

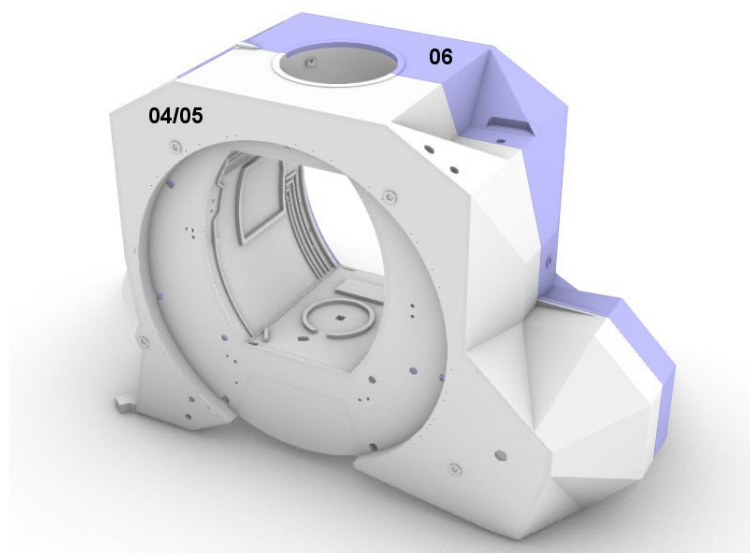
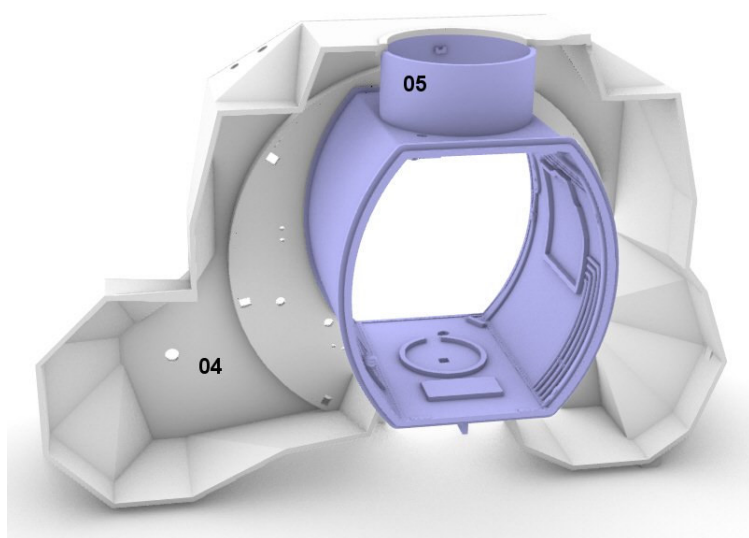
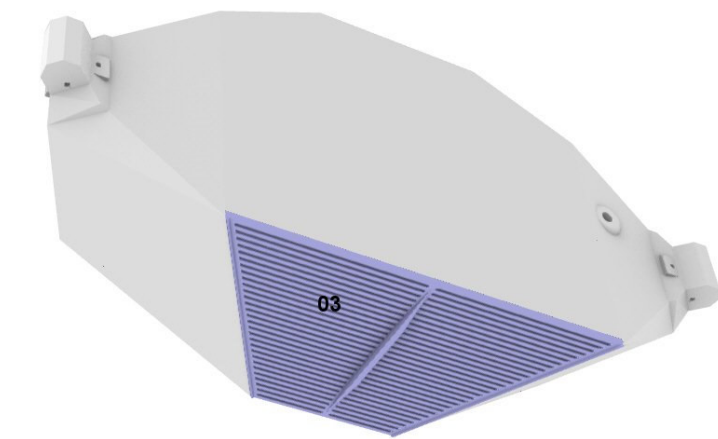
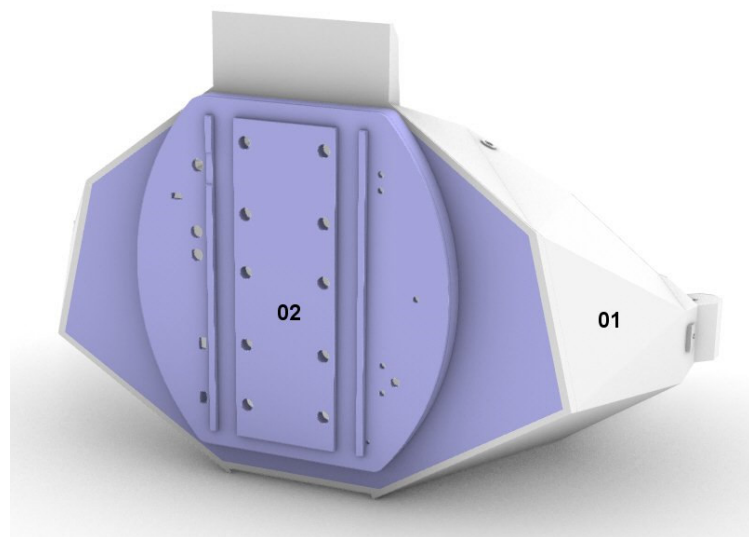
Lunar Module Ascent Stage

For further information on building this model check

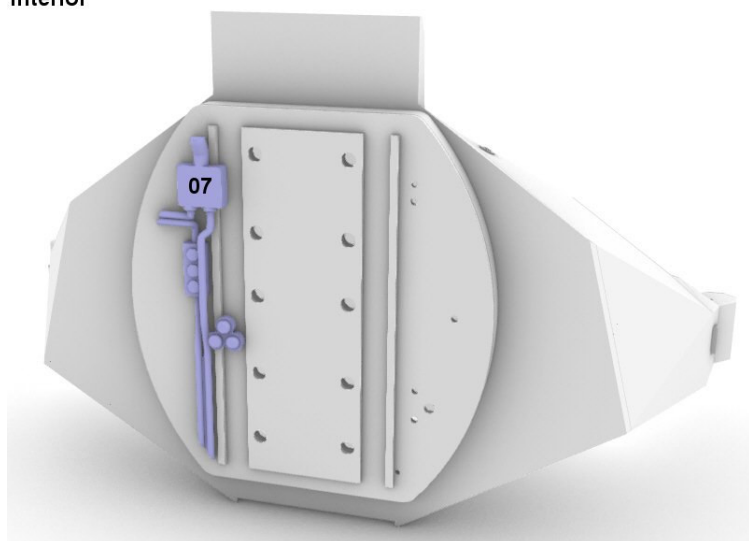
1/24 LM : <http://spacemodels.nuxit.net/LEM-24/index.htm>

1/32 LM : <http://spacemodels.nuxit.net/1-32 LM AS/Ascent stage.htm>

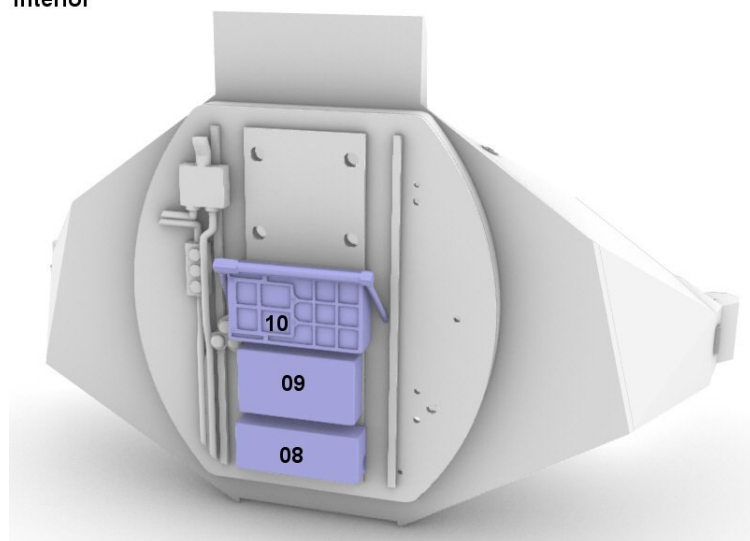
1/48 LM : <http://spacemodels.nuxit.net/1-48-LM/index.html#The Ascent Stage>



interior

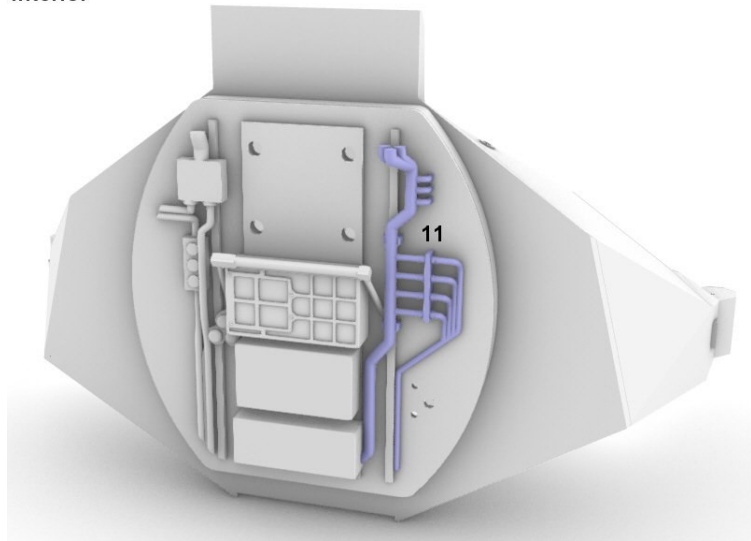


interior

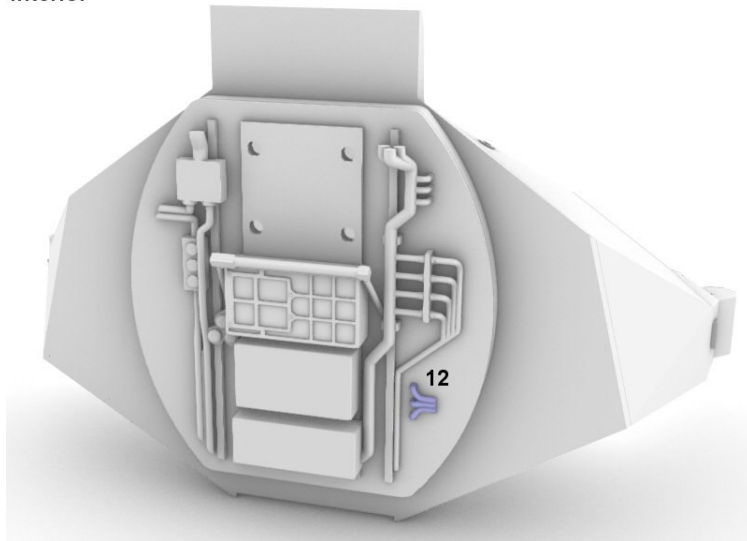


If you don't want to model the interior of the ascent stage, that step in the instruction is not needed anytime you see the word « interior » on the image. In this case you can go directly to **Page 12**,

