CHRONIC3D.COM

Saturn V rocket Apollo 15
AS 510 mission

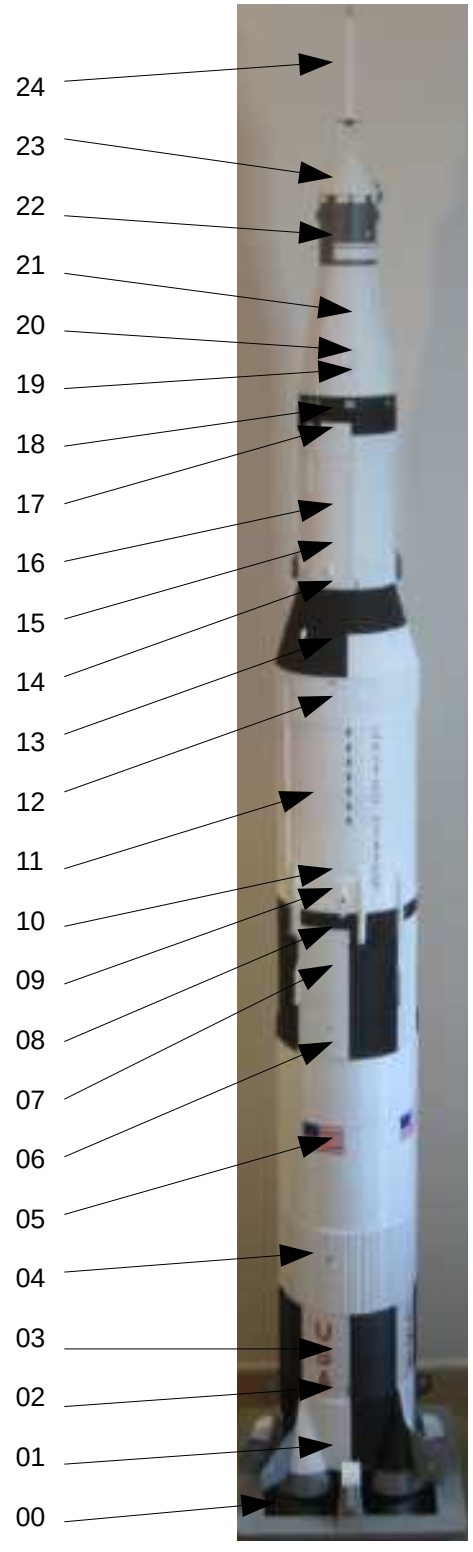
Building instruction
Scale 1/60th
1,82m high
24 items demountable

656 pieces
Finished weight 3kgs

Amount of filament per color :
Silver : 1,2 kg
White : 860 grs
Black : 330 grs
Yellow : 330 grs
Grey : 90 grs
Gold : 60 grs
Brown : 40 grs
Red : 20 grs
Blue : 10 grs

Items definition :

00 : launch pad
01 : S1C trust structure
02 : bottom of RP1 tank
03 : RP1 tank
04 : S1C inter-tank structure
05 : LOX tank
06 : S1C LOX tank top
07 : S1C-S2 inter-stage structure
08 : S2 trust structure
09 : bottom of LOX tank
10 : S2 common bulkhead
11 : S2 LH2 tank
12 : S2 LH2 tank top
13 : Inter-stage S2-S4B structure
14 : S4B trust structure
15 : S4B common bulkhead
16 : S4b LH2 tank
17 : S4B LH2 tank top
18 : Instrument unit
19 : LM fairing
20 : LM descent stage
21 : LM ascent stage
22 : Service module
23 : command module
24 : escape tower



In this pack : S1C stage

Some agglomerated wooden plank is needed

266 pieces

70 cm high

1450 grs

Naming the items :

S5 00-G_01_x4.stl

S5 : saturn 5
00 : number of module
G : grey color as W-white, S-silver, B-black, Be-blue, R-red, Br-brown, Y-yellow
01 : part number per color
X4 : number of parts

Gluing with CA glue (cyanoacrylate glue)

Dans ce pack : l’étage S1C

Un peu de planche de bois aggloméré sera
Utile pour construire le pas de tir.

266 pieces

70 cm de haut

1450 grs

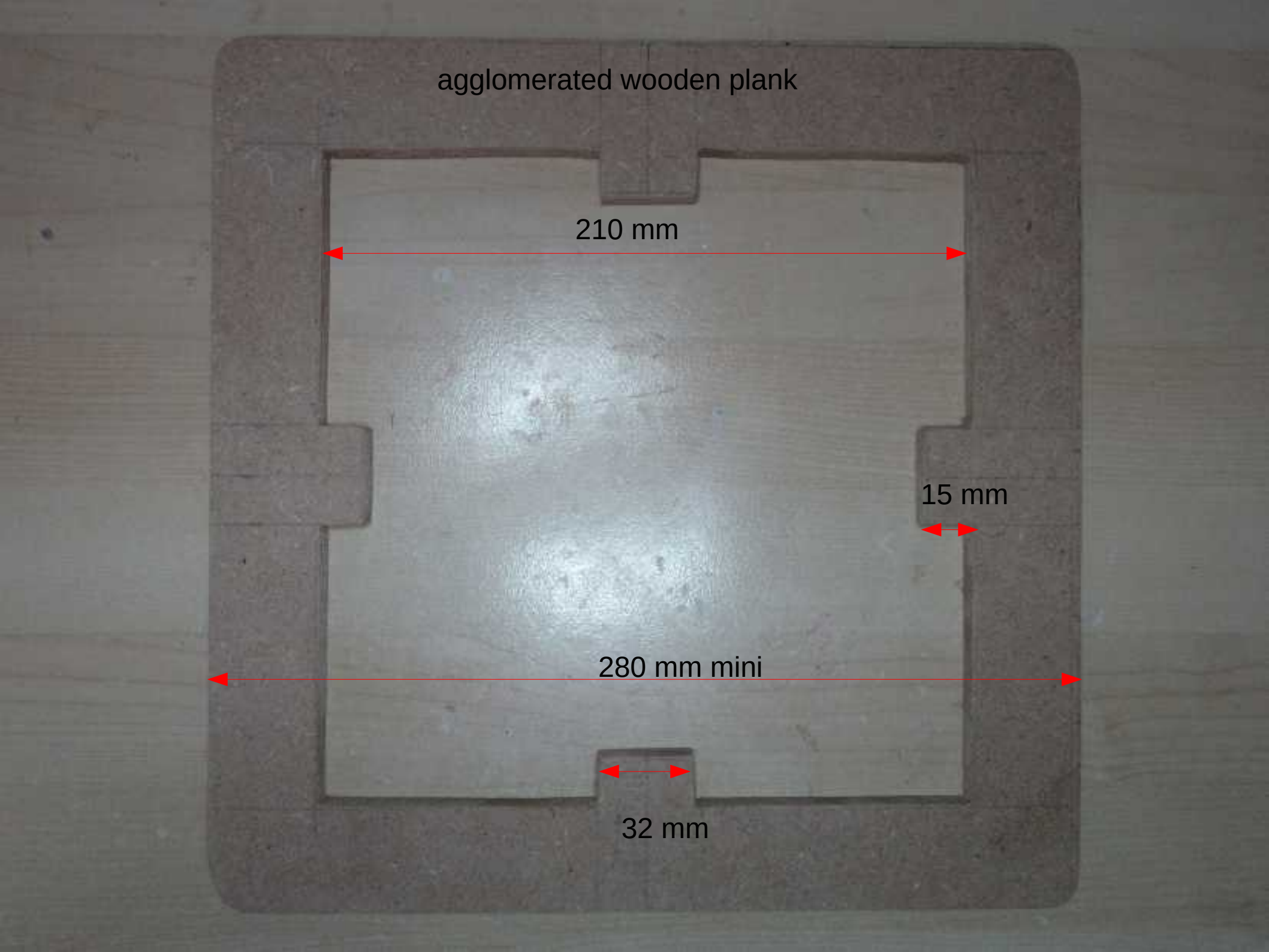
Nomenclature des pièces :

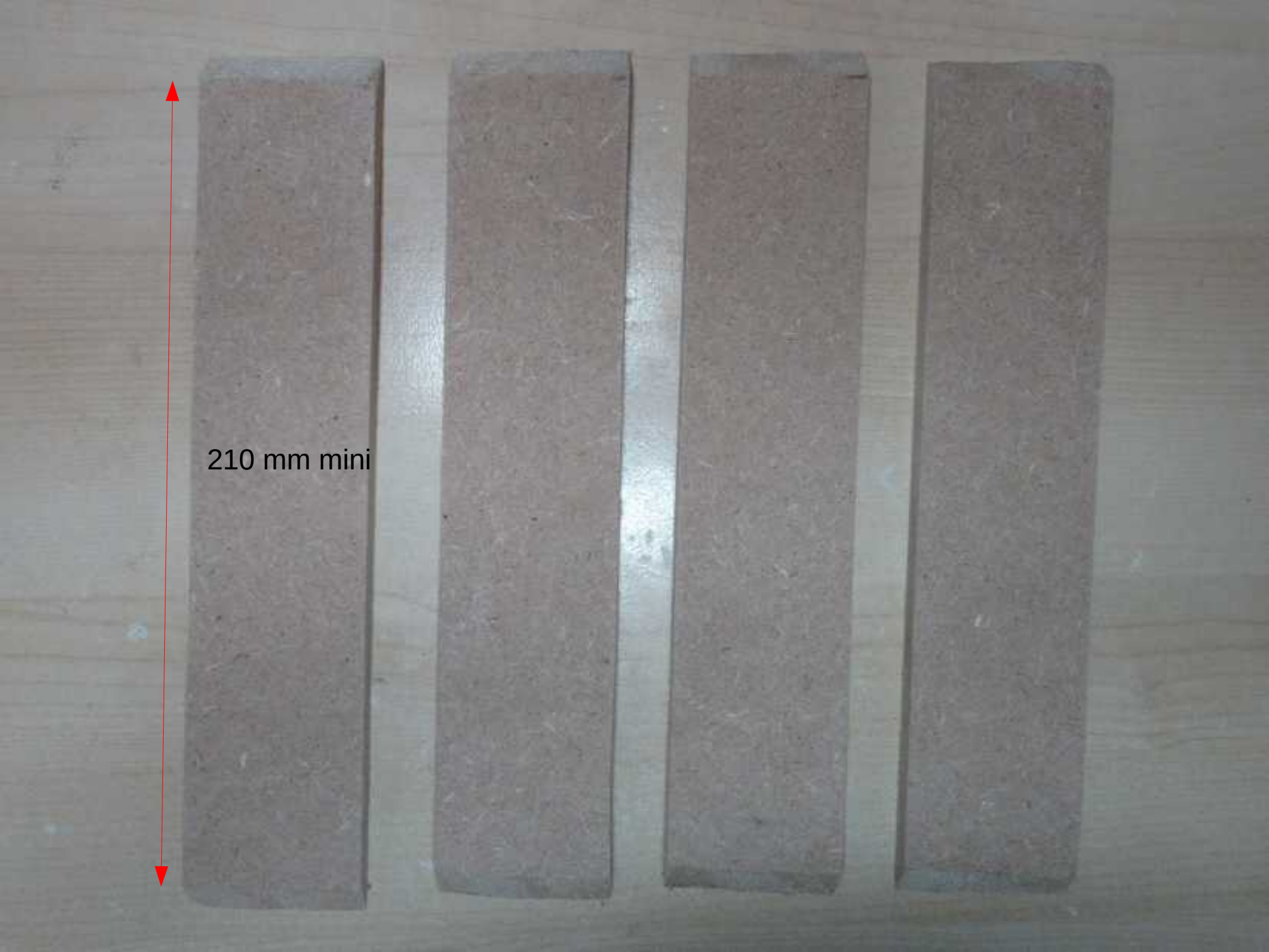
S5 00-G_01_x4.stl

S5 : saturn 5
00 : numéro du module
G : couleur grise puis W-blanc, S-argent, B-noir, Be-bleu, R-rouge, Br-marron, Y-jaune
01 : numéro de la pièce par couleur
X4 : nombre de pièces nécessaire

