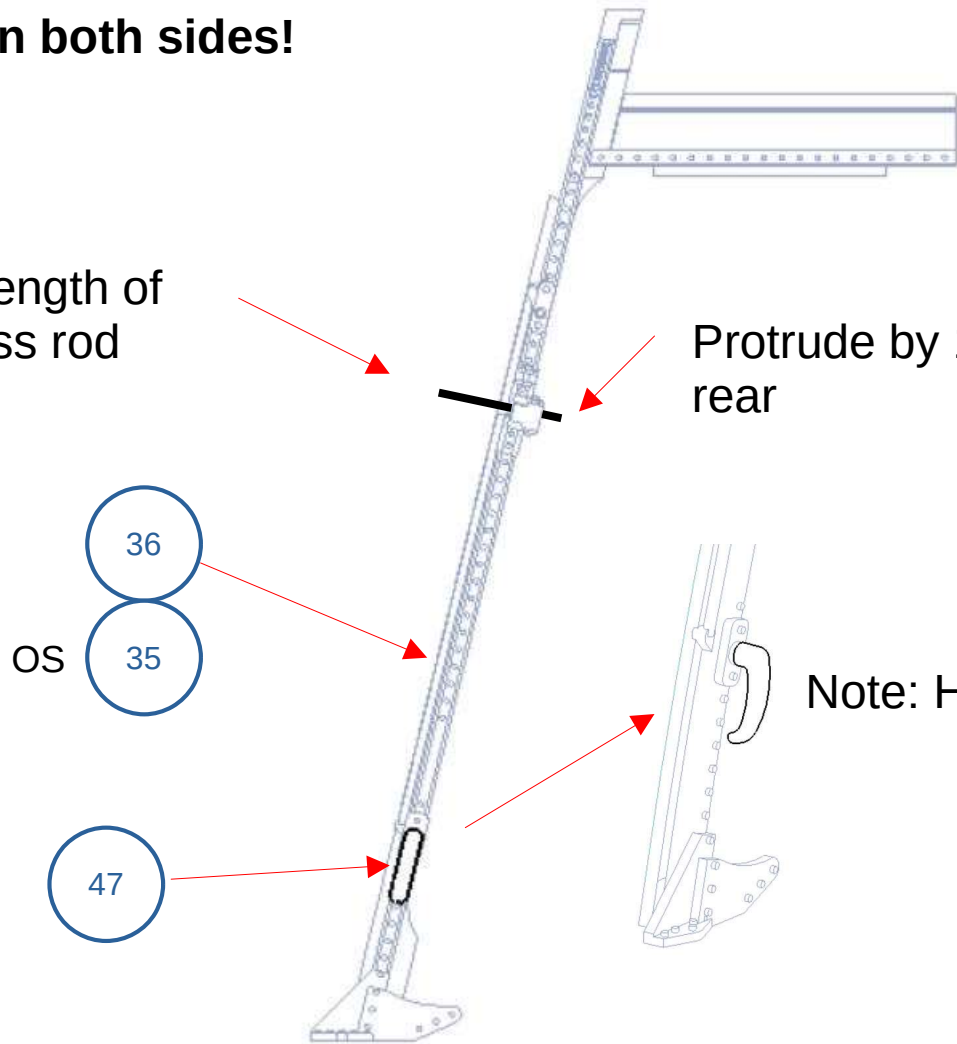
Protrude by 1 mm at
rear

OS
36
35

47

Note: Handle pointing down

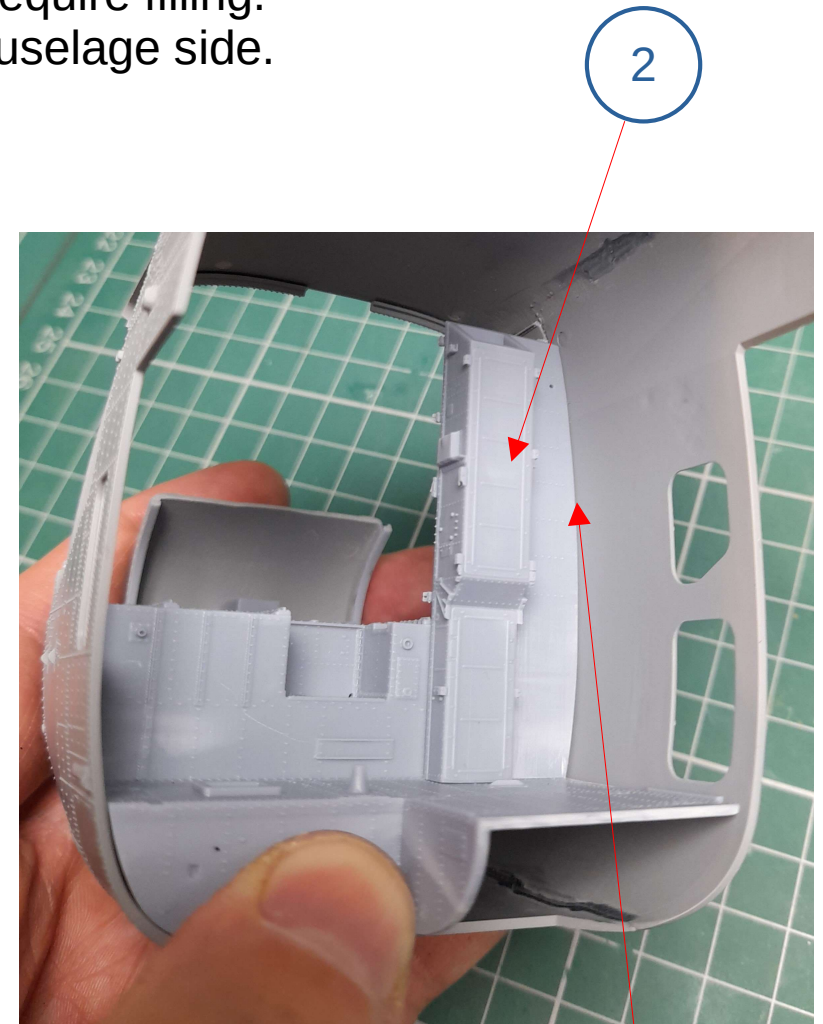
View from inside



Cockpit Assembly

Clean up the cockpit deck Part 01 and test fit to the fuselage to ensure no gap exists at the front and forward sides.

This seam will be hidden by the kit canopy so does not require filling.
Glue part 2 to part 1 ensuring it touches the side of the fuselage side.

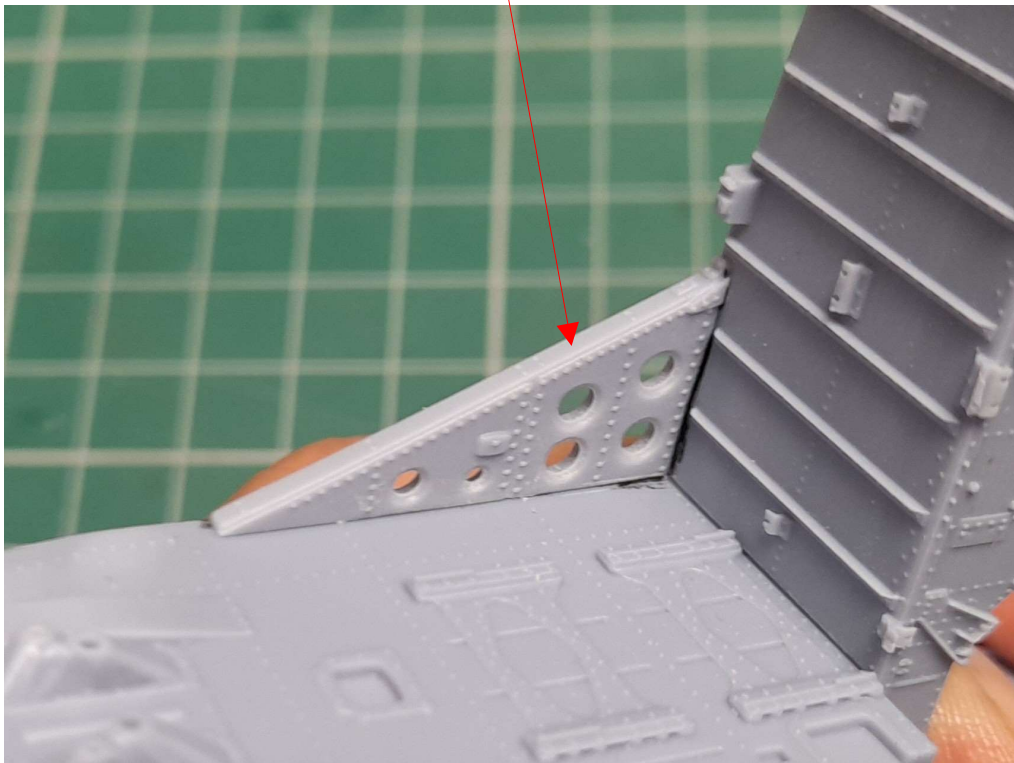


No gap

Cockpit Assembly continued

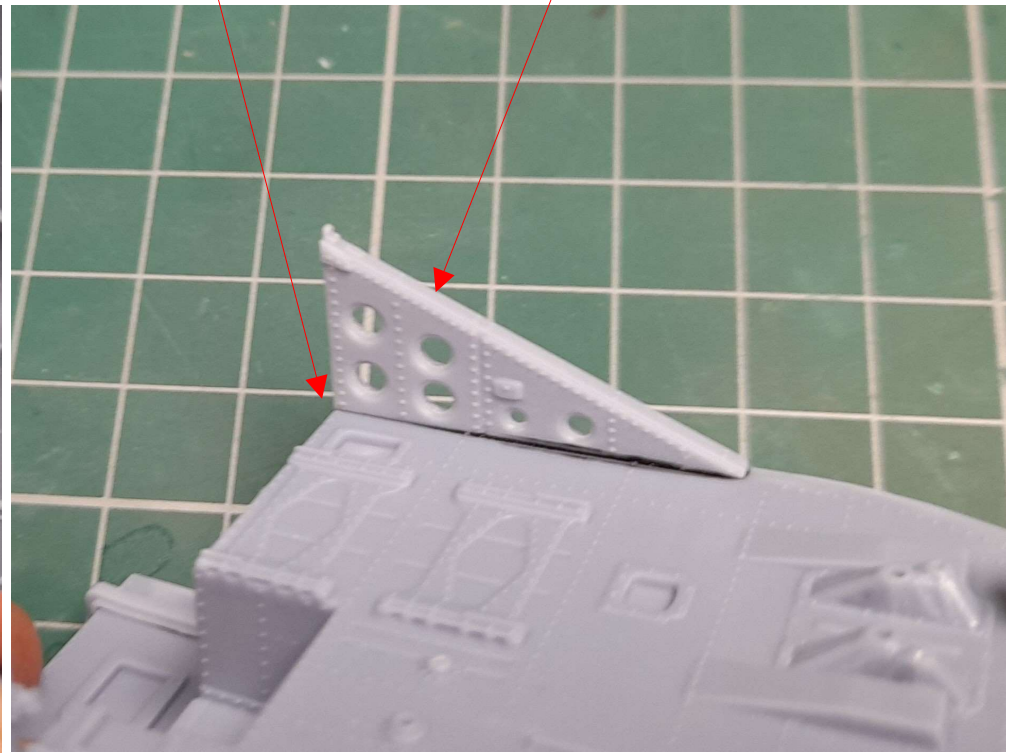
Add parts 12 and 13 to the assembly.
Use the forward fuselage as a positioning guide

