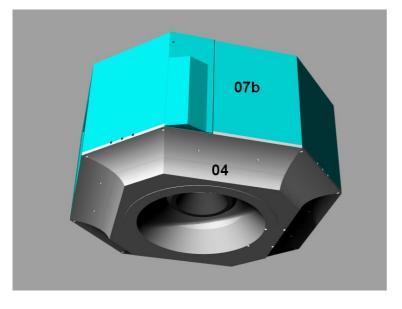
# Apollo 5 Lunar Module Descent Stage

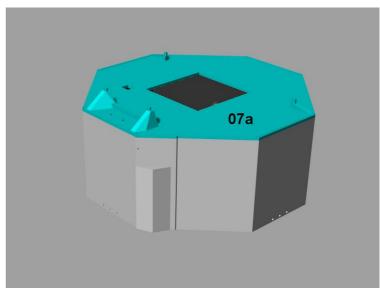
For further information on building this model check

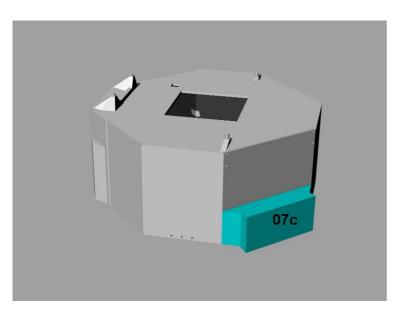
1/24 LM: <a href="http://spacemodels.nuxit.net/LEM-24/index.htm">http://spacemodels.nuxit.net/LEM-24/index.htm</a>

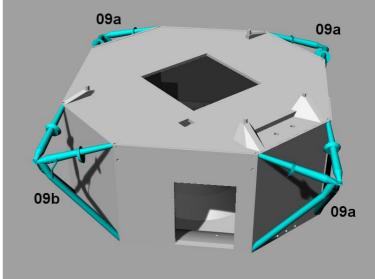
1/32 LM: <a href="http://spacemodels.nuxit.net/1-32 LM/index.htm">http://spacemodels.nuxit.net/1-32 LM/index.htm</a>

1/48 LM: http://spacemodels.nuxit.net/1-48-LM/index.html

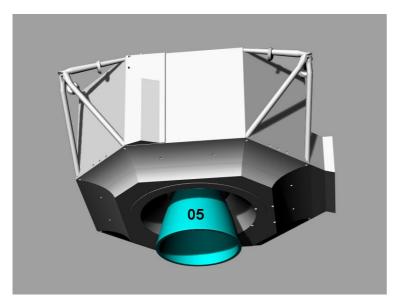


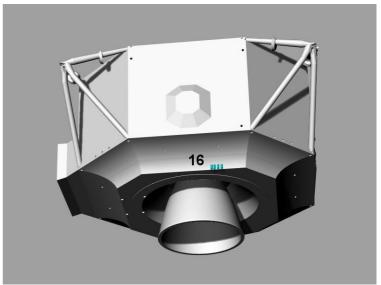




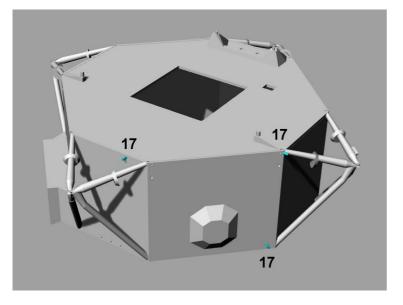


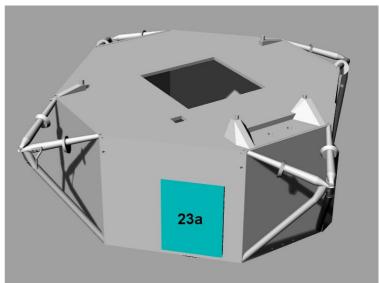
Part 09b is slightly different from parts 09a as it has the umbilical connector to the SIV-B stage,



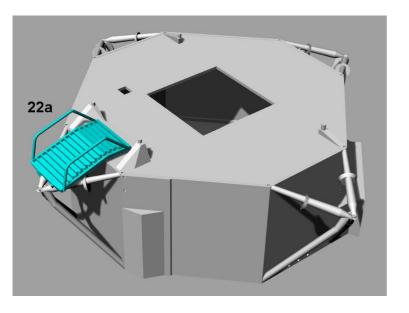


Parts 16 (propellant drains) can be replaced by 0.75 mm styrene rods. The outside lenght is 2 mm.