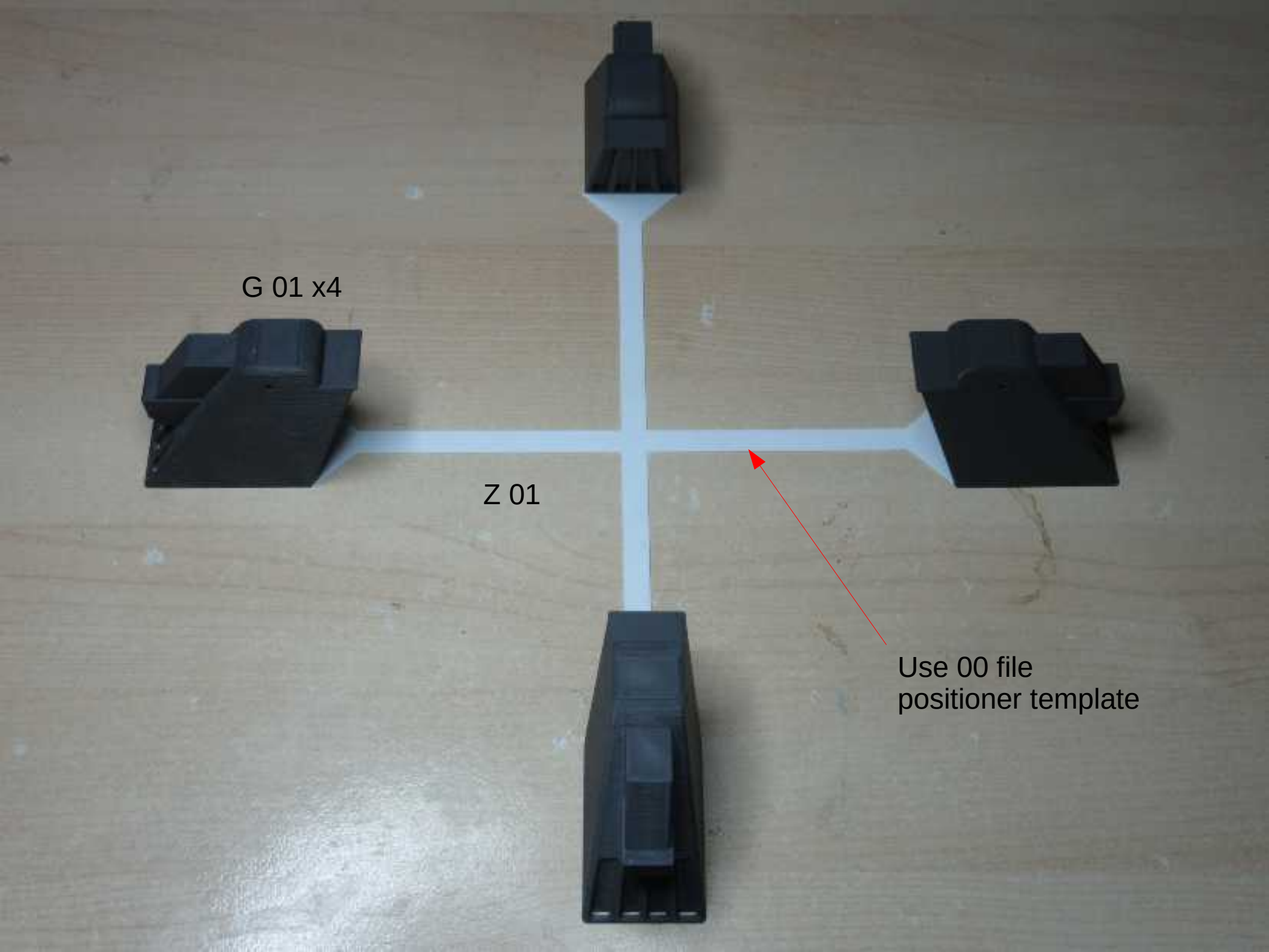
Collage à la colle cyanoacrylate

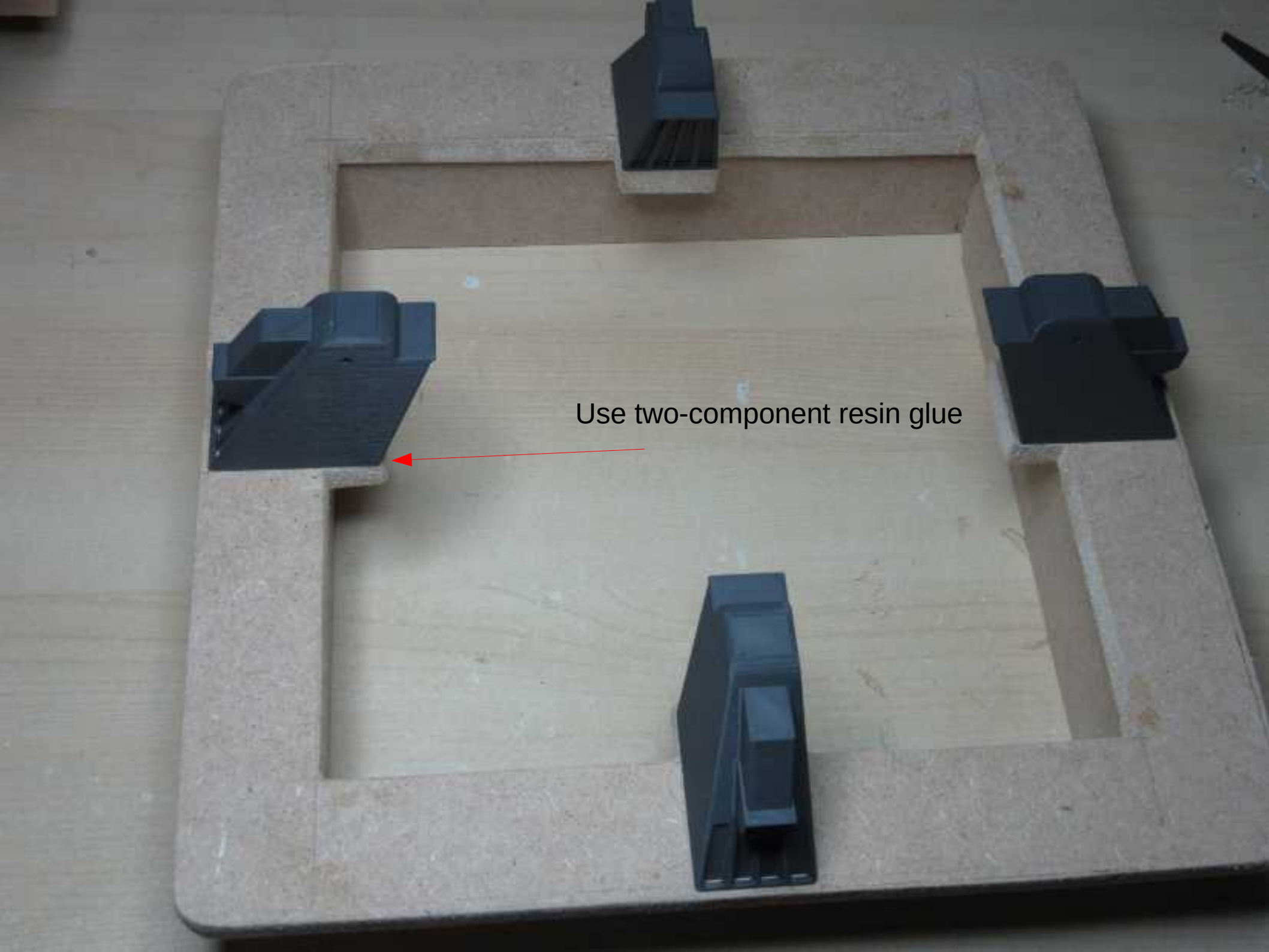
Launch pad construction


agglomerated wooden plank
210 mm
15 mm
280 mm mini
32 mm


210 mm mini

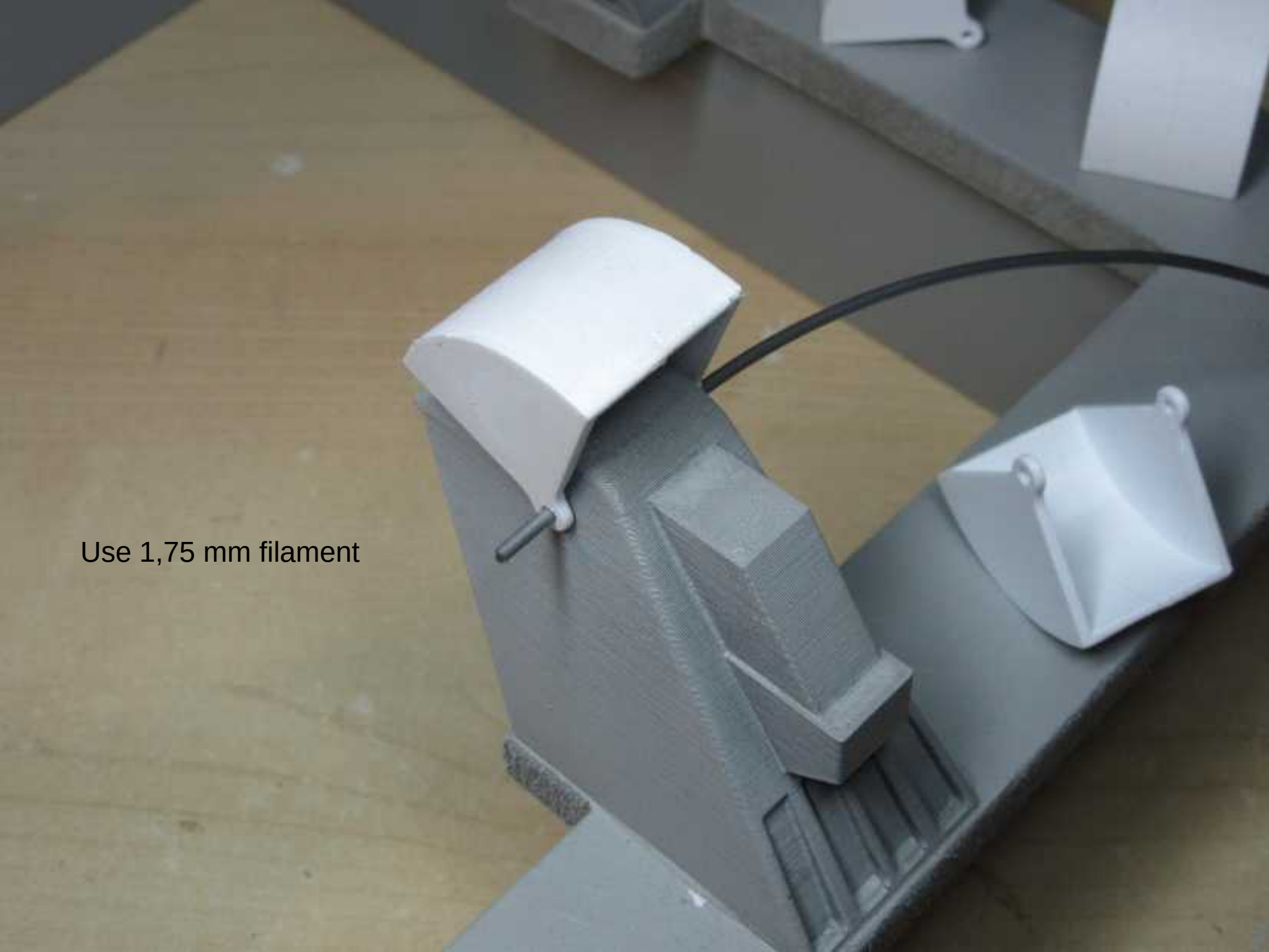

10 cm minimum


G 01 x4
Z 01
Use 00 file
positioner template

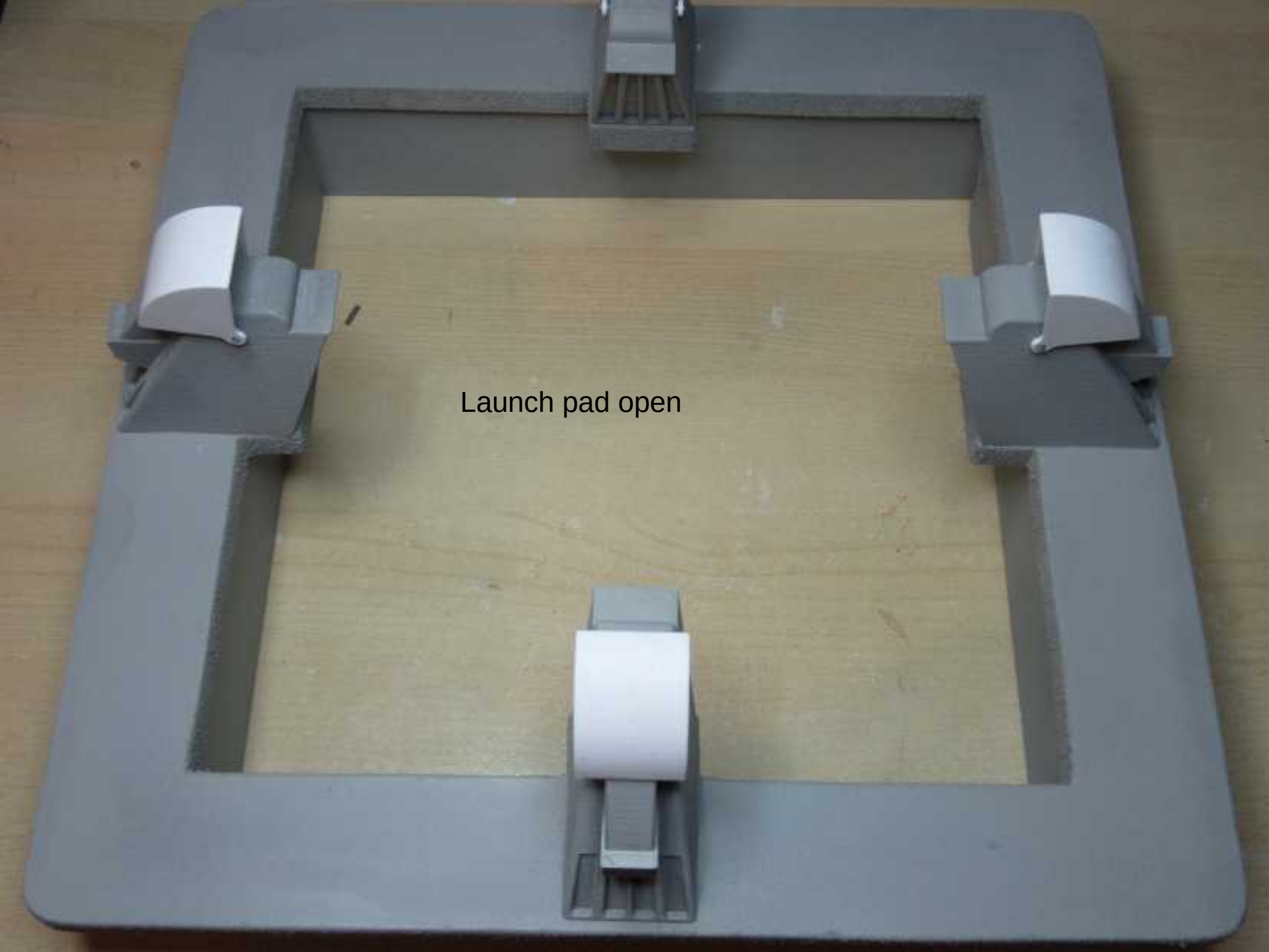

Use two-component resin glue

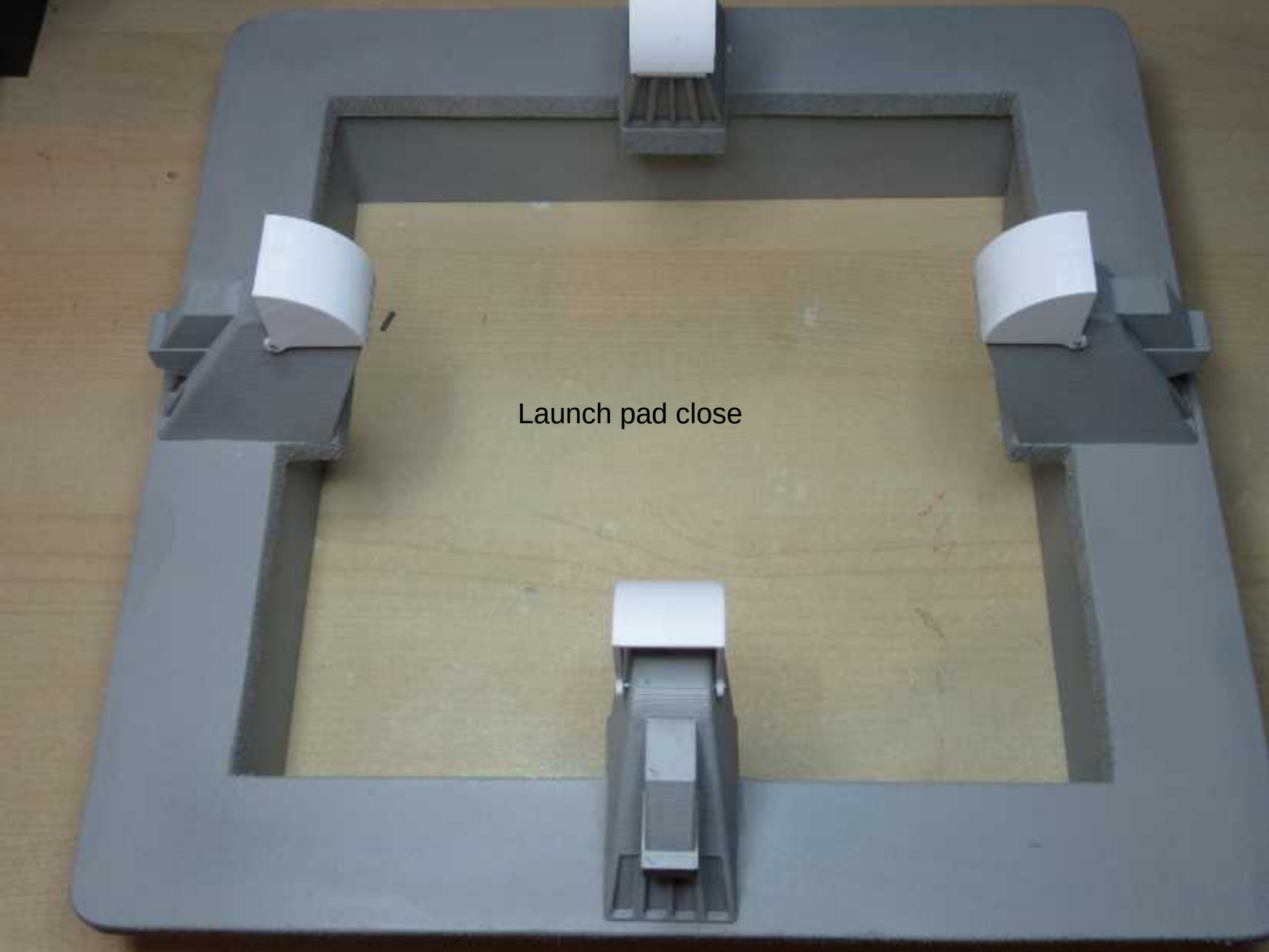

proposal of grey paint


W 01 x8



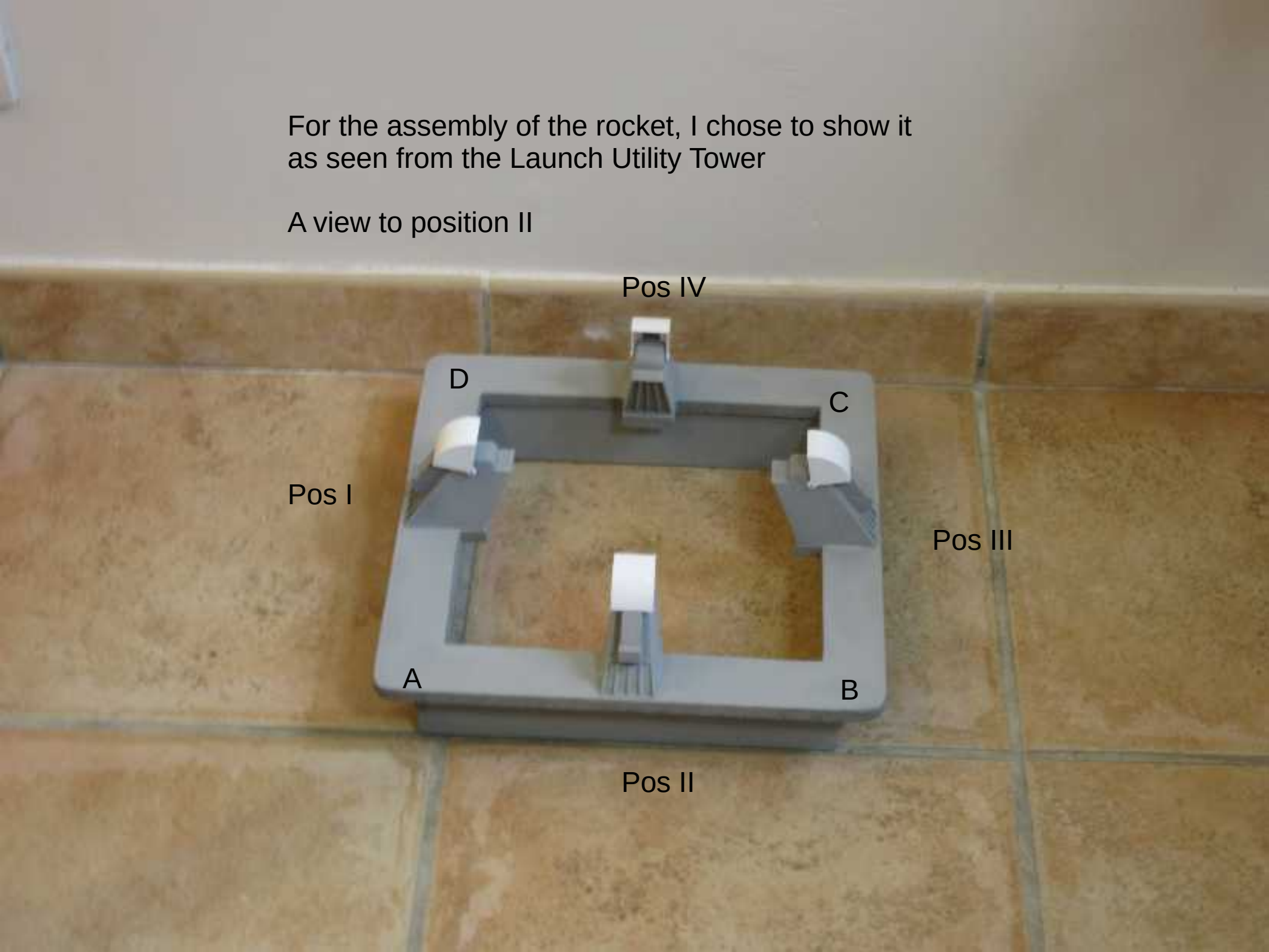
Use 1,75 mm filament


Launch pad open


Launch pad close

For the assembly of the rocket, I chose to show it as seen from the Launch Utility Tower