13



Ensure no
overhang

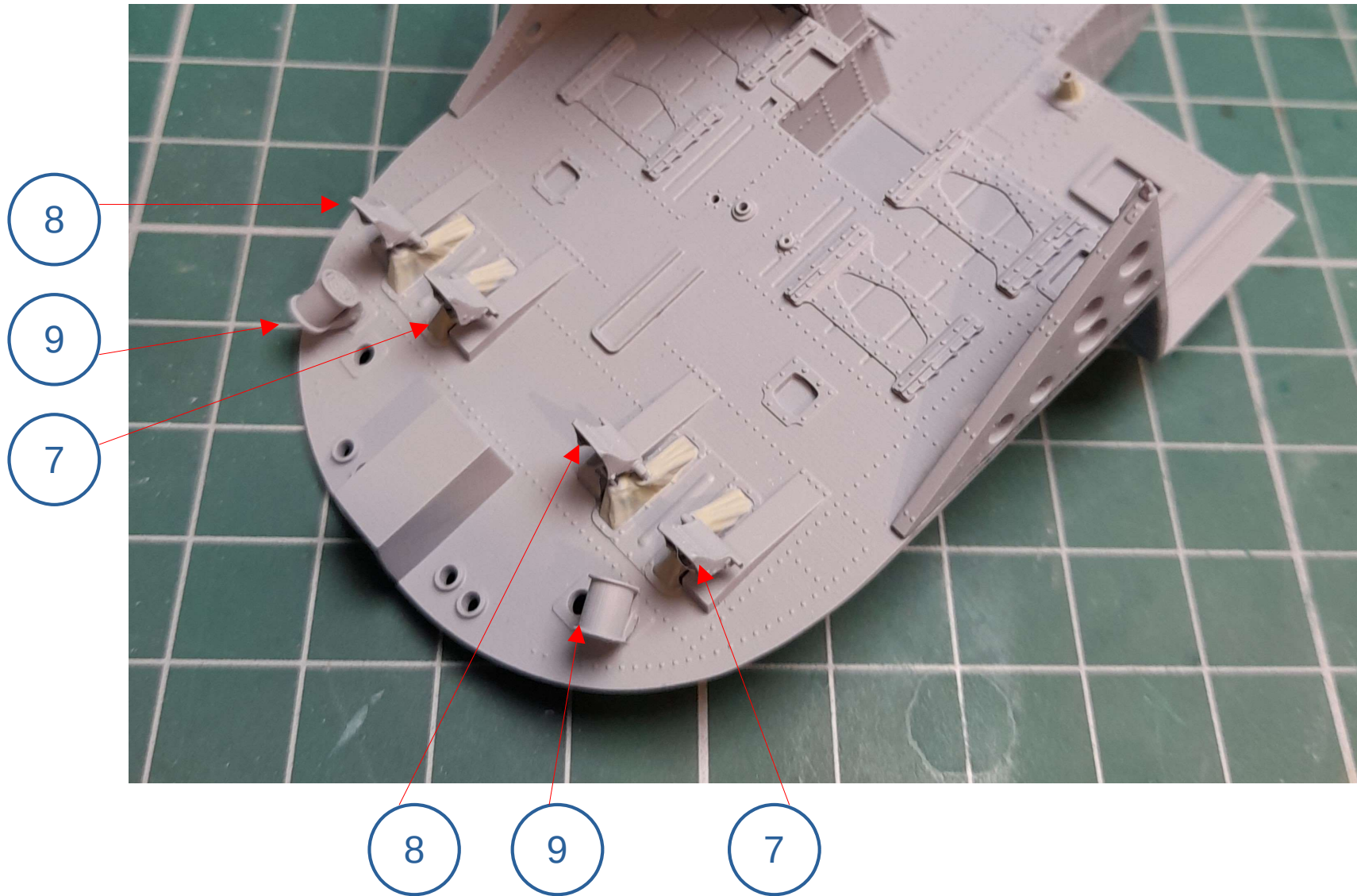
12



Cockpit Assembly continued

Add the foot pedals and fans

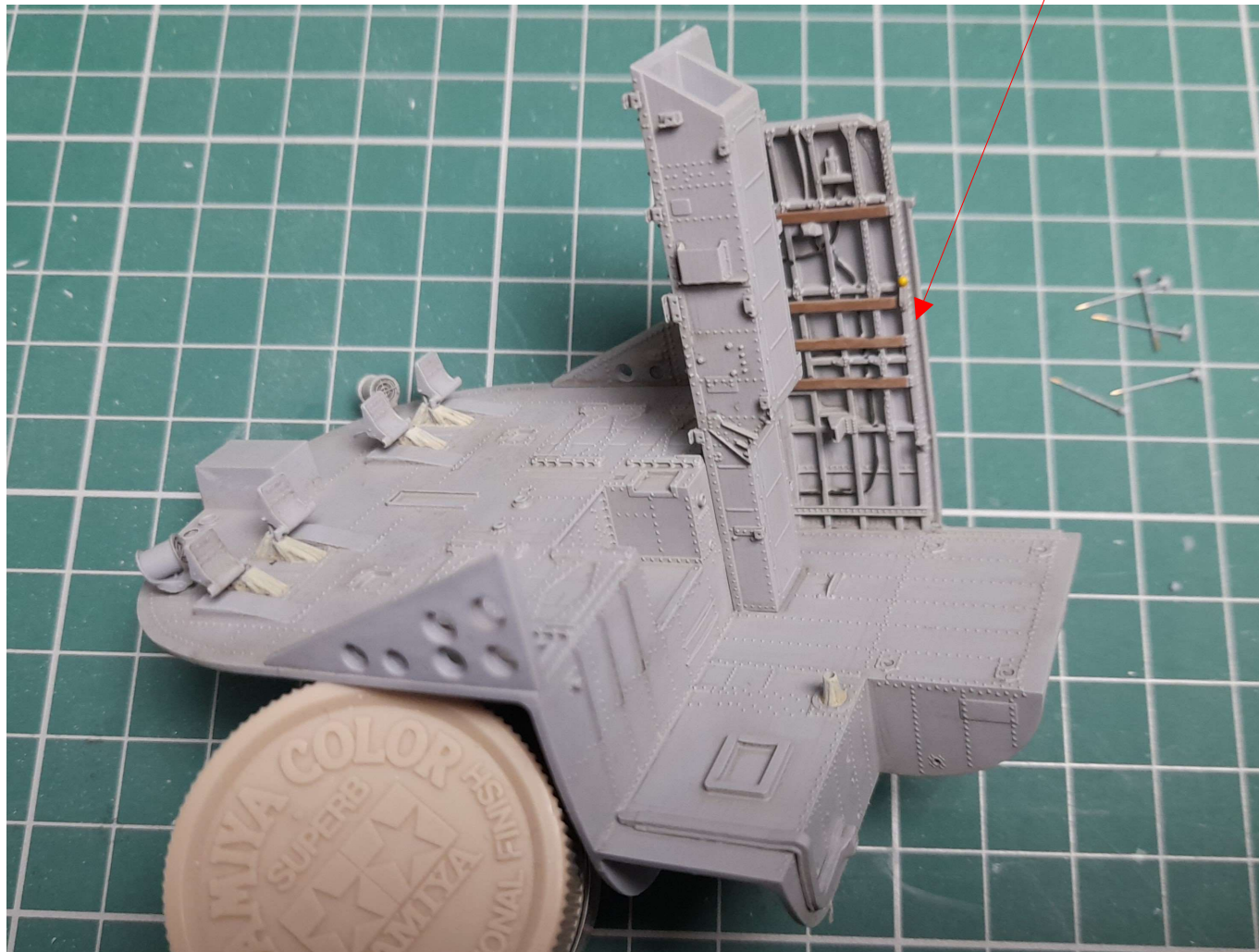
Align the fans to point upwards to between the foot pedals



Cockpit Assembly continued

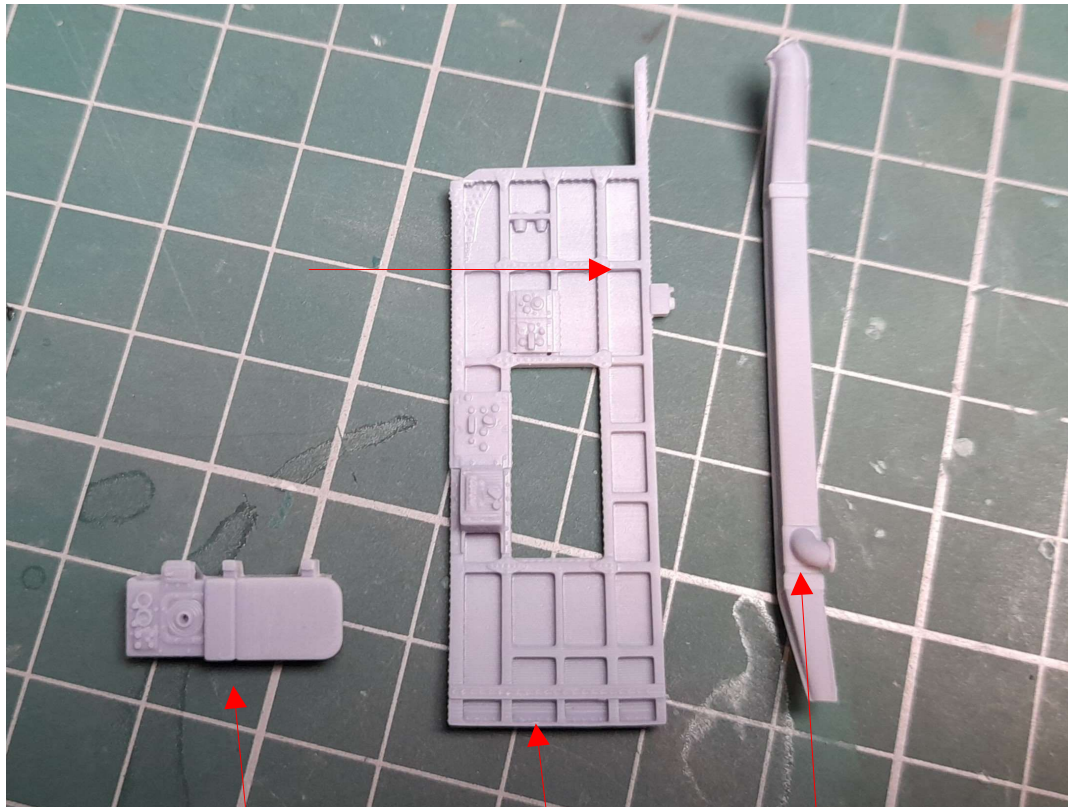
Add part 15 using the forward fuselage as a positioning guide.
This assembly can now be painted

15



Cockpit Assembly continued

Create the rear cabin sidewall and control assembly.
Parts 23 and 26 have locating features on the rear.
This assembly can now be painted.