interior



interior

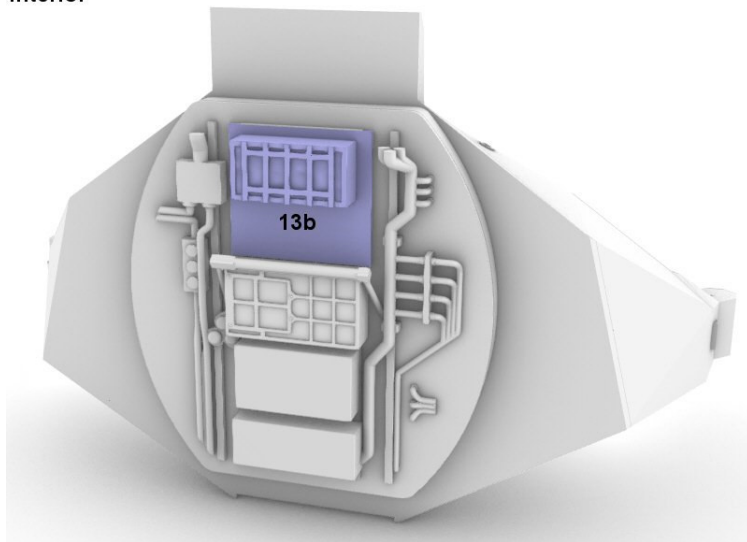


interior



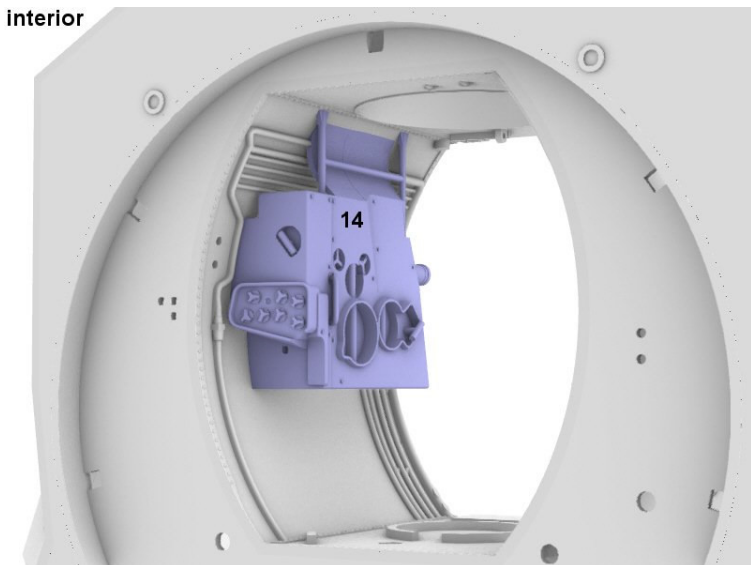
Configuration for Apollo 9 to 11

interior

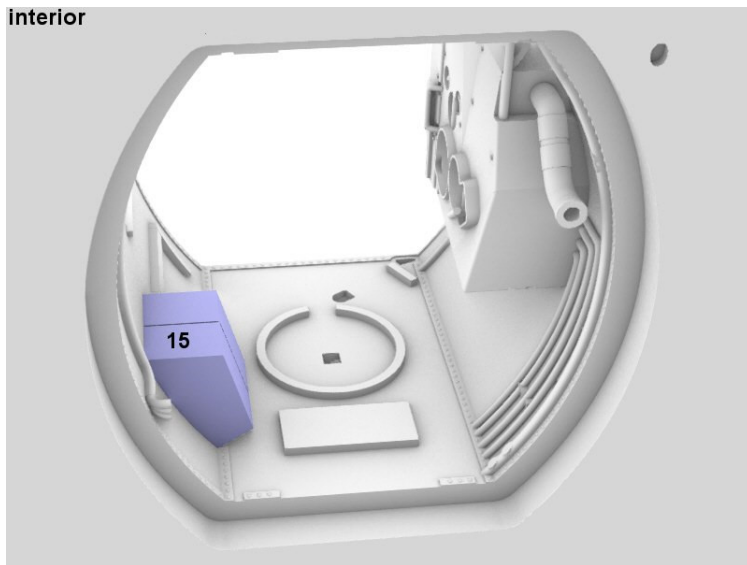


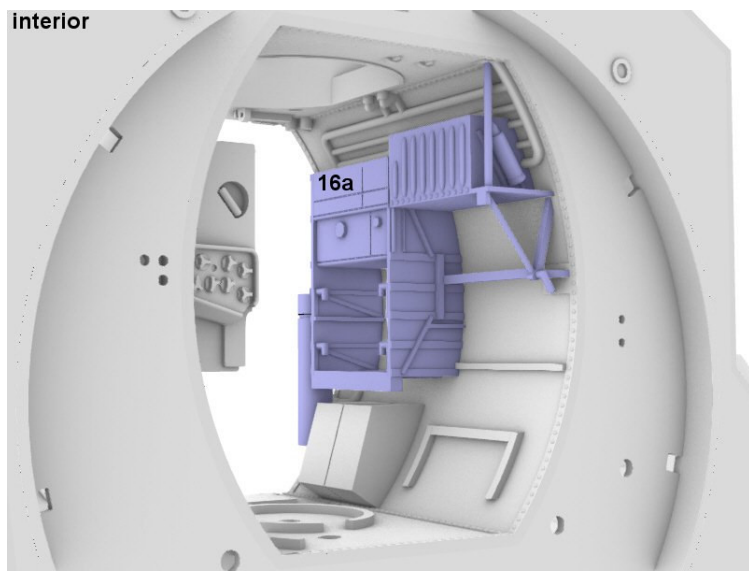
Configuration for Apollo 12 to 17

interior

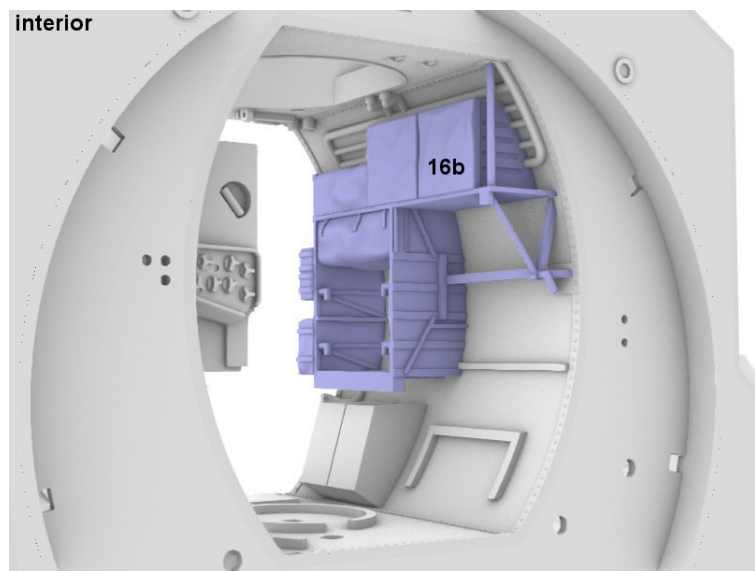


interior

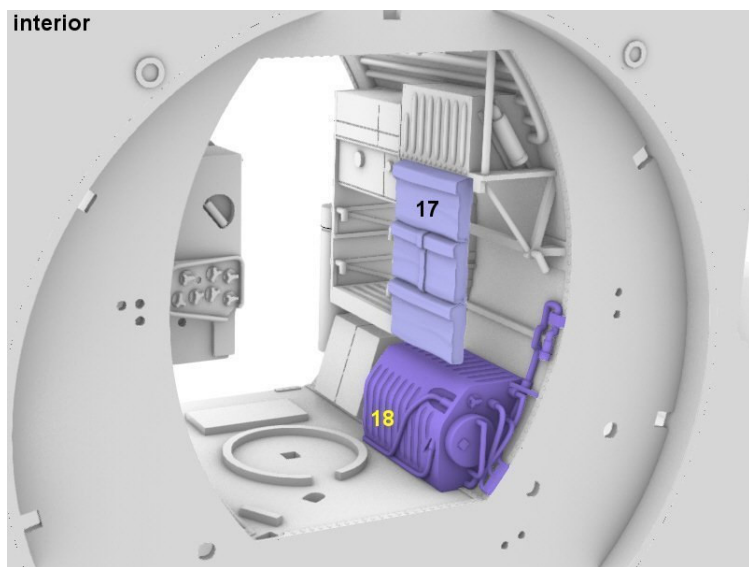




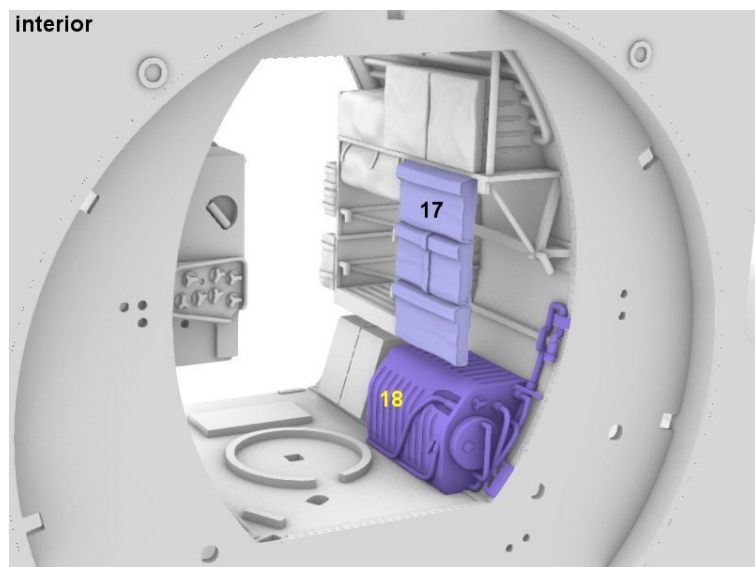
Configuration for Apollo 9 to 11



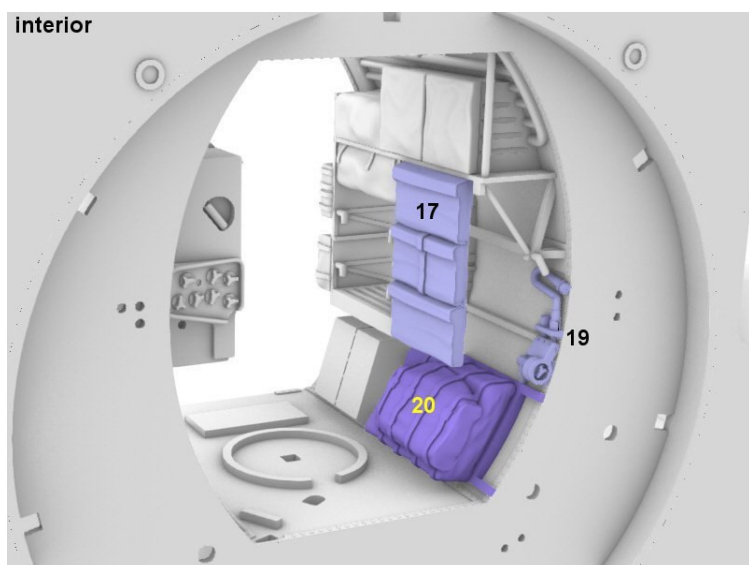
Configuration for Apollo 12 to 17



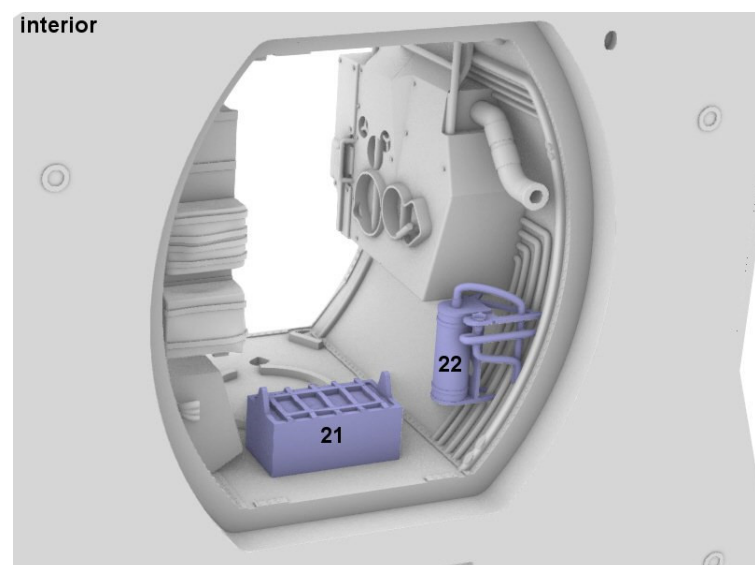
Configuration for Apollo 9 to 11

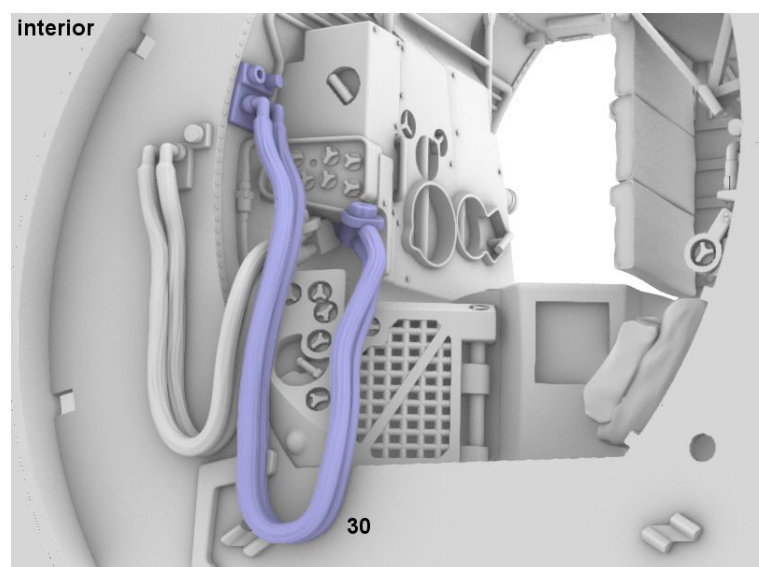
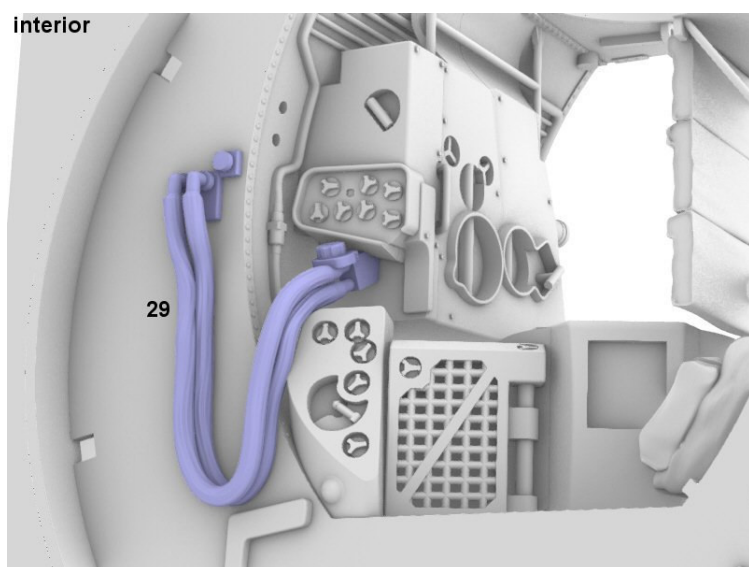
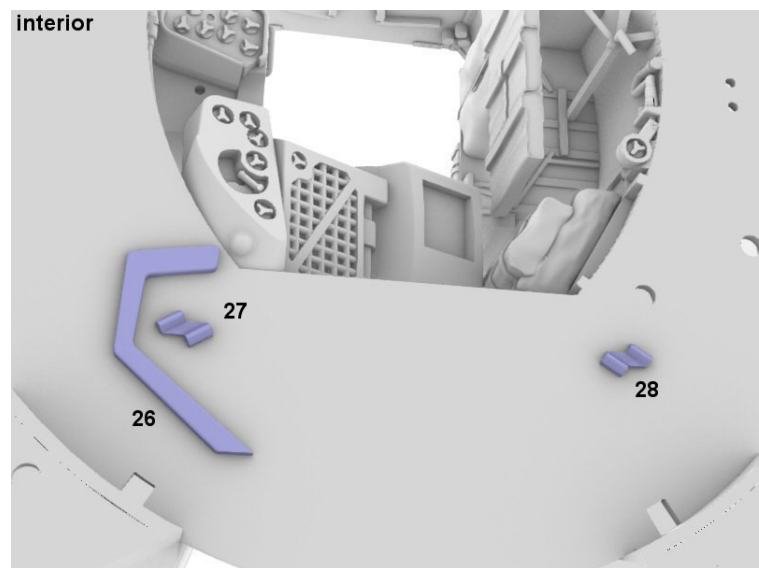
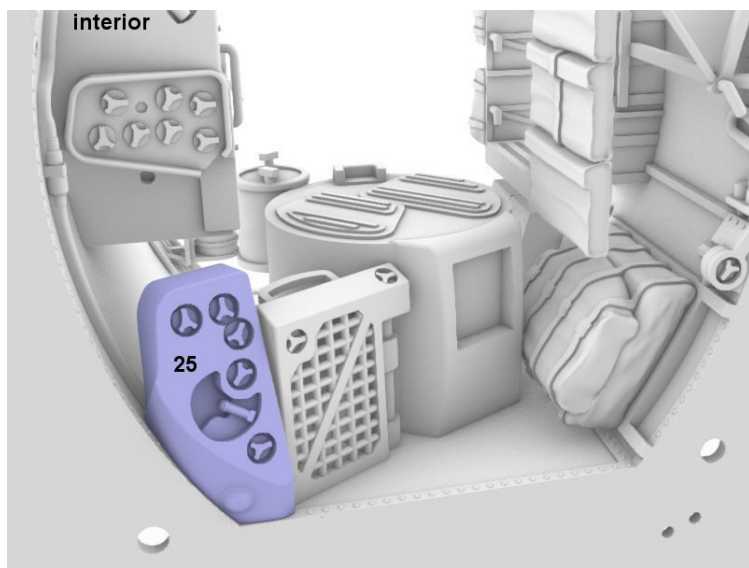
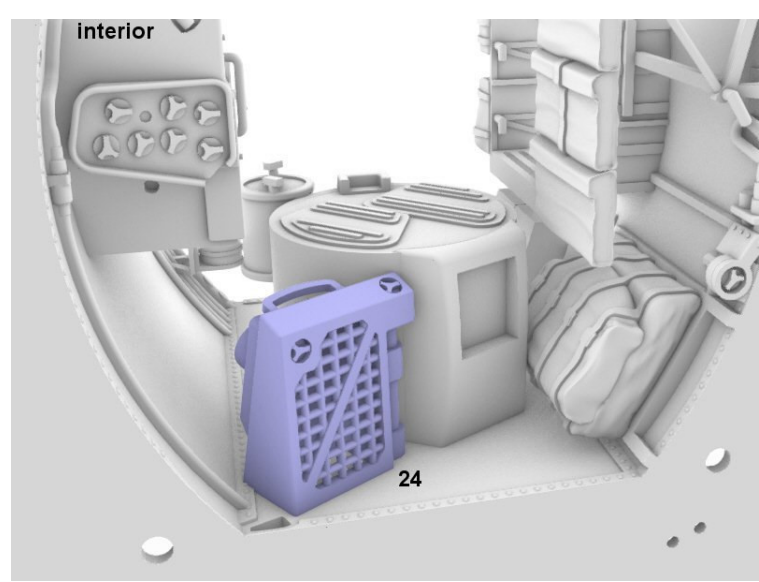
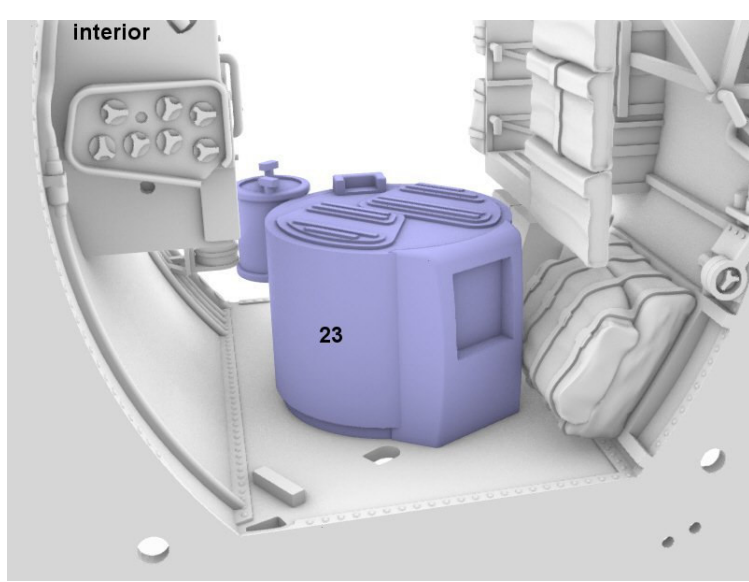