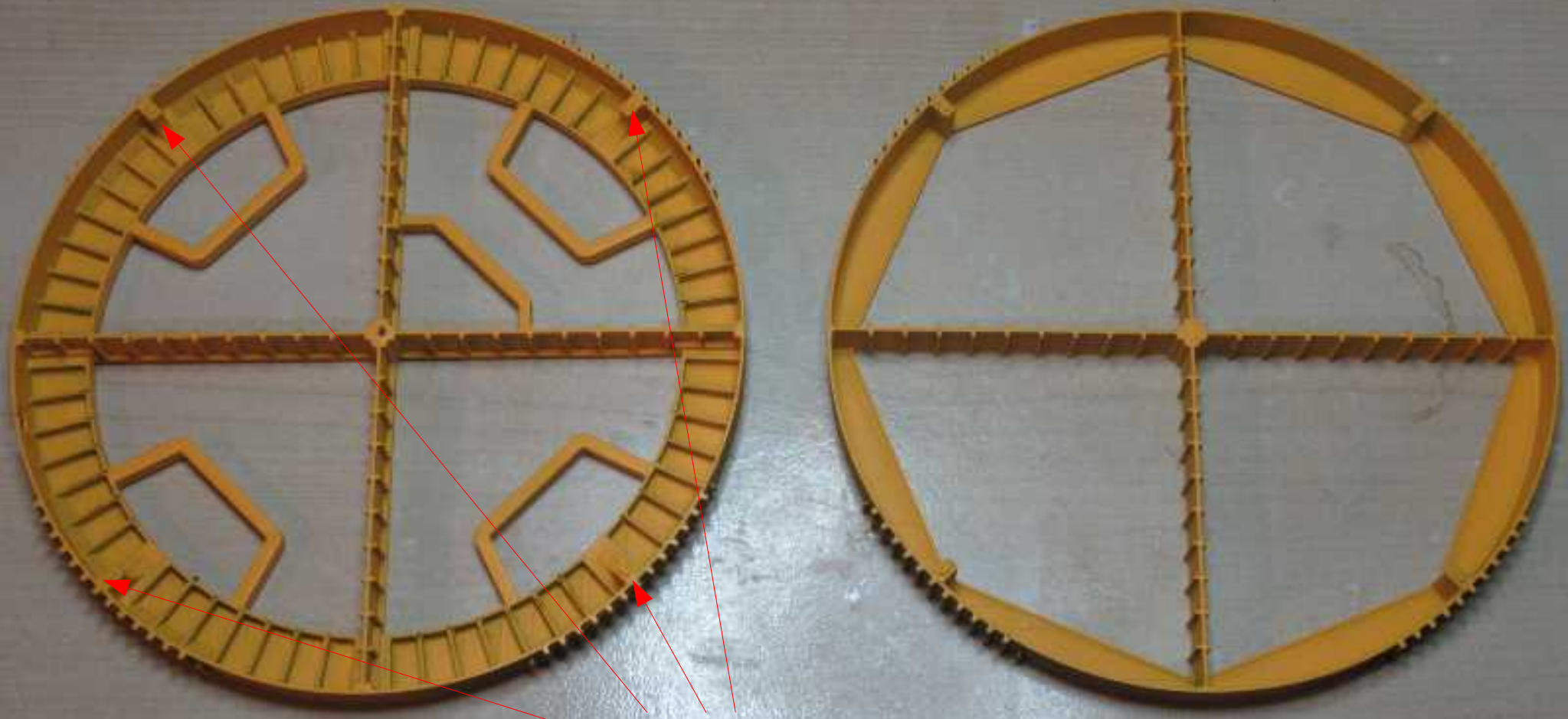
A view to position II



Module 01

Y 01

Y 02



Use the 4 guide pawns for assembly


Y 03

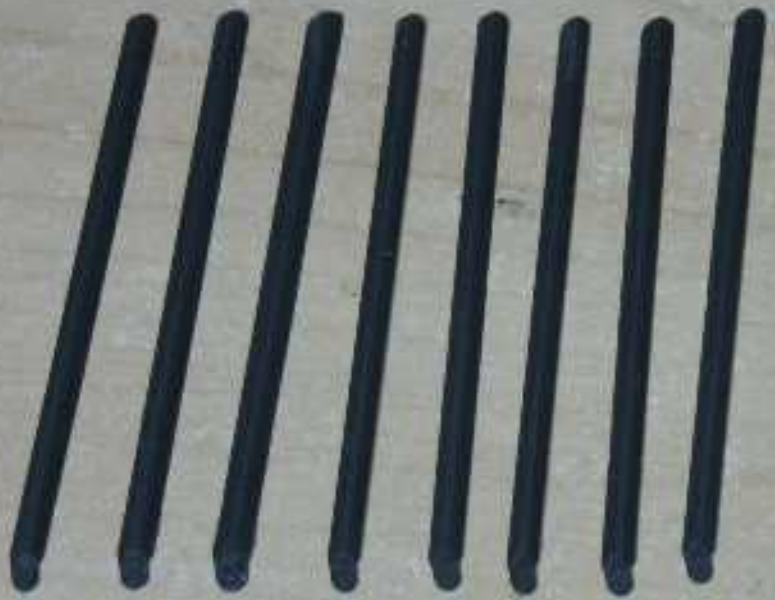

Y 04


Y 05

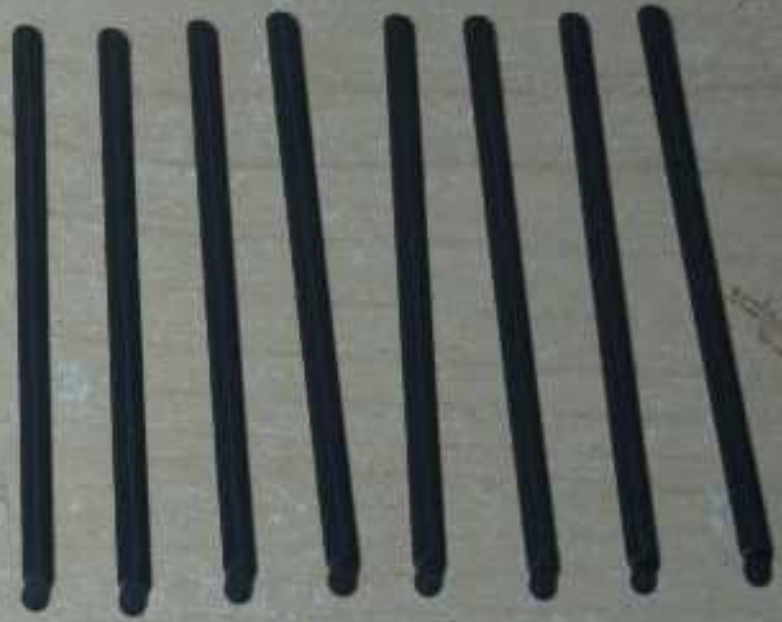

Y 06


Y 07

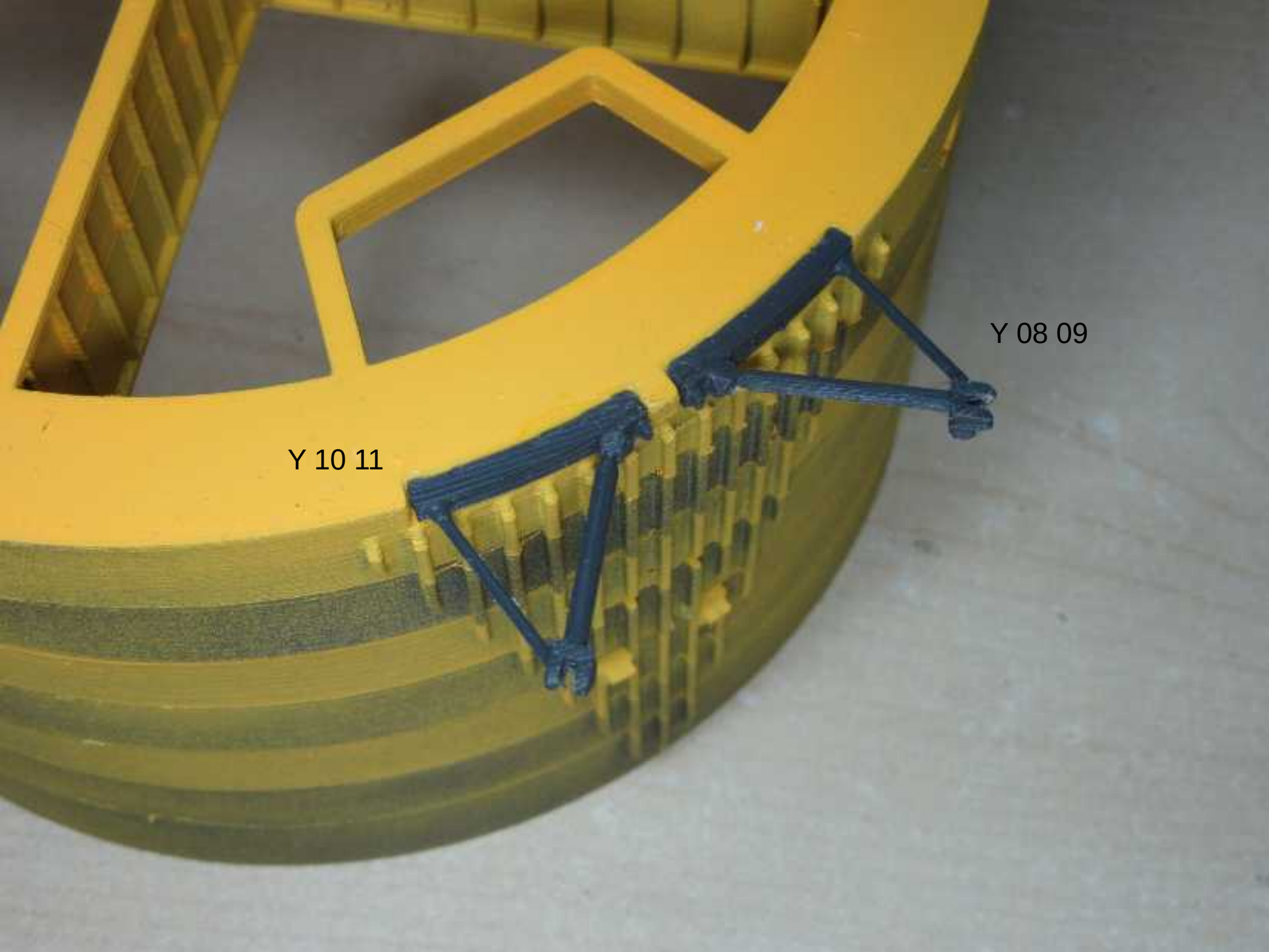
pieces to be painted
yellow afterwards



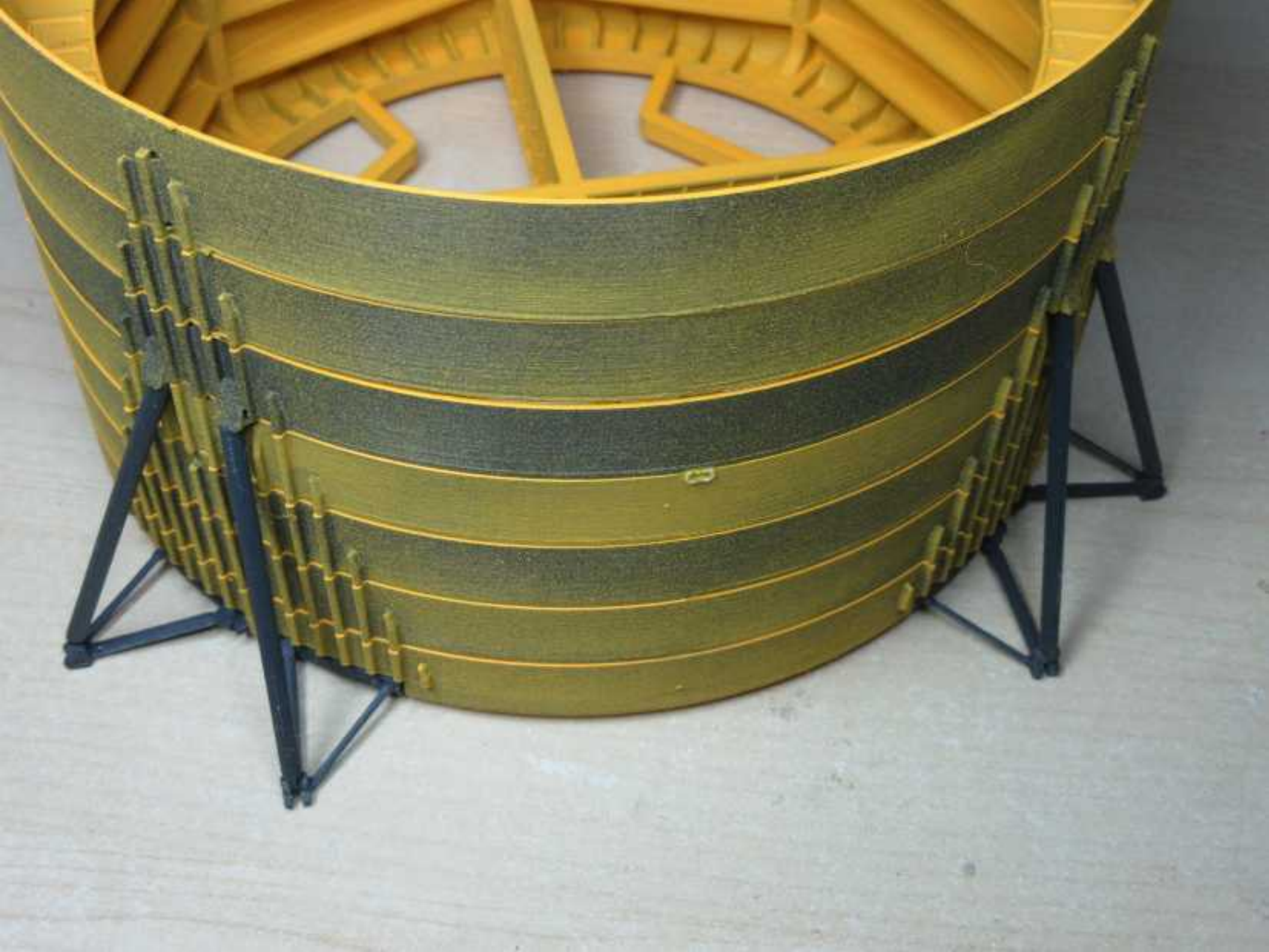
Y 12 x8

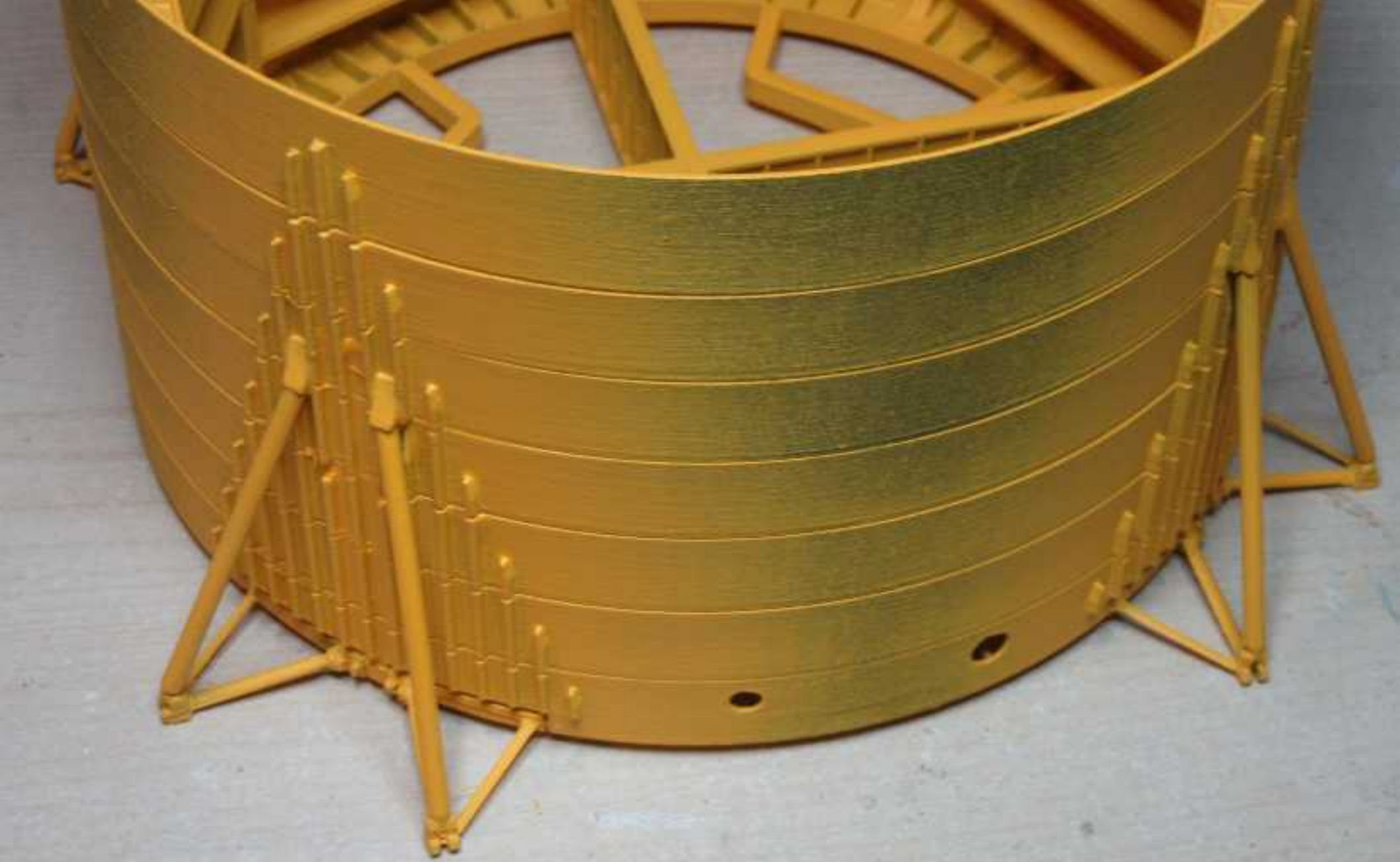


Y 13 x8


Y 08 09
Y 10 11


Light angle

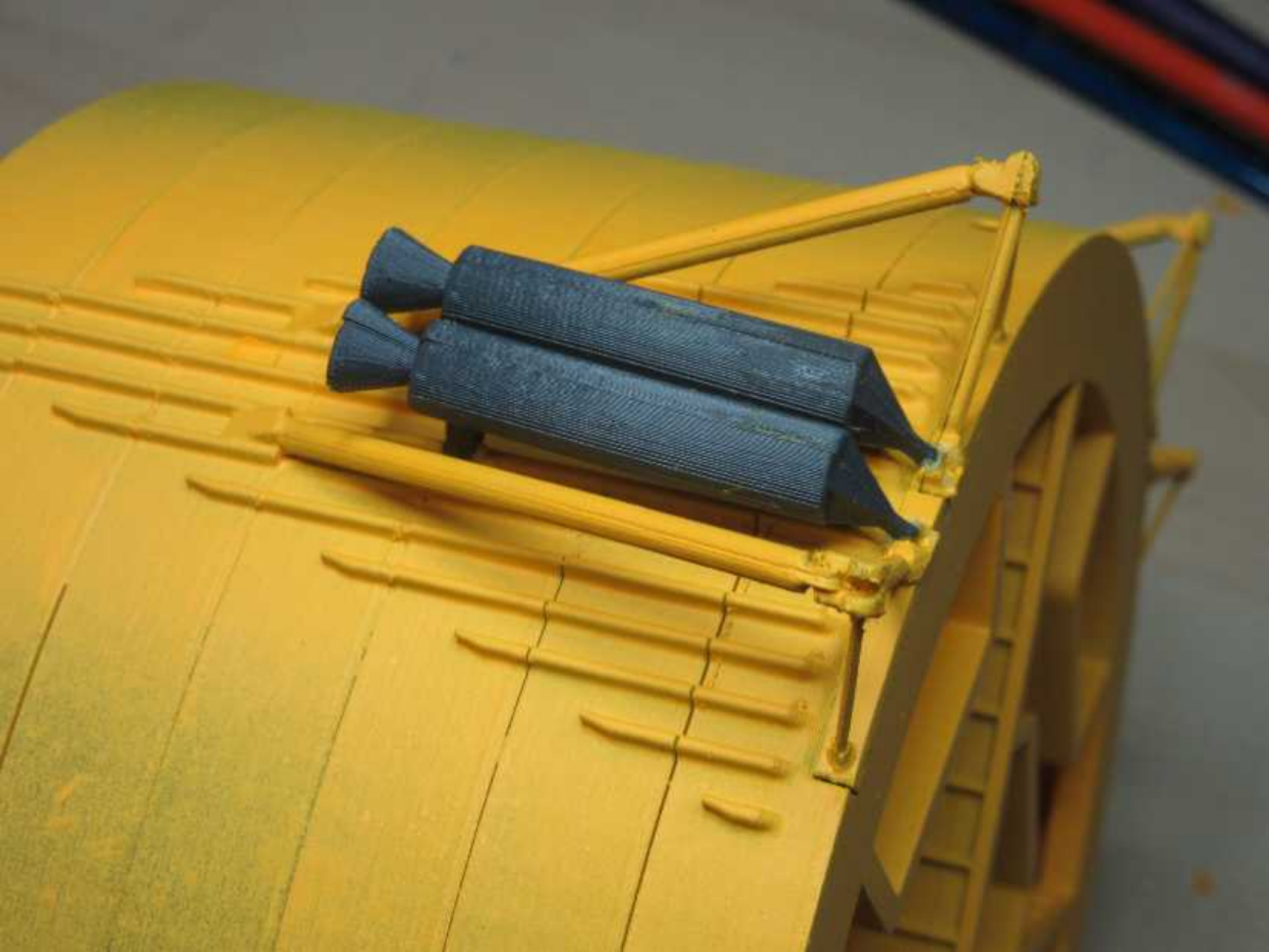




After painting

Y 15 x8

Y 14 x8

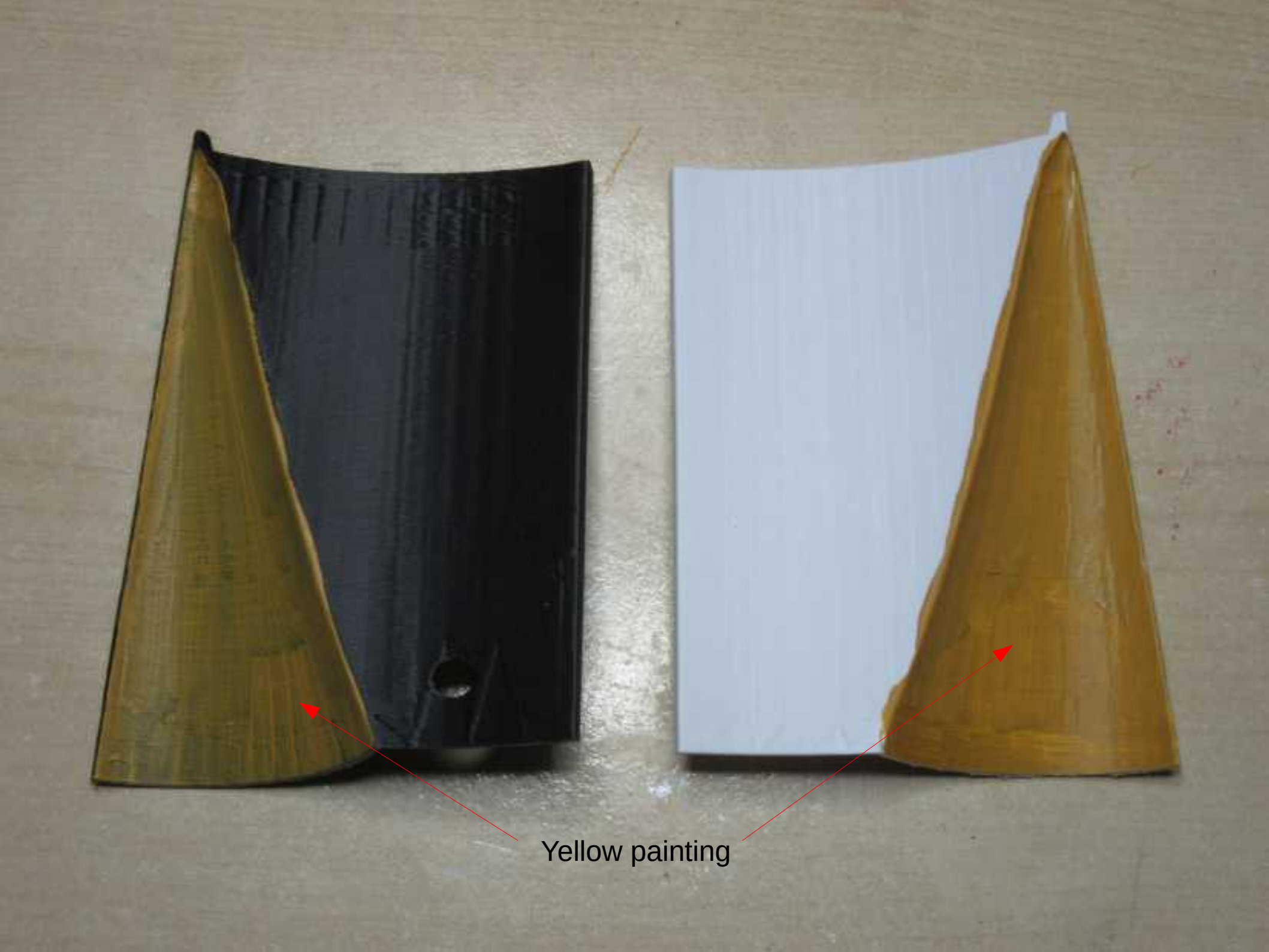


Fairing position I

W 01

B 01

In this pack, you find a file “fairing compl” if you prefer to paint this part


Yellow painting


Fairing position I (left side from tower view)
One hole (fill drain RP1)