23

14

26



ICM Part G9

Cockpit Assembly continued

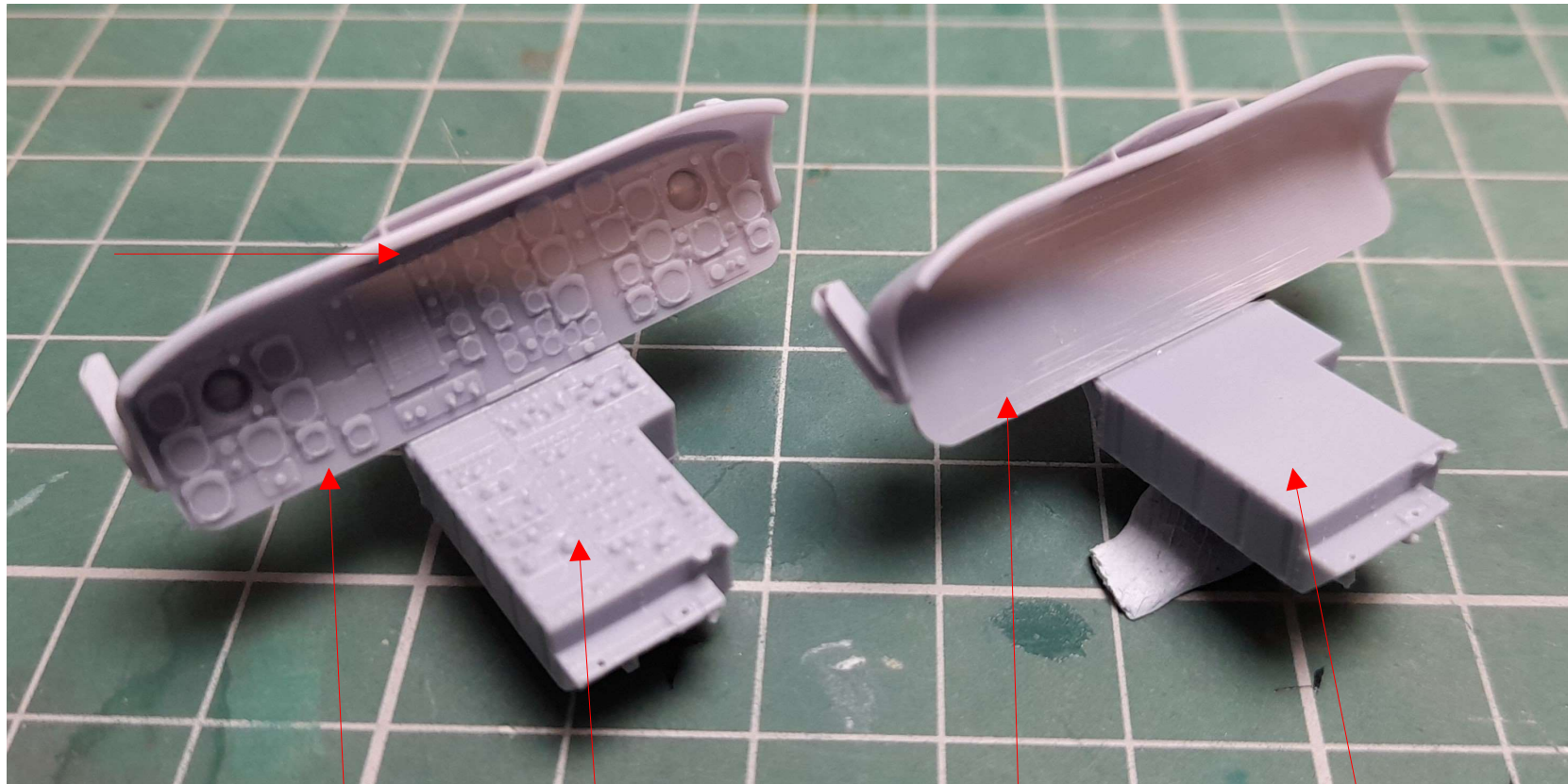
Create the instrument panel and centre console

OPTION

Choose 10a/11a for painted instruments

Choose 10b/11b to use 3D decals or photoetch (not included)

These assemblies can now be painted



11
a

10
a

11
b

10
b

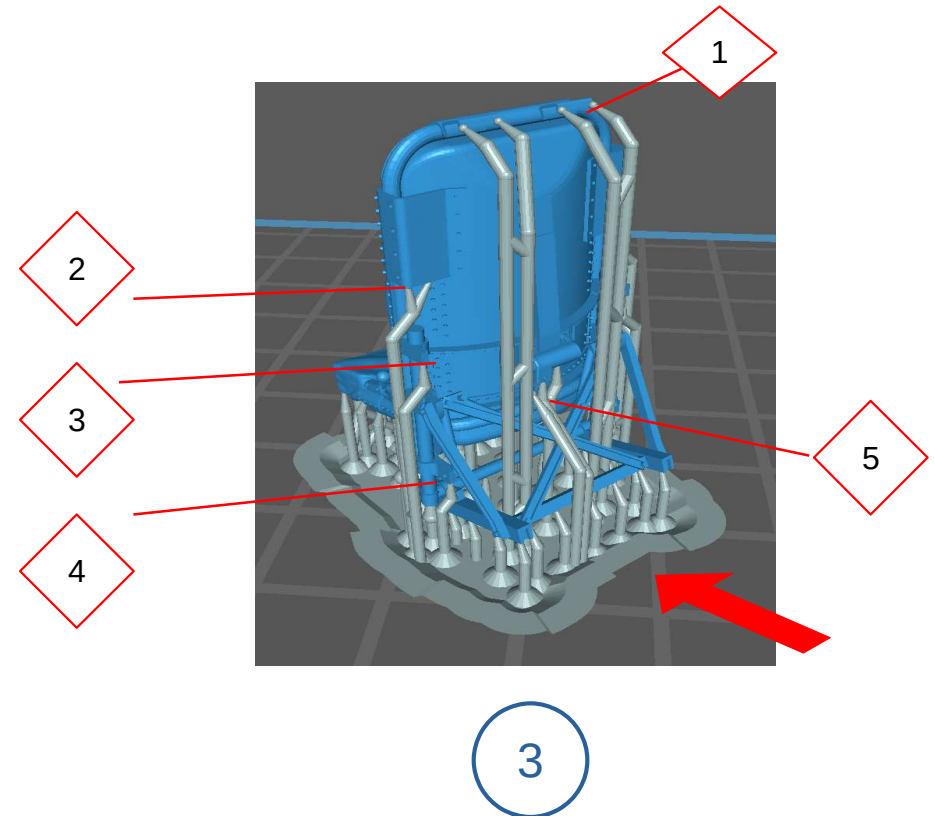
Pilot and Co-pilot forward seats

Note: Both forward seats are identical

Remove the protective cage from around the seats

Remove supports in the sequence shown. Then remove the remaining supports by working from the back to the front of the seat:

Some fine layer lines from the printing process may be visible on the seat cushions. A light rub with a sanding sponge will remove these.



Pilot and Co-pilot forward seats continued

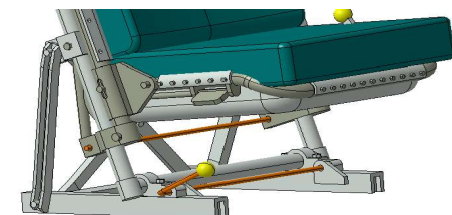
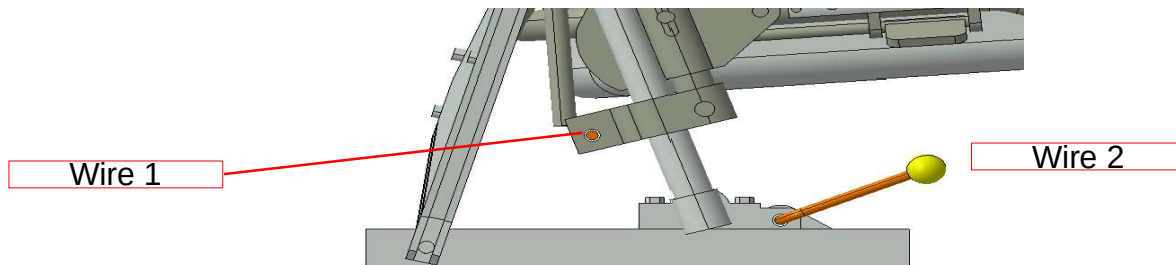
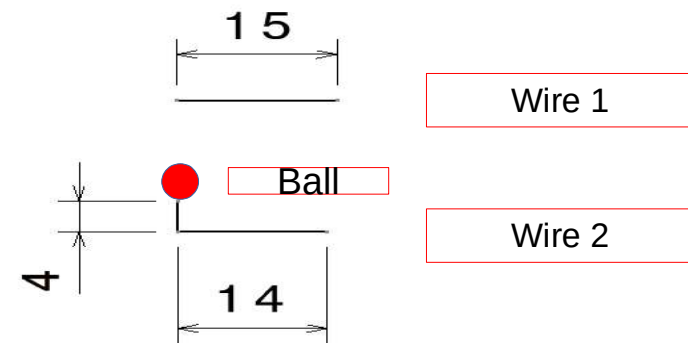
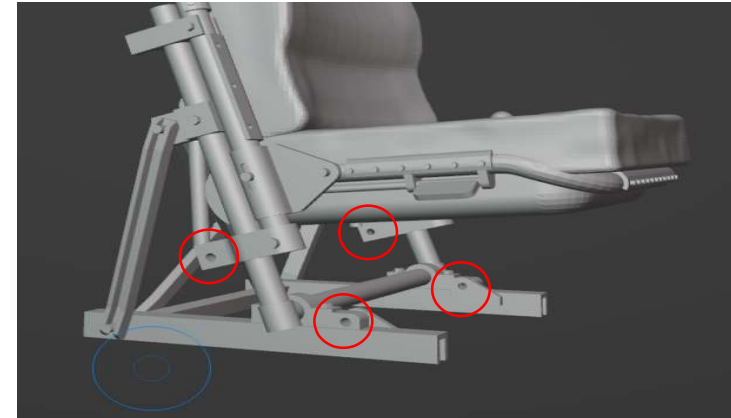
Open the 4 holes indicated using a 0.4 mm drill bit.

Cut and bend the supplied 0.3 mm wire to the two lengths shown below, and file the ends square. You will need two of each part.

For the handle grip, Part 50 (a 1 mm ball) is provided (with some spares). Glue the ball to the end of the wire with instant glue (CA). A small depression is moulded on the ball to assist location. Once the glue has cured, remove any excess printing support and sand to a round shape.

Place the wires in the positions shown, and use a small amount of instant glue (CA) to secure in place.

These seats can now be painted



Aft Pilot Seat

Remove the protective cage from around the seats

Trim the supports on Part 5 (Seat back) carefully in the sequence shown, then remove from back to front:

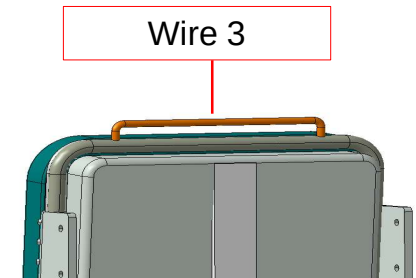
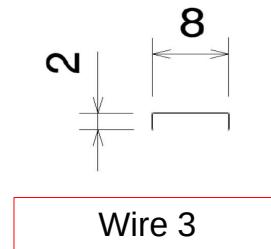
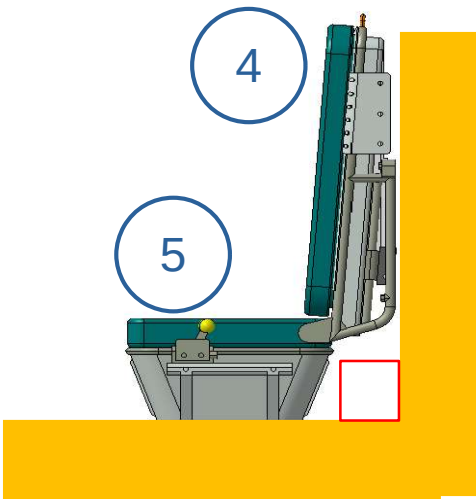
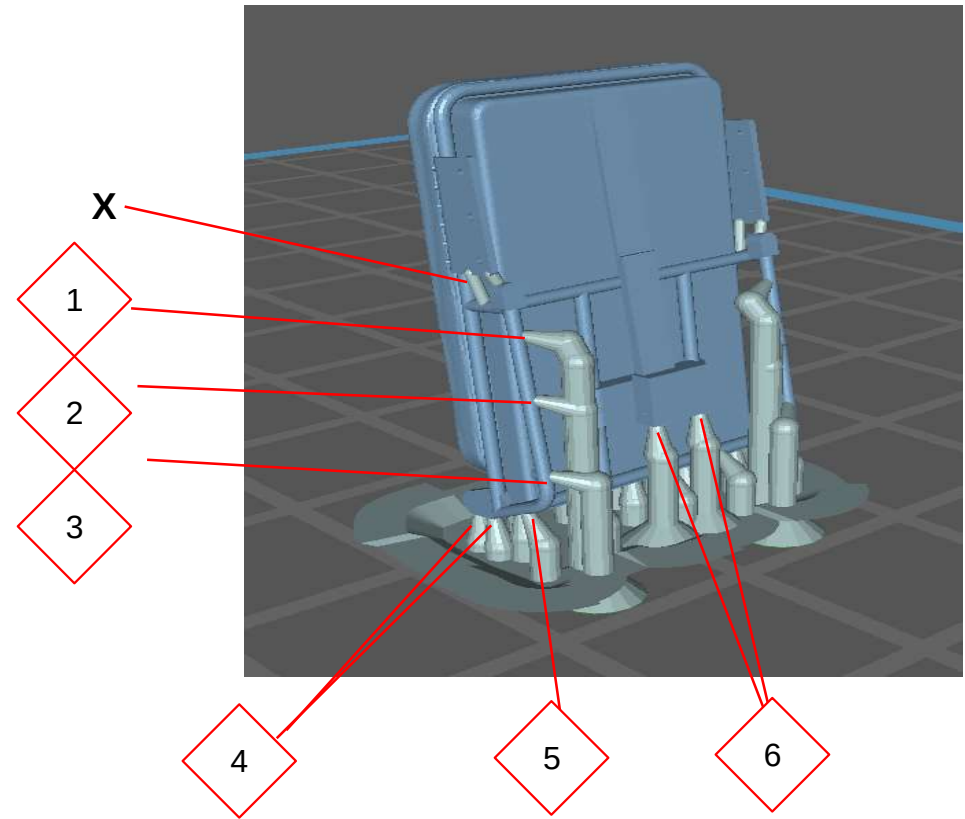
It is suggested to use a thin micro saw to remove the supports marked **X**.