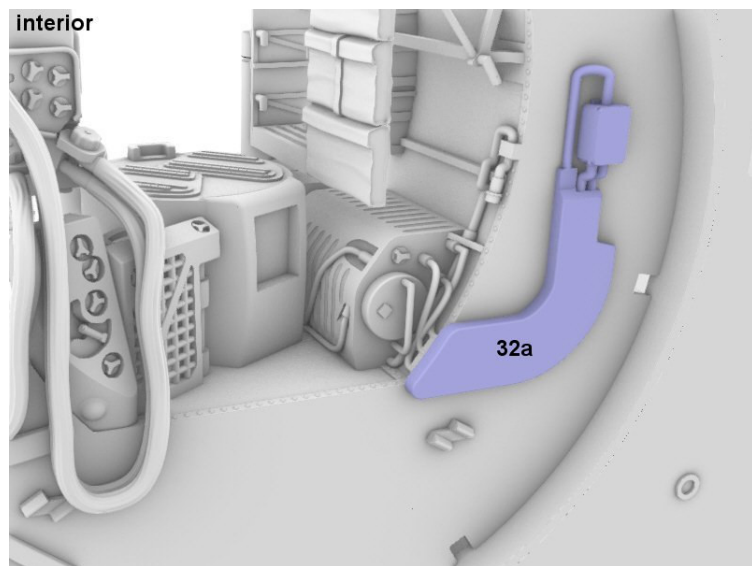
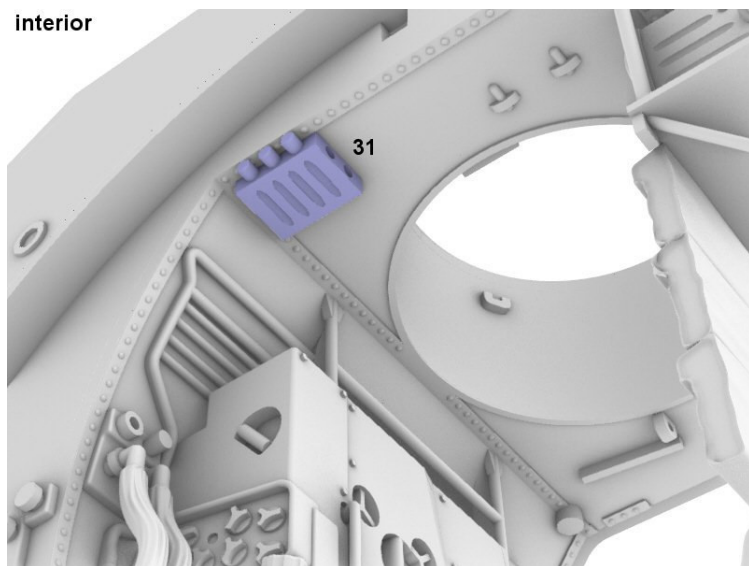
Configuration for Apollo 12 to 14



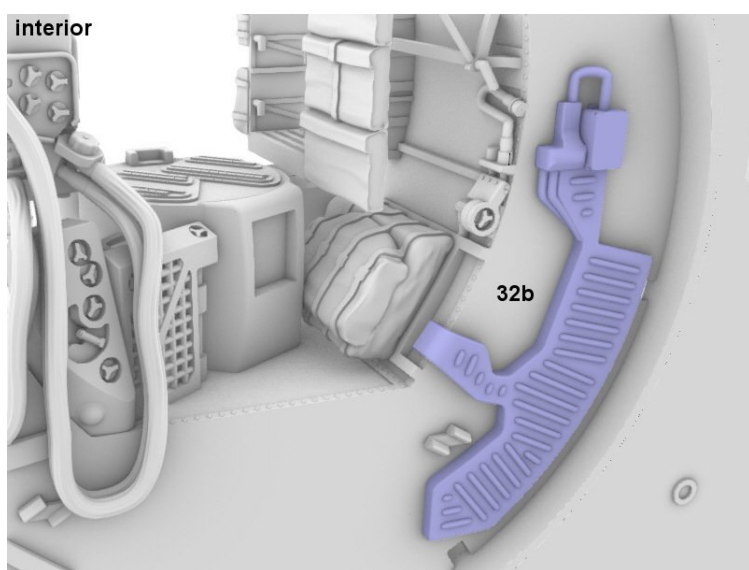
Configuration for Apollo 15 to 17



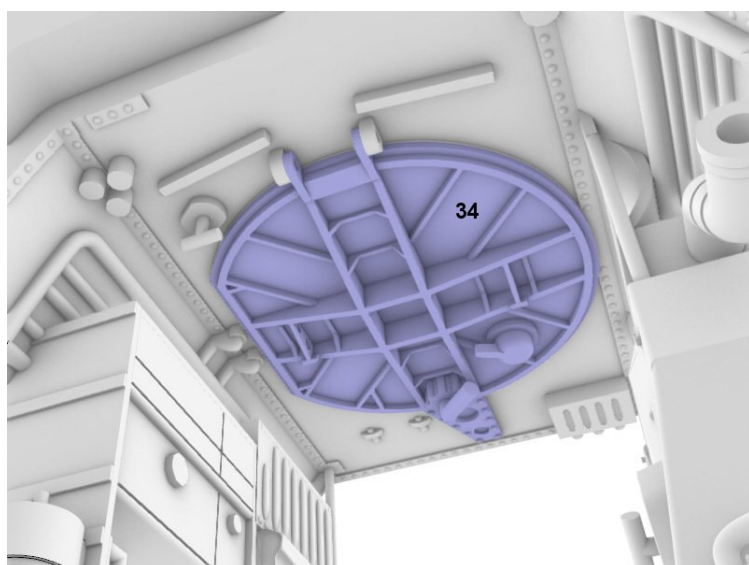
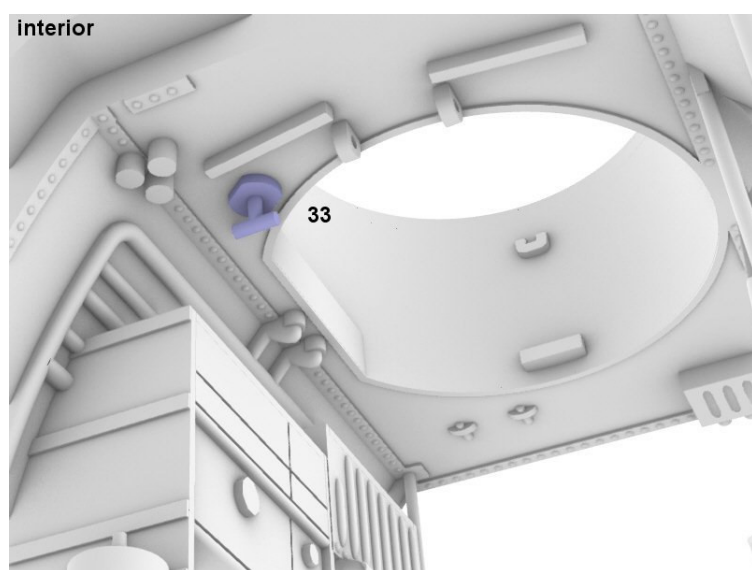




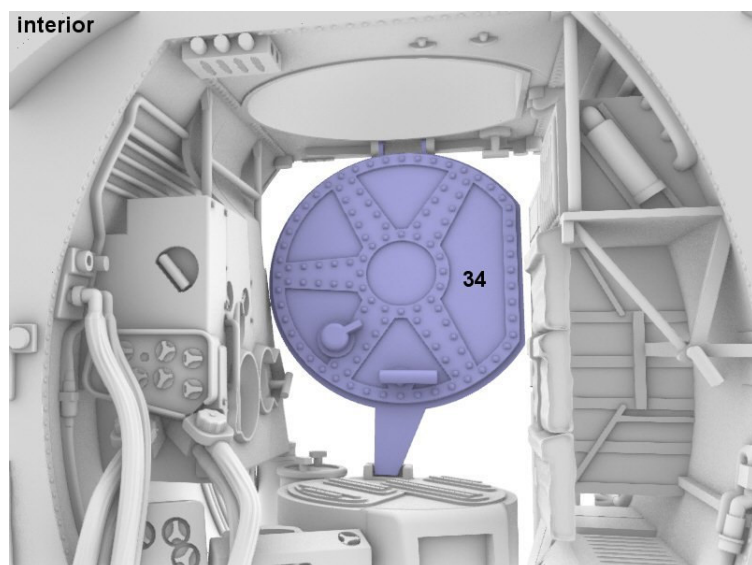
Configuration for Apollo 9 to 11



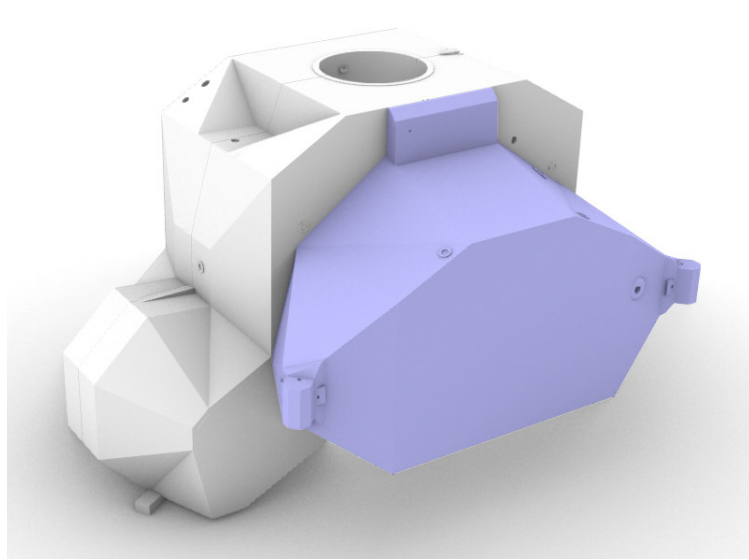
Configuration for Apollo 12 to 17



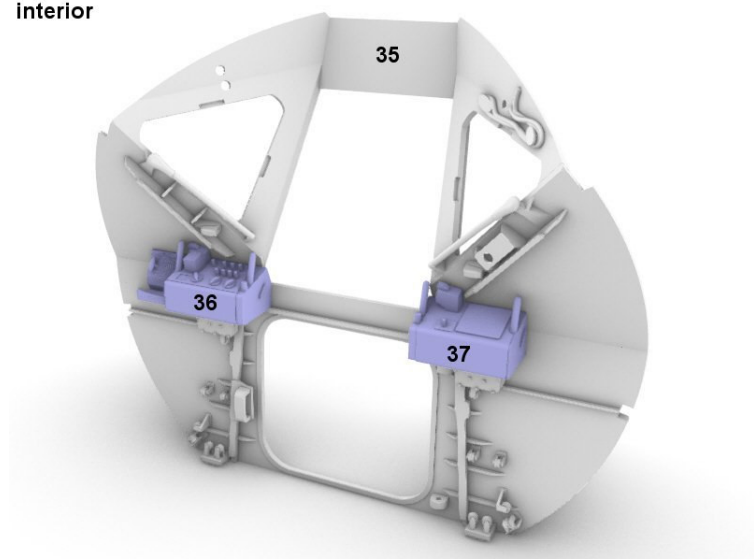
Upper hatch in closed configuration. Even if you don't intend to model the LM interior, part 34 needs to be installed.



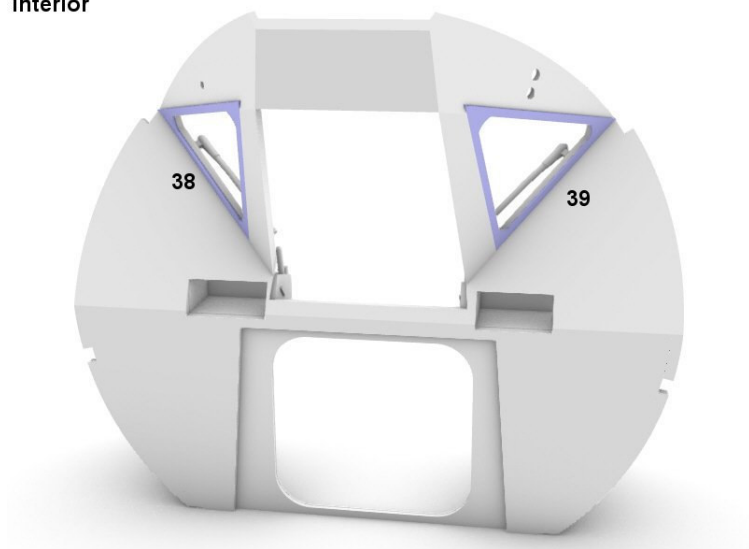
Upper hatch in open configuration (during Apollo 15 stand-up EVA for instance).



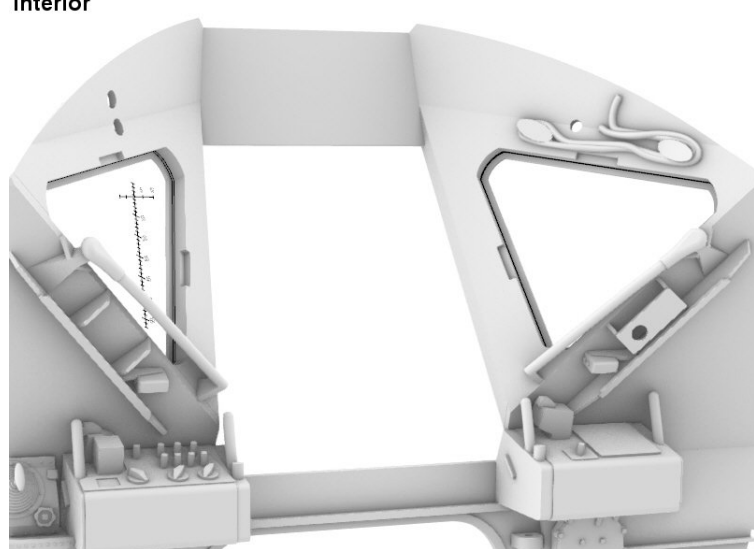
interior



interior

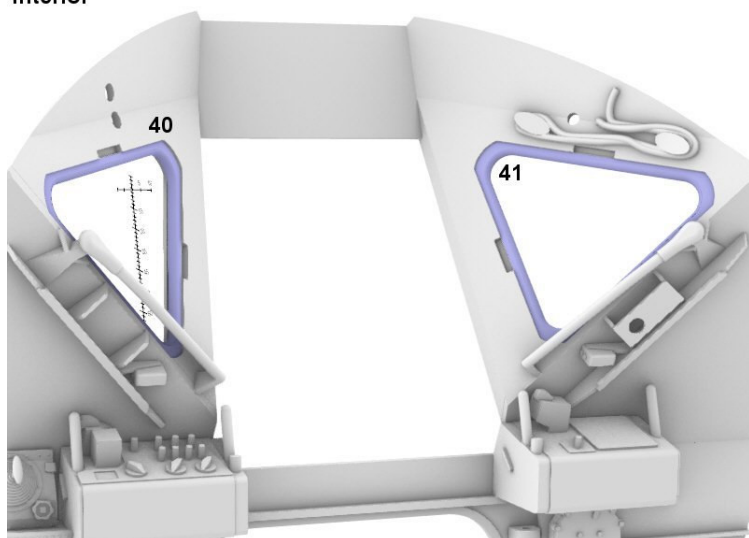


interior

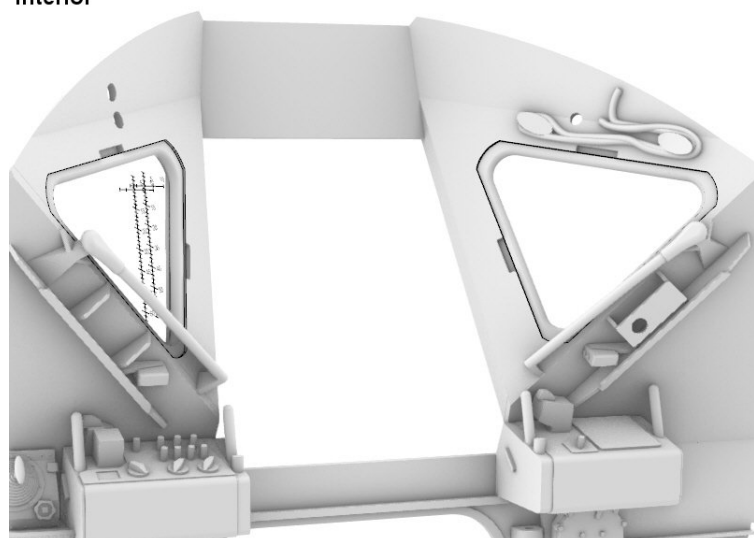


The outer windows are cut out of transparent plastic sheet using the patterns in [A4](#) or [US Letter](#).

interior

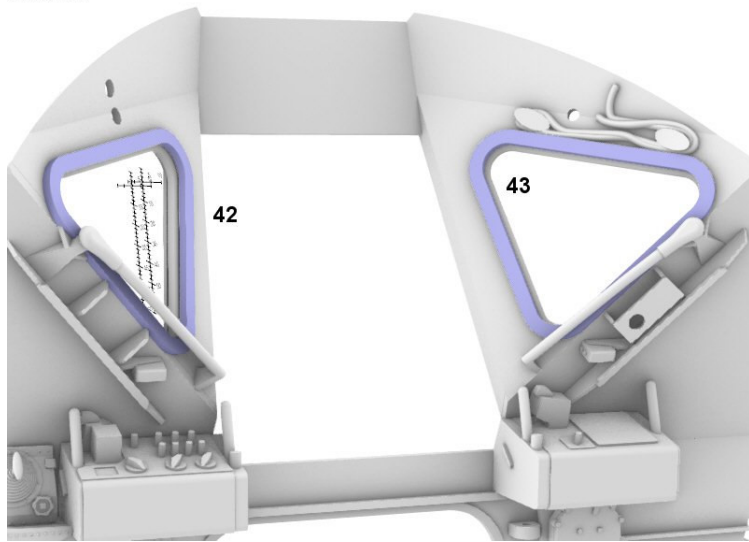


interior

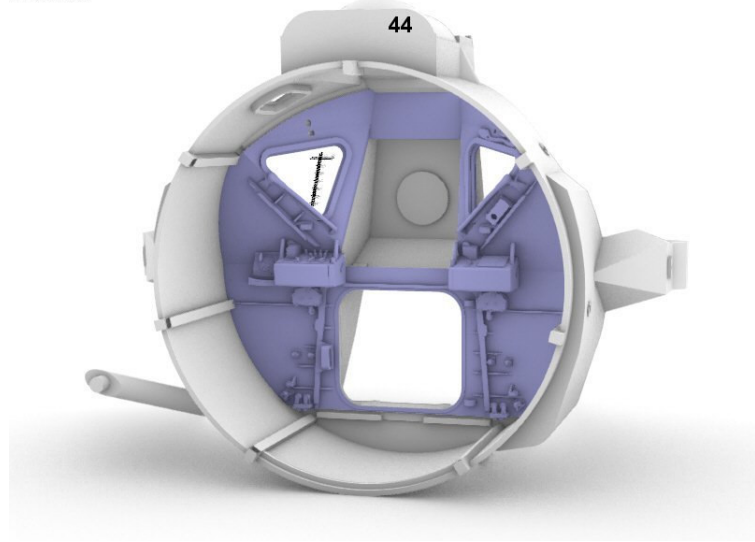


The inner windows are cut out of transparent plastic sheet using the patterns in [A4](#) or [US Letter](#).