Same level

Pos IV
Pos I
Pos III
Launch Utility Tower
Pos II

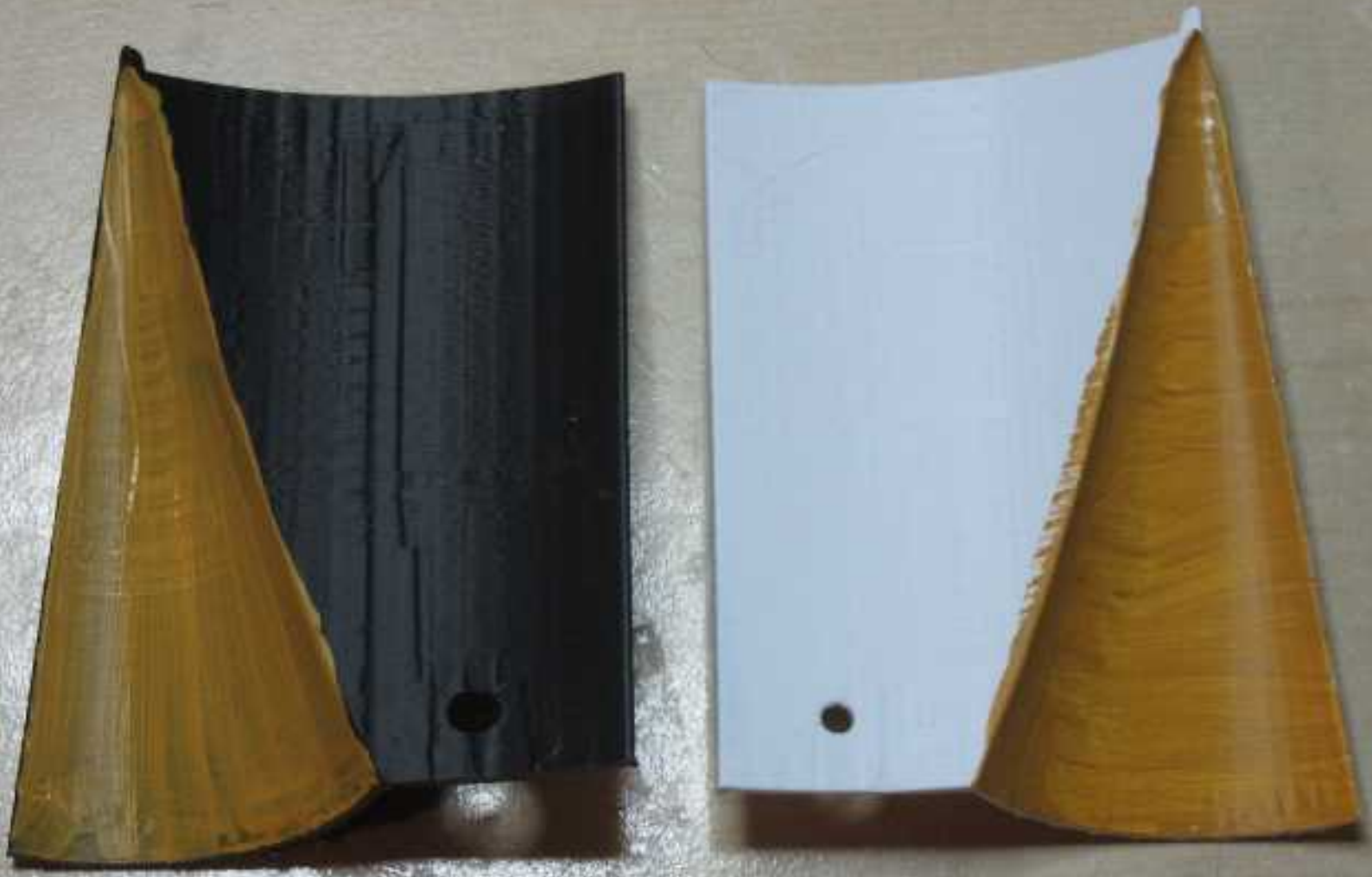
Fairing position II

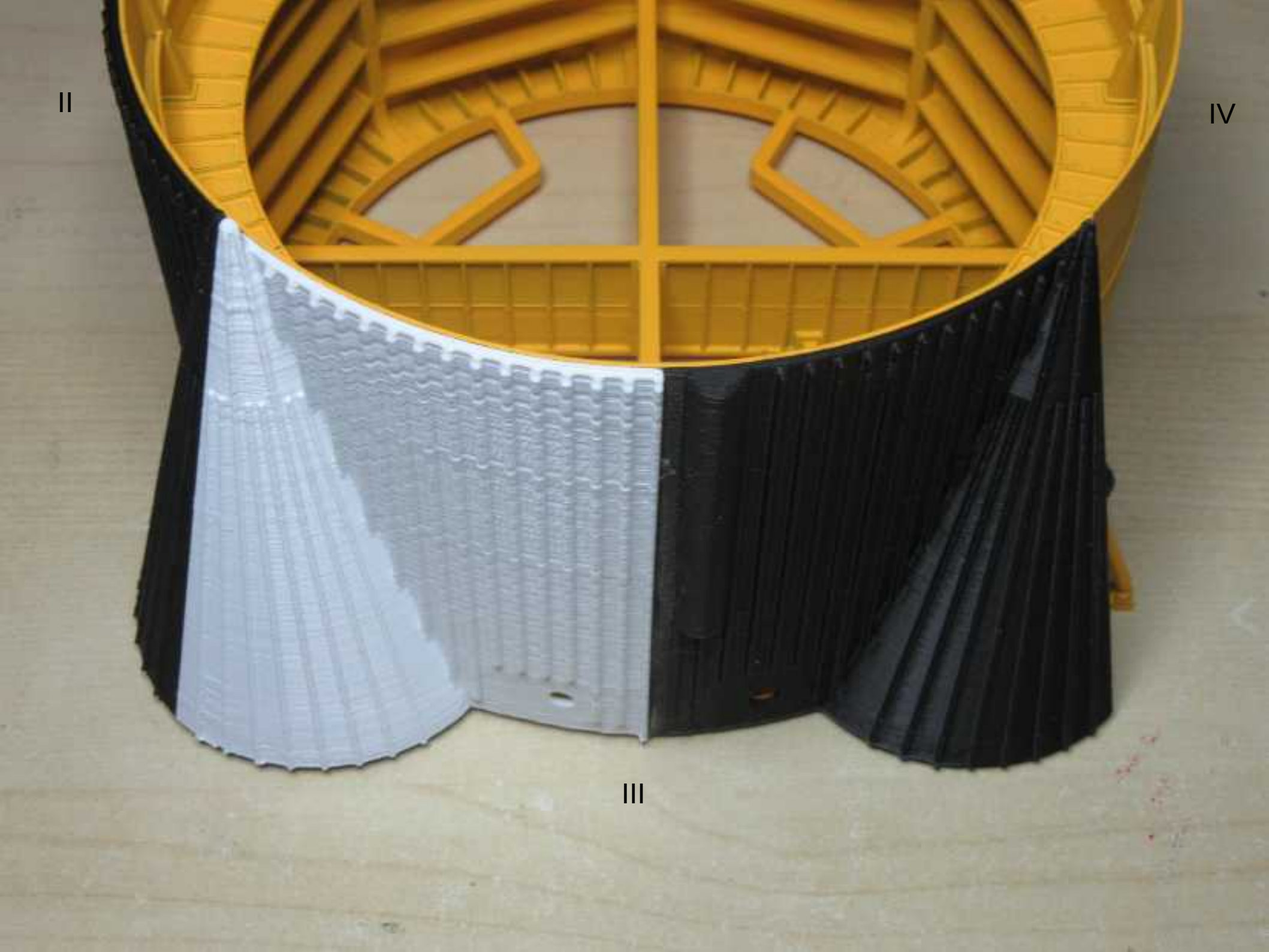
W 02

B 02


I
II
III

Fairing position III




II
IV
III

Fairing position IV

W 04

B 04


I
III
IV

S 01

S 02

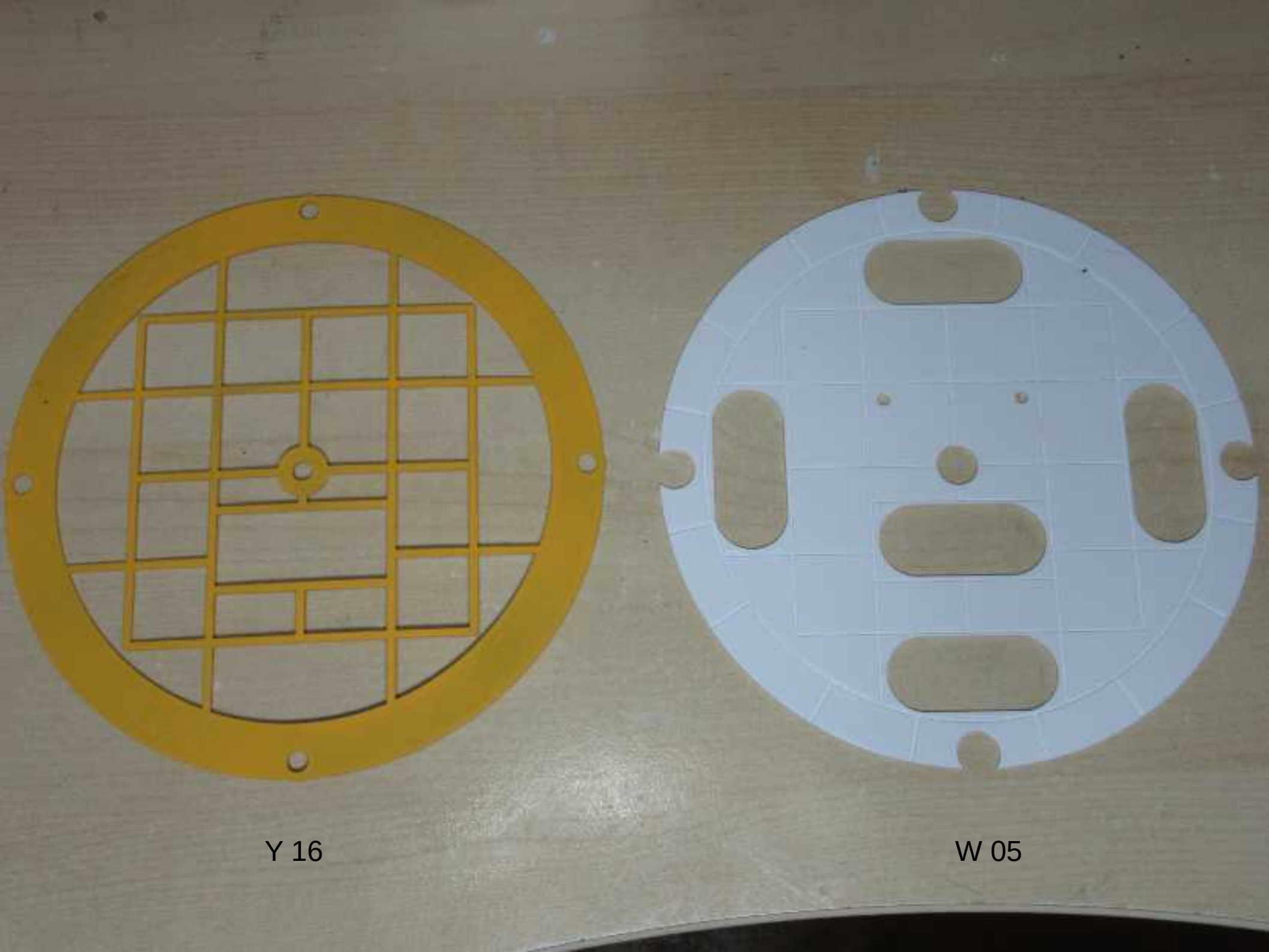
S 03

S 04


RP1 line
Helium line

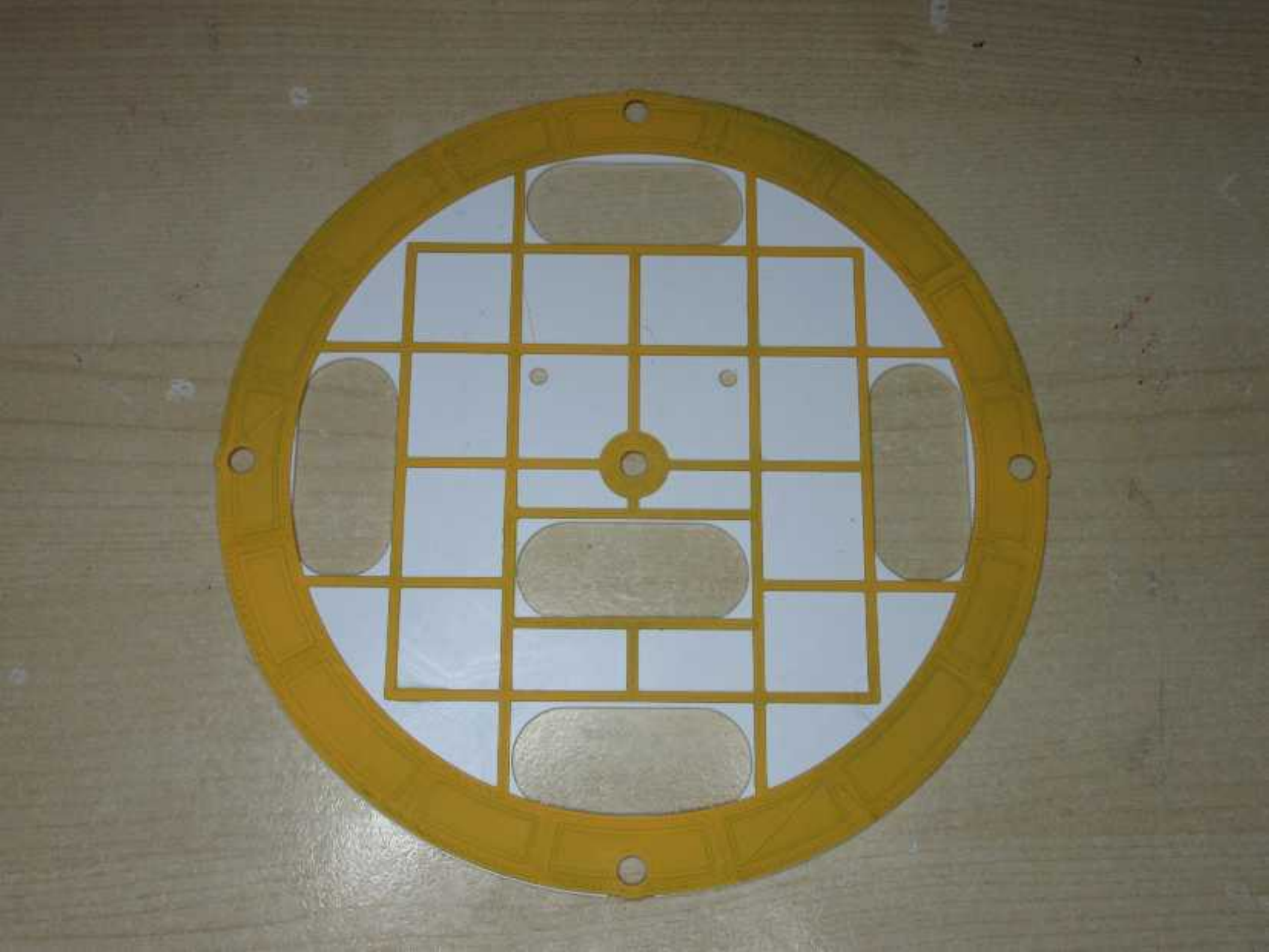

IV
III
I
II


III



Y 16

W 05



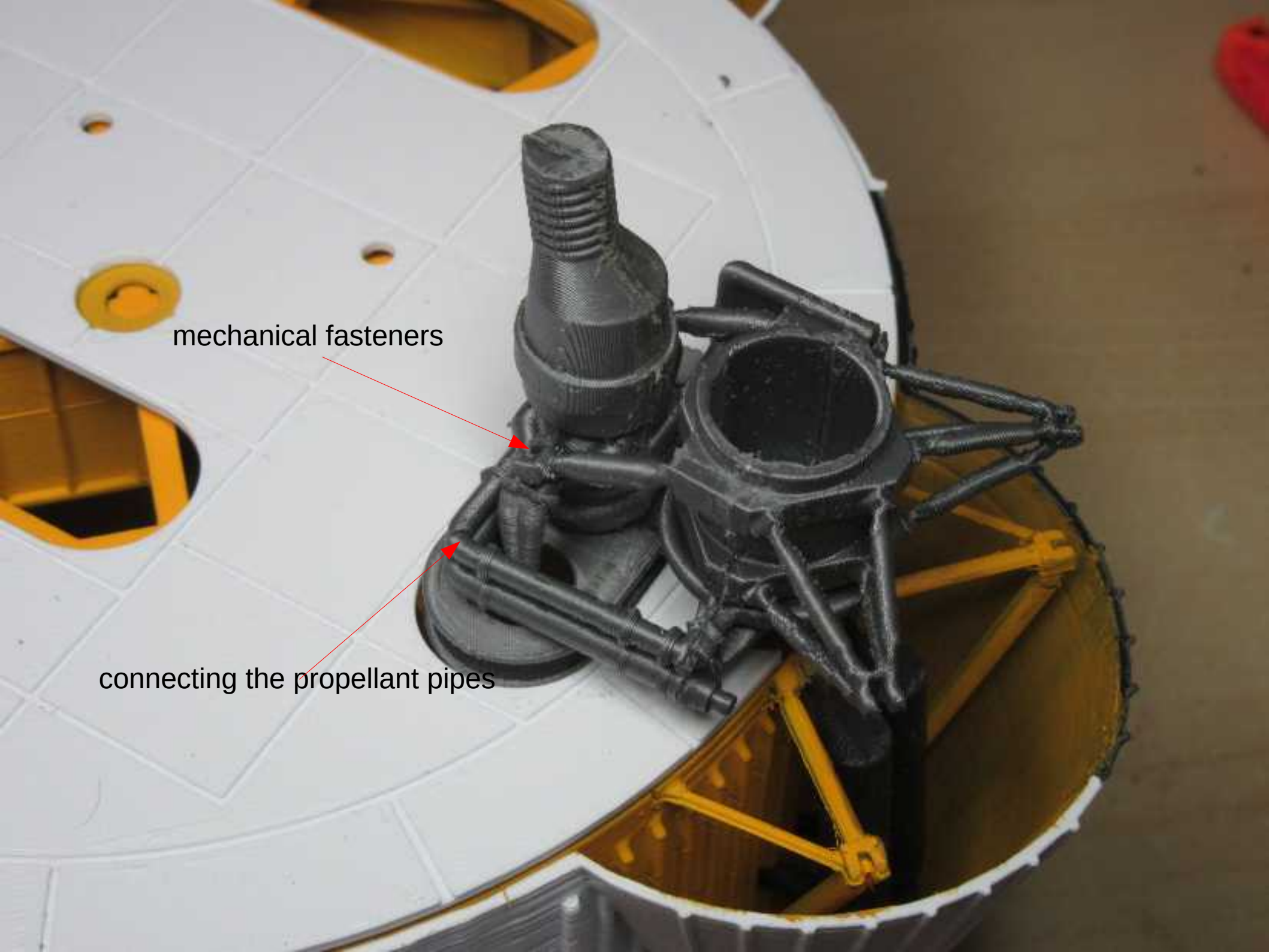

III
II
IV
I


S 05 x5
S 06 x5
RP1 line
S 07 x10

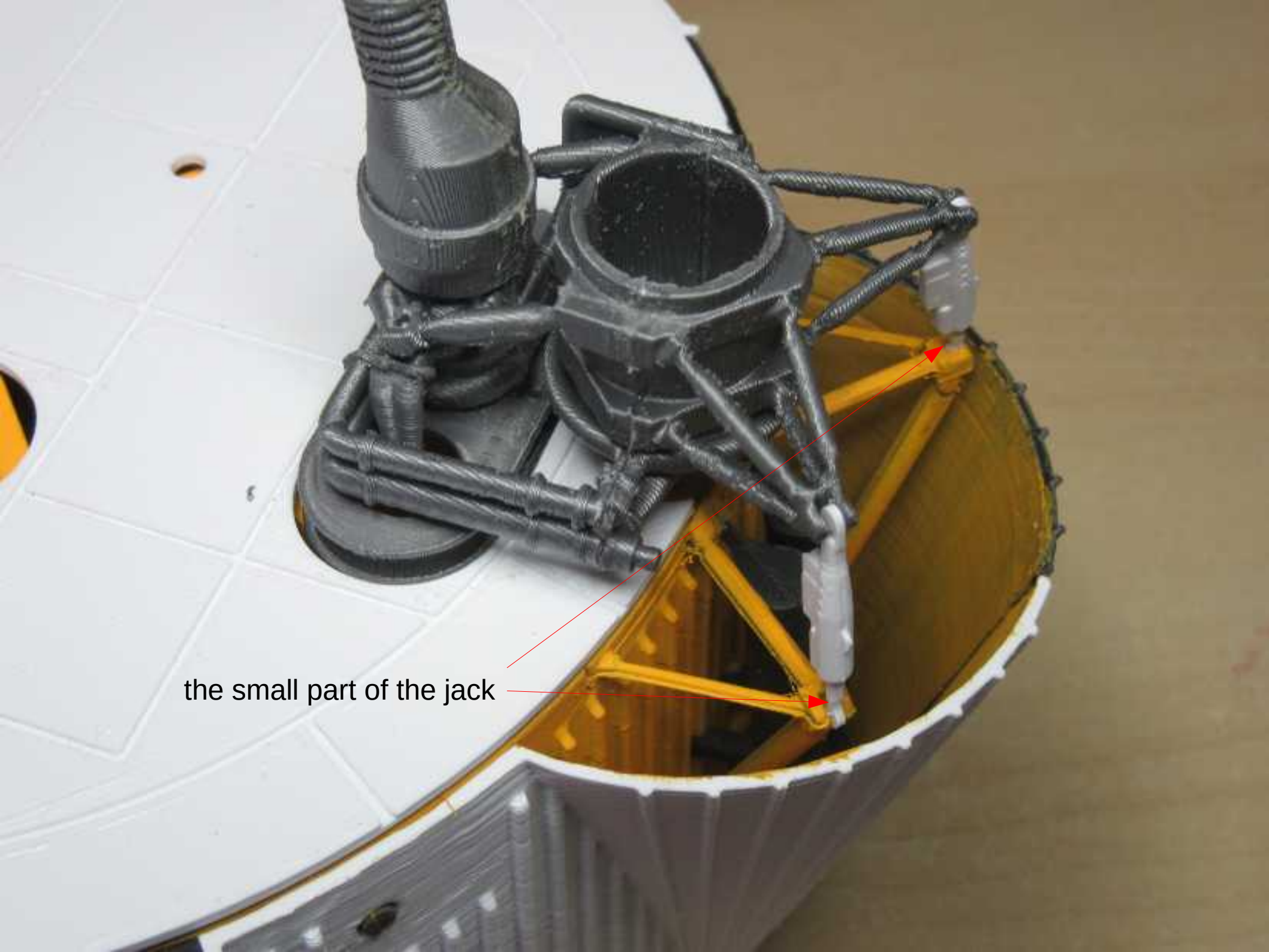
S 08 x5

S 09 x5

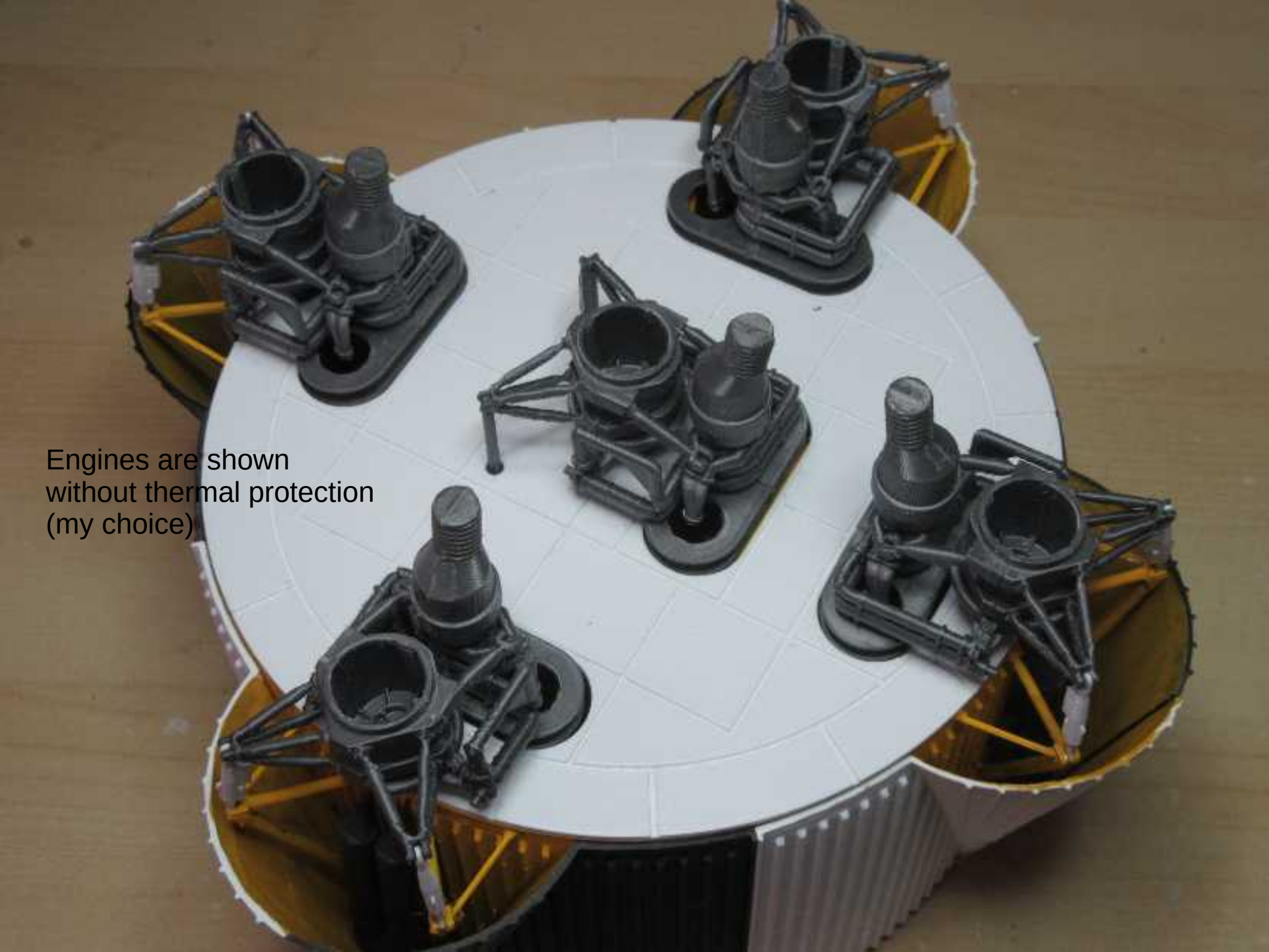

Note the exhaust turbine position
For each F1 motor

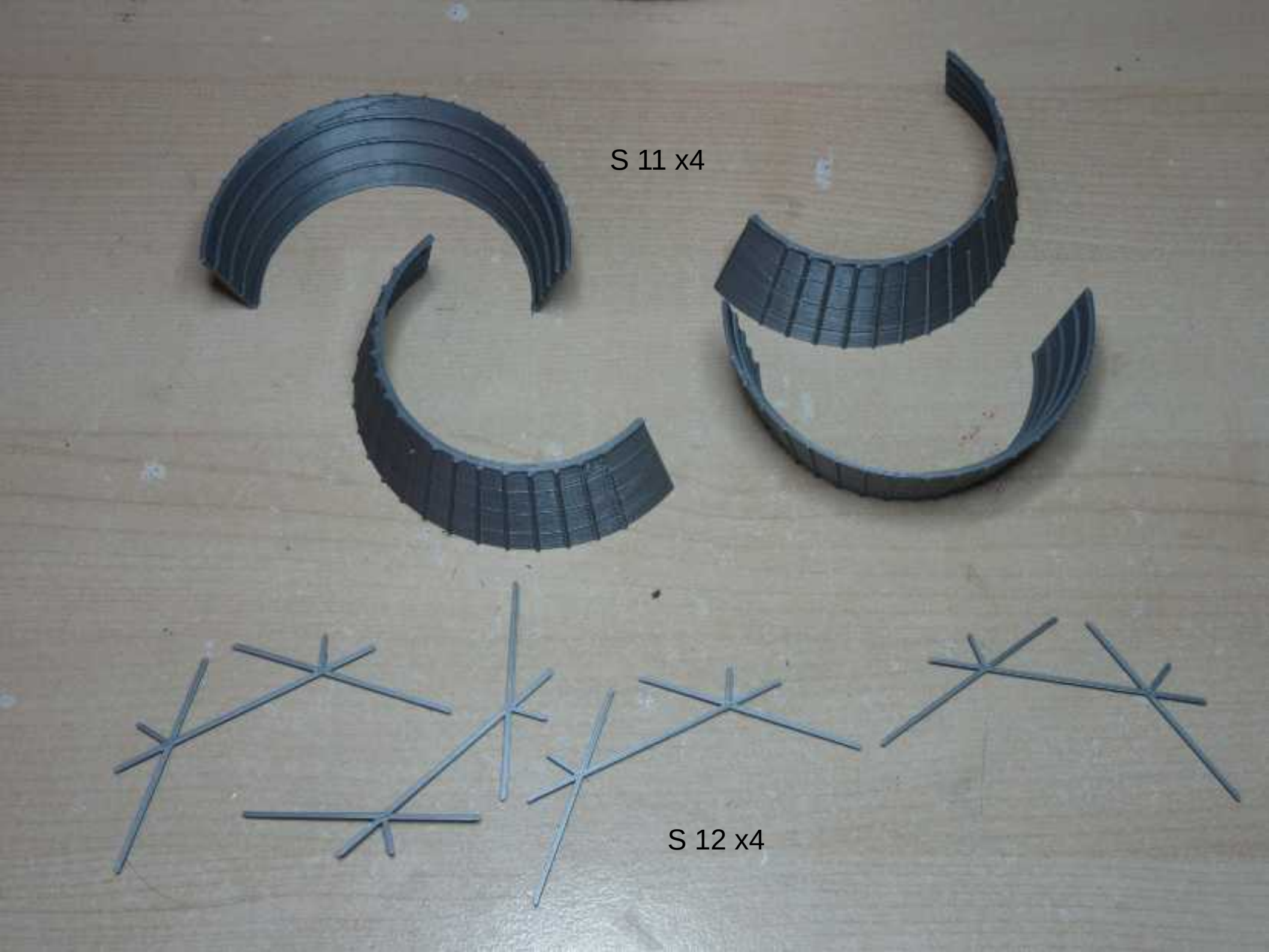

mechanical fasteners
connecting the propellant pipes


W 06 x8
W 07 x8

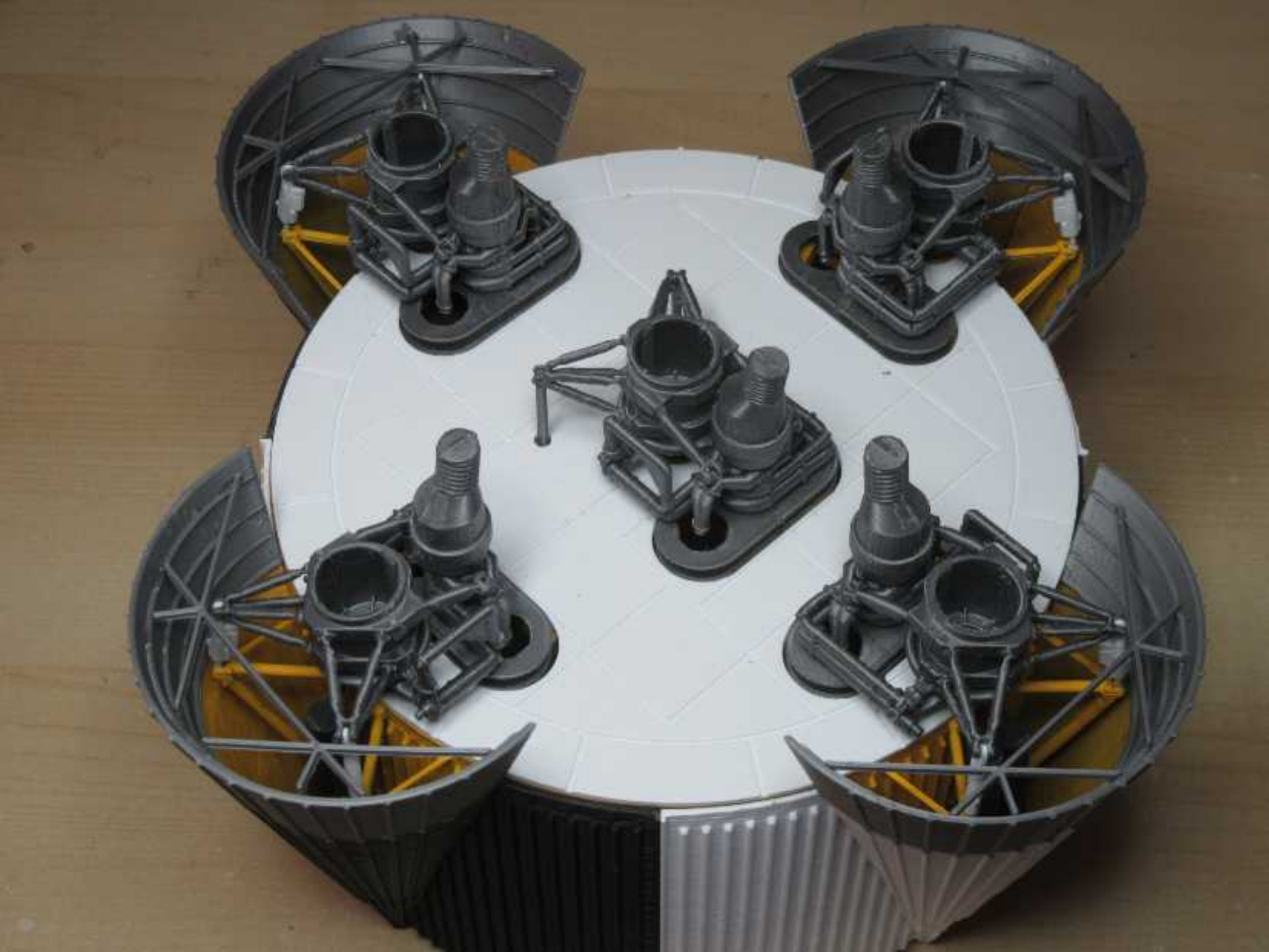

the small part of the jack

S 10 x2


Engines are shown
without thermal protection
(my choice)


S 11 x4
S 12 x4


Upper the third line




S 14 x5
S 13 x5


Glue zone


Circular gas turbine exhaust !

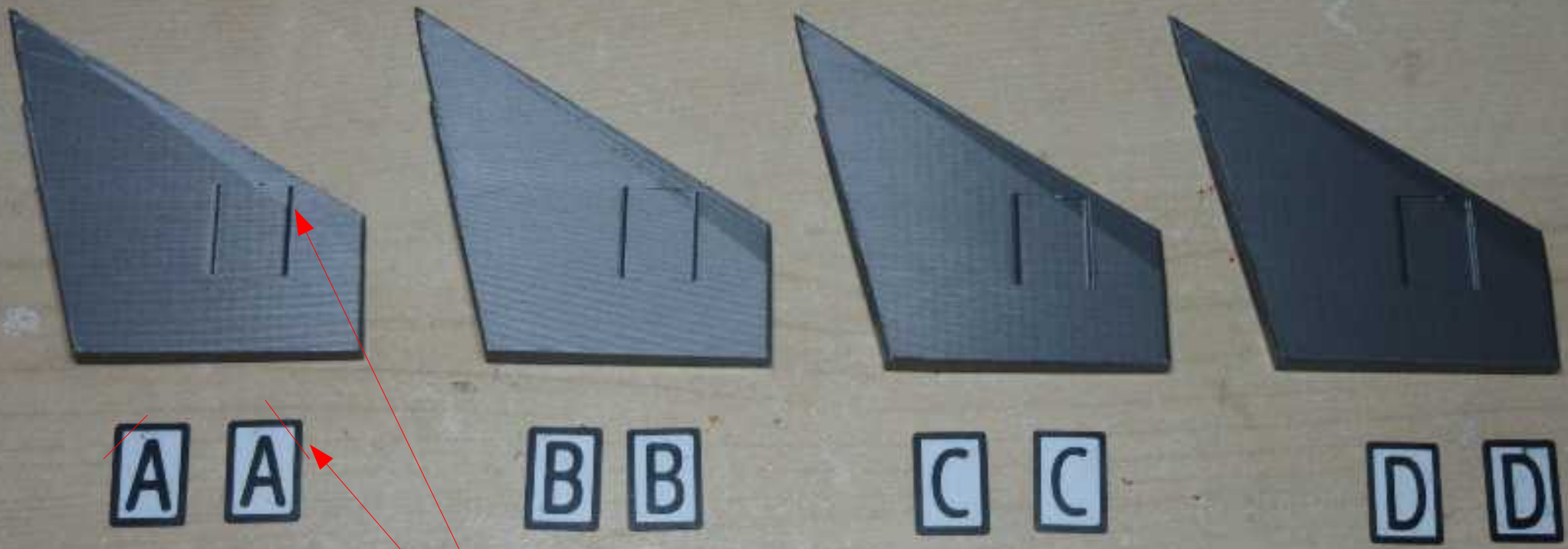
For this print, you must align the STL files in the slicer
and print them one after the other,
without removing the previous print