Parts 17 (helium vents) can be replaced by 0.75 mm styrene rods. The outside length is 1.5 mm.



# Apollo 9 to 14 Lunar Module Descent Stage

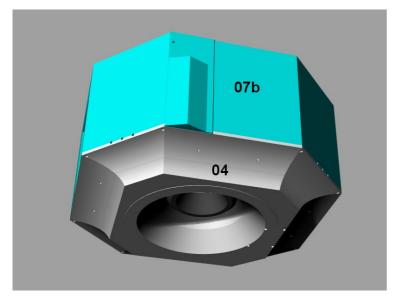
#### Extended Landing Gears

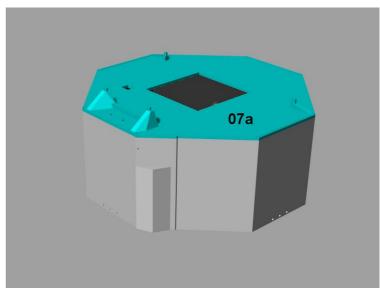
For further information on building this model check

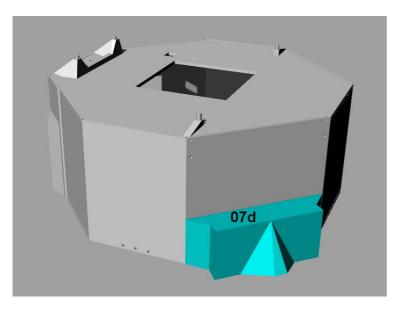
1/24 LM: <a href="http://spacemodels.nuxit.net/LEM-24/index.htm">http://spacemodels.nuxit.net/LEM-24/index.htm</a>

1/32 LM: <a href="http://spacemodels.nuxit.net/1-32 LM/index.htm">http://spacemodels.nuxit.net/1-32 LM/index.htm</a>

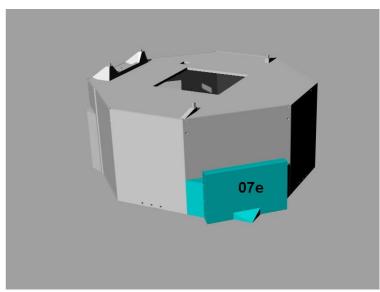
1/48 LM: http://spacemodels.nuxit.net/1-48-LM/index.html



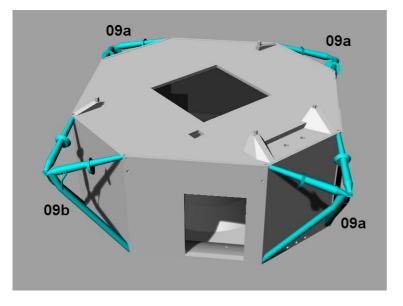




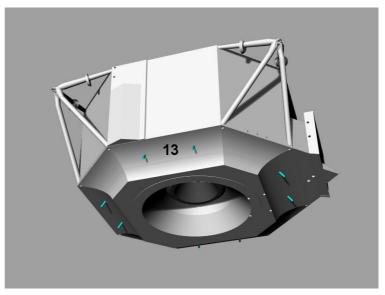
Part 07d is only present on the Apollo 9 descent stage,



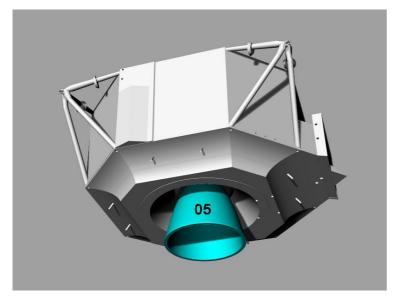
Part 07e is present on all LM descent stages from Apollo 10 to Apollo 17,