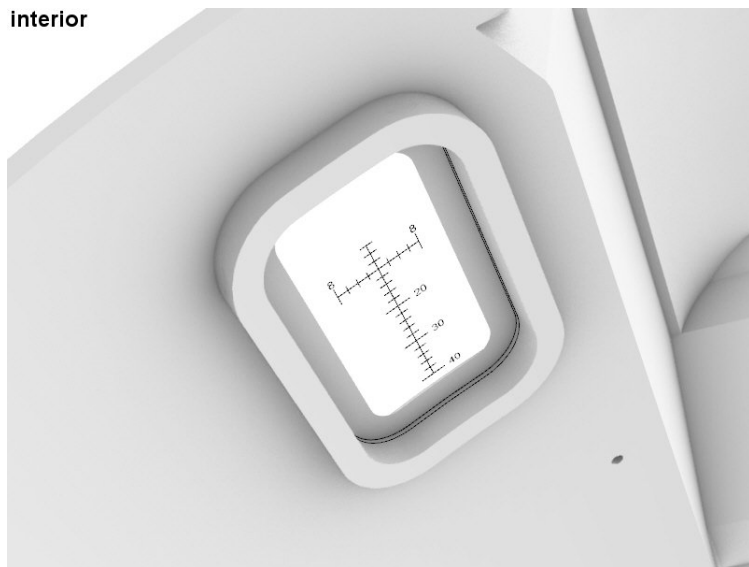
interior



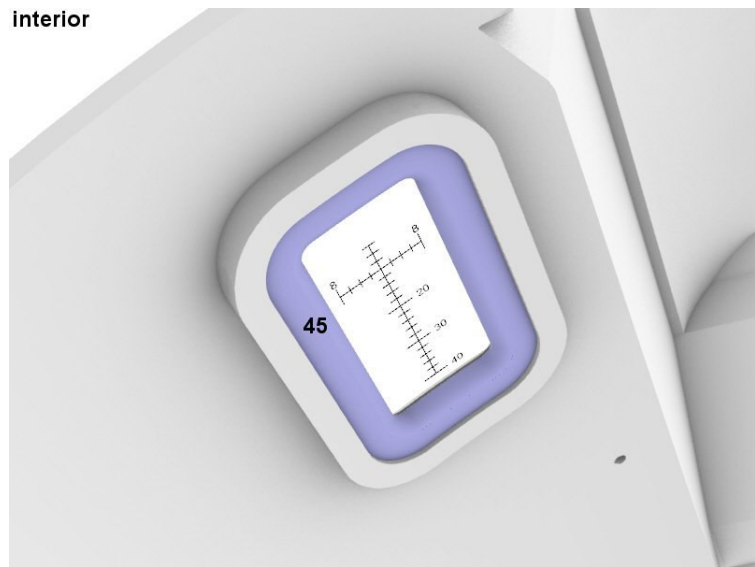
interior



interior

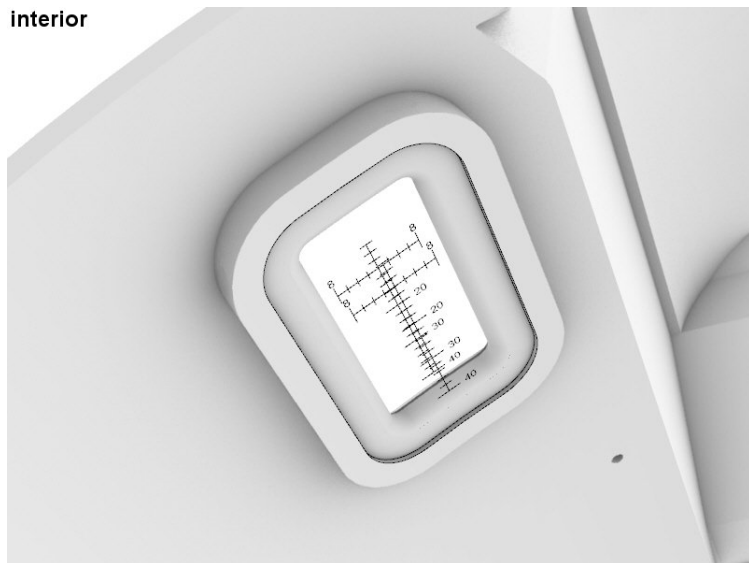


interior

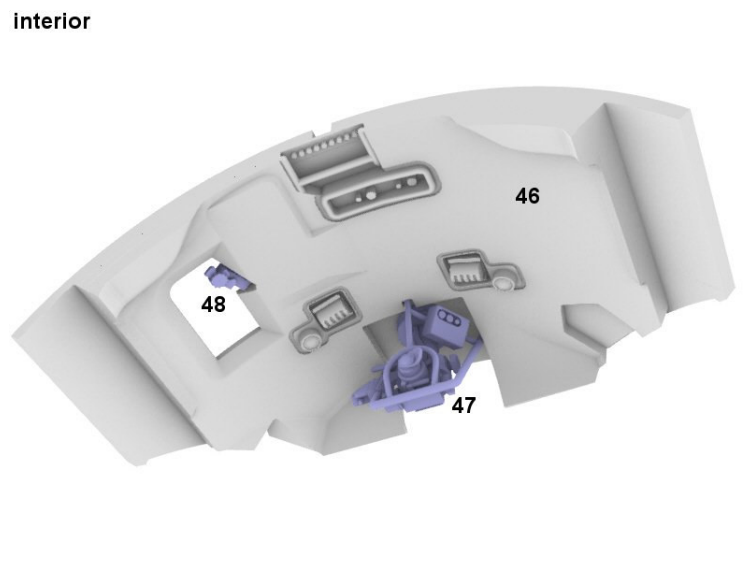


The outer windows are cut out of transparent plastic sheet using the patterns in [A4](#) or [US Letter](#).

interior

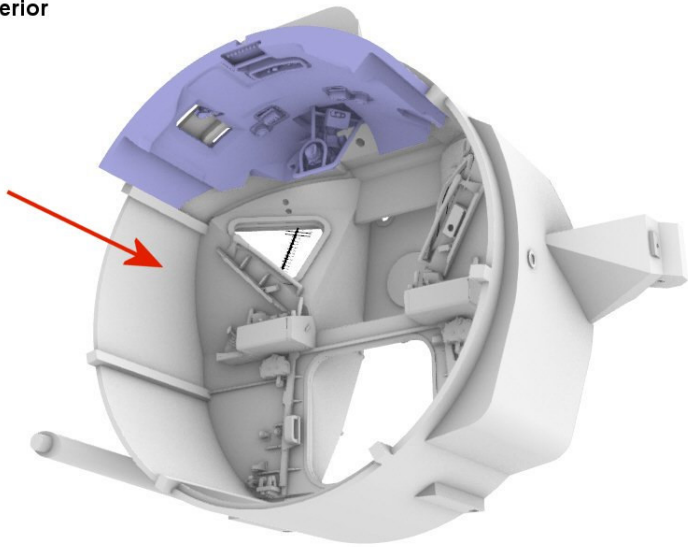


interior

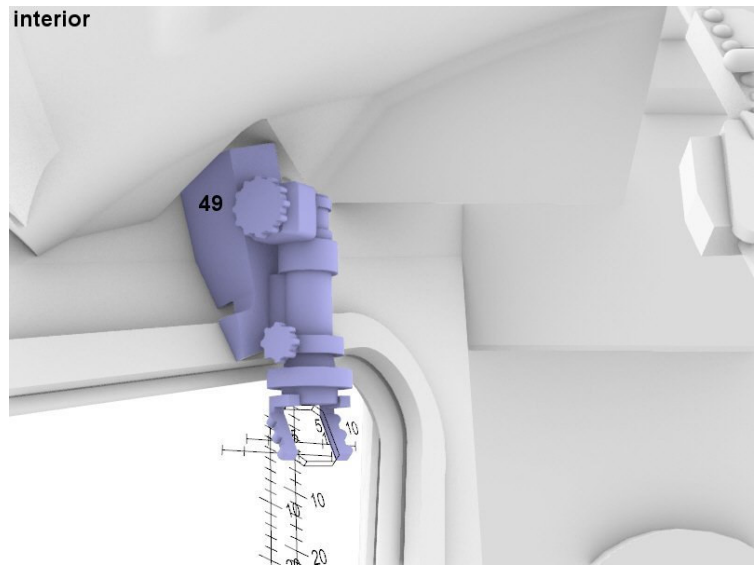


The outer windows are cut out of transparent plastic sheet using the patterns in [A4](#) or [US Letter](#).

interior

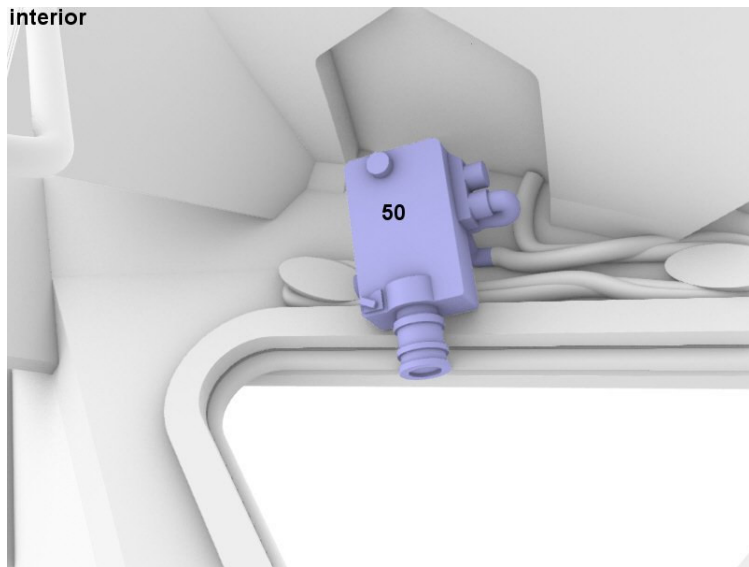


interior

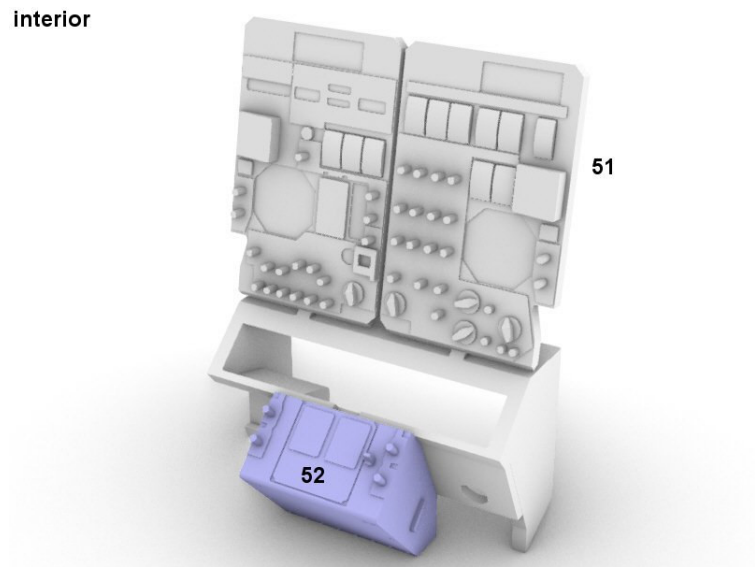


The COAS glass is cut out of transparent plastic sheet.

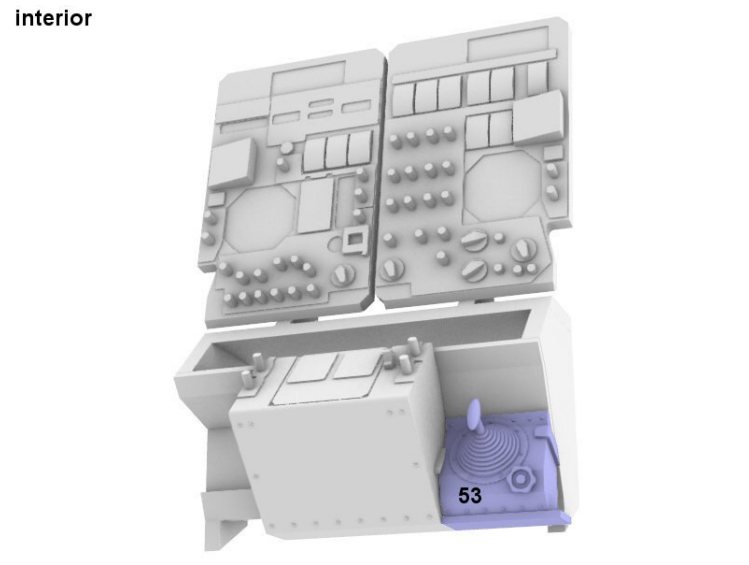
interior



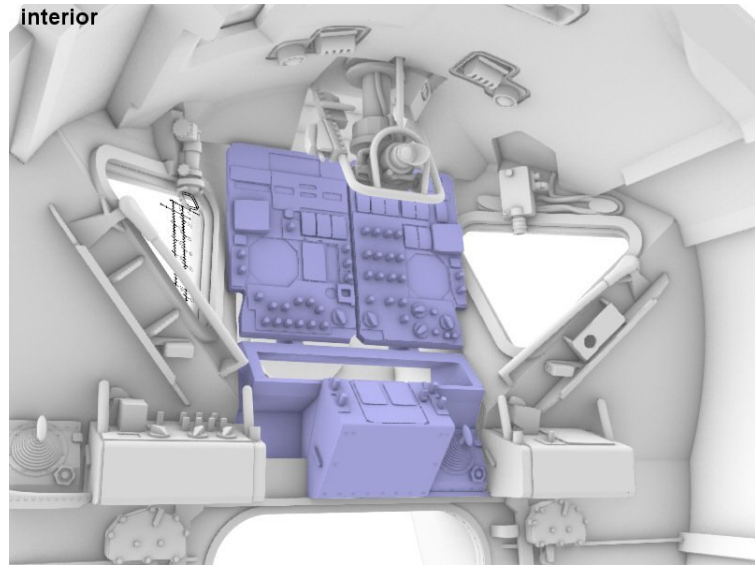
interior

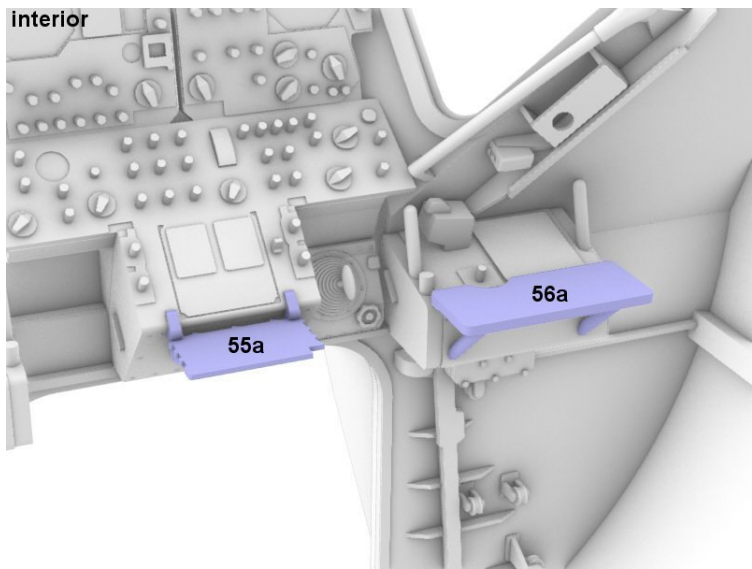
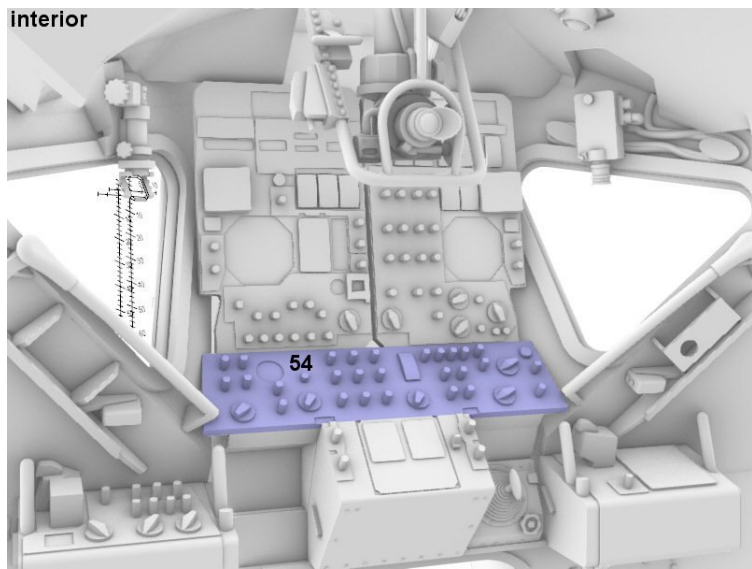