W 08 x2
B 05 x2

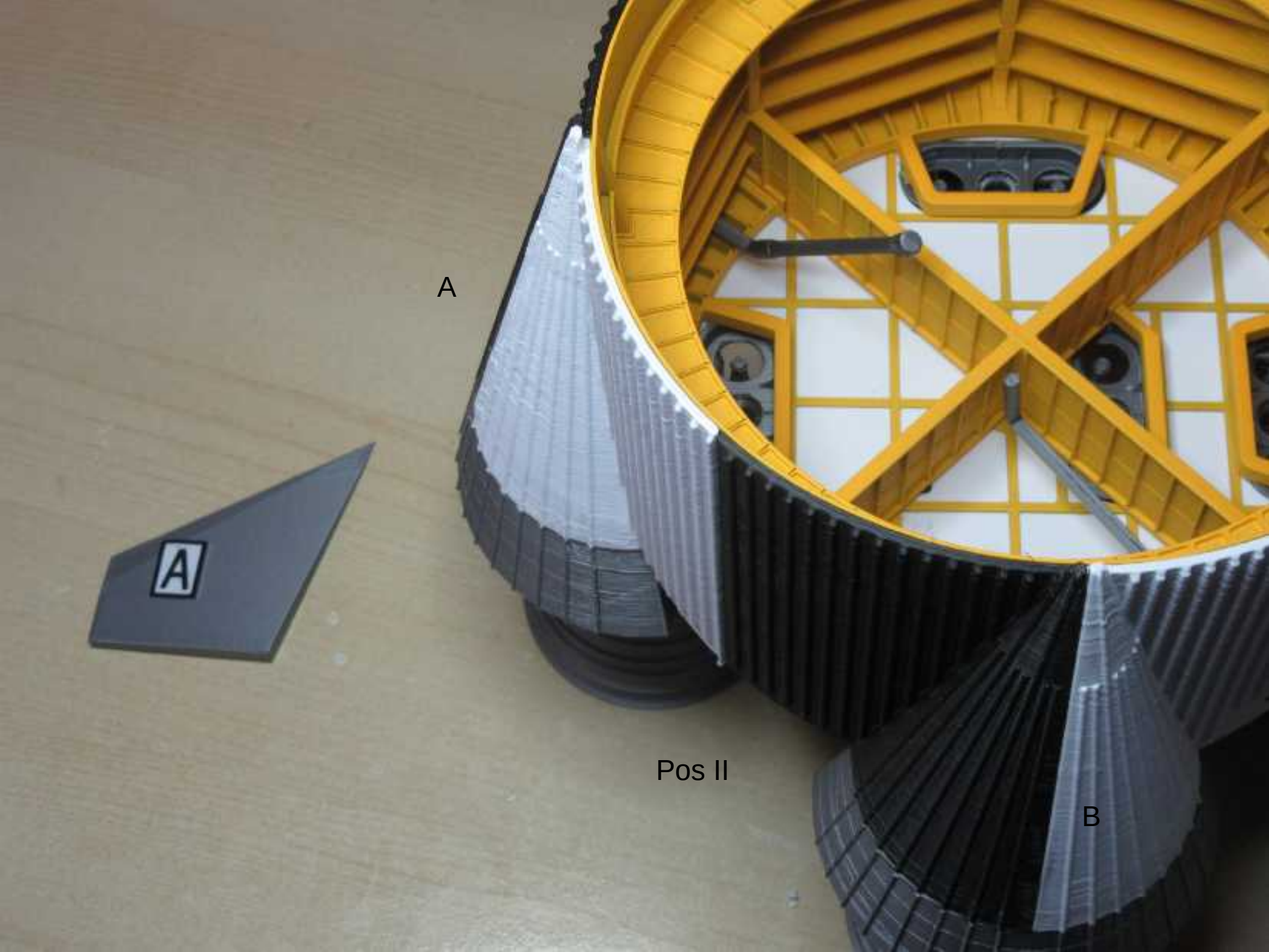
Printing upside down for best quality

Use the control marker

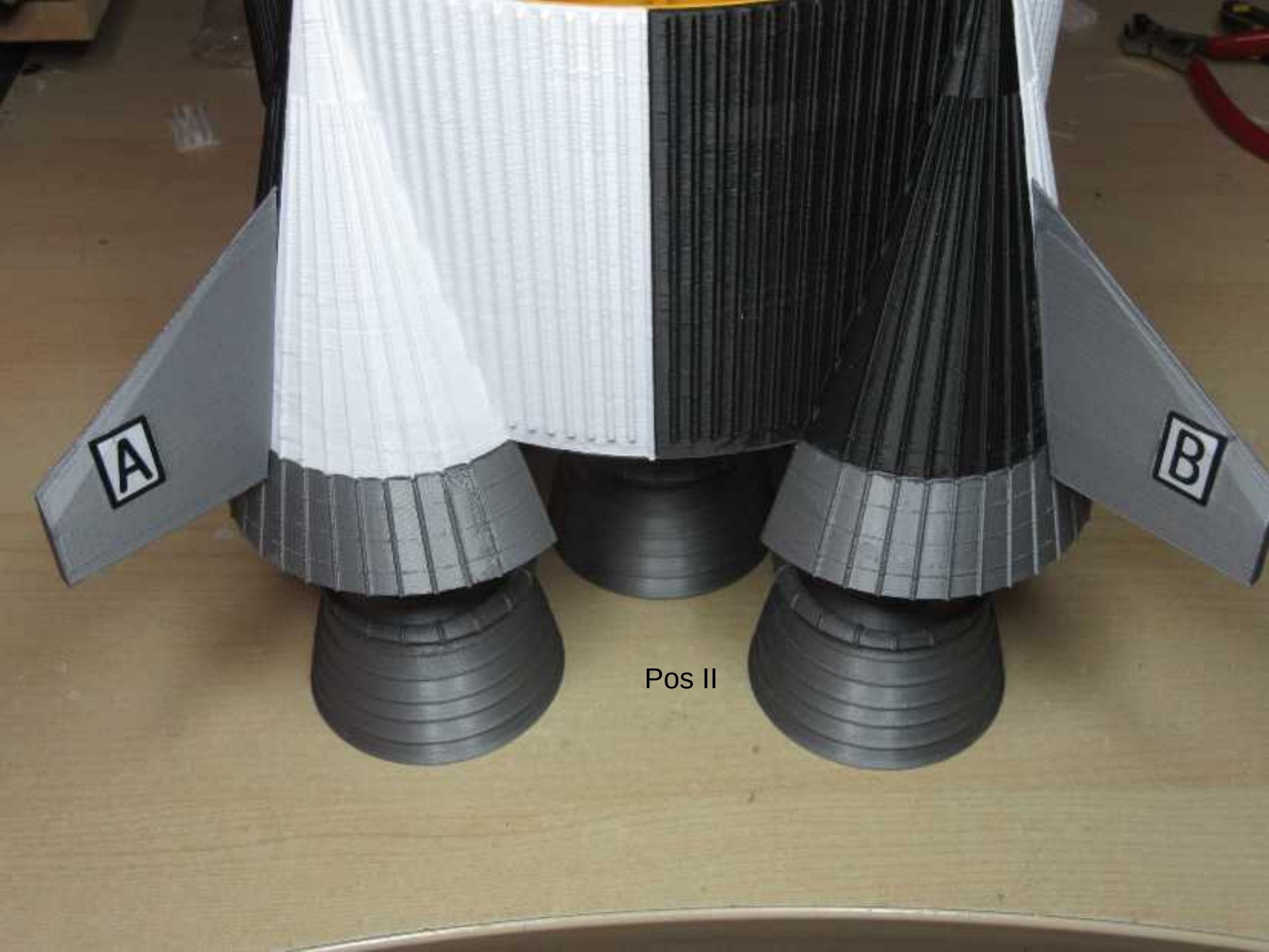
S 15 x4



bend the corners

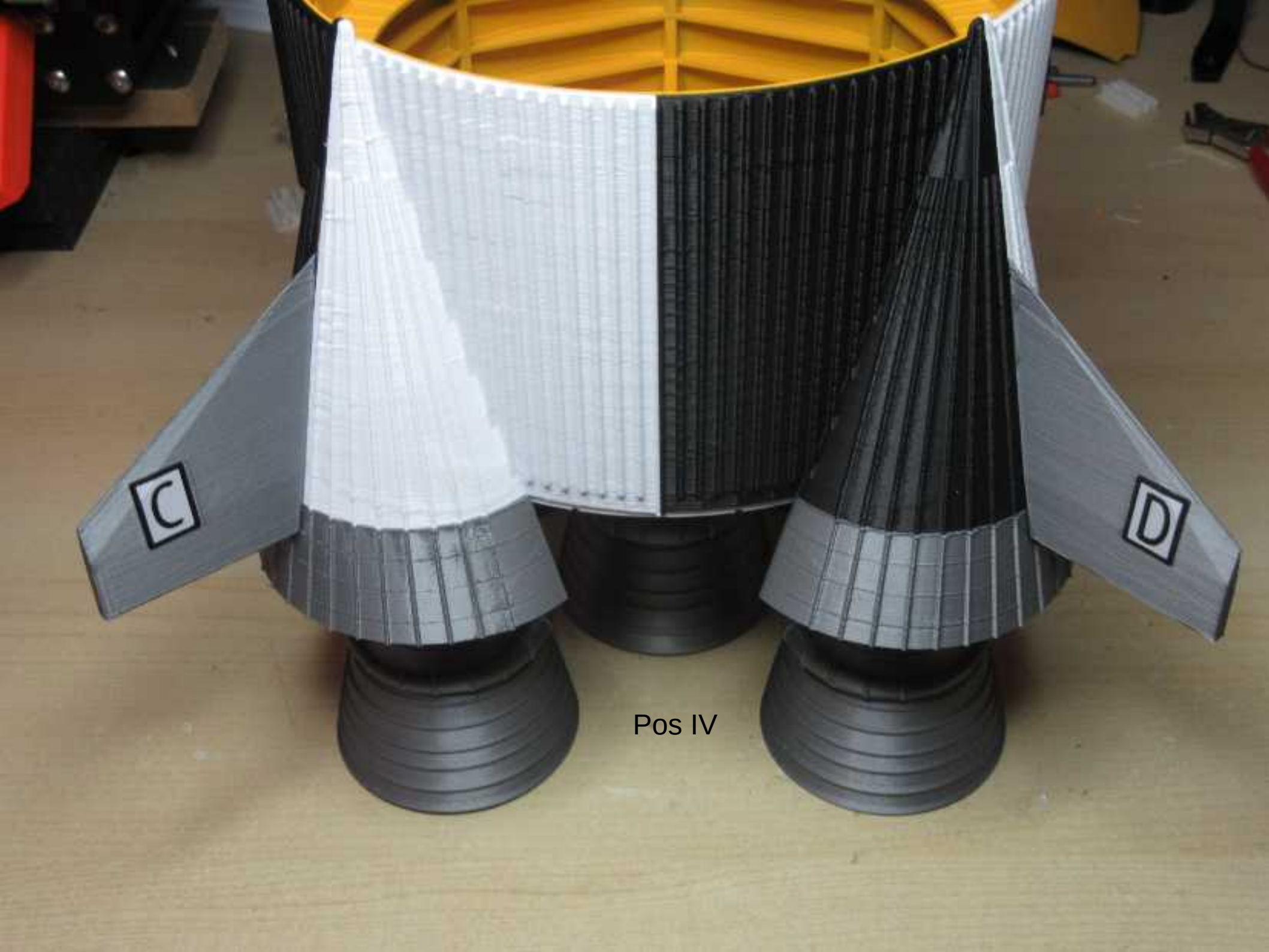

A
A
Pos II
B

II



Pos II

Pos III



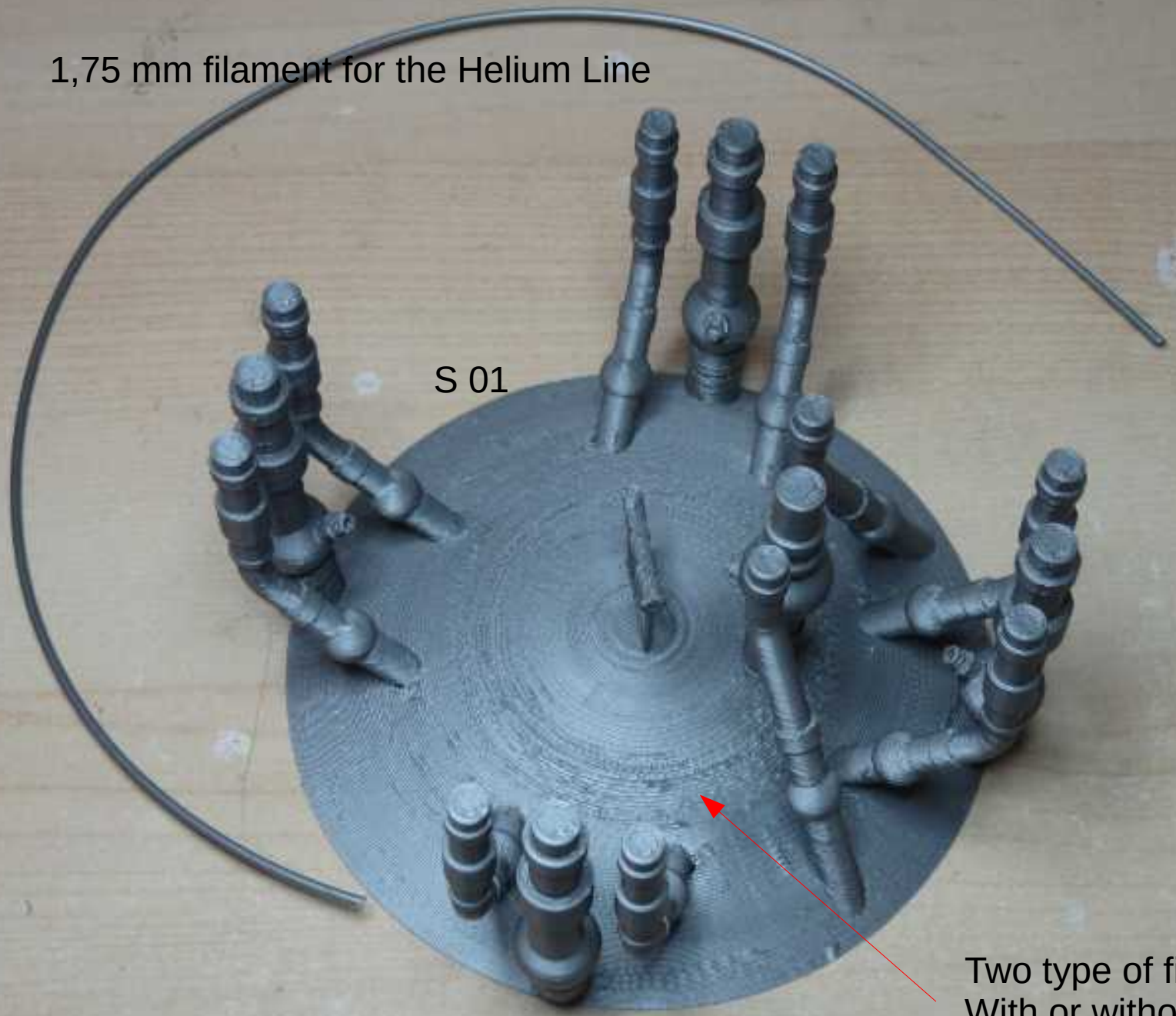
Pos IV

Pos I

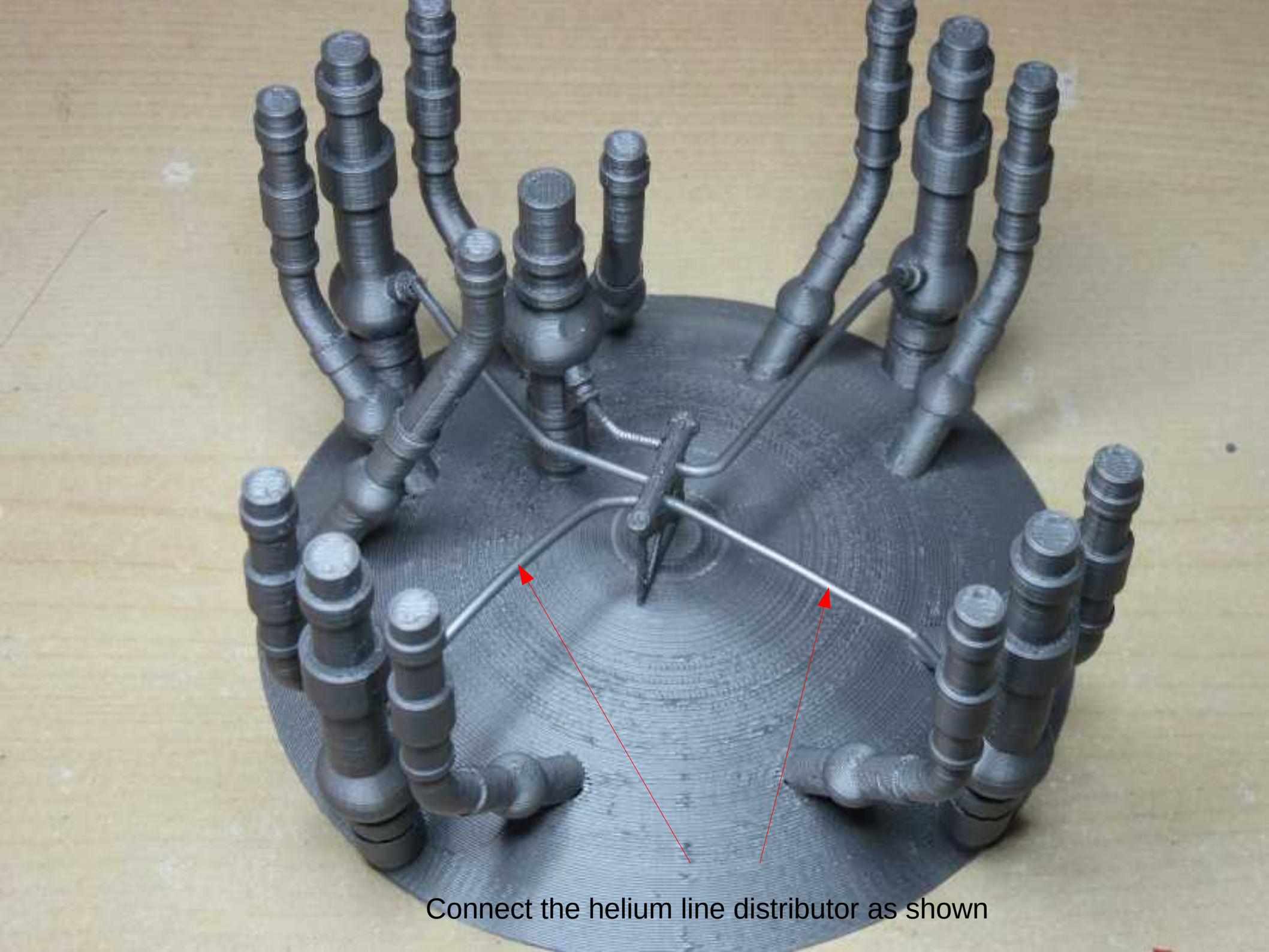

A
B

Module 02

1,75 mm filament for the Helium Line



Two type of file available
With or without support

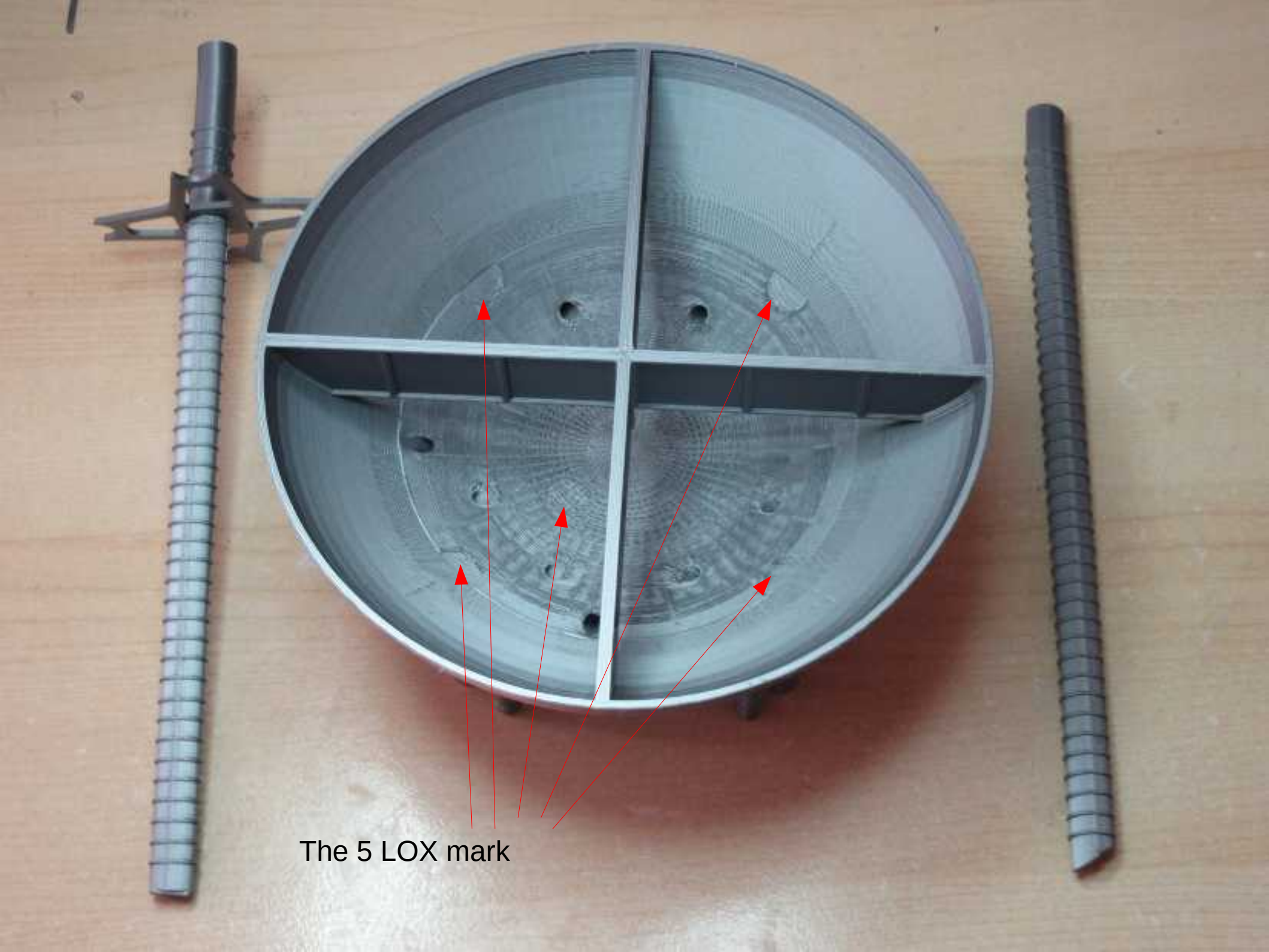

Connect the helium line distributor as shown

S 02


LOX line mark must be located 45° from RP1 baffle


S 03
S 04
S 05 x4
S 06 x4

S 07


The 5 LOX mark


Do not glue !
A
B

For this print, you must align the STL files in the slicer
and print them one after the other,
without removing the previous print

Module 03

Printing upside down for best quality

Use the control marker

W 01
B 01
R 01 x4

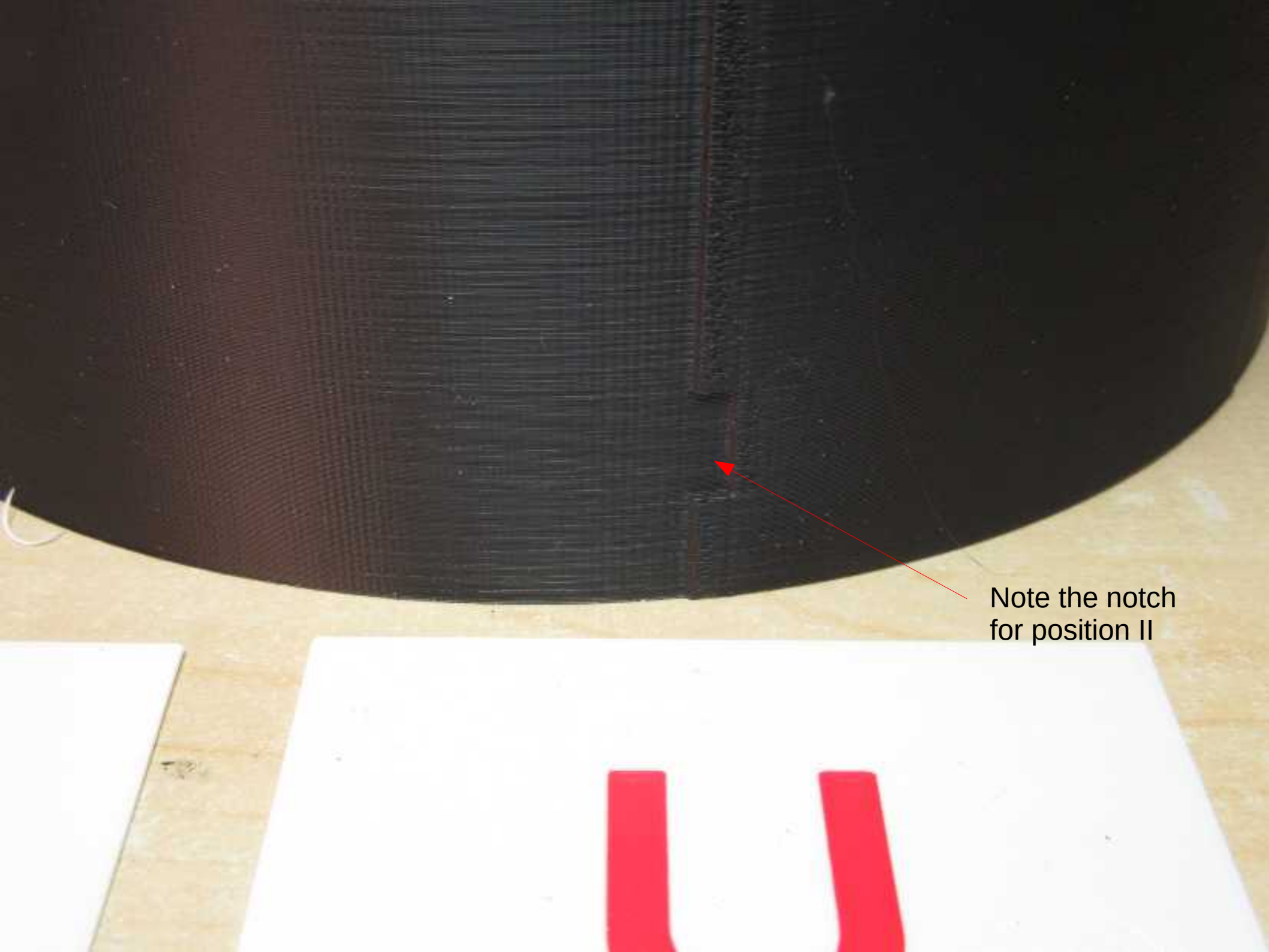
In this pack you will find a file “B 05 flat” if you prefer paint this part