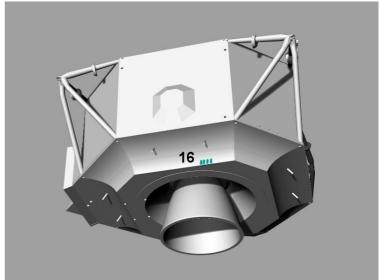


Part 09b is slightly different from parts 09a as it has the umbilical connector to the SIV-B stage,

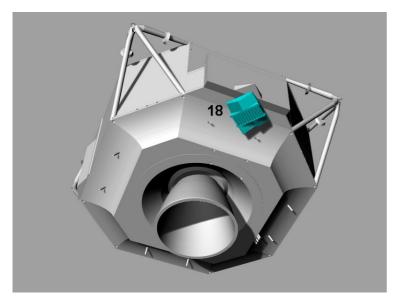


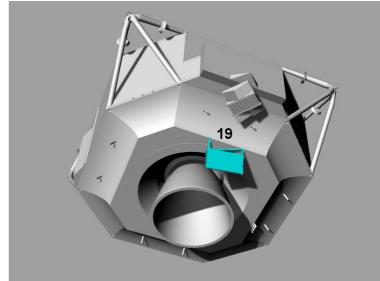
Parts 13 (landing gear chock mounts) can be replaced by 0,75 mm styrene rods. The outside length is 3 mm.

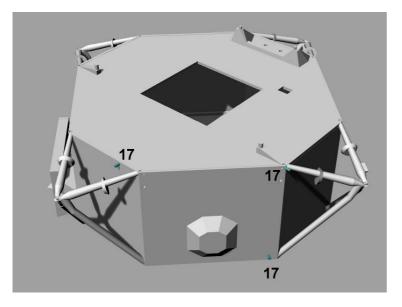


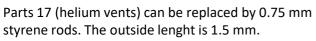


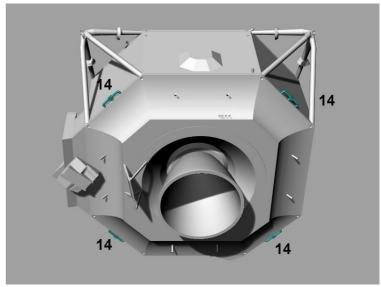
Parts 16 (propellant drains) can be replaced by 0.75 mm styrene rods. The outside lenght is 2 mm.

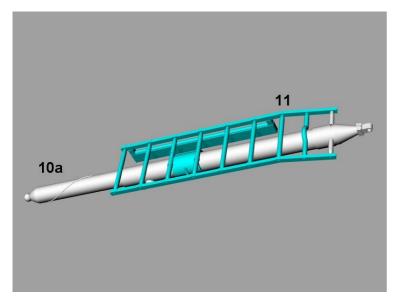




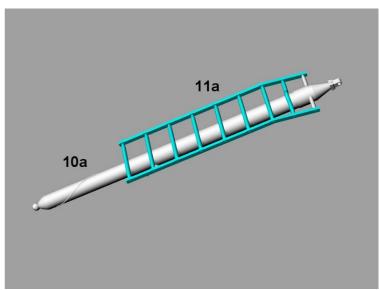




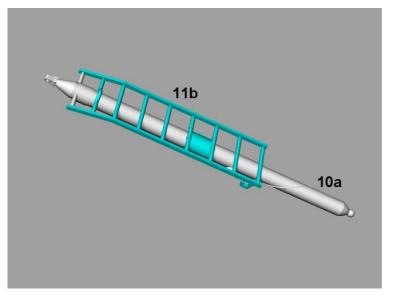




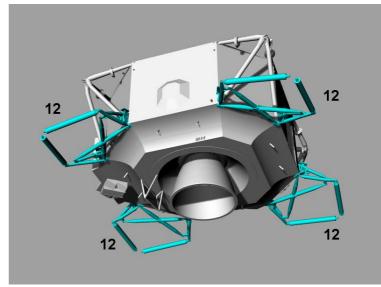
Parts 11 is only for Apollo 11 and Apollo 12 LMs.