For Part 4 (Seat base), trim the supports in any sequence.

Glue both parts together using perpendicular surfaces (90 deg) as a guide.

Cut and bend the supplied 0.3 mm wire to the shape shown below. Drill 0.4 mm holes in the top of the seat – a small indent will be visible at each hole location.

Fit the wire with instant glue (CA).
This seat can now be painted



Seat belt Info

PLEASE NOTE: The kit seats are significantly undersized, and as a result aftermarket seat belts are too short.

A length of belt is added to the seat back to allow the belt Y section to be located correctly when draped over the top of the seat.

A step in this belt is positioned to suit the Kelik belts (with the black retractors trimmed off). This length of belt should be painted to match the belts you are using. Please consult your references.

Add belt from here



Add belt from here



Forward facing crew seat

Locking handles:

Two locking handles are to be added to part 6 as shown.

Enlarge the locating holes on the seat with a 0.4 mm drill bit.

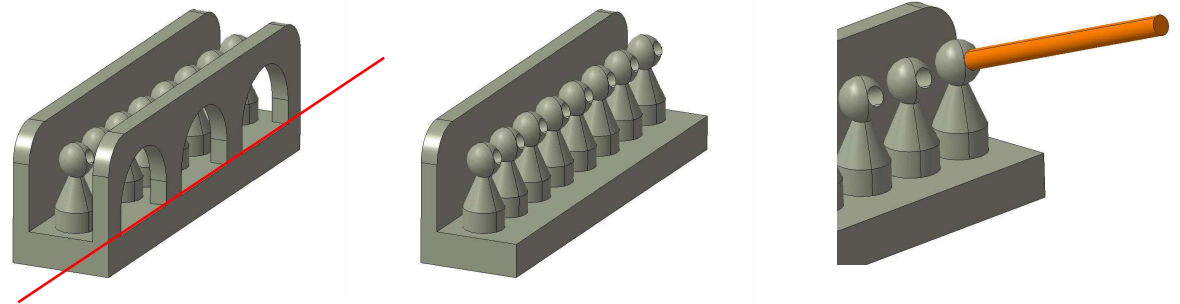
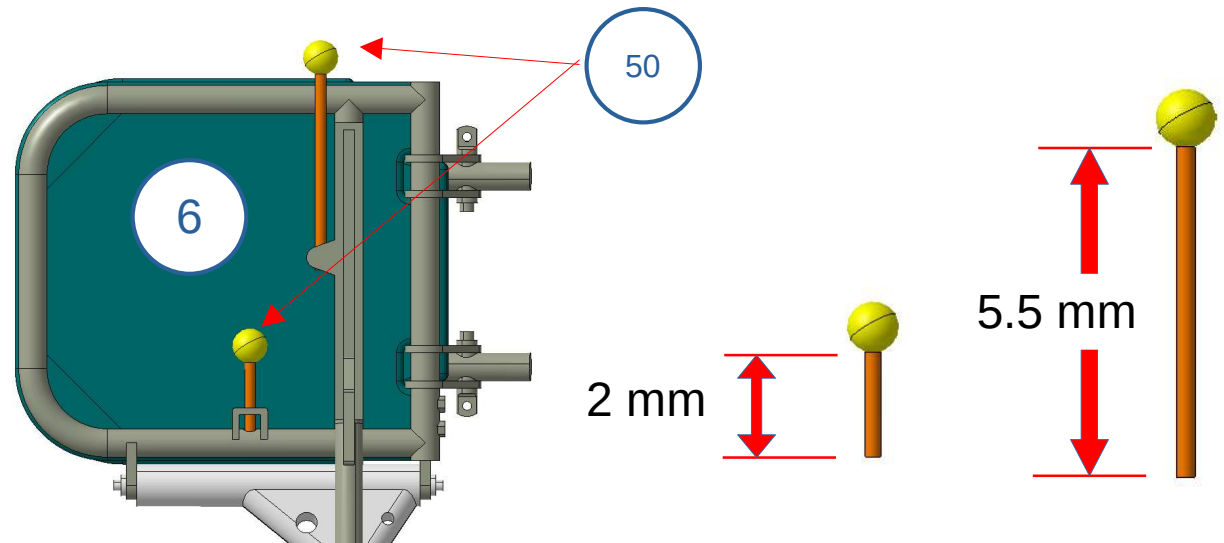
Expose the round handle ends (50) by cutting the protective wall flush with the base.

Glue a short length of the supplied 0.3 mm wire to the ball, locating in the recessed hole. When the glue has cured, trim the ball from the support and sand to a spherical shape.

Produce two handles

Trim the wires to the final length shown and fit to the seat.

This seat can now be painted

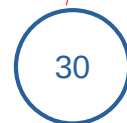
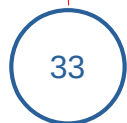
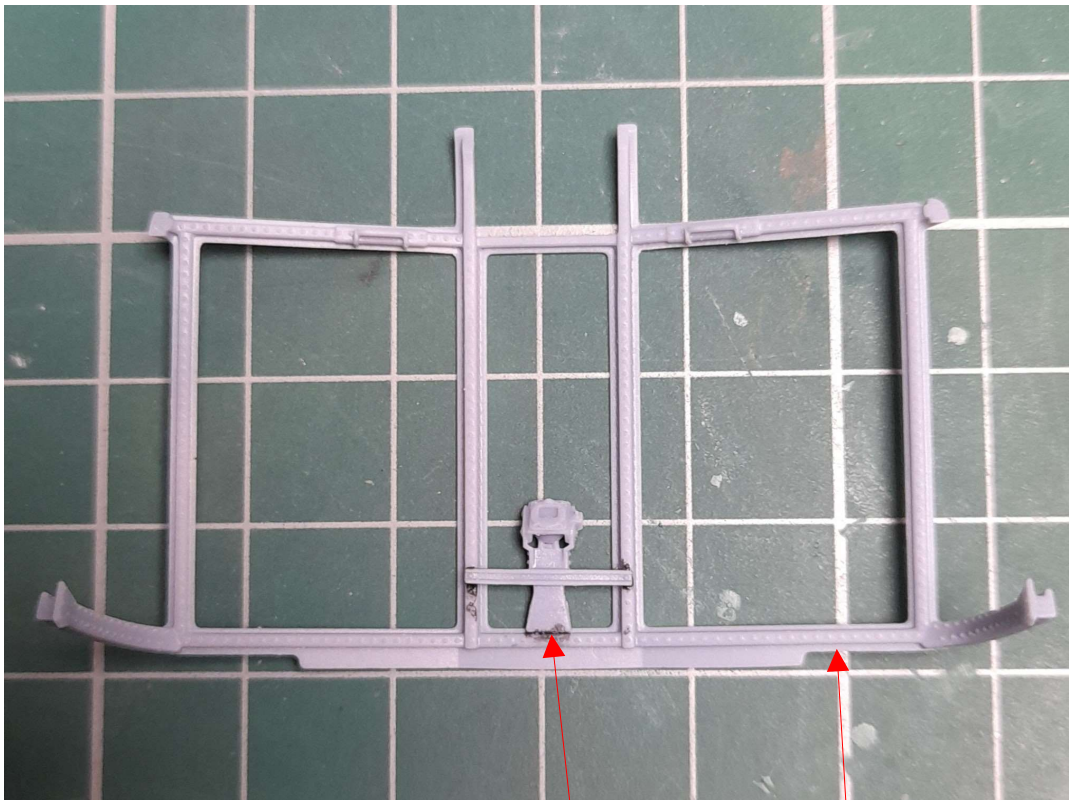


Cockpit Assembly continued

Prepare the forward canopy frame and side door inner panels
As shown
These assemblies can now be painted



Door stay to be
Pointing upwards

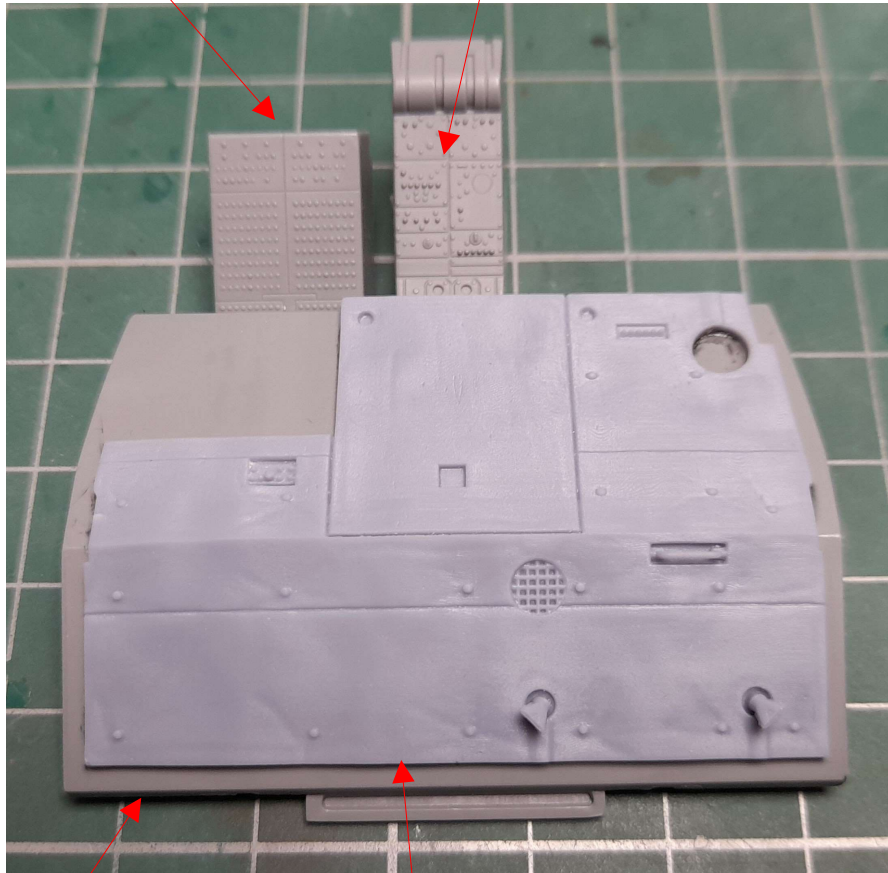


Cockpit Assembly continued

Prepare the ceiling panel assembly as below. Part 27 represents ceiling insulation panels as well as other details. Please check your references as this insulation is usually not present on civilian conversions. This assembly can now be painted