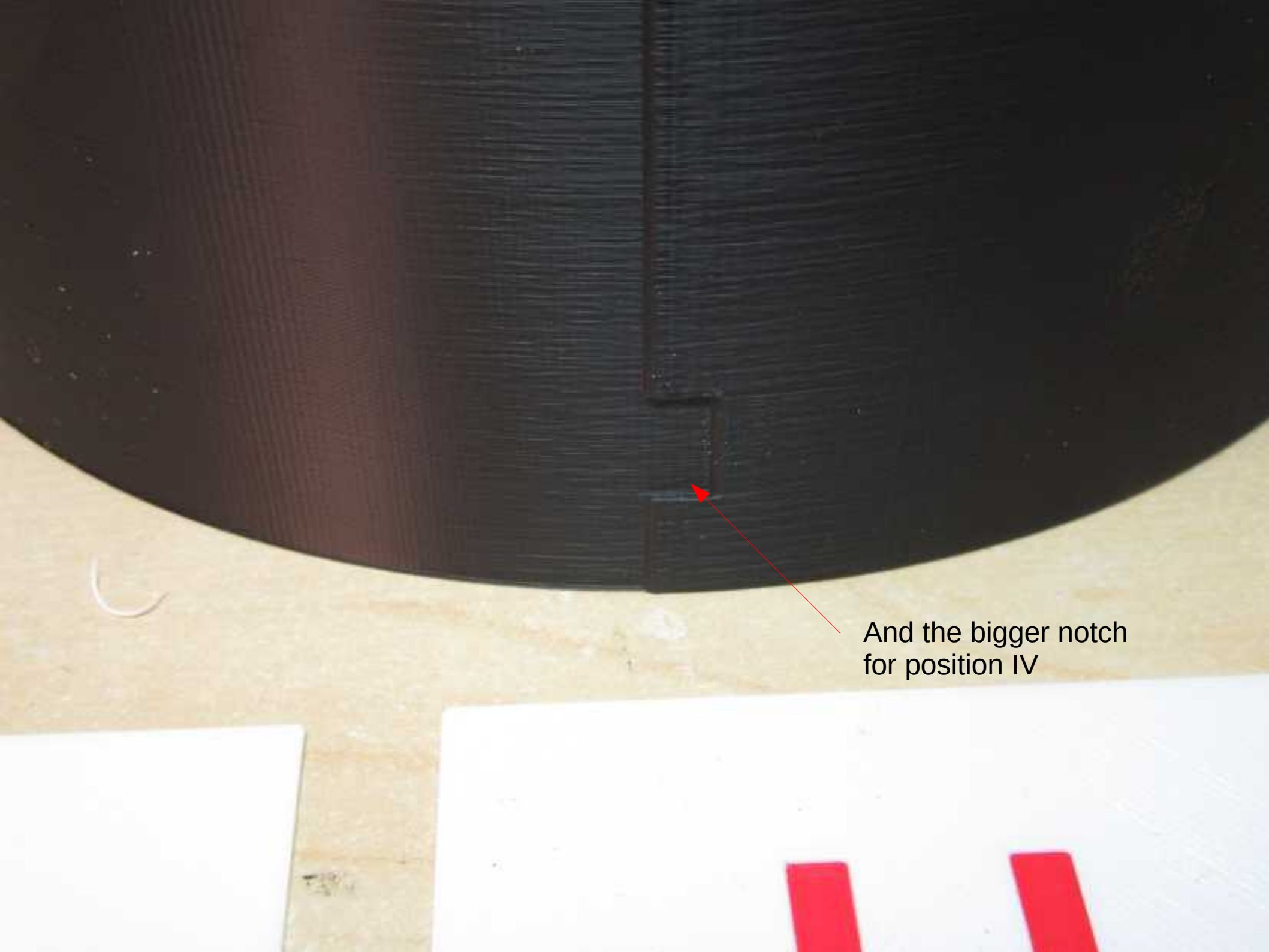
W 02
B 02
R 01 x4

W 03
B 03
R 01 x4

W 04
B 04
R 01 x4


B 05
USA
USA
USA
USA


Note the notch
for position II


And the bigger notch
for position IV

Glue position II first


USA

Then position IV


USA


Position IV
II
USA
Position I

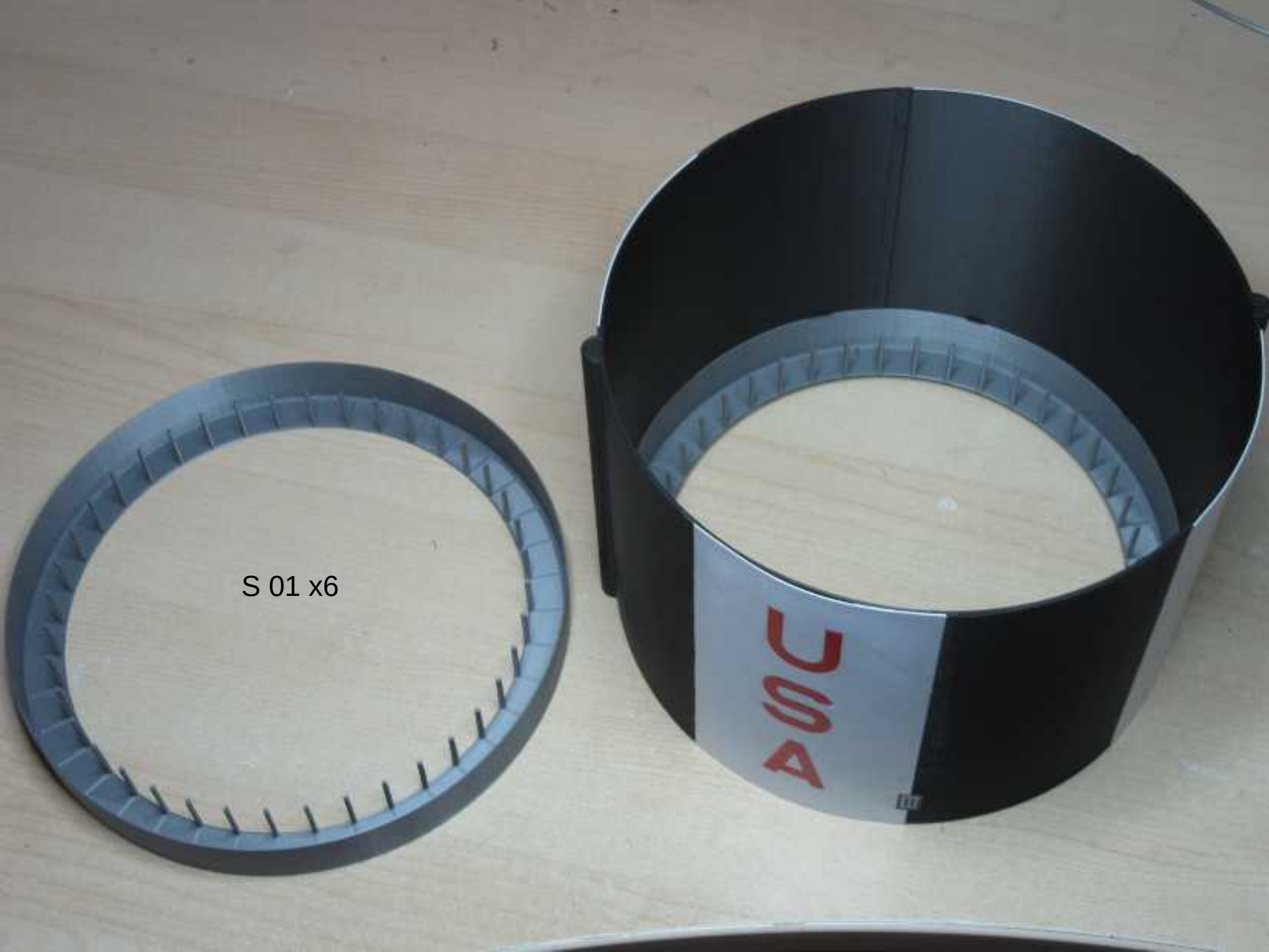

USA


II
IV
USA
III


USA


S 01 x6
AMC


D S A
3 mm

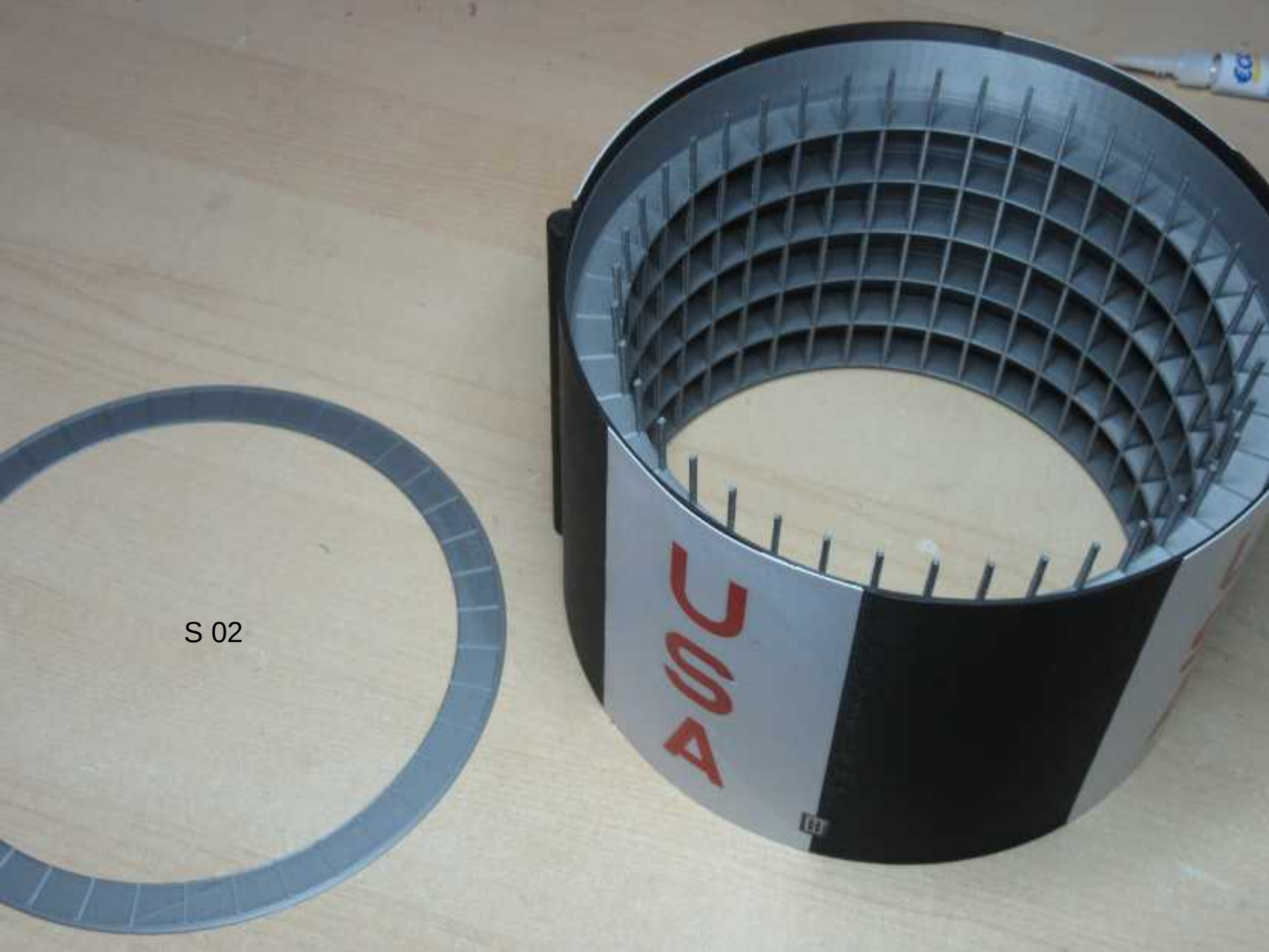

S 01 x6
USA


S 01 x6
alignment
USA


S 01 x6
USA


S 01 x6
USA


S 01 x6
USA


S 02
USA

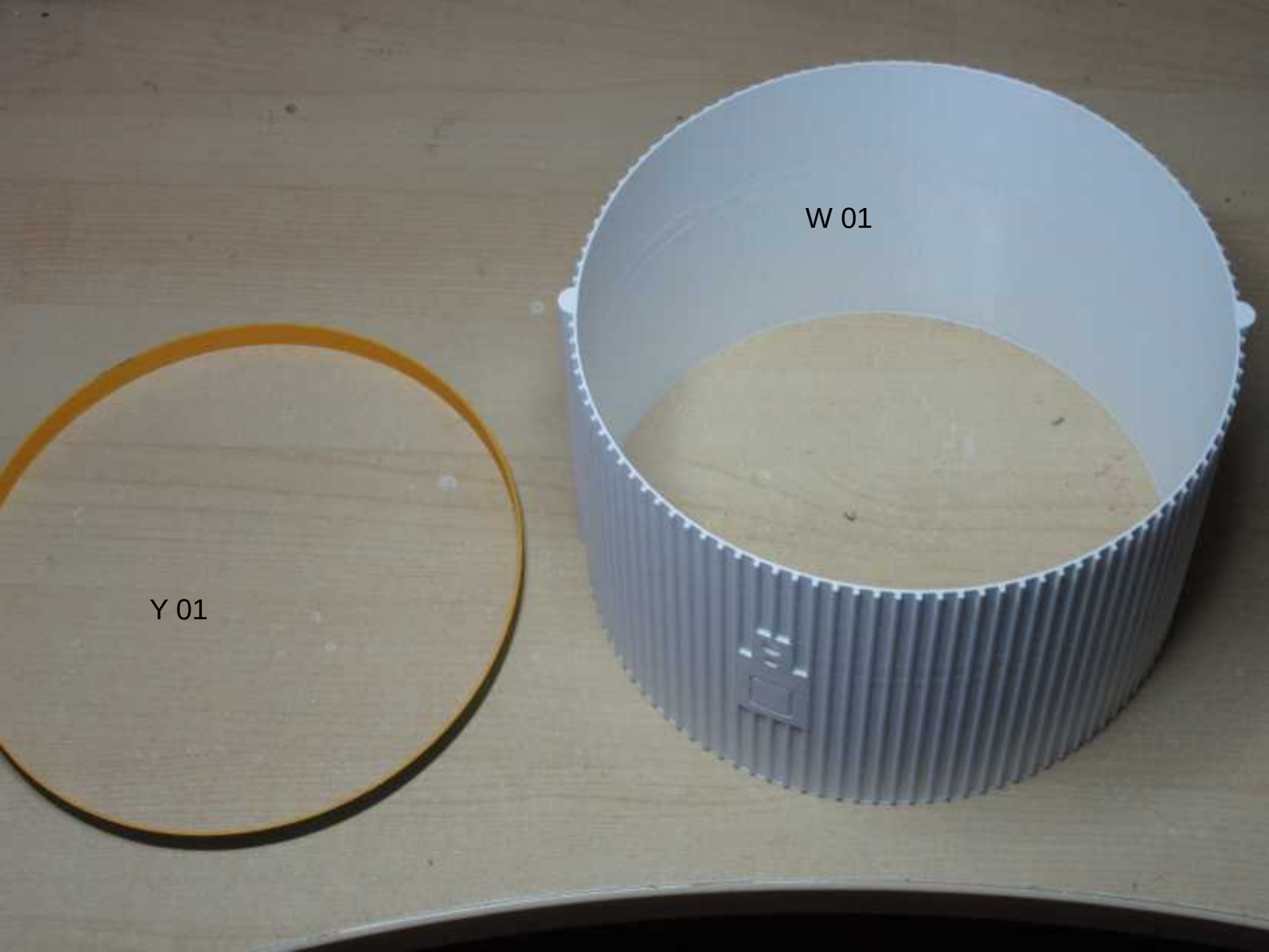

USA


USA

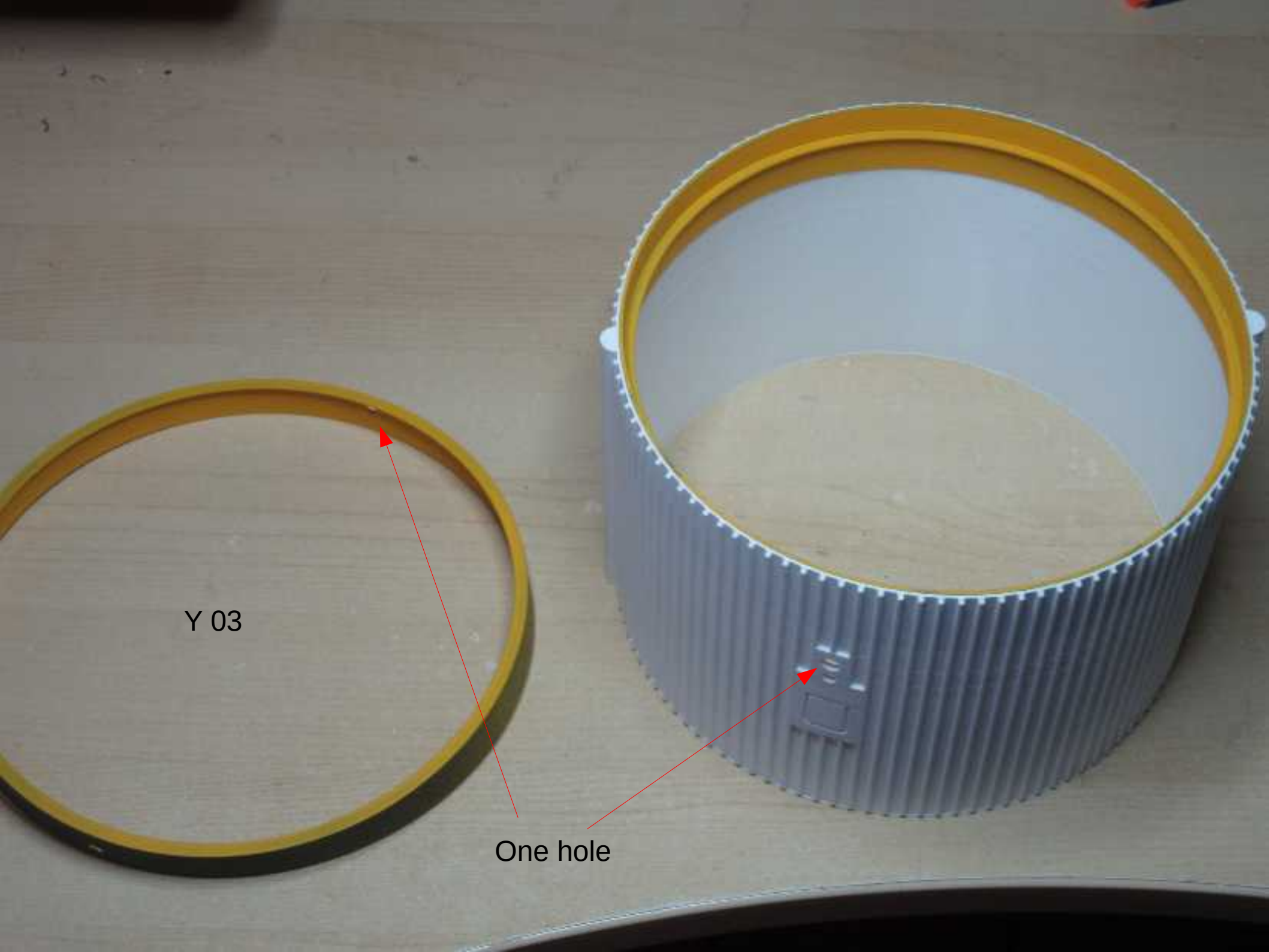
Module 04

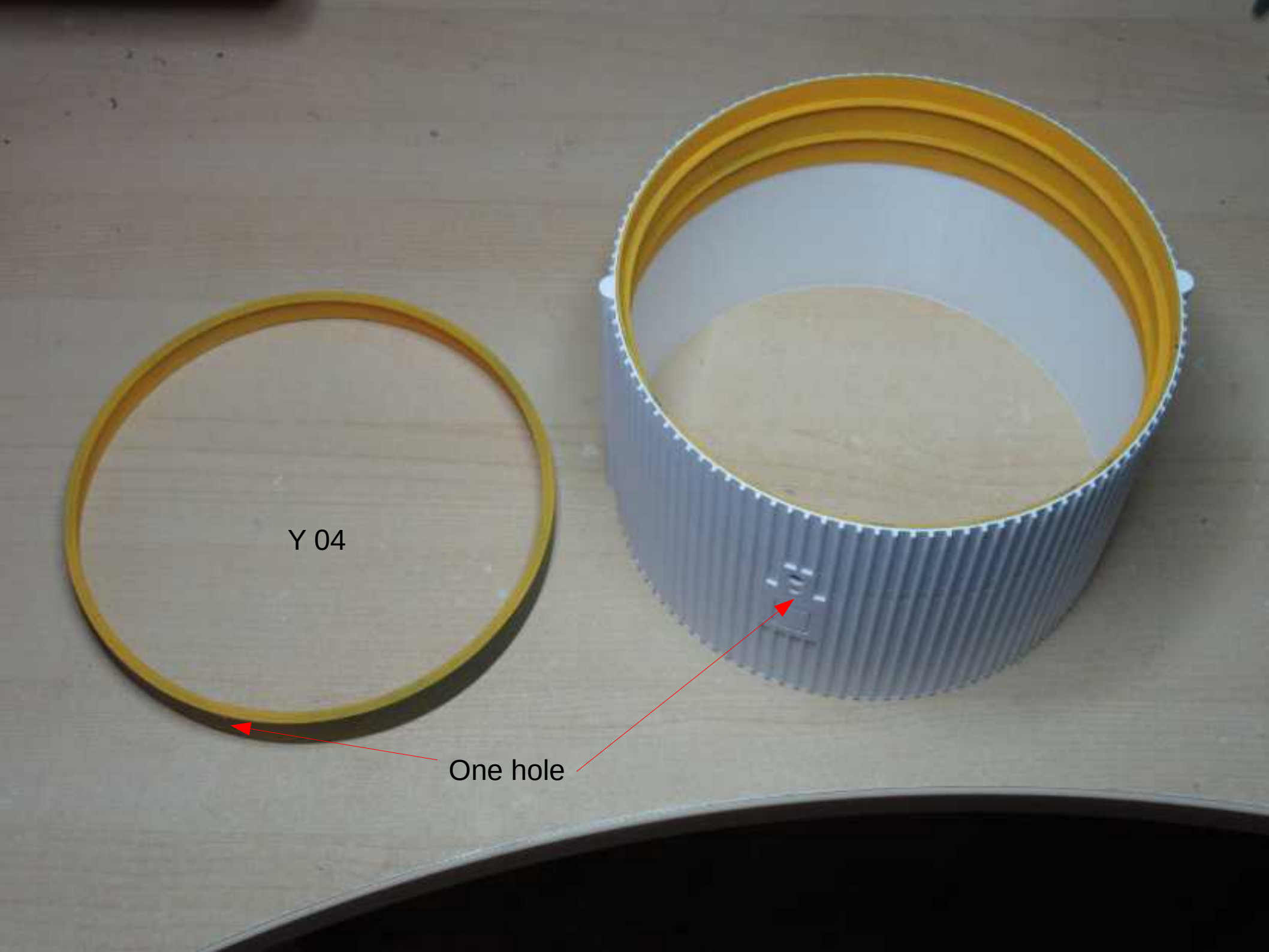
S 01 S 02 S 03 S 04 S 05 S 06


S 07 x4
S 08 x4


W 01
Y 01


Y 02 x3


Y 03
One hole


Y 04
One hole


Y 02 x3


Y 05
Two holes located there
See the correct position two pictures later


Y 02 x3

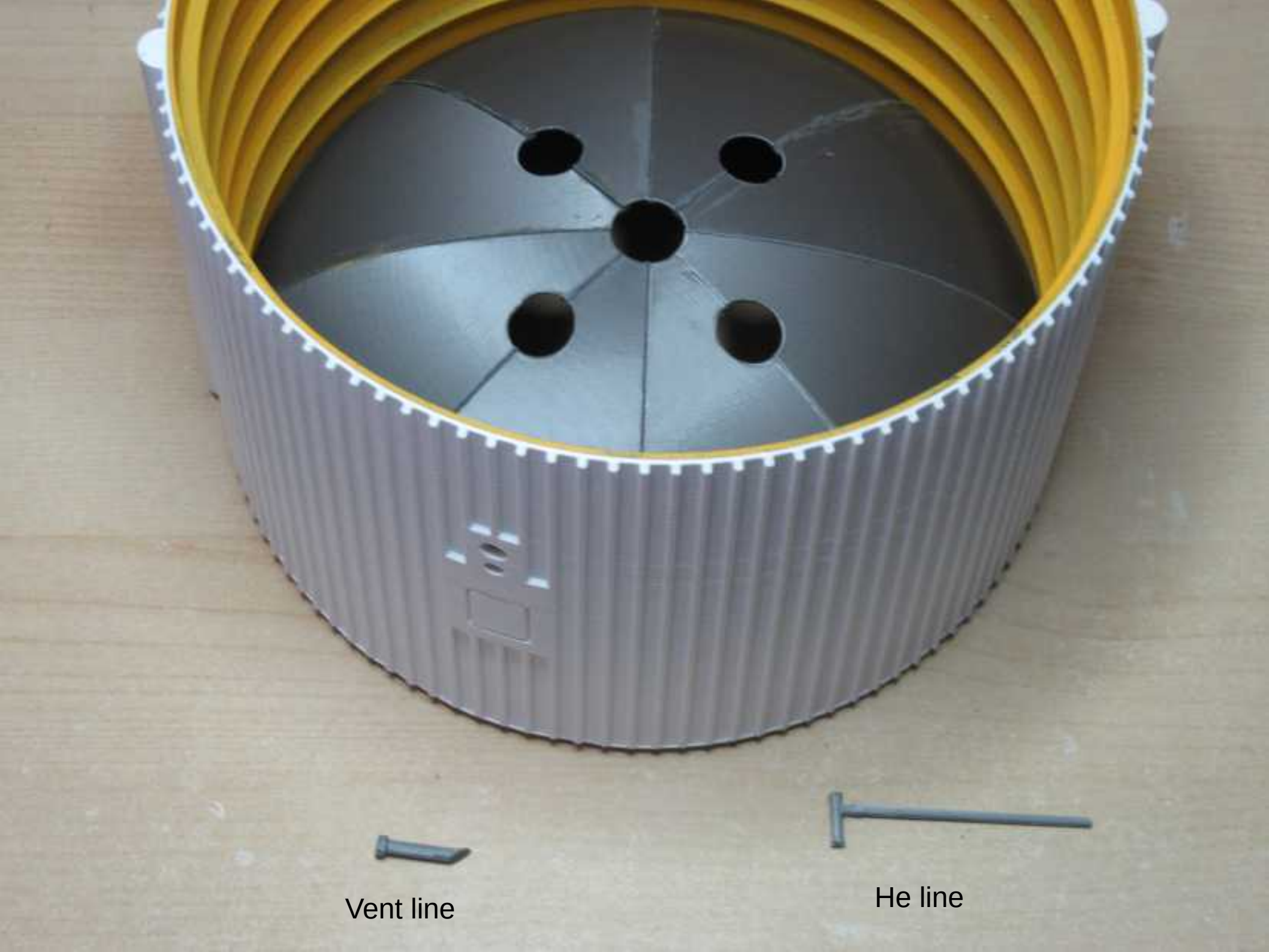
To assembly the dome,
put it in the previous module first

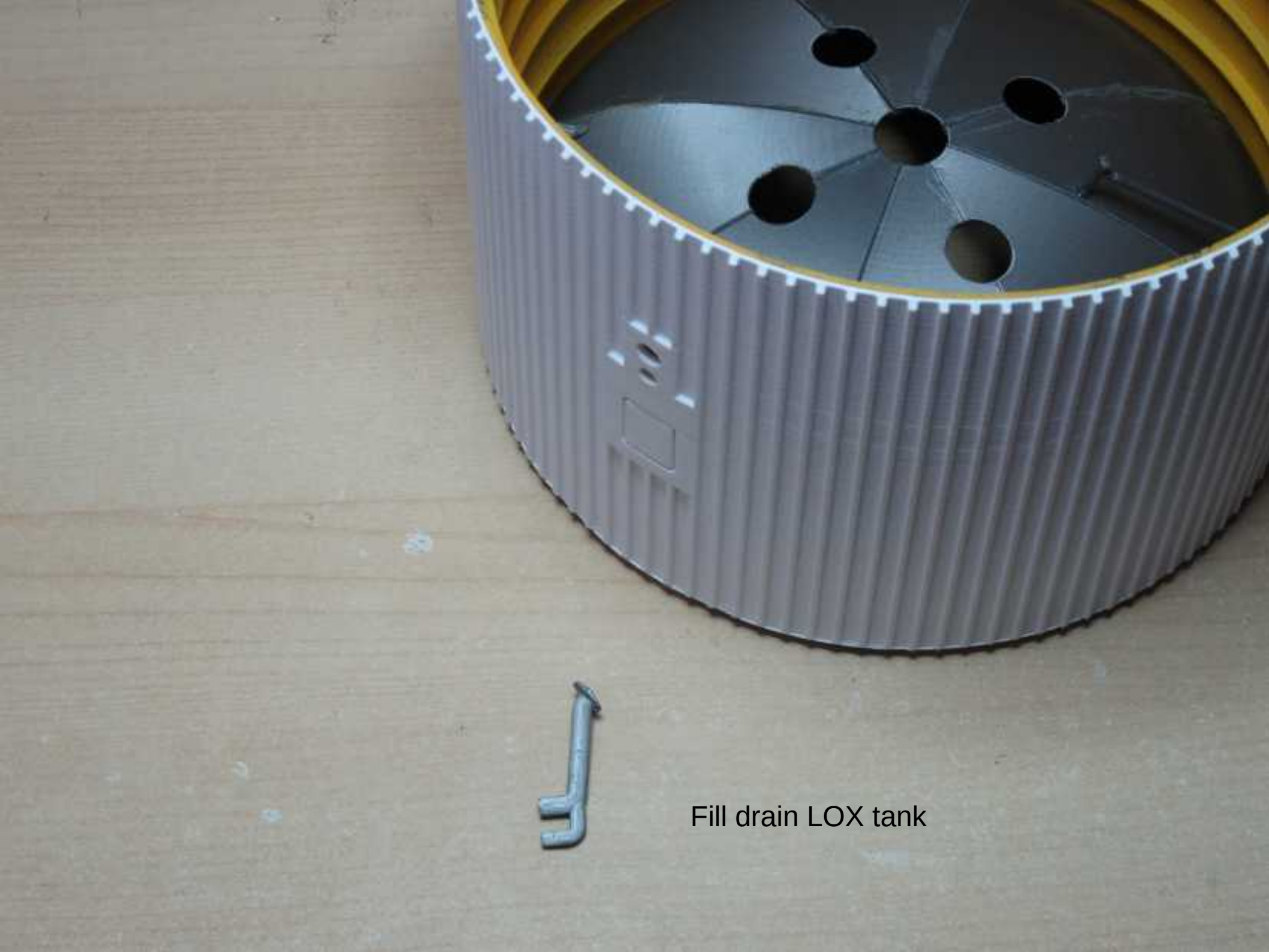
Like this

Do not glue !