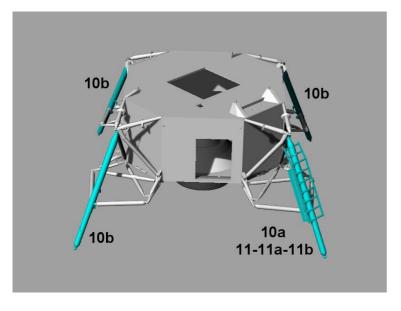


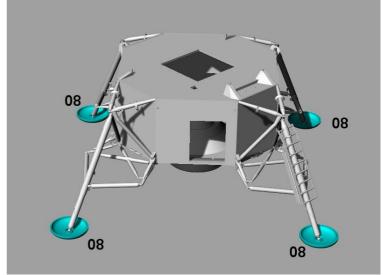
Parts 11a is only for Apollo 9 and Apollo 10 LMs.

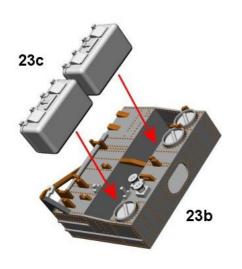


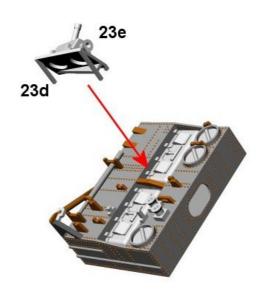
Parts 11b is only for Apollo 13 and Apollo 14 LMs.



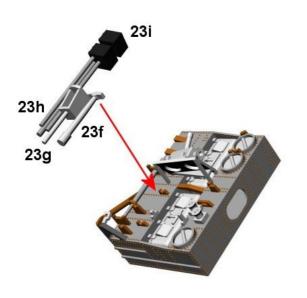


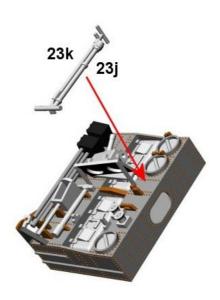


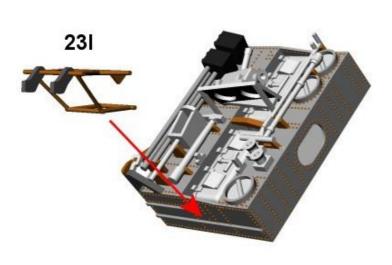


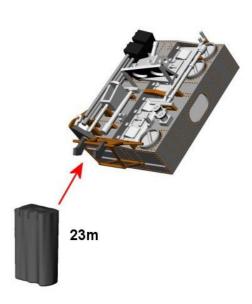


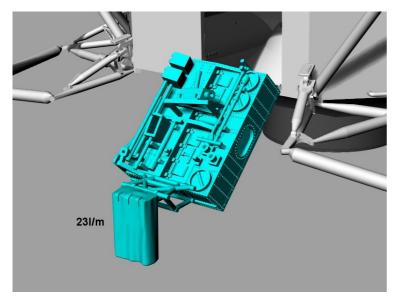
This section describes how to assemble the MESA, depending how you want to display your model you can choose which part you want to insert in the MESA.



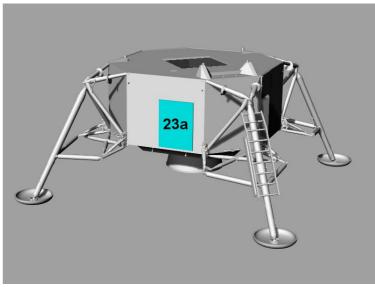




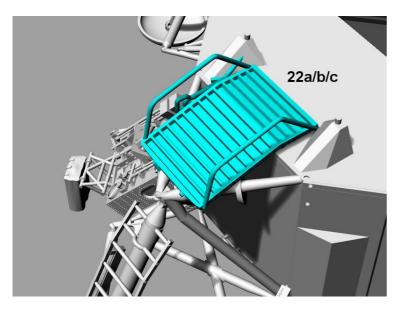




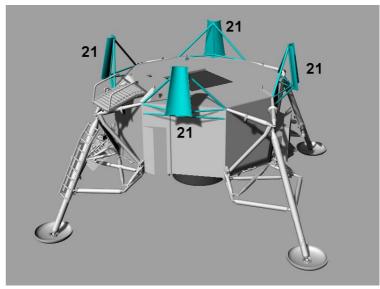
Open MESA, parts 23I and 23m are not needed if the MESA is just deployed for TV transmission.