interior

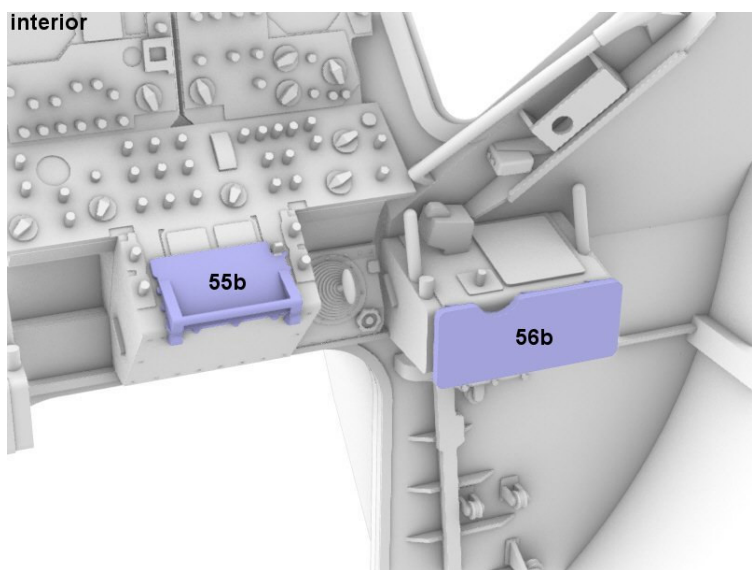


interior

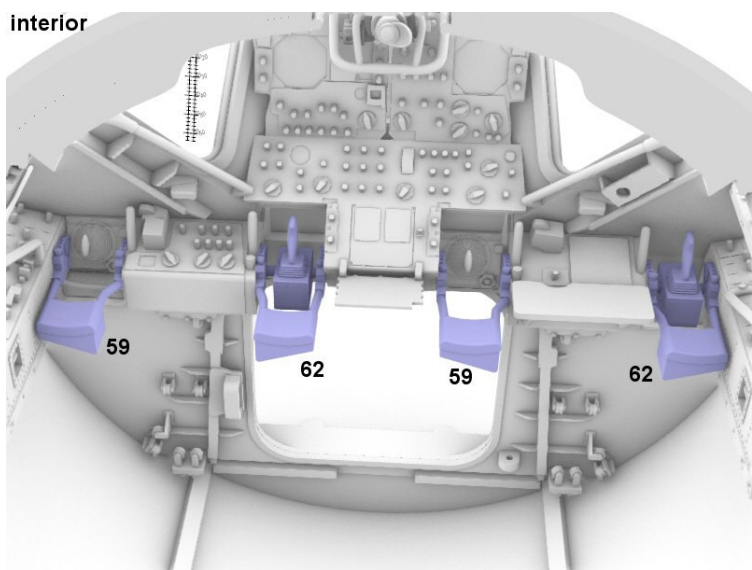
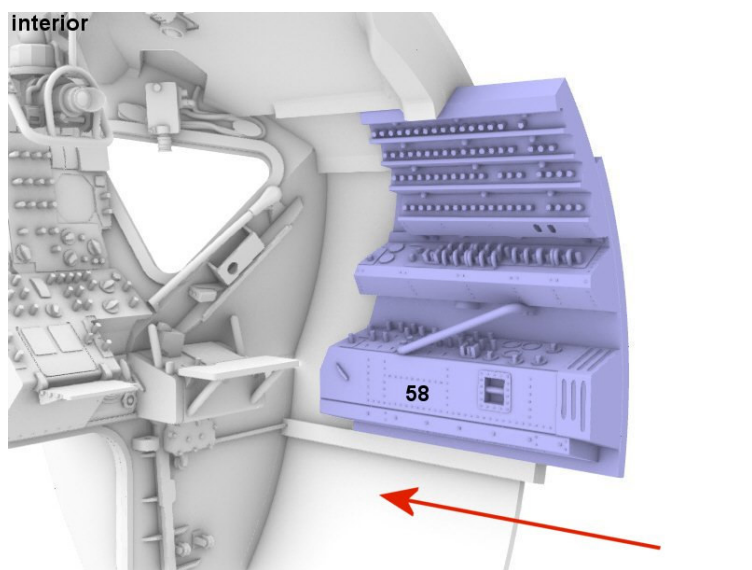
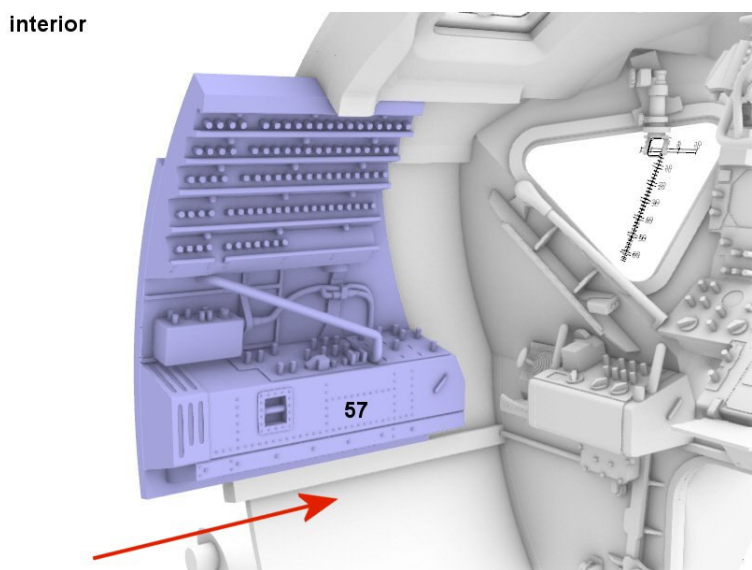




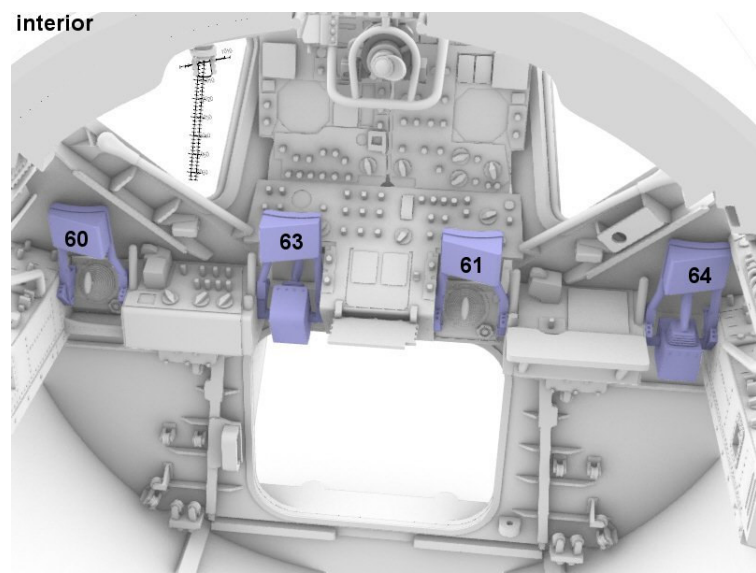
The panel 4 and panel 6 tables can be displayed unfolded.



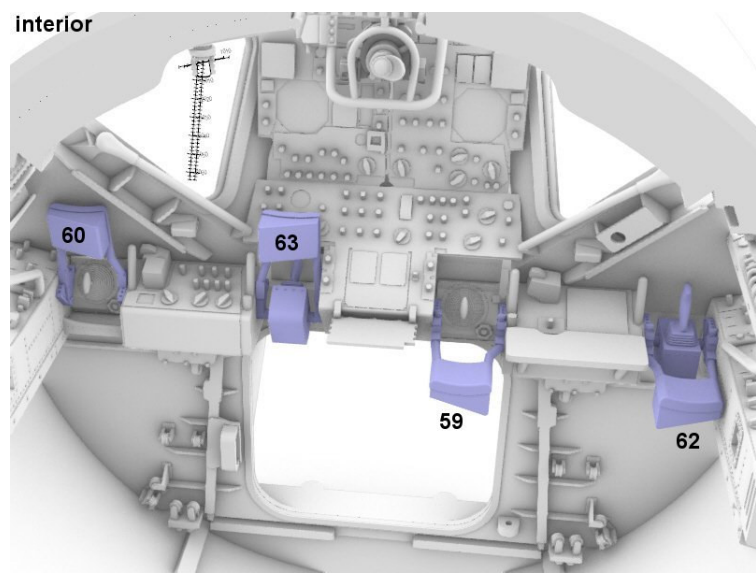
The panel 4 and panel 6 tables can also be displayed folded.



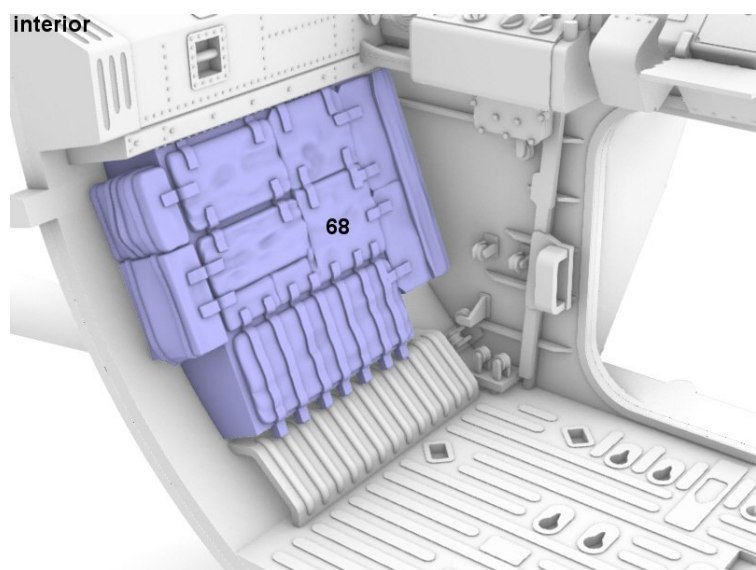
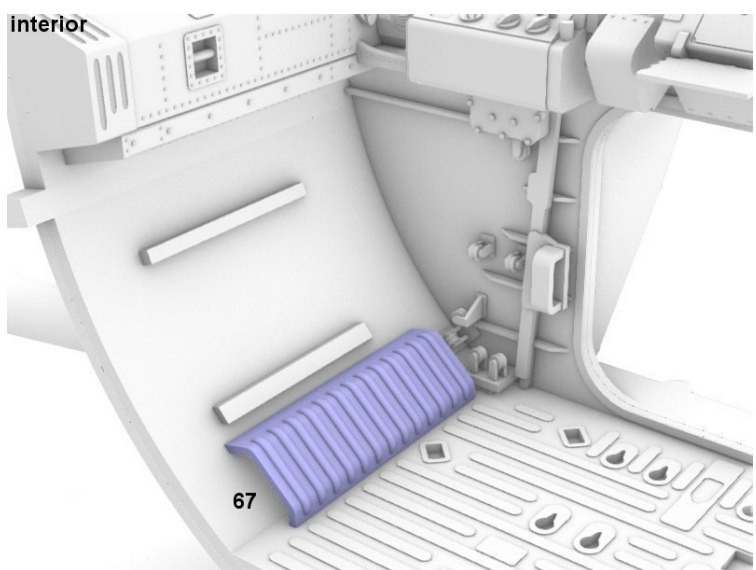
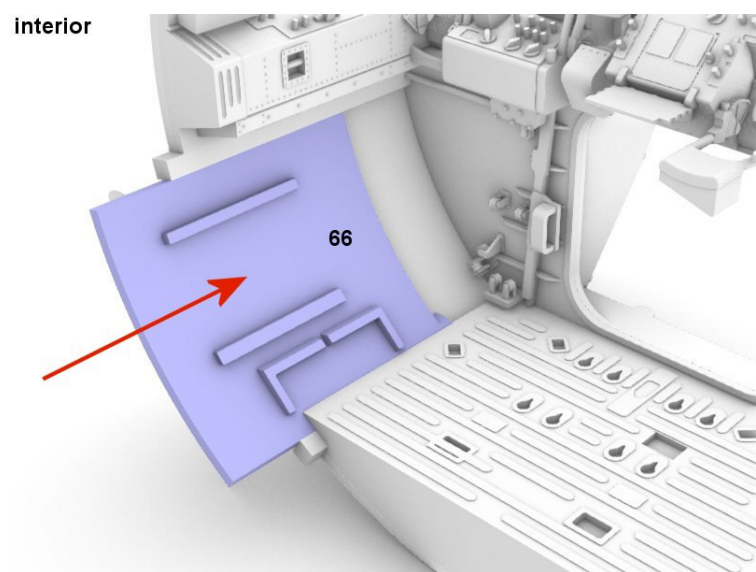
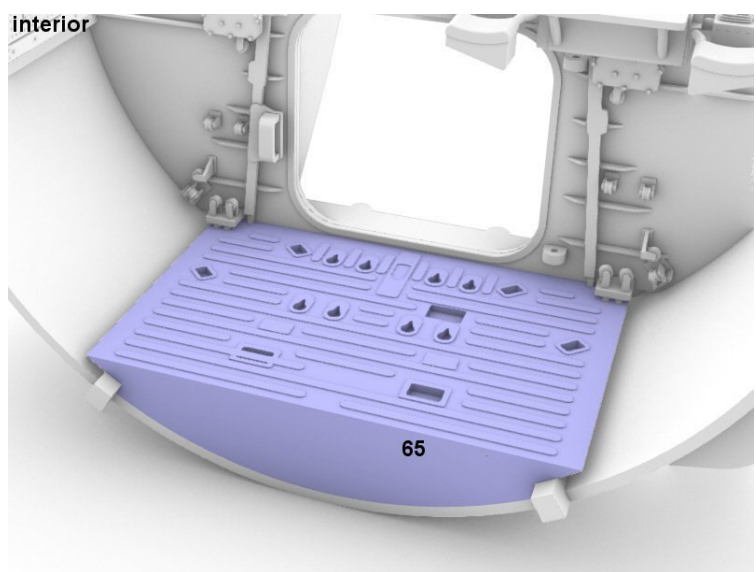
The TTCA and ATCA armrests can be displayed unfolded.