Then, glue the inter-tank skirt on it
USA

these two parts can be easily assembled


Vent line
He line



Fill drain LOX tank


You may need to adjust the size of the passing holes

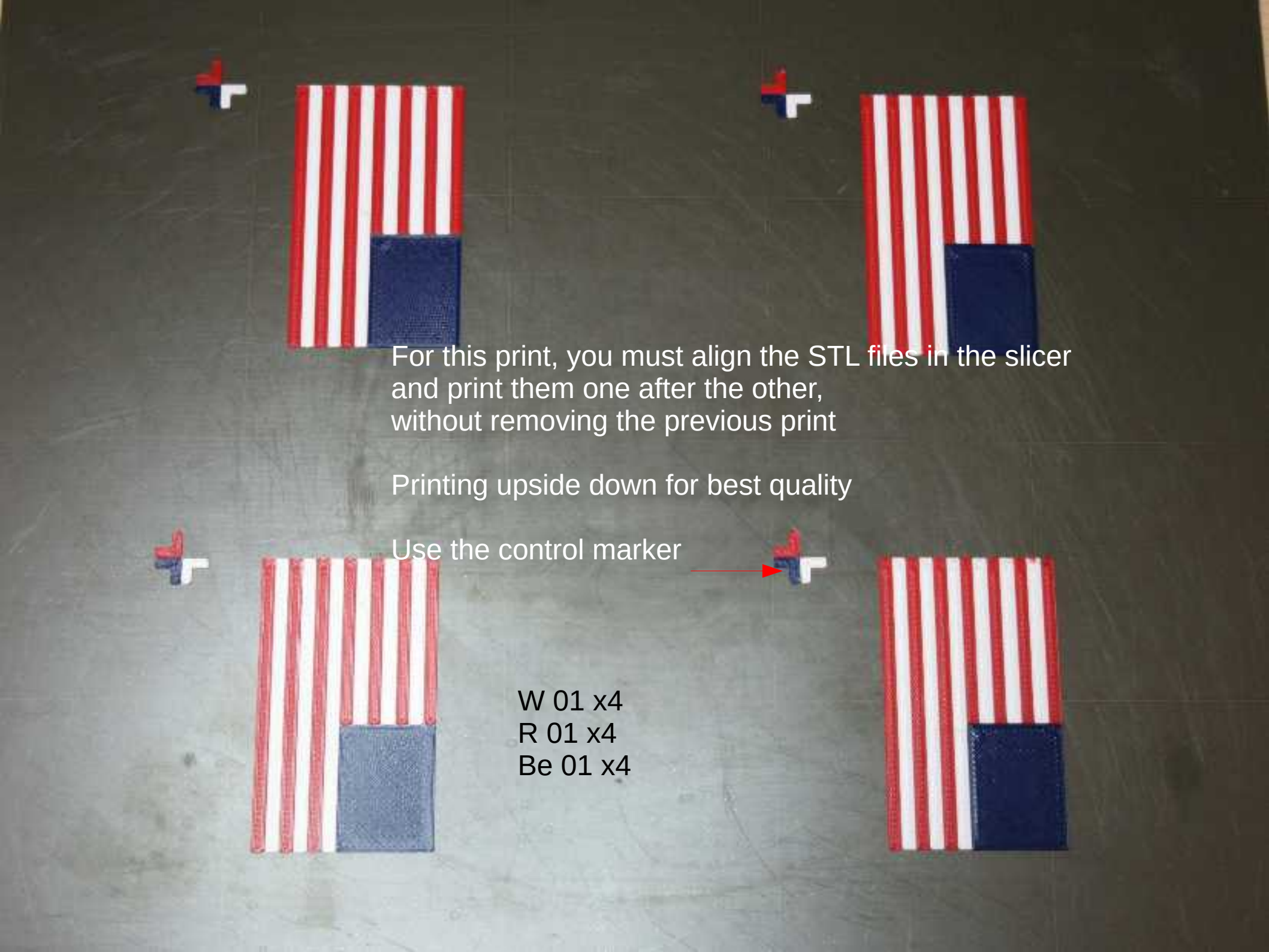
Module 05

Cutting supports of
S01 x4 and S 02 x4

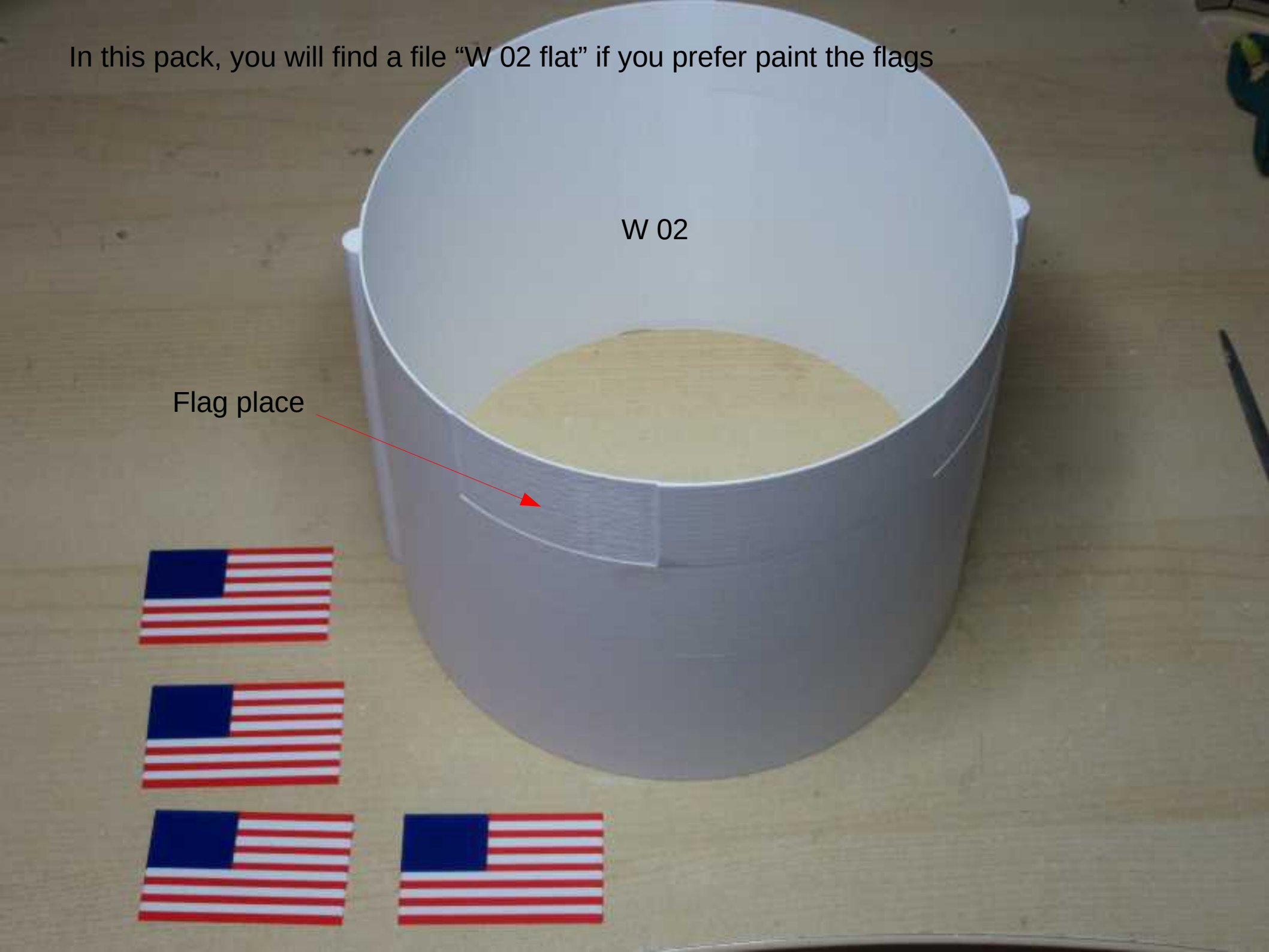

S 01 x4
S 02 x4

S 03


S 04

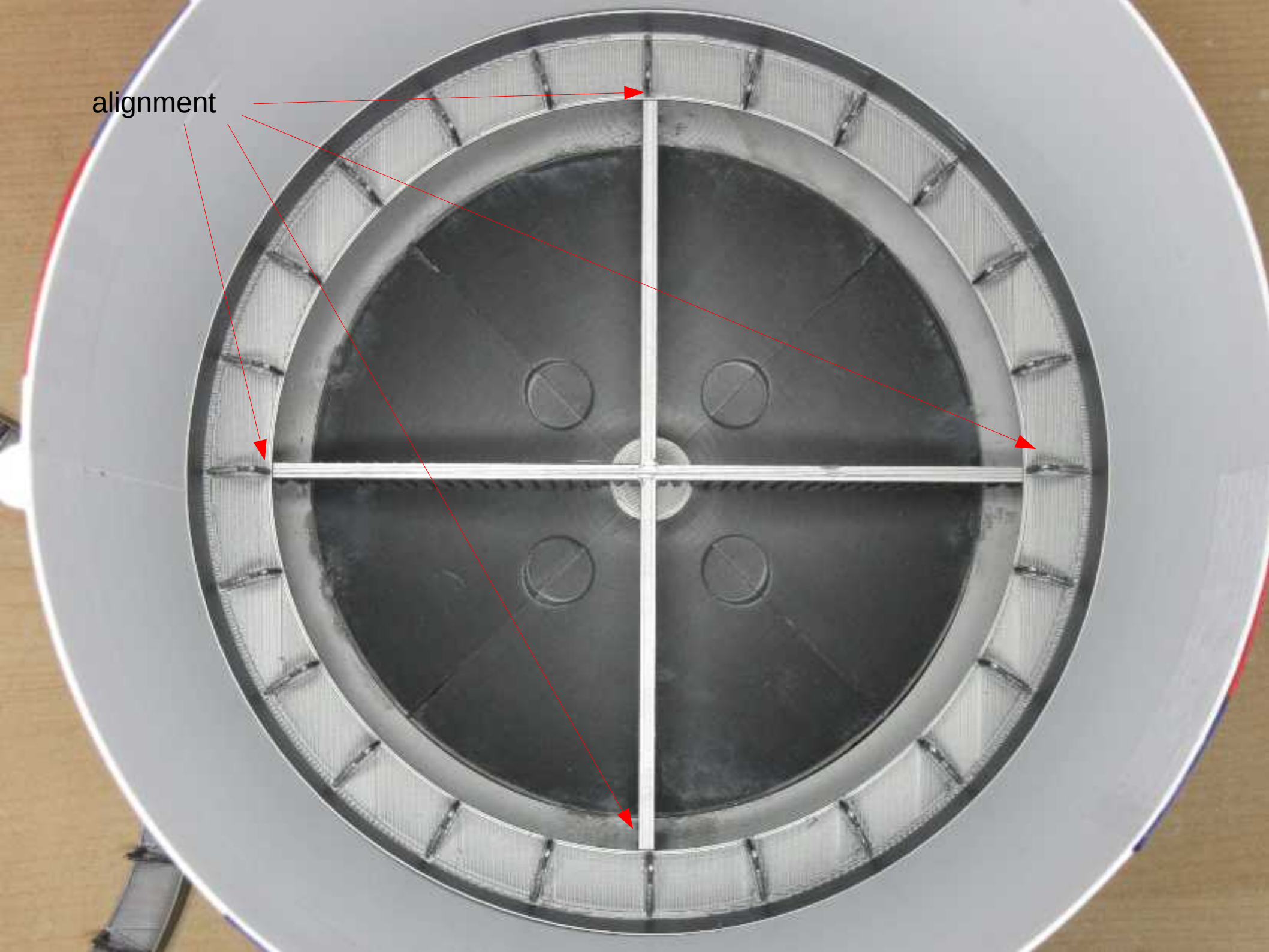

For this print, you must align the STL files in the slicer
and print them one after the other,
without removing the previous print
Printing upside down for best quality
Use the control marker
W 01 x4
R 01 x4
Be 01 x4