Kit Part F28

Kit Assy see step 36



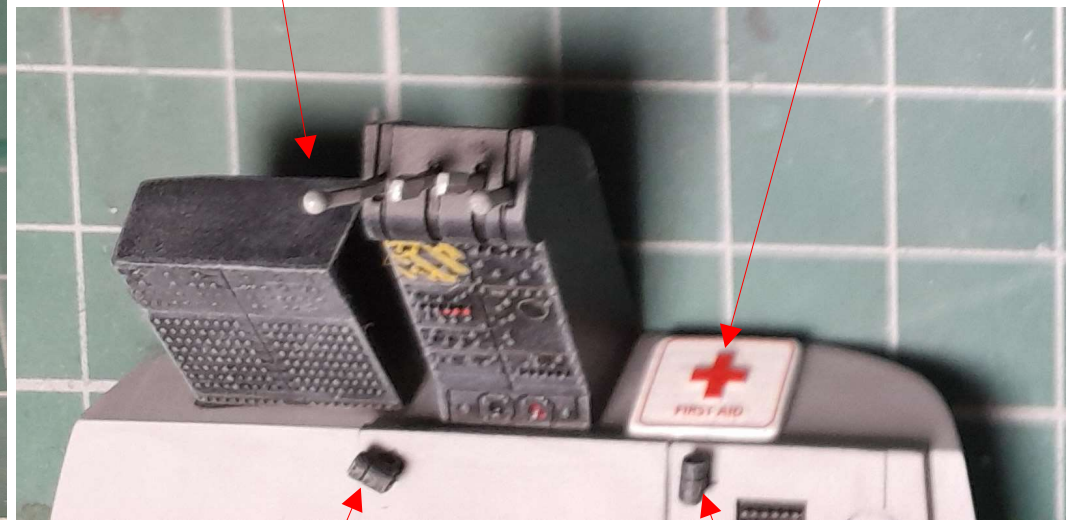
Kit Part G9



Ensure part is centred

Note! Kit part F28 requires minor trimming to clear the canopy frame part 36
Trial fit to determine material removal required

Not included
(Part of Kelik decal set)



Positionable Lamps



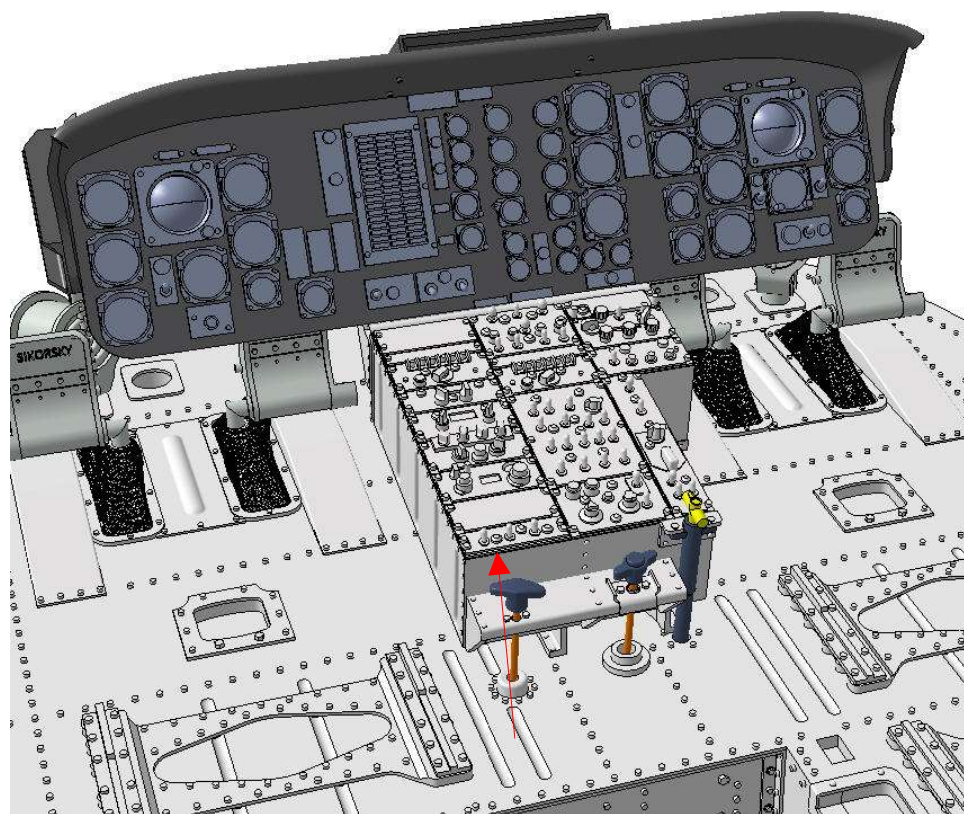
Cockpit Assembly continued

Glue the instrument panel assembly to the cockpit floor

Add the three pull handles to the rear of the console

Fit a 10 mm length of 0.3 mm brass rod to the handles 44 and

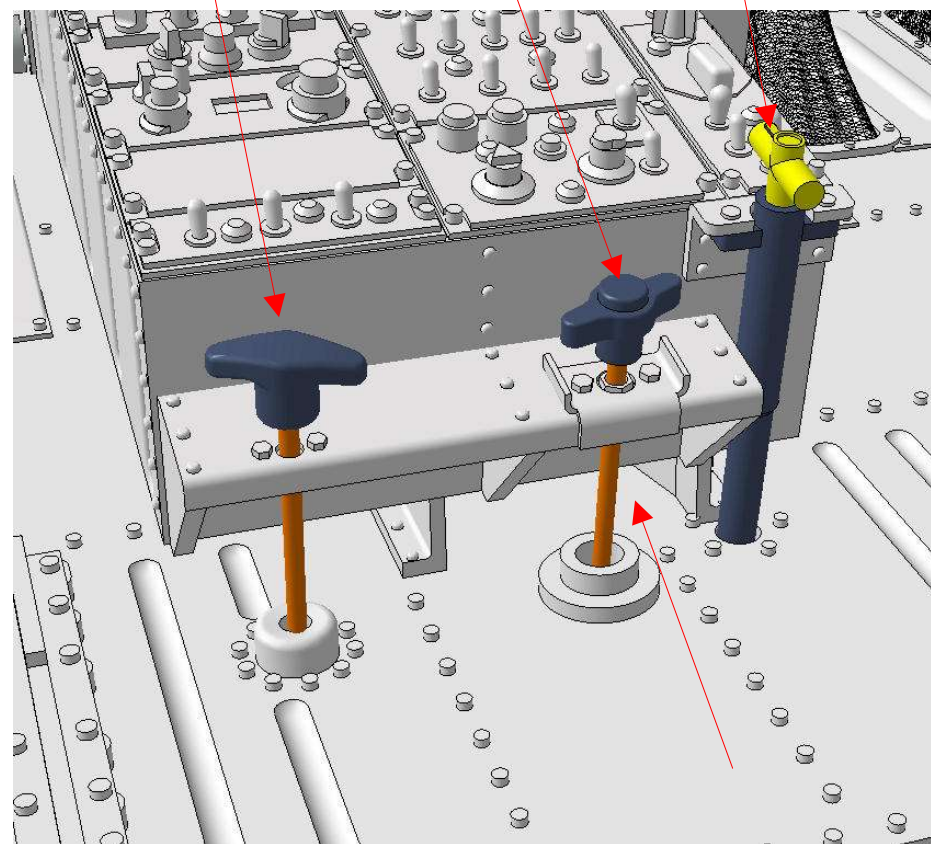
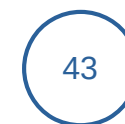
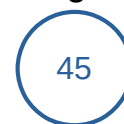
45



Parking brake

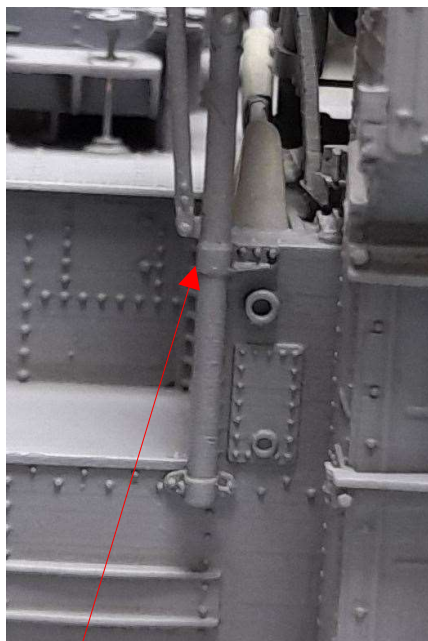
Nose wheel lock

Emergency cargo
release



Cockpit Assembly continued

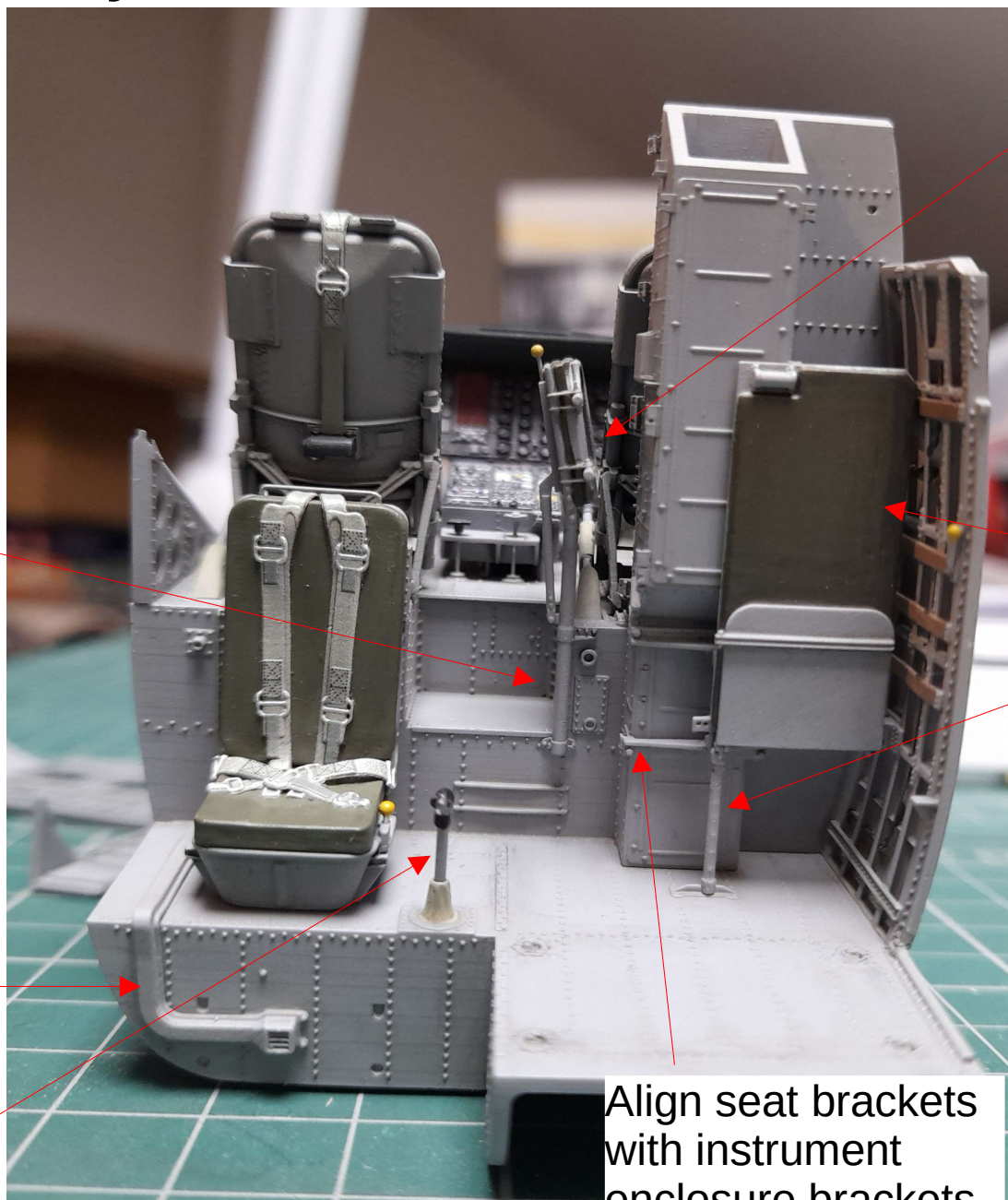
Add all seats to the
cockpit



Position seat part
06 as shown



Kit Part G27



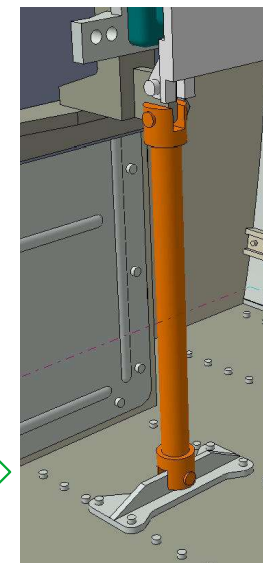
Align seat brackets
with instrument
enclosure brackets