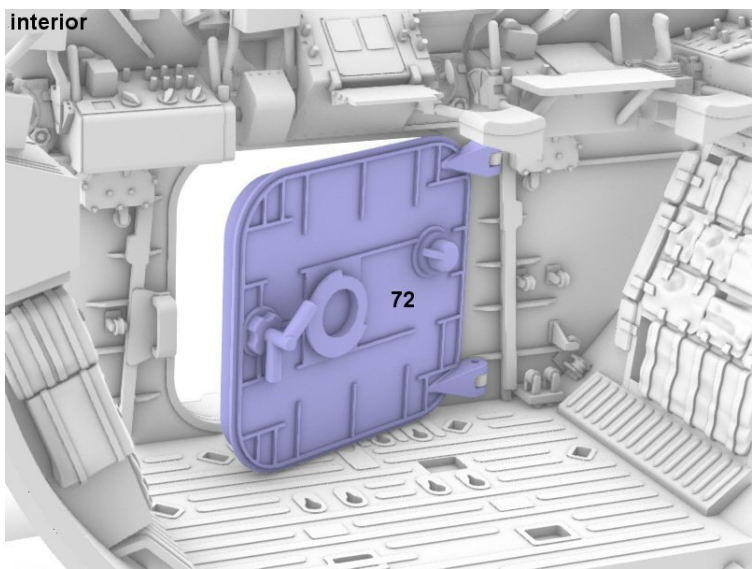
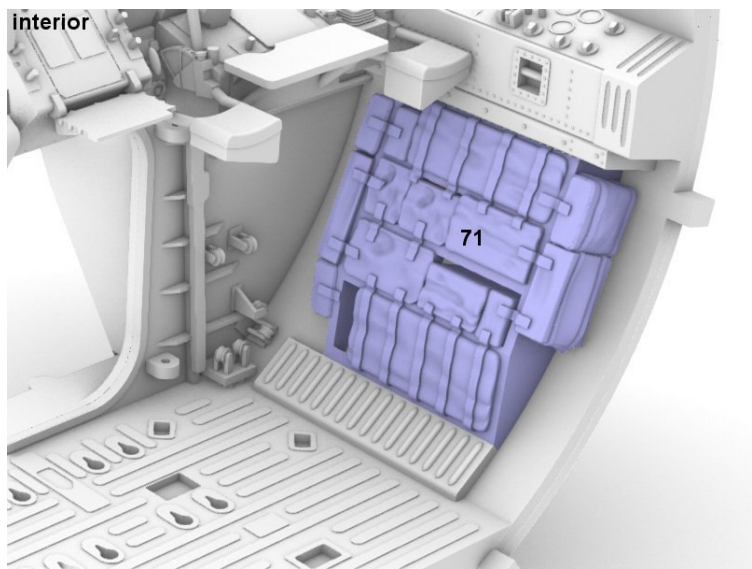
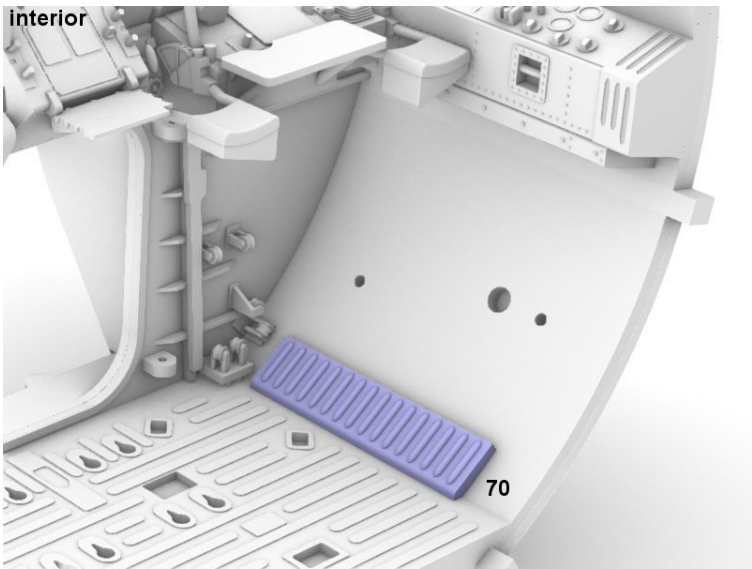
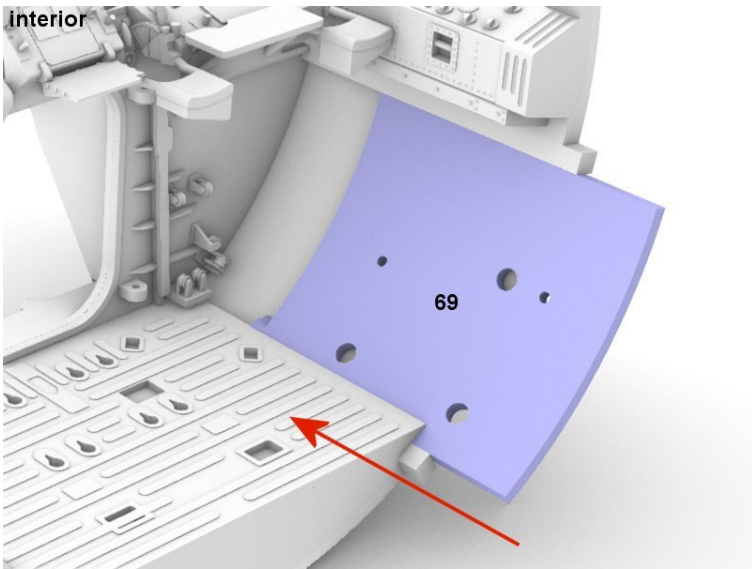


The TTCA and ATCA armrests can be displayed folded.

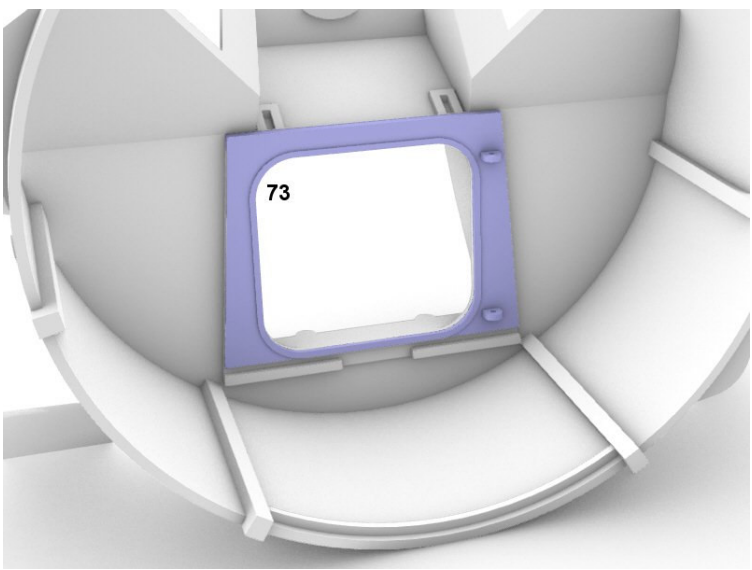
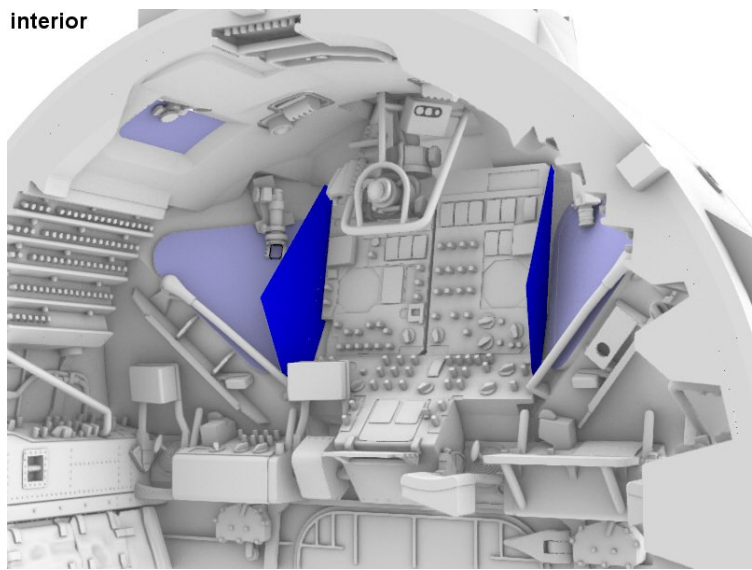


The TTCA and ATCA armrests can be displayed either folded and unfolded.



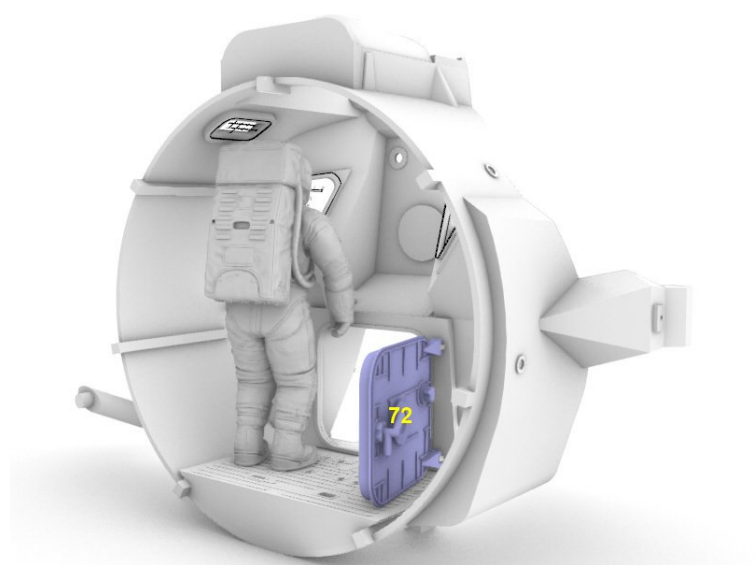
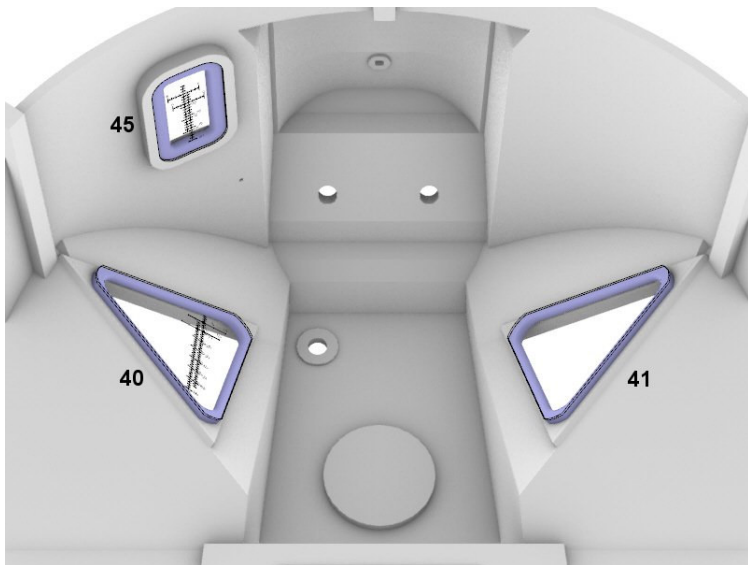
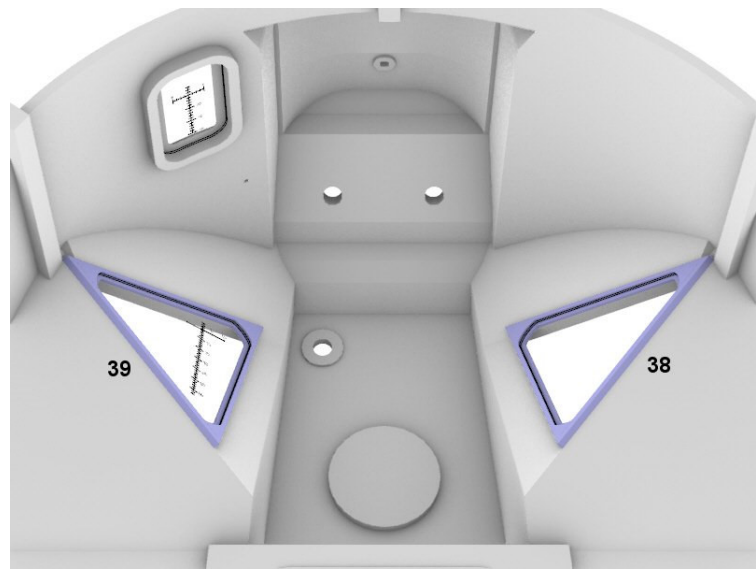
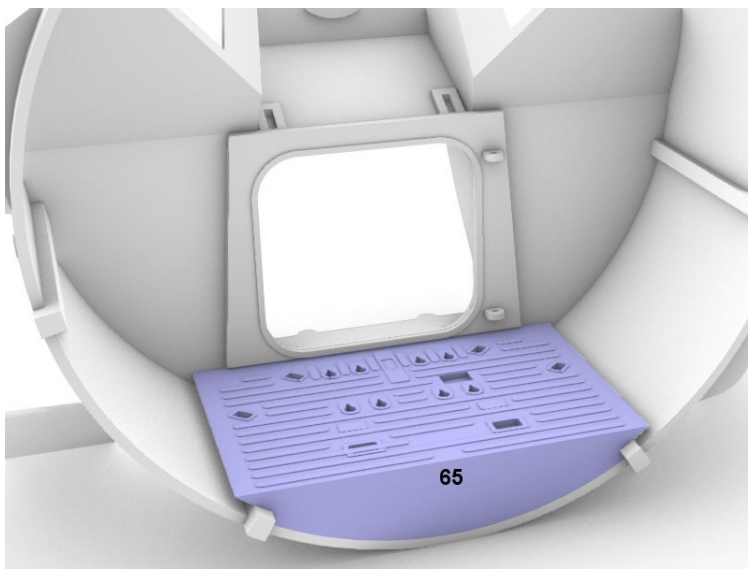


There no need to glue the door, insert 0,75 mm rods in the hinges to allow the hatch to open freely.

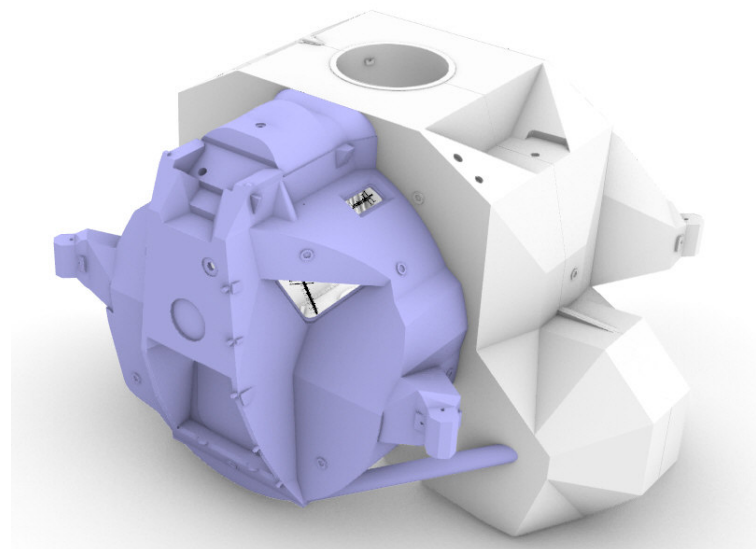
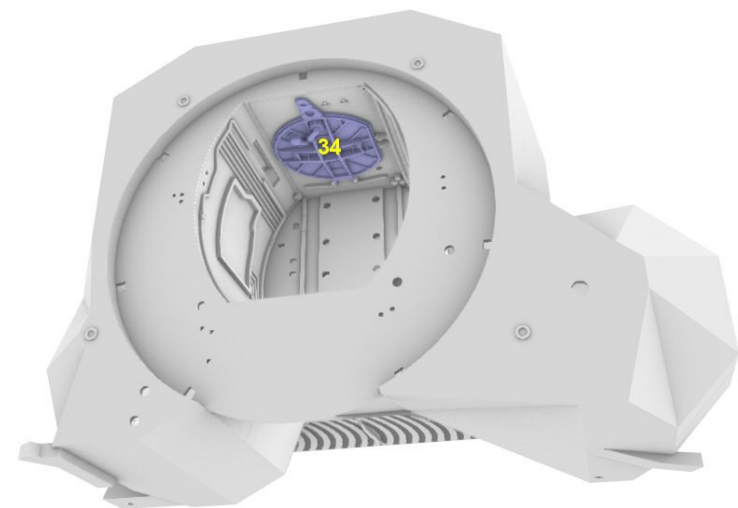


The glareshields and window shades were made out of black paper, the patterns can be found [in a pdf document I created for different scales](#).