In this pack, you will find a file “W 02 flat” if you prefer paint the flags




Index

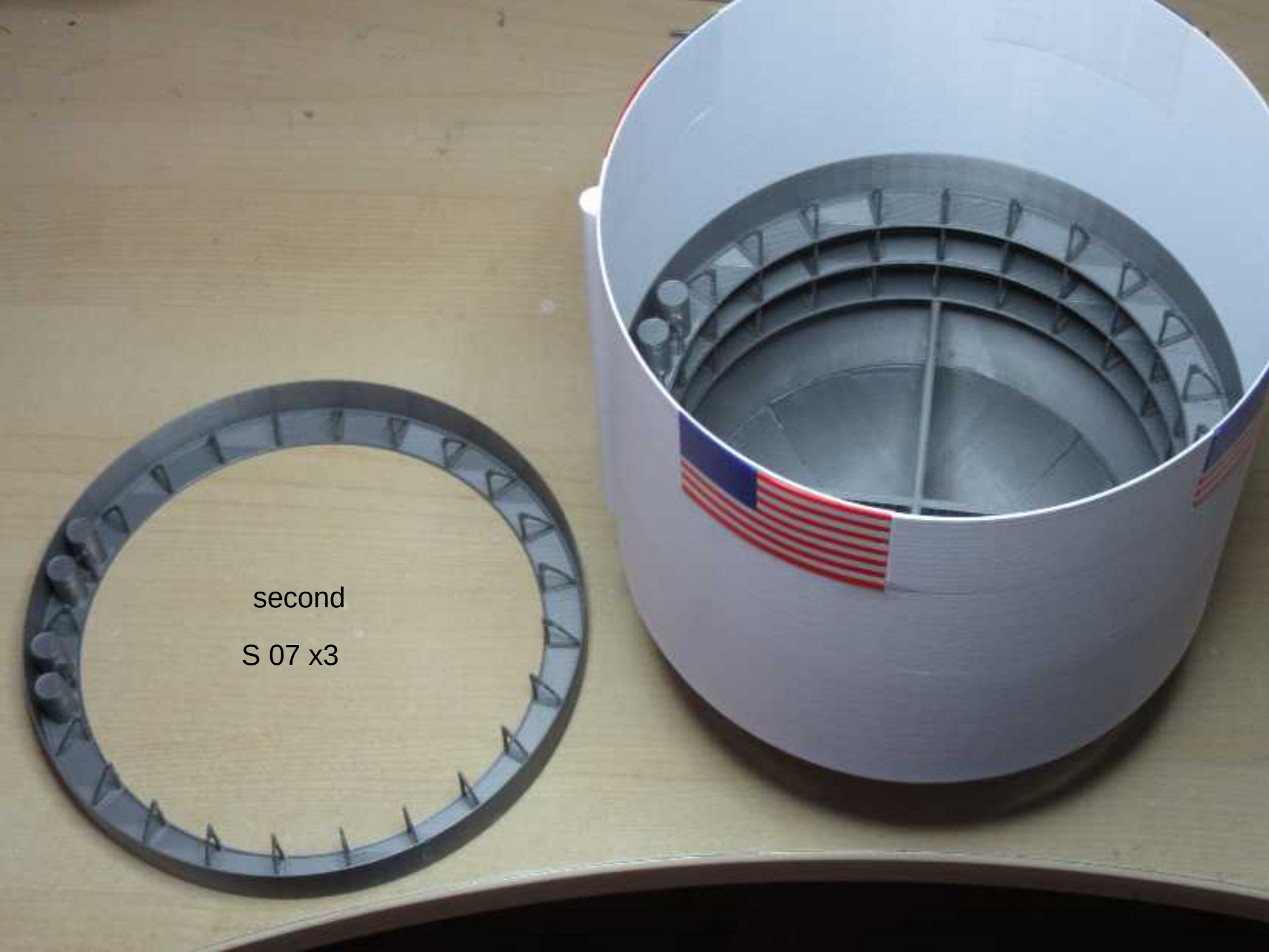

S 05 x7


alignment


S 06


Helium tank located position I
IV
I
III
II

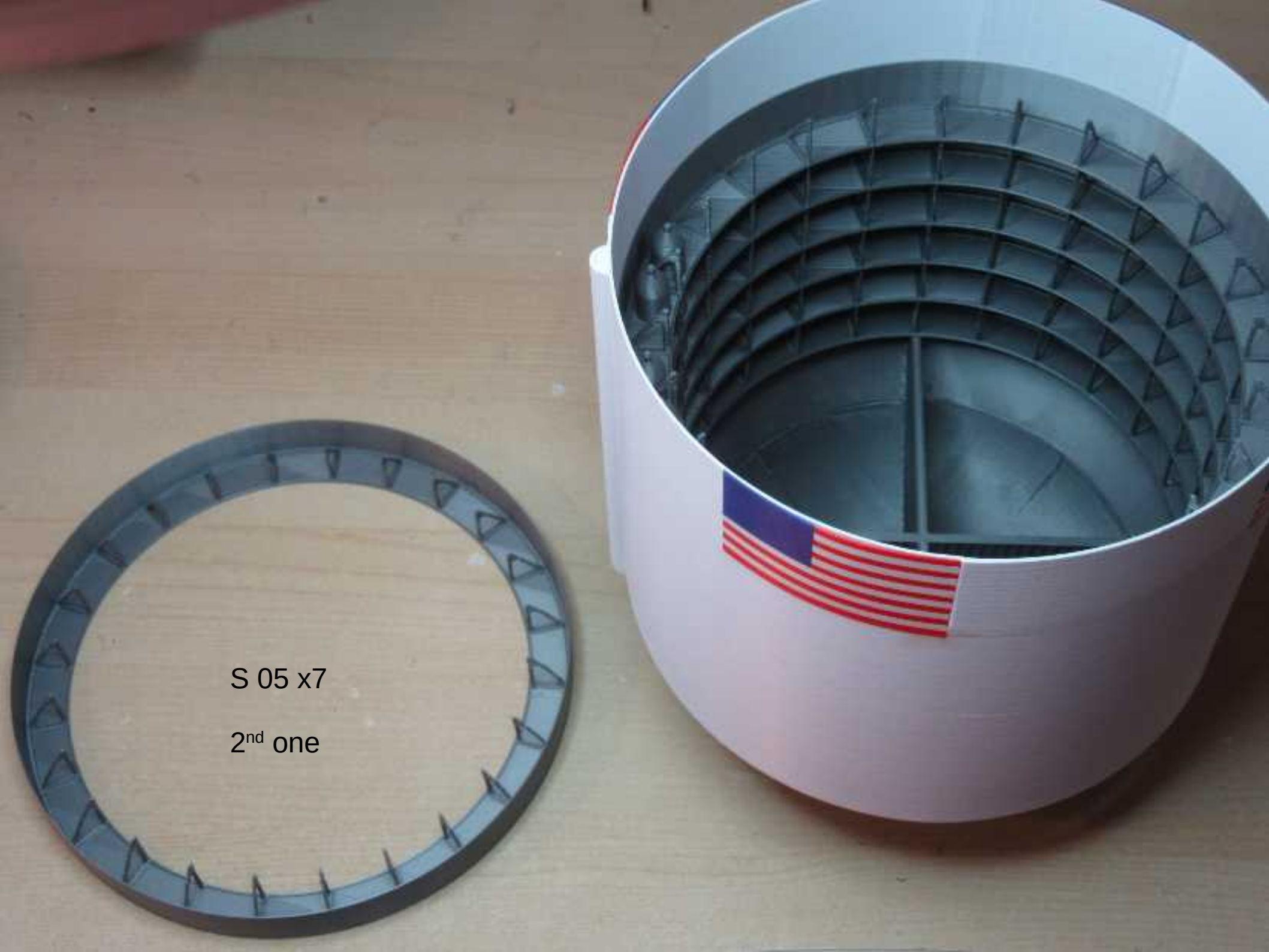

first
S 07 x3


second
S 07 x3


third
S 07 x3


S 08

The finished helium tank

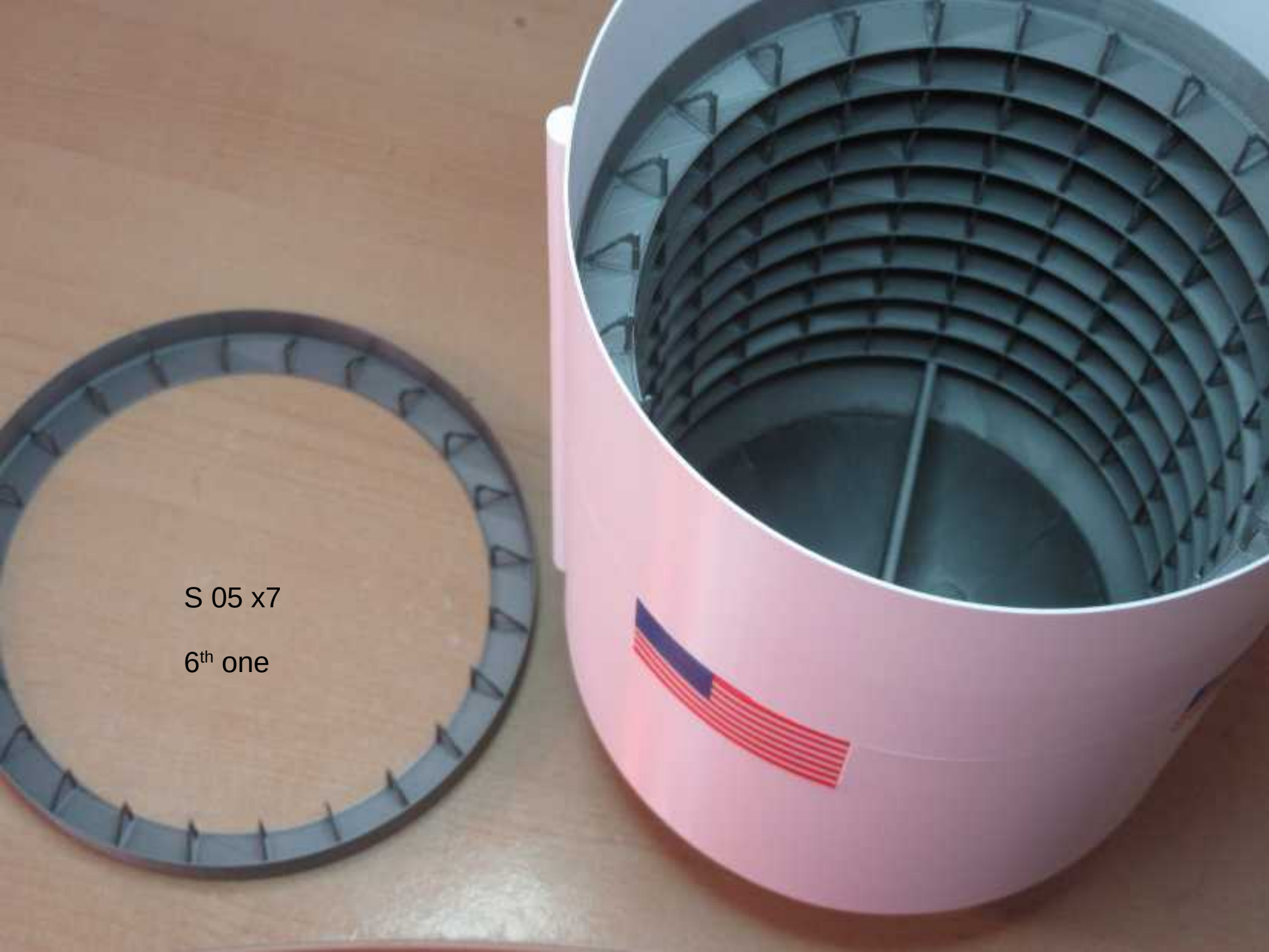

S 05 x7
2nd one

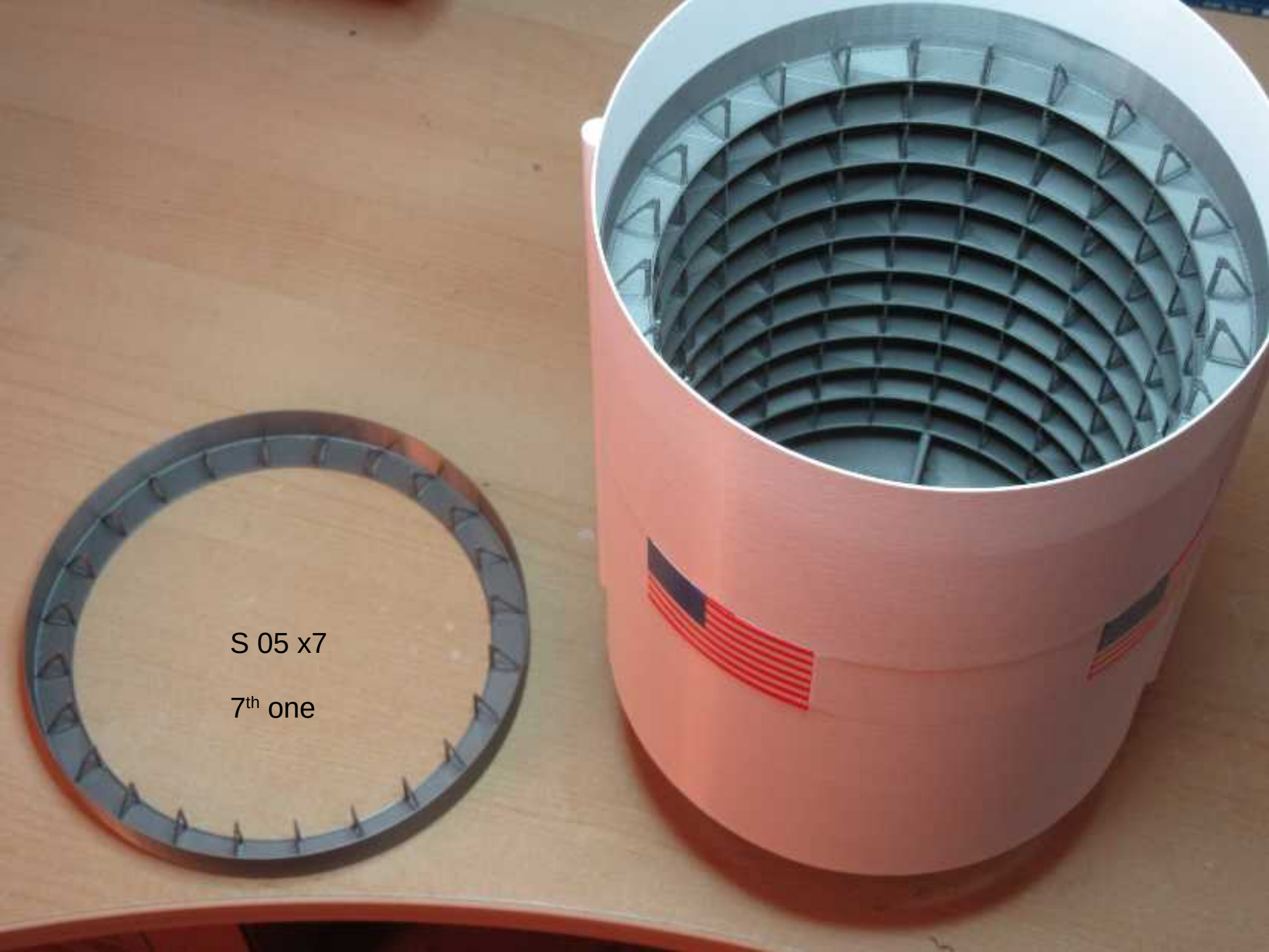

S 05 x7
3rd one


W 03


S 05 x7
4th one


S 05 x7
5th one


S 05 x7
6th one


S 05 x7
7th one


S 09

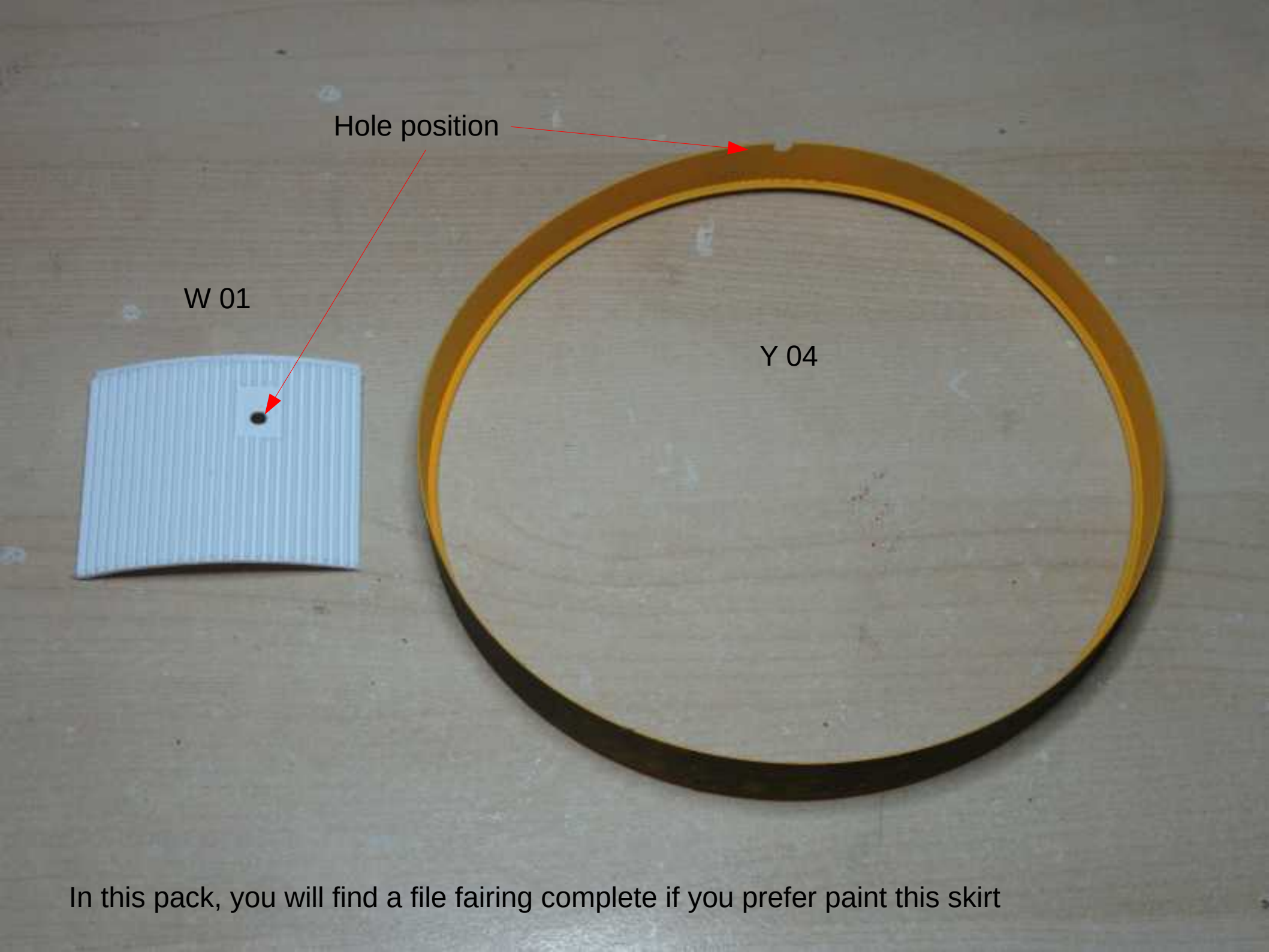

Helium tanks this side I


S 10


Module 06
Y 01 x7
Y 02
pieces to be painted
yellow afterwards


Y 03
there’s a hole on the Y 03 part.
This hole have to be aligned with the dome hole

After painting



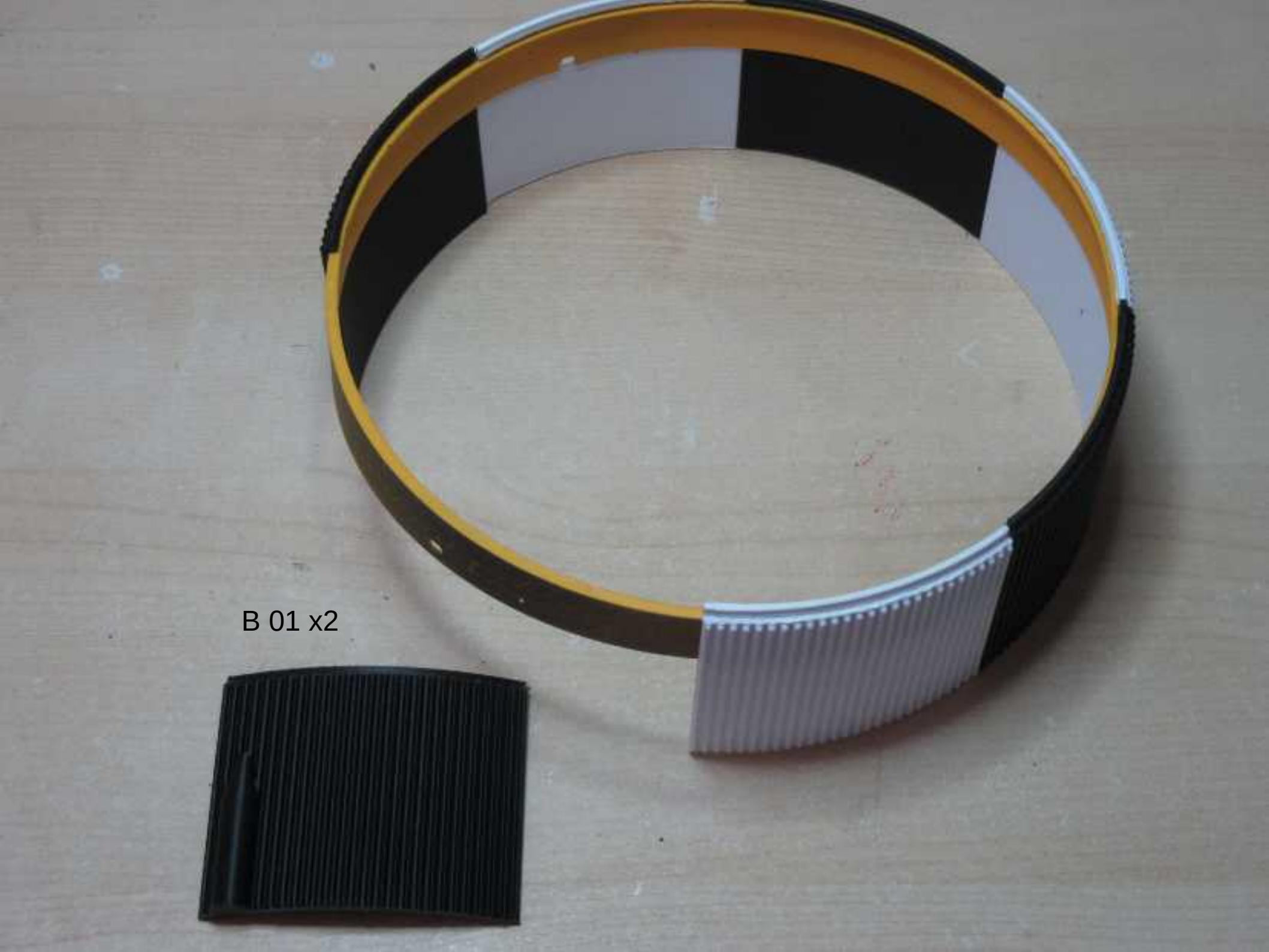
In this pack, you will find a file fairing complete if you prefer paint this skirt


B 01 x2


W 02 x3


B 02 x2


W 02 x3


B 01 x2


W 02 x3

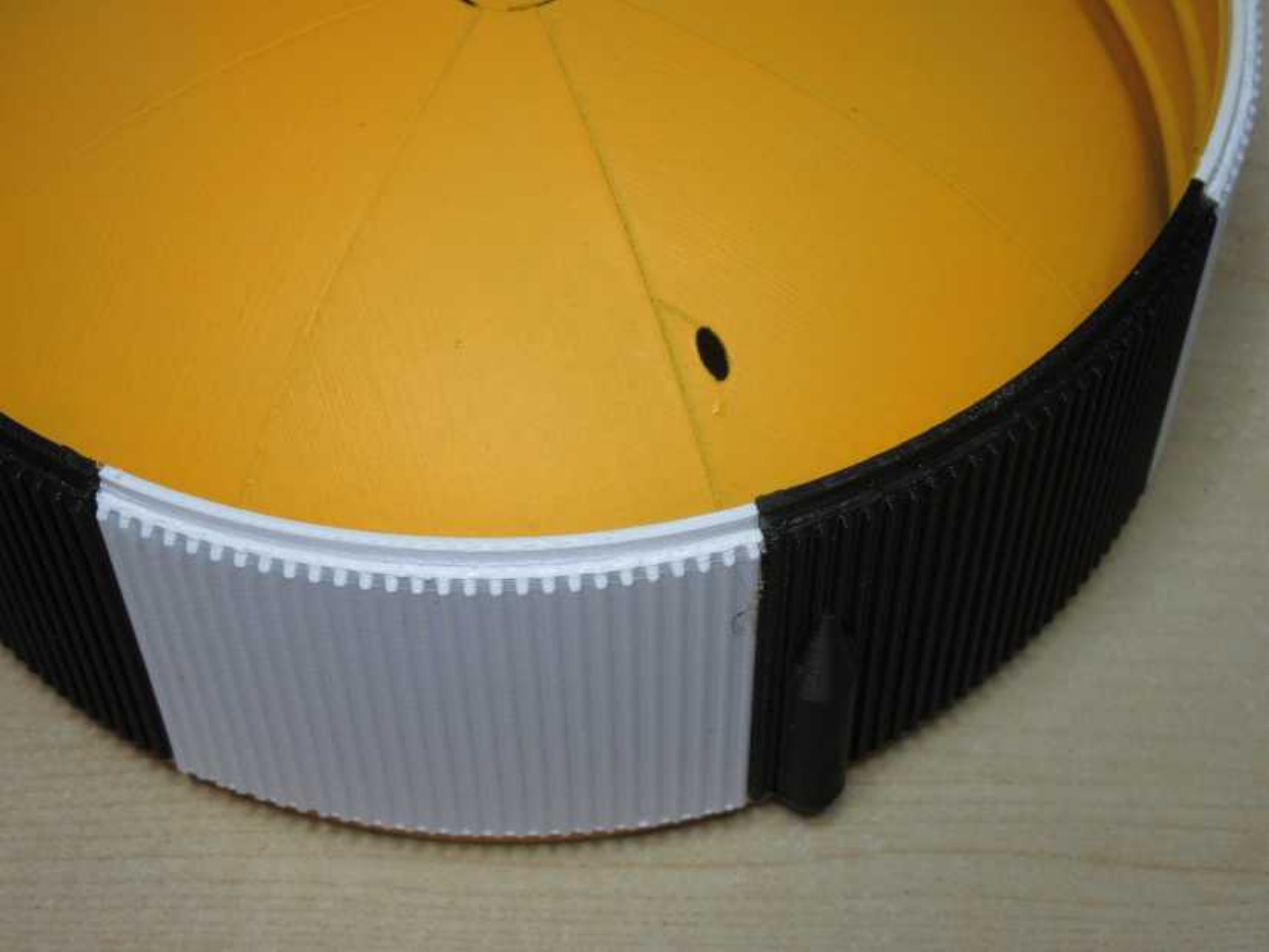

B 02 x2

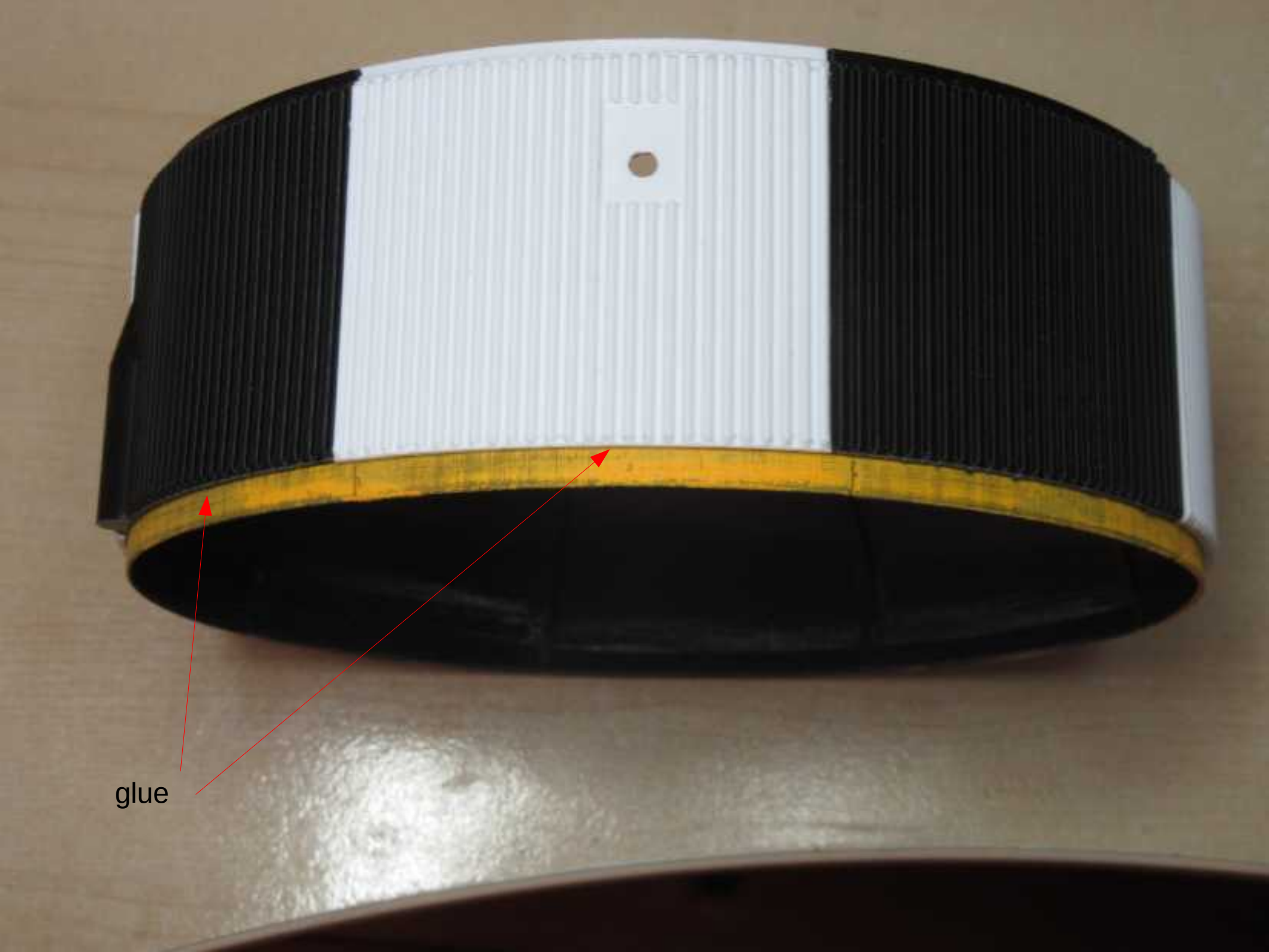

Y 05 x2

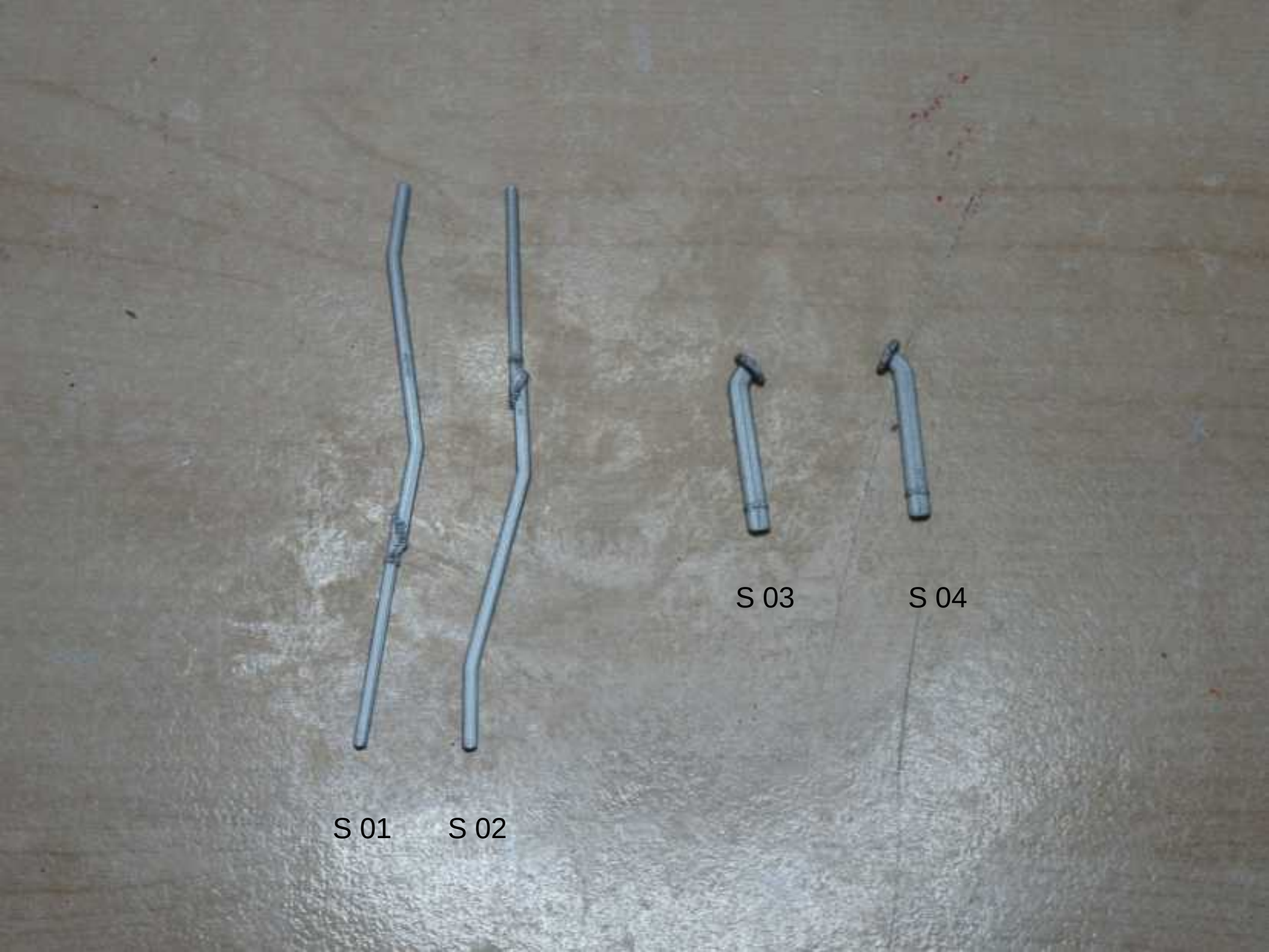

Y 05 x2


Corresponding position


alignment

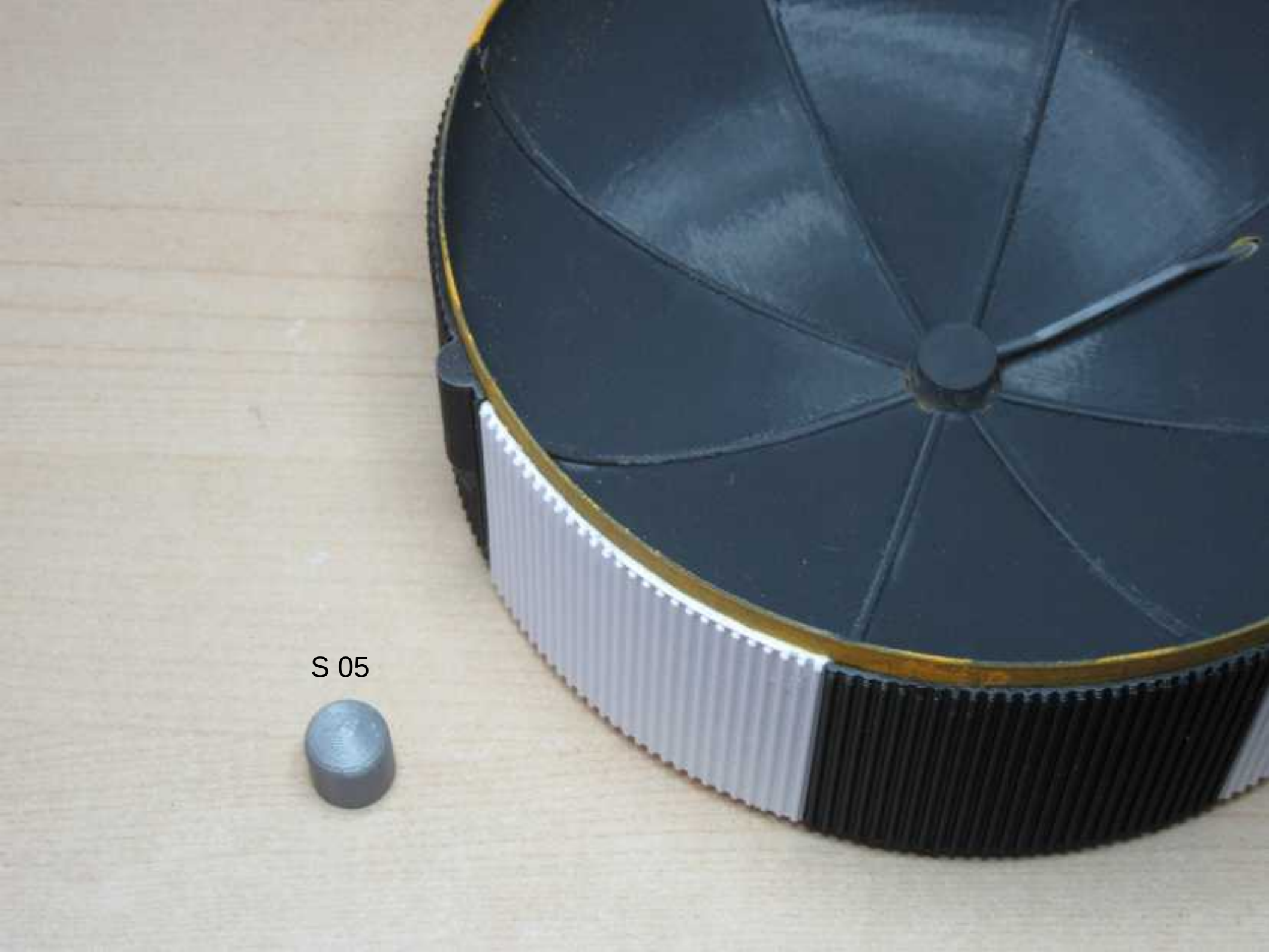



glue


S 01
S 02
S 03
S 04


Insert this end first in the hole


Corresponding hole


S 05

S 06


USA
The end !