Option
Forward facing crew
seat (Jump seat)
not always fitted.
Consult your
references

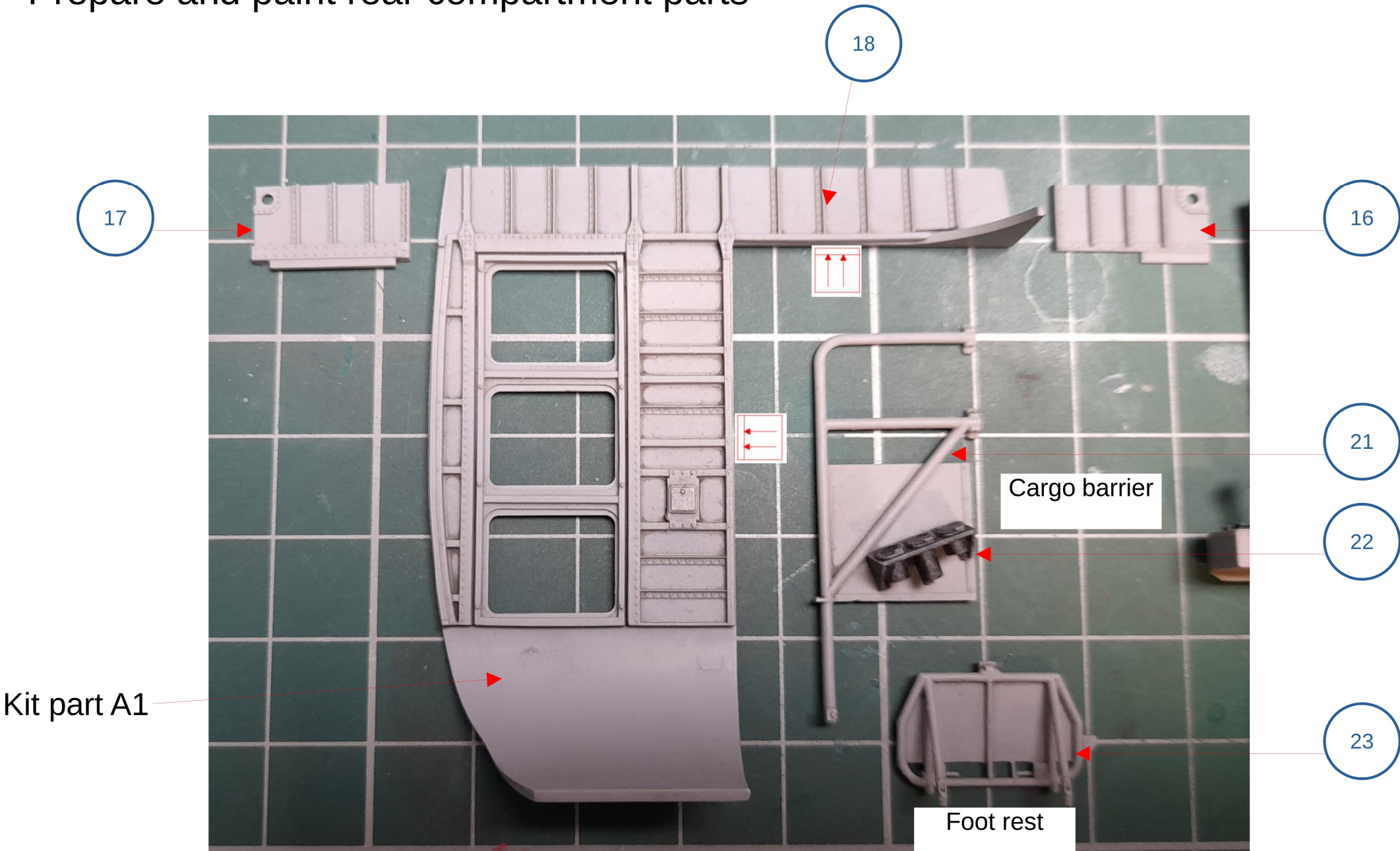


Option! Rear facing
crew seat not
always fitted.
Consult your
references



Cockpit Assembly continued

Prepare and paint rear compartment parts



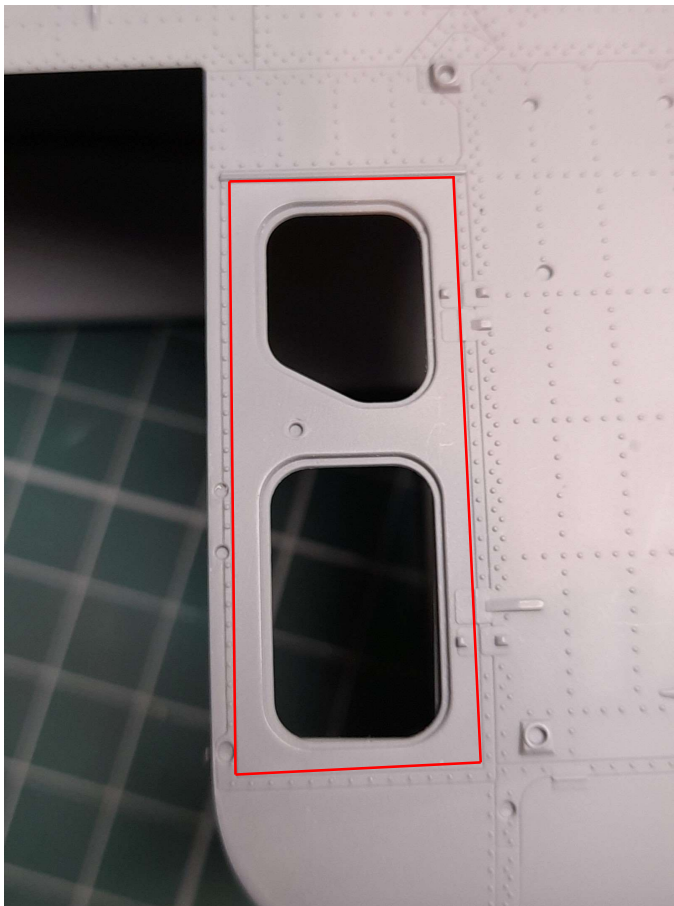
Side Door



The rear side door can be shown open or closed (Kit is closed by default)

To use the open door (Part 32), trim the door opening as shown.

The easiest way is to chain drill small holes around the perimeter, leaving a small amount of material to the final edge. Trim the inner door away and finish to the final size with sanding sticks.



Cockpit installation

Fit the cockpit deck into the forward fuselage, then the sidewall assembly, then the ceiling assembly.

Important! - Test fit the forward fuselage to the rear fuselage, and also test fit the rear cockpit panel fit before glueing the ceiling assembly in place.

Install the upper detail panels parts 16 and 17.

16

17

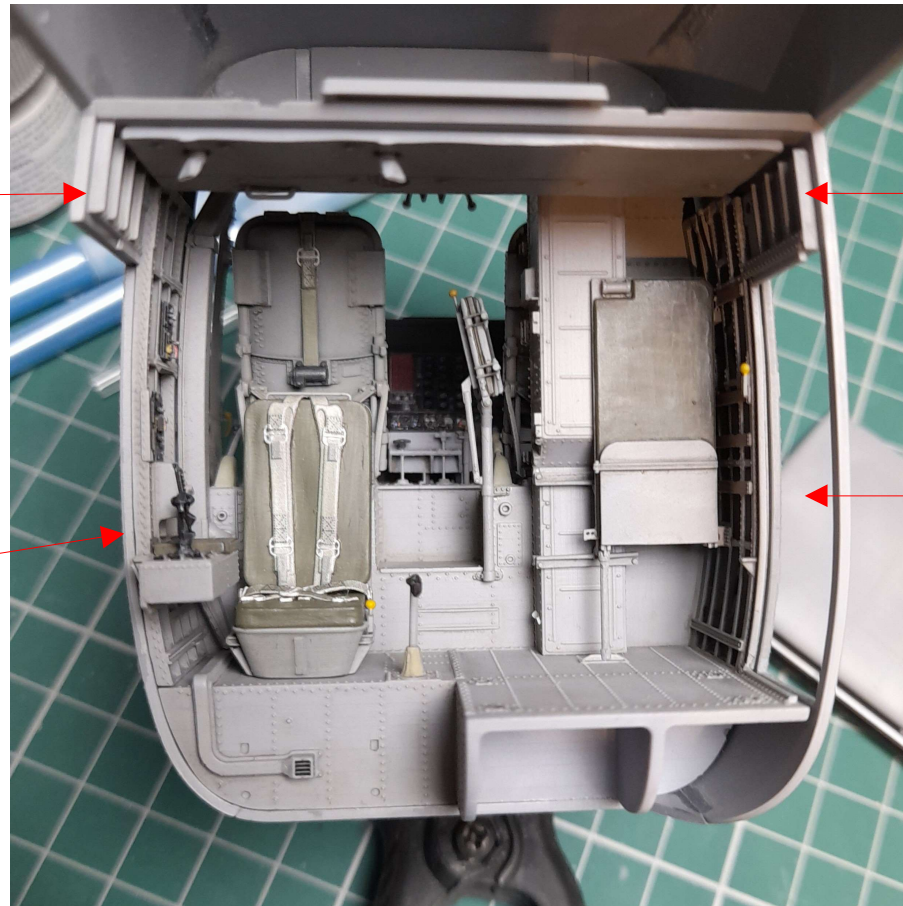
31

32



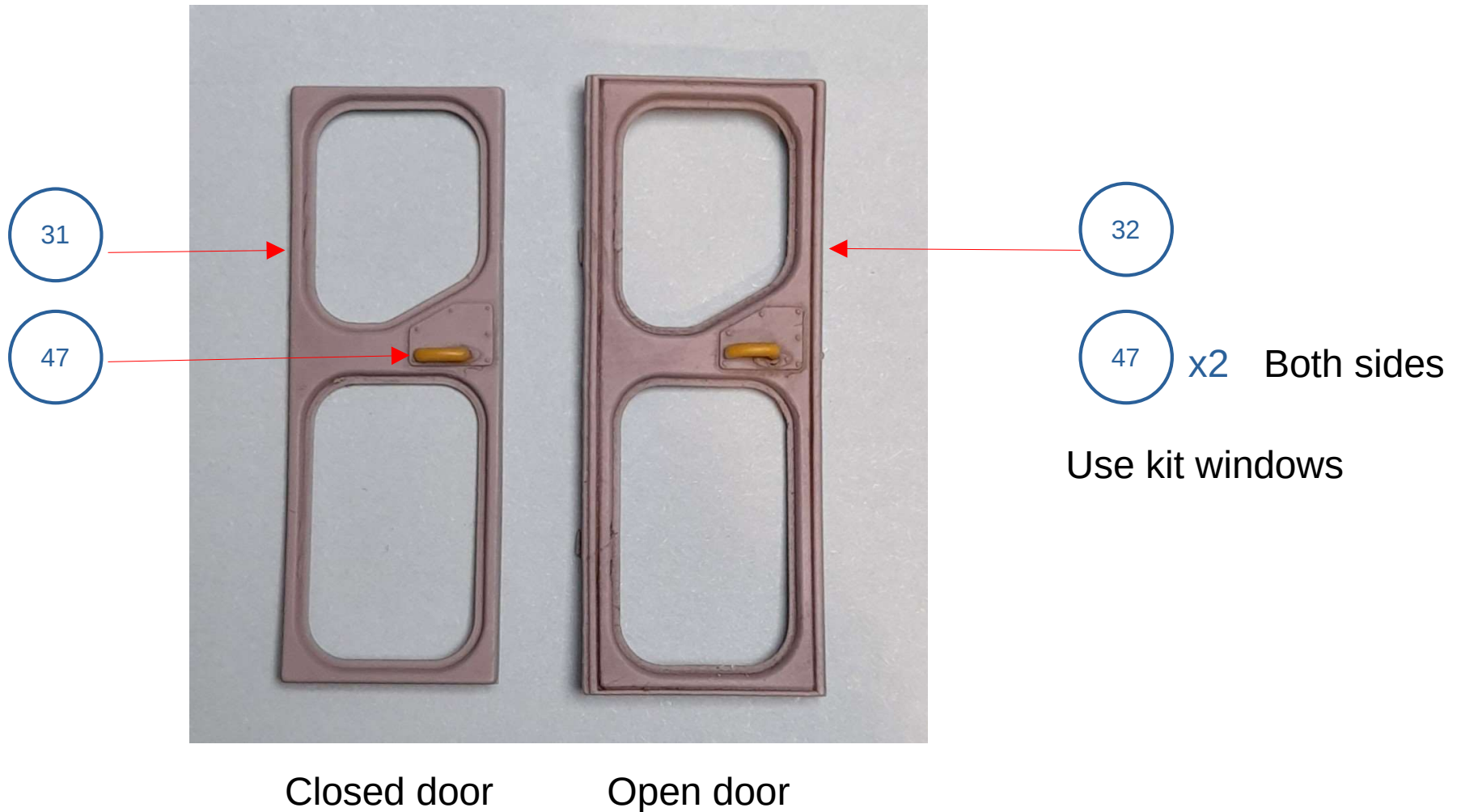
See following page

Note!
Add sidewall
assembly
Before ceiling!