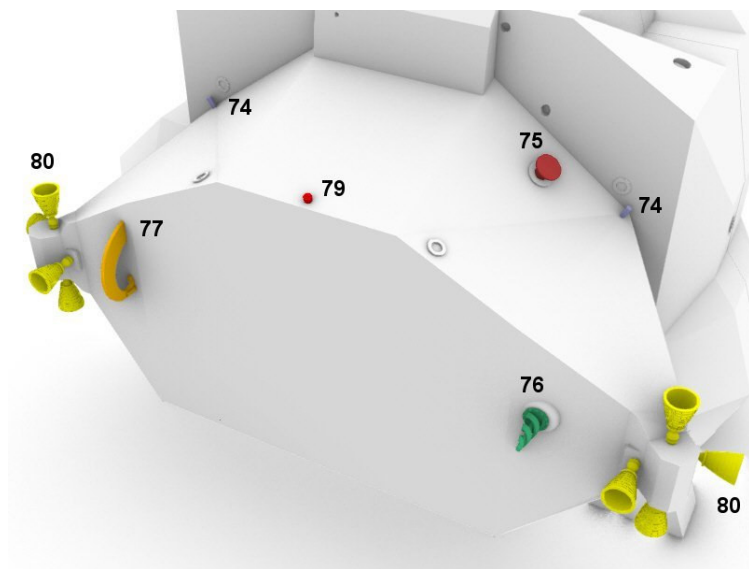
If you don't intend to model the interior there is still some work to do inside like fixing the hatch, the floor and the windows.



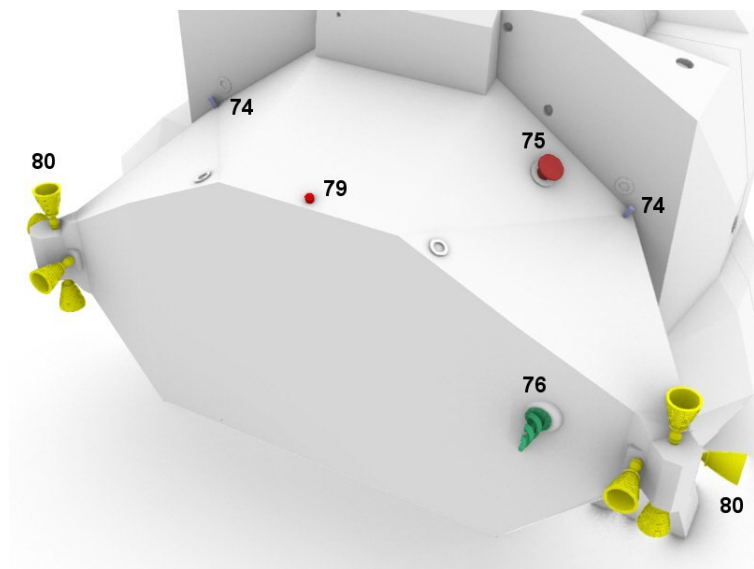
This is a Max Grüter astronaut available on Shapeways and Cults3D (<https://cults3d.com/fr/mod%C3%A8le-3d/art/apollo-a7-l-spacesuit-study>)



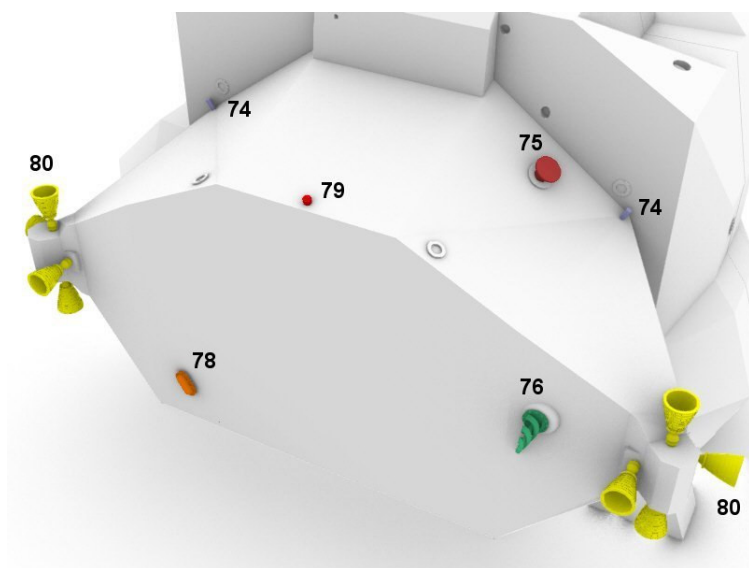
If you modelled the interior the forward section is just inserted but not glued and can be dismantled to show the interior



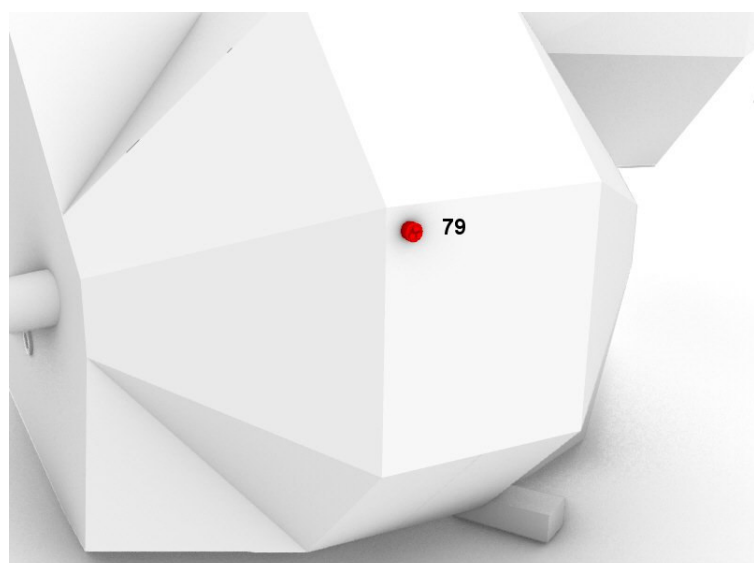
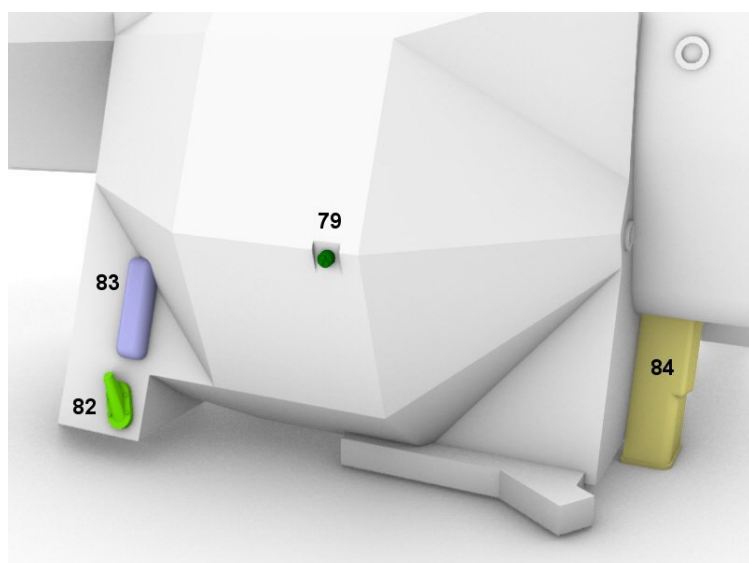
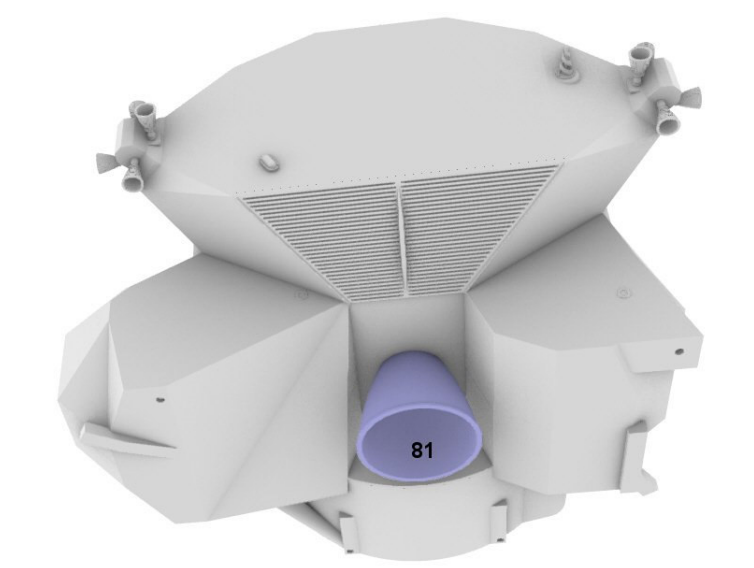
Aft section configuration for Apollo 5 and Apollo 9. Parts 74 can be replaced by a 0.75 mm rod (length 2 mm)

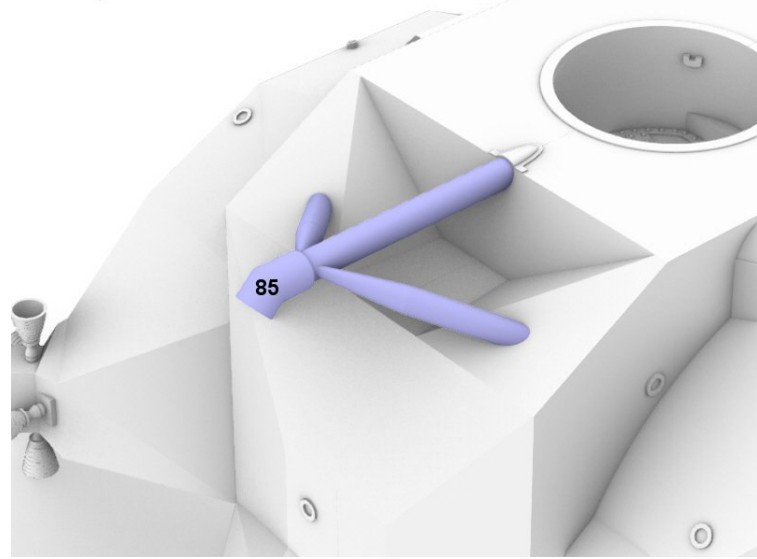
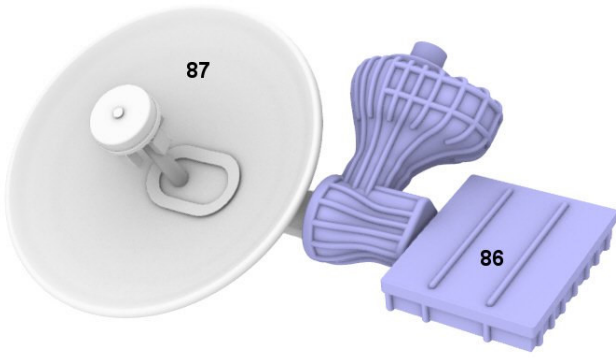


Aft section configuration for Apollo 10.

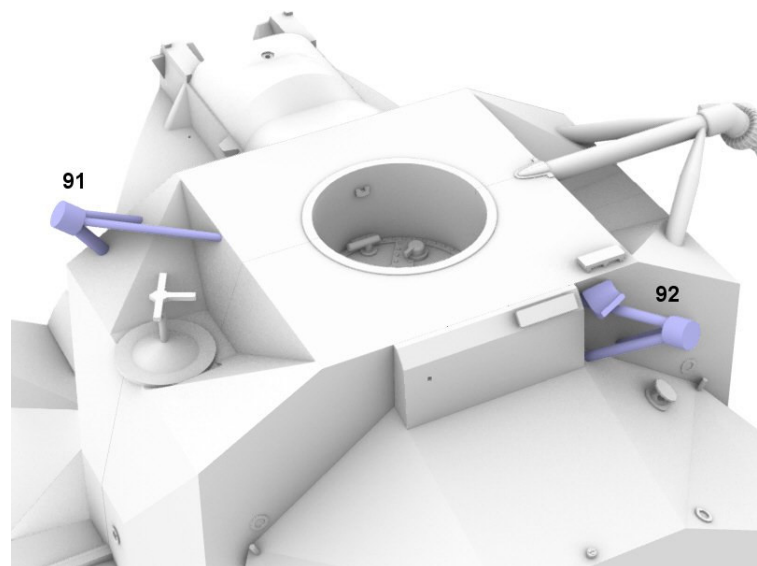
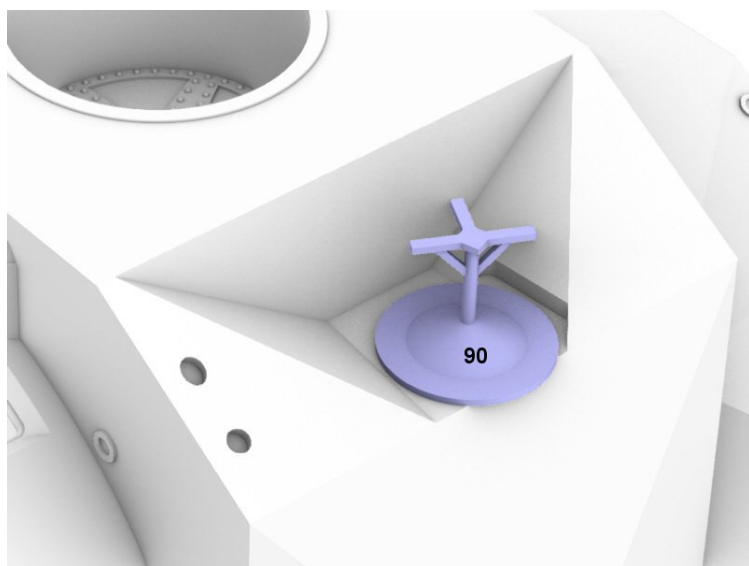
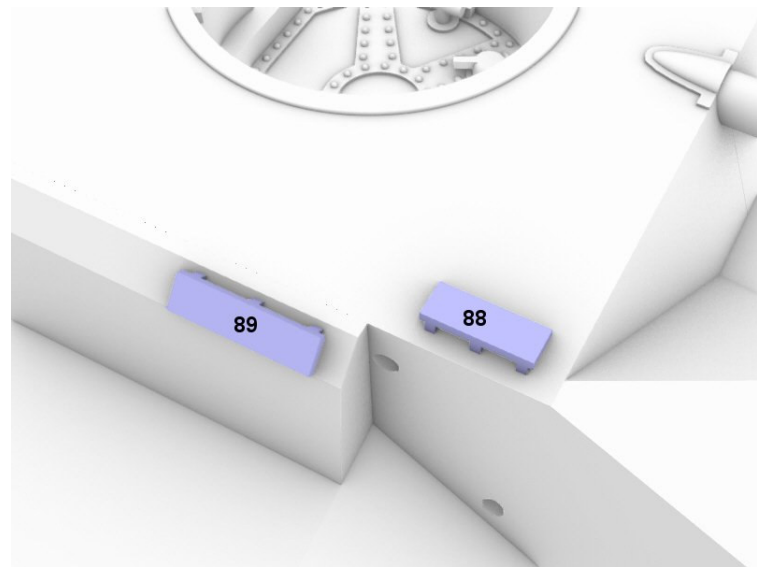
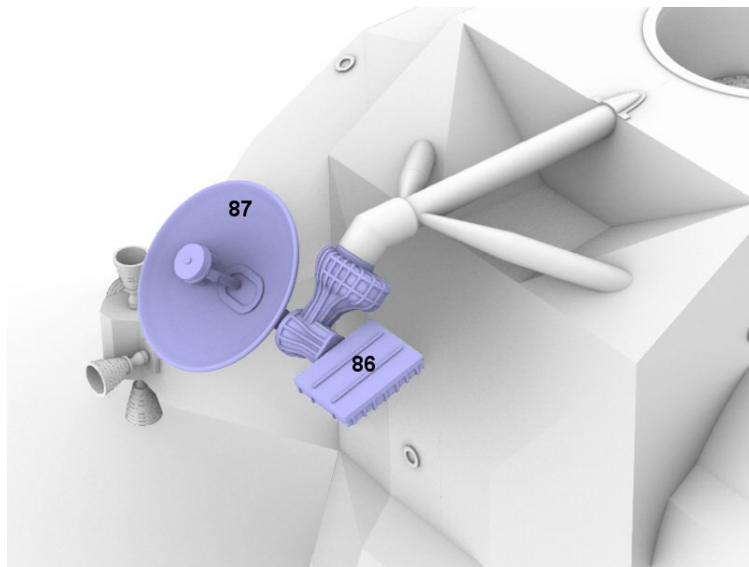


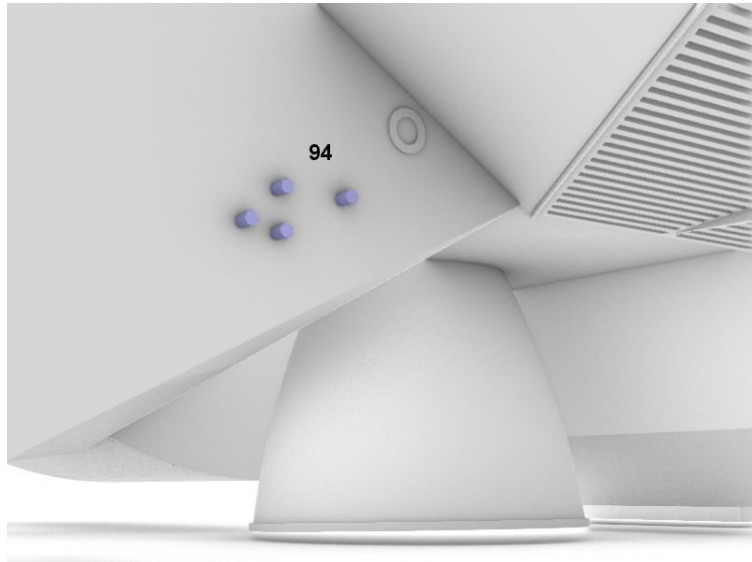
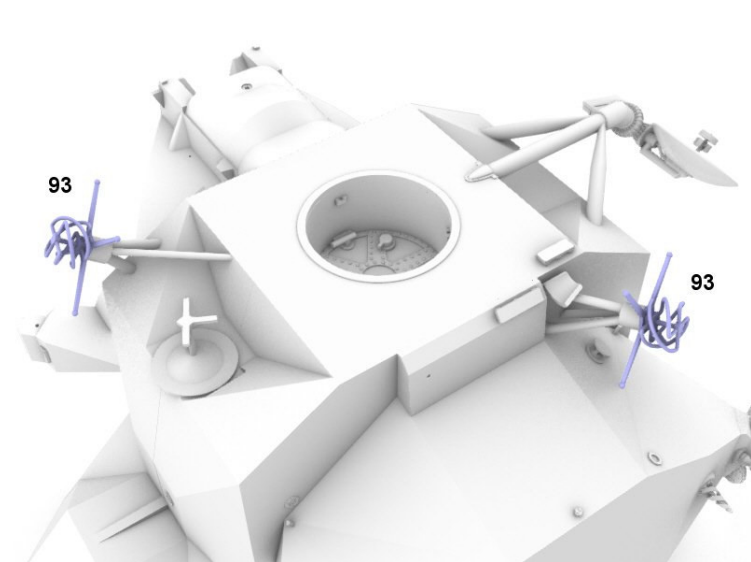
Aft section configuration for Apollo 11 to 17.



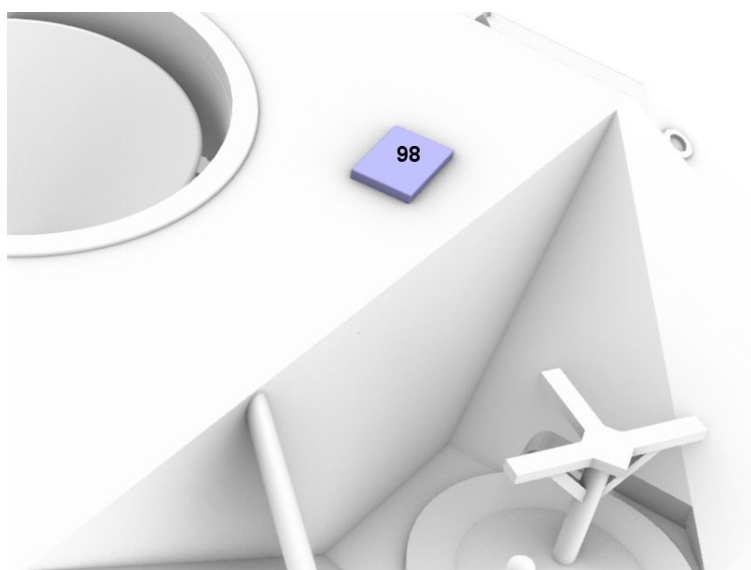
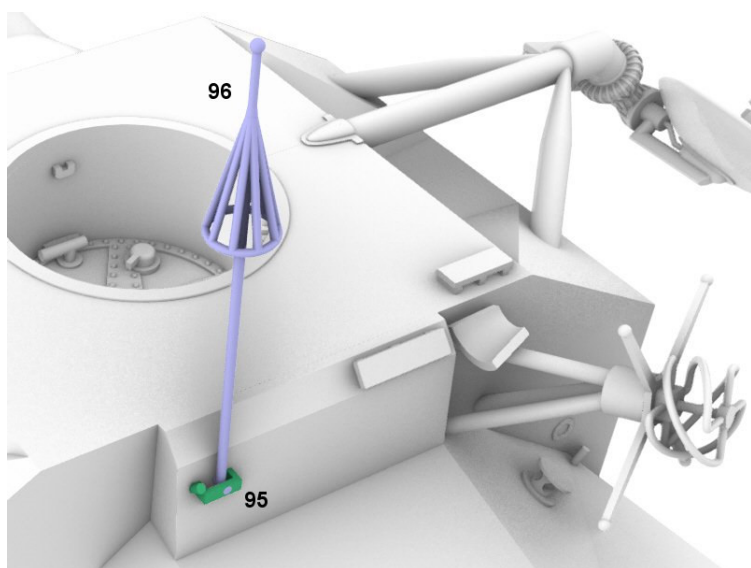


For the orientation of the antenna you can refer to this [document](#). Note that the Apollo 16 antenna motor failed, the antenna pointed to the horizon in the backward direction of the LM (see [AS16-113-18331](#)).

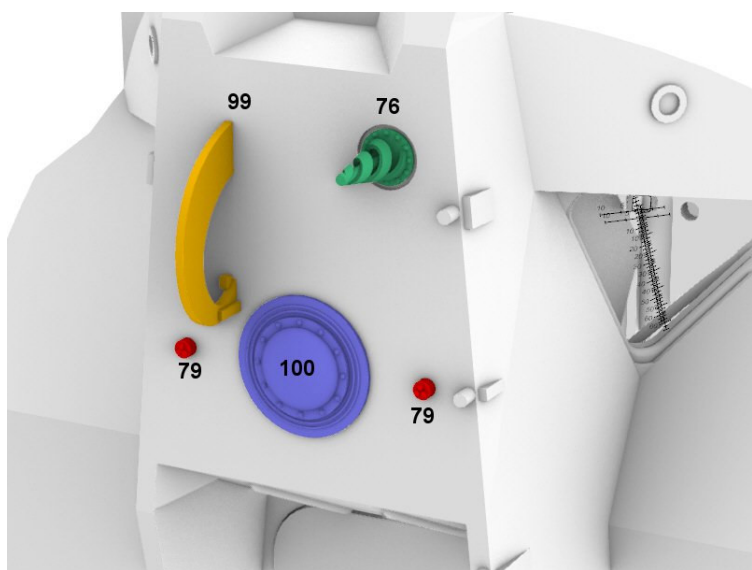




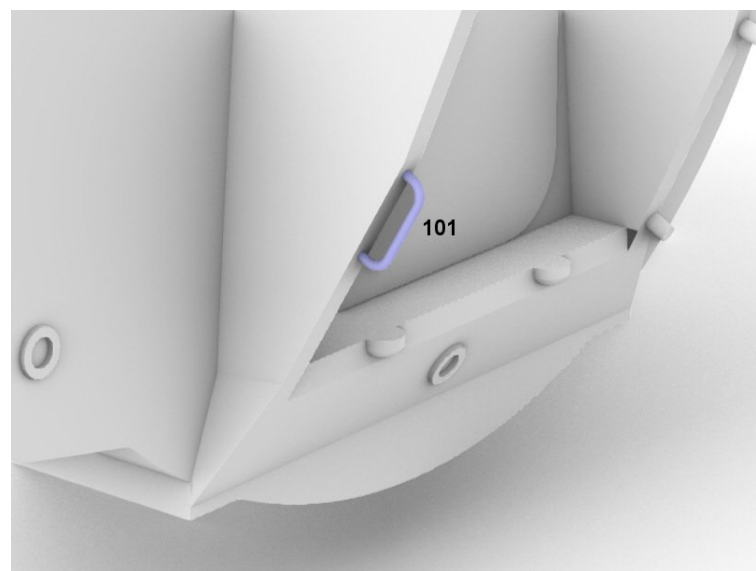
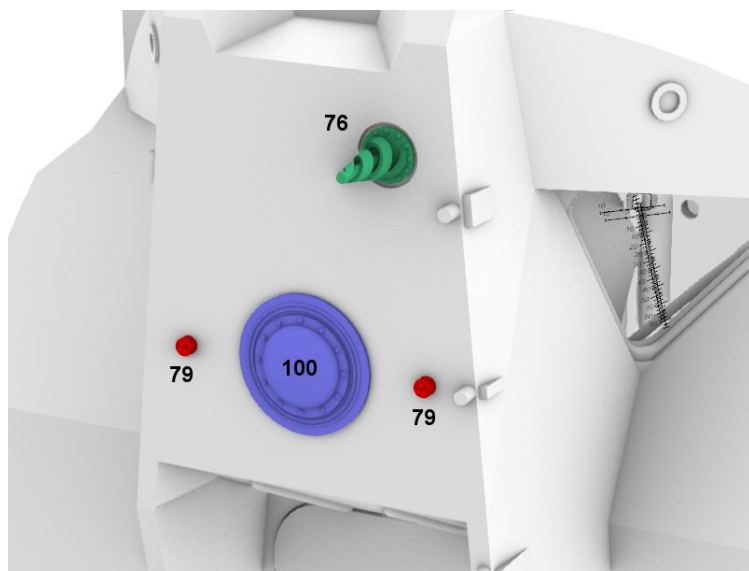
Parts 94 can be replaced by a 0.75 mm rod (length 1 mm).



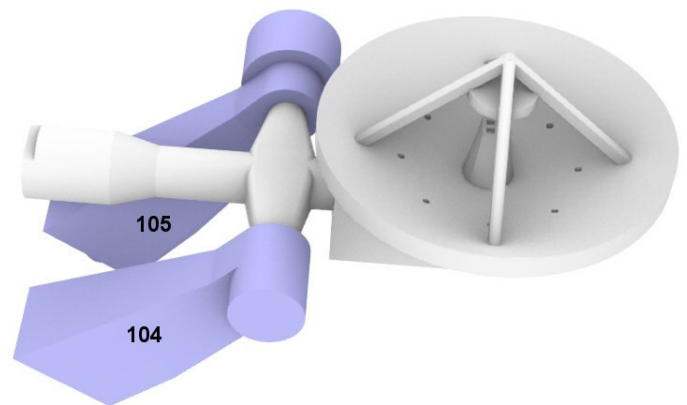
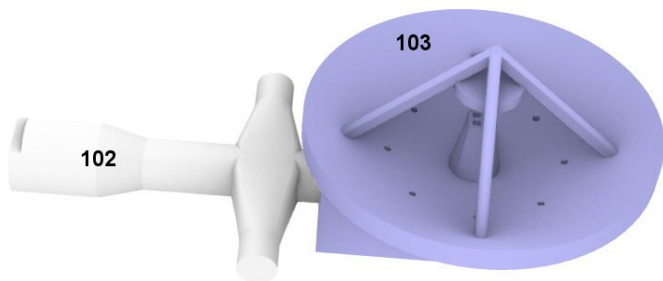
Part 98 is only present on Apollo 15 to 17.



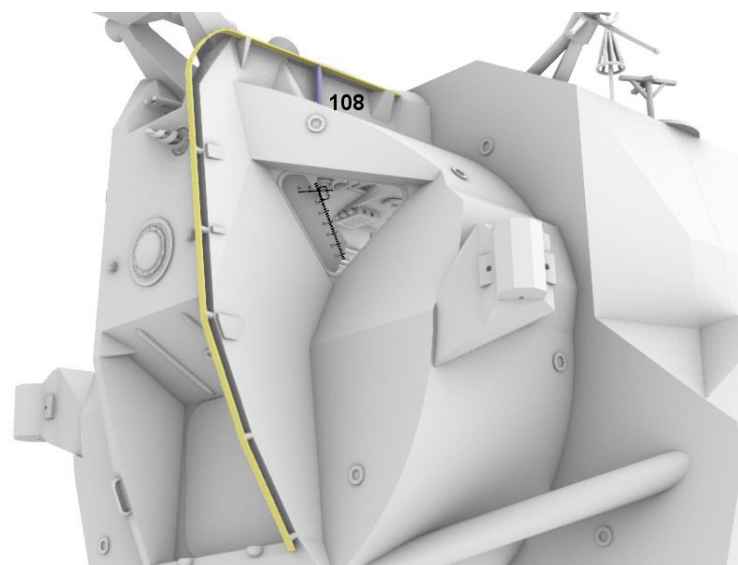
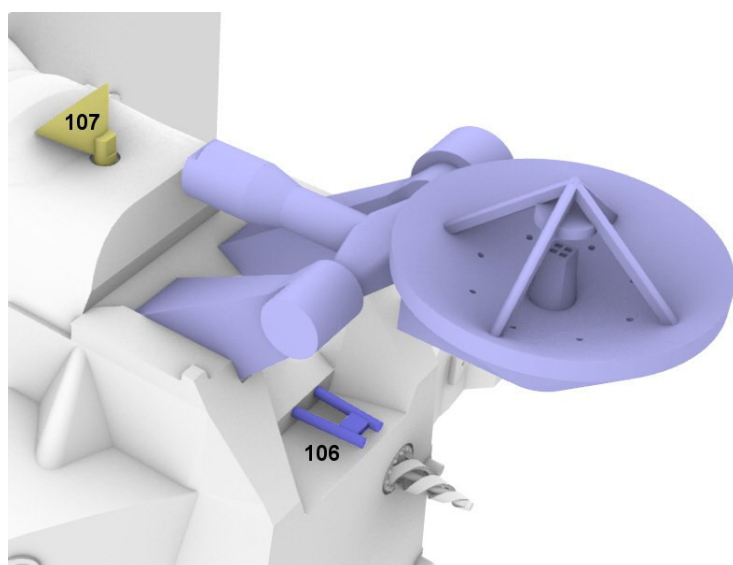
Configuration for Apollo 5 and 9.



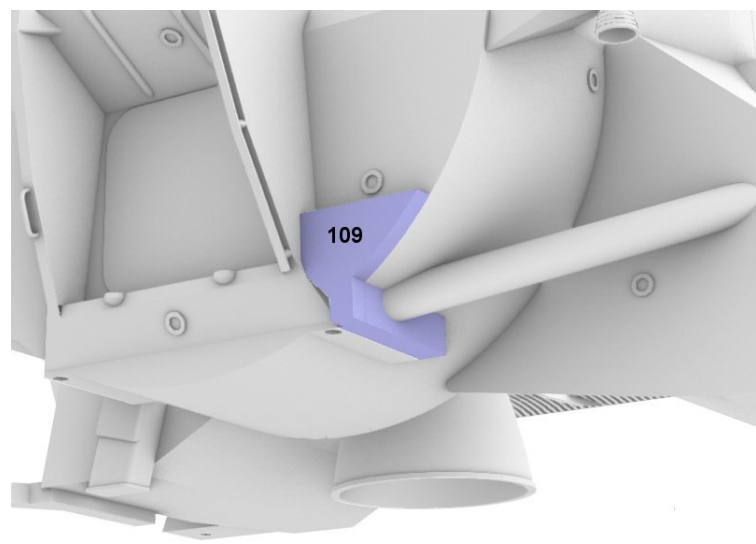
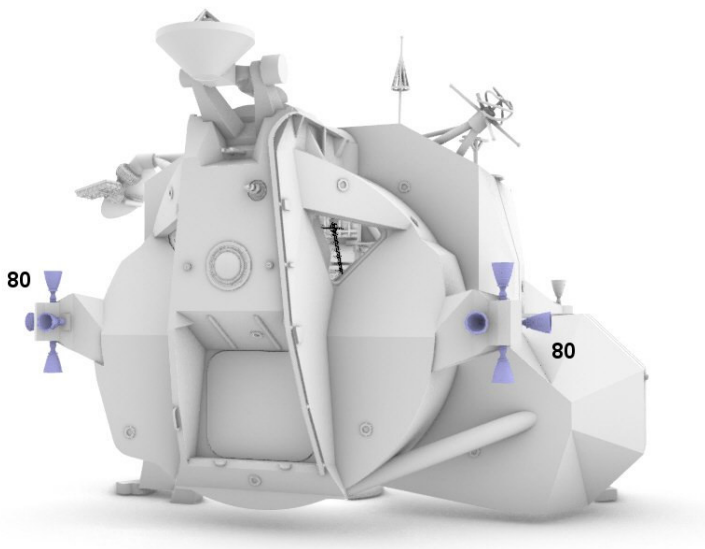
Configuration for Apollo 10 to 17.



The orientation of the rendezvous radar can be chosen freely depending on the moment of the mission.



Parts 108 can be replaced by a 0.75 mm rod, the handrail itself cut in paper using the coating pattern in [A4 format](#) or [Letter format](#).



Part 109 is only present on Apollo 15 to 17.