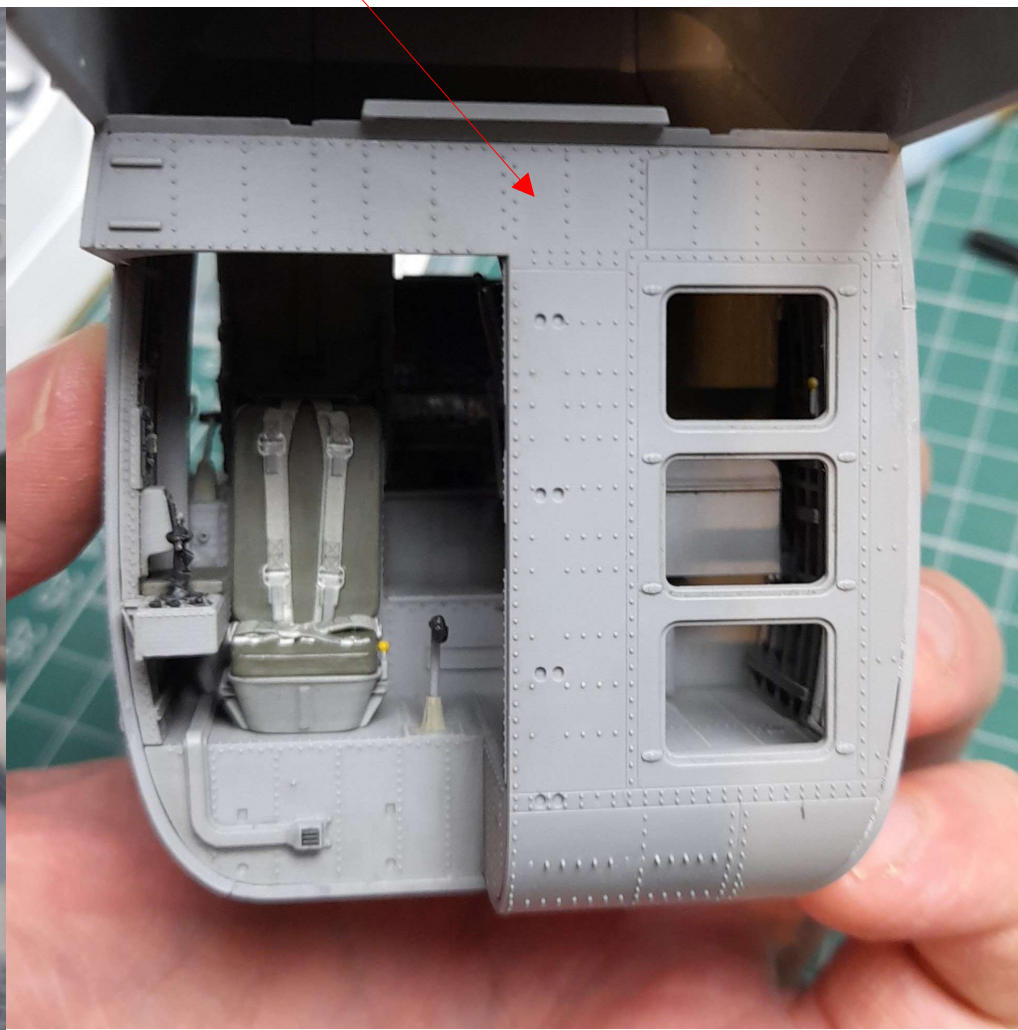
Cockpit installation

Choose door option and assemble as shown



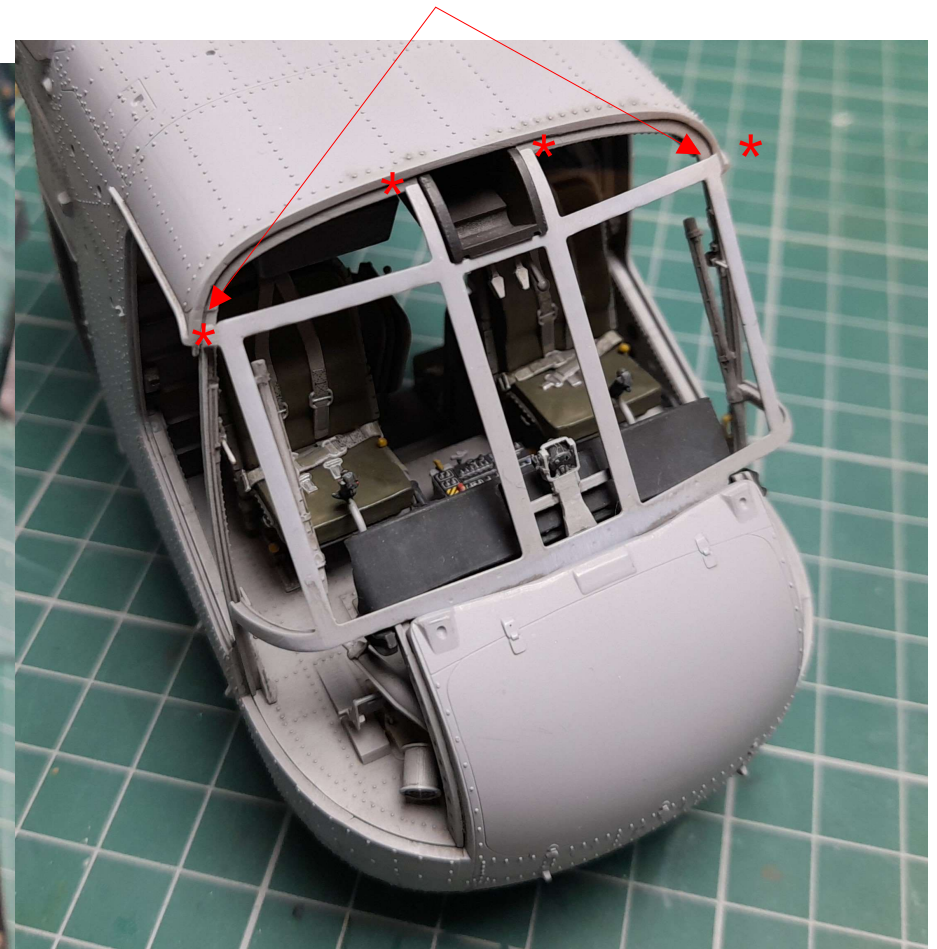
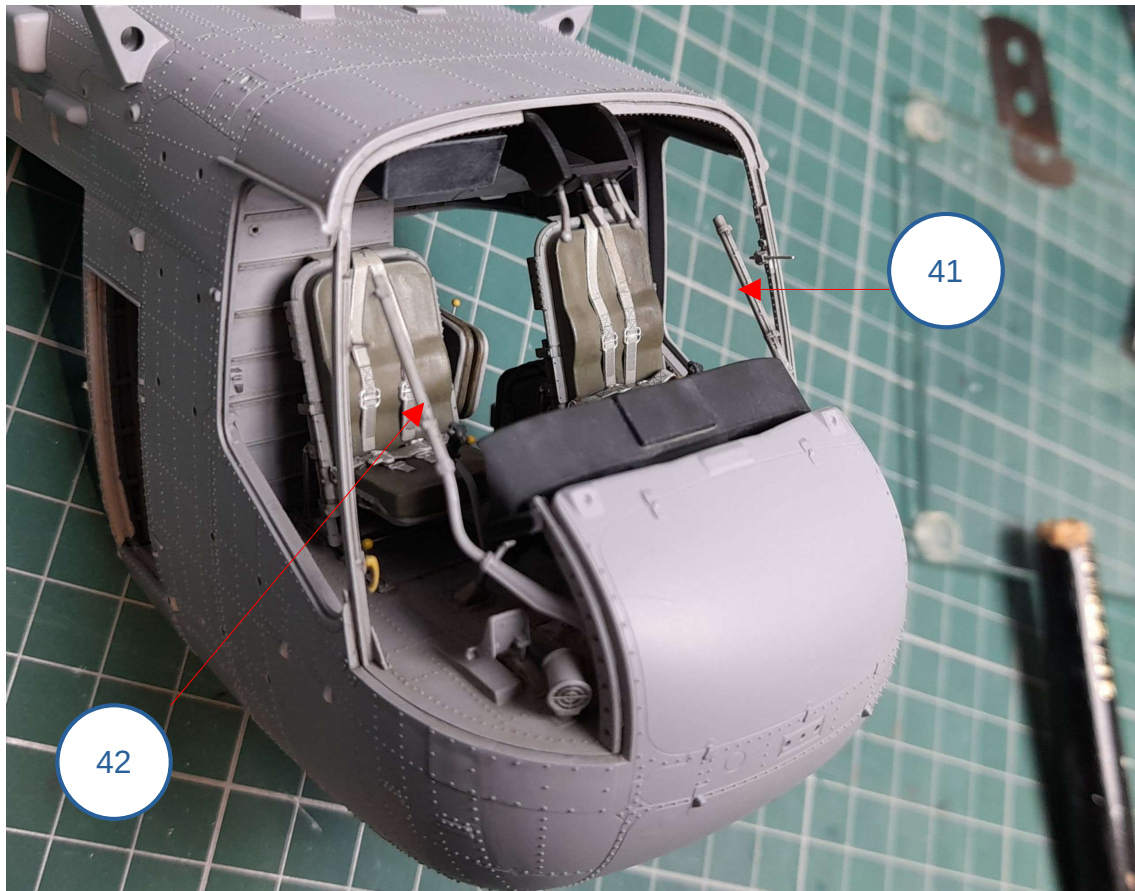
Cockpit installation continued

Install rear panel



Front canopy framing and heater ducting

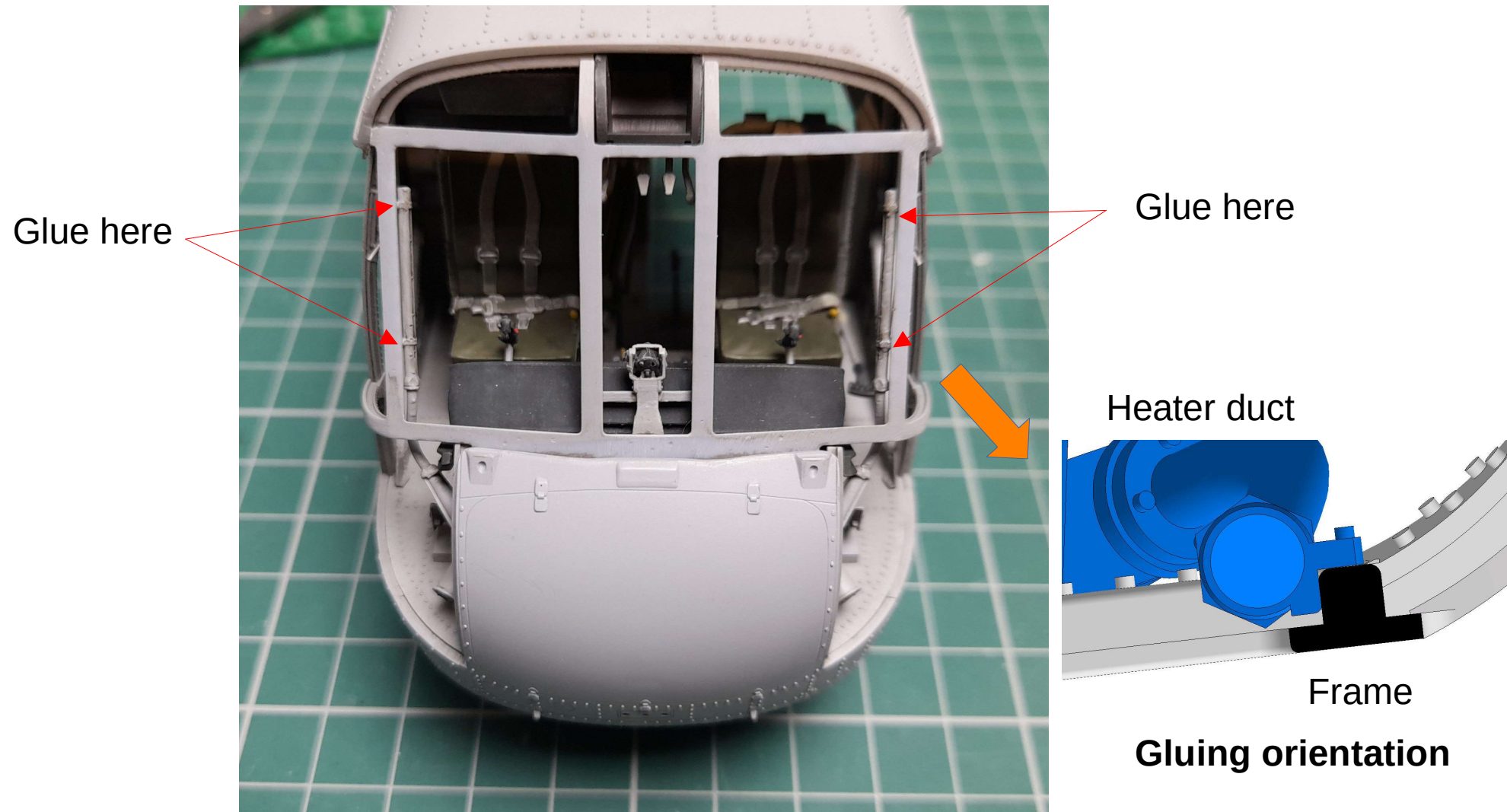
Important! – Add canopy heater ducting parts 41 and 42 without glue before fitment of the canopy inner frame. They fit into the floor holes next to the floor fans. Add the canopy frame and check fitment of the kit canopy before glueing in place. Remove material at the points marked * if required. Glue is only required in the two locations shown.



Glue here only

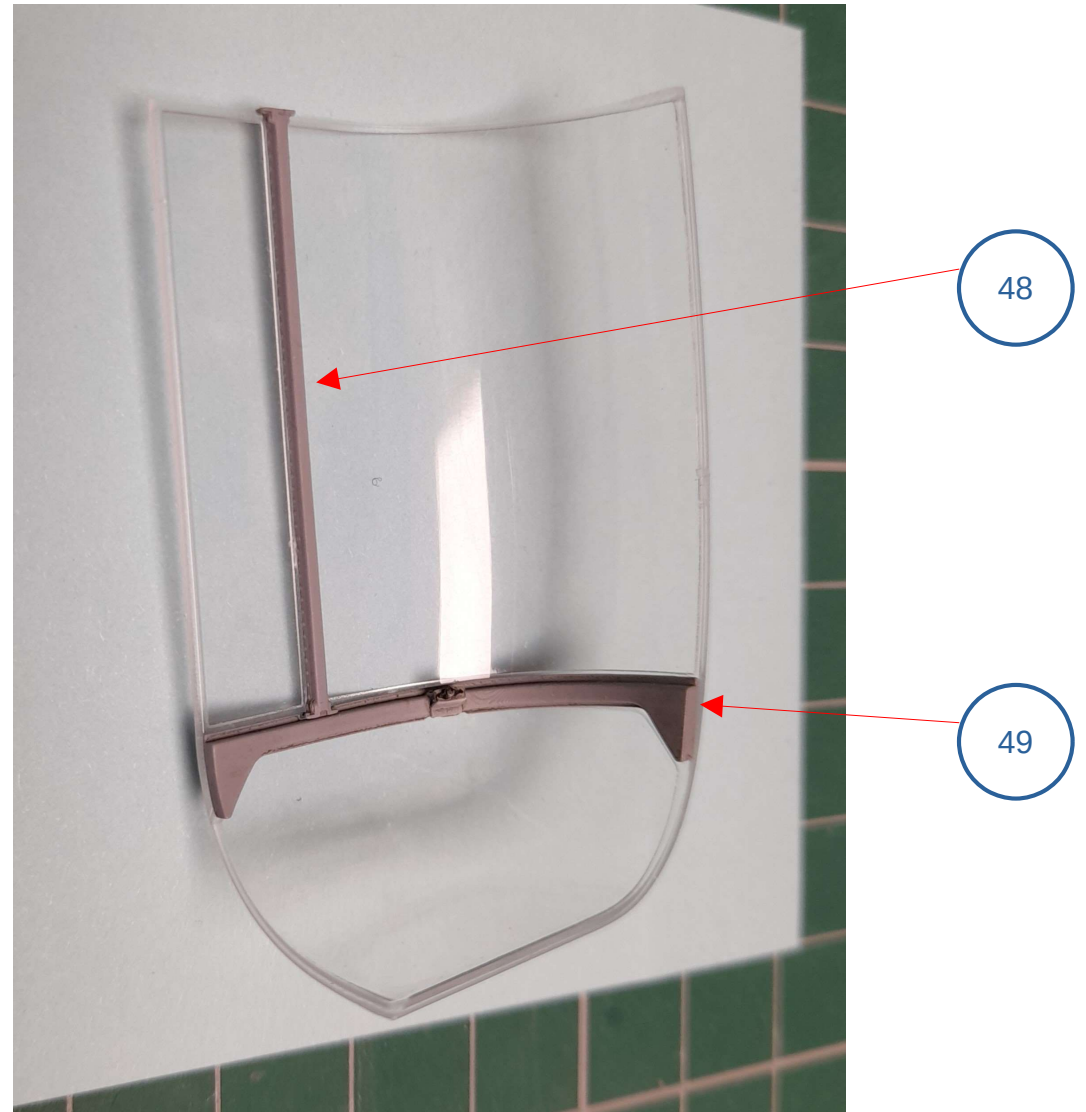
Front canopy framing and heater ducting

With the canopy frame now glued in place, glue the heater ducts to the frame. My apologies this is fiddly!



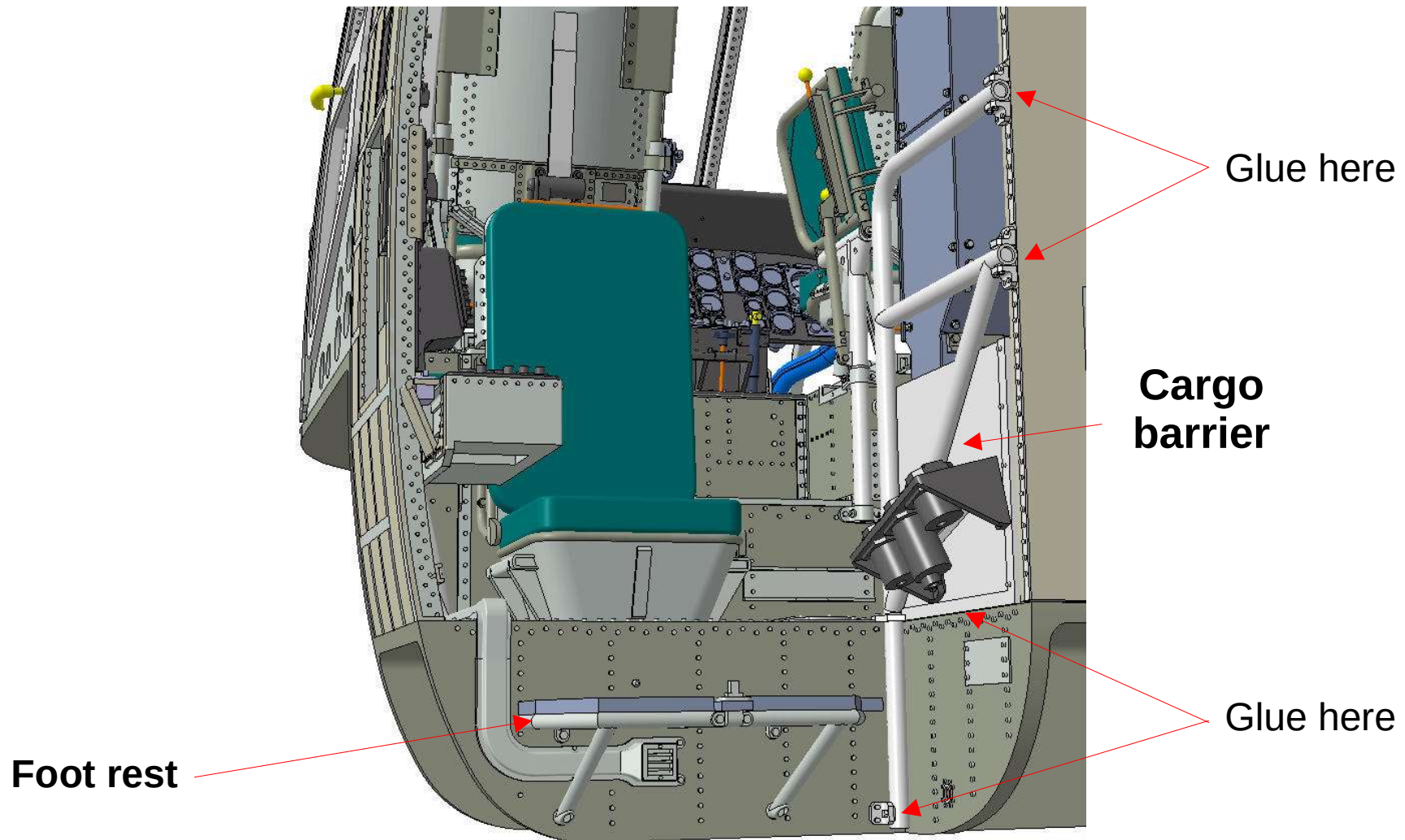
Rear canopy framing

Prepare parts 48 and 49 and glue to the rear window with a small amount of pva glue. Align with the canopy framing and ensure no edge overhang that will affect fitment. If using a mask set with inner masks, paint frames before adding these parts.



Rear cockpit – final additions

Before adding the rear canopy glass, add the foot rest and cargo barrier



Forward Side doors

Add the inner door frames to the kit doors with a small amount of pva glue.
If using a mask set with inner masks, paint frames before adding these parts.

Note! Extra door handles (Part 47) are provided. These can be added to the outside of the kit door as they have been missed in the kit.



Conclusion

That's it for the cockpit !

Add the glazing in line with the kit instructions (Step 20 and 21),

Combine the forward and rear fuselage assemblies, then carry on with your build from Step 39

Many thanks for your purchase.

Please follow my page on facebook to keep up to date with what else I am working on.

I have other detail parts for the ICM CH-54 kit in development (as time permits...) and a head full of ideas for other projects.

If you have any suggestions or issues please message me via my facebook page.

Please let me know if you share your work anywhere online as I would love to see it.