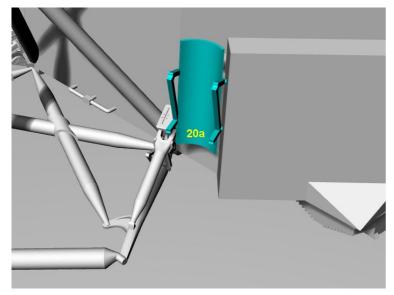
Closed MESA when the LM is not on the Moon or just after landing.



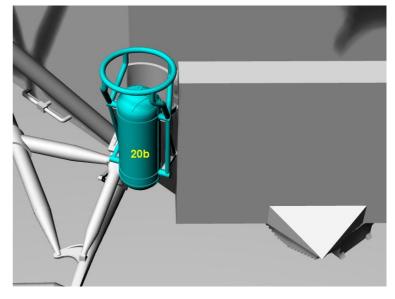
Part 22a is for Apollo 5 and 10, part 22b for Apollo 9, part 22c for Apollo 11 to 14.

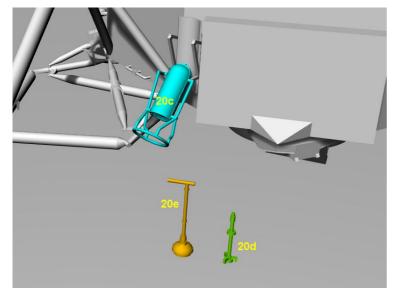


Parts 21 are not needed for Apollo 5, Apollo 9 and Apollo 10.

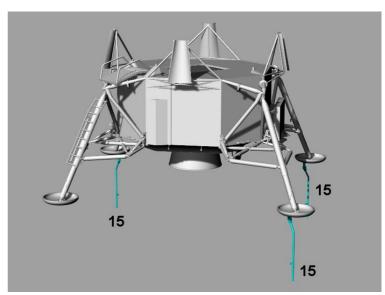


Undeployed RTG for Apollo 12 to 14.

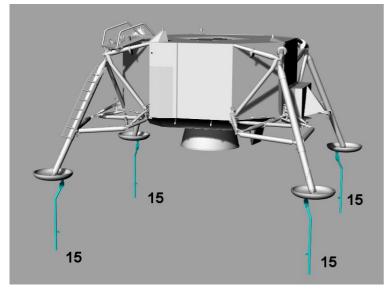




Deployed RTG for Apollo 12 and 14.



Only 3 landing probes for Apollo 11 to Apollo 14.



4 landing probes for Apollo 9 and Apollo 10.

## Apollo 15 to 17 Lunar Module Descent Stage

For further information on building this model check

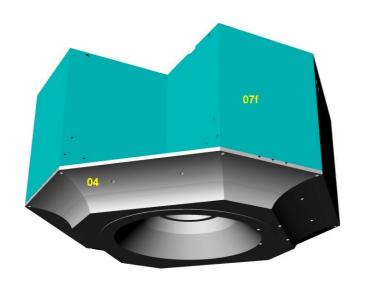
1/24 LM: <a href="http://spacemodels.nuxit.net/LEM-24/index.htm">http://spacemodels.nuxit.net/LEM-24/index.htm</a>

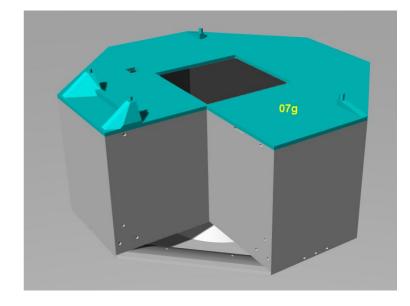
1/32 LM: <a href="http://spacemodels.nuxit.net/1-32 LM/index.htm">http://spacemodels.nuxit.net/1-32 LM/index.htm</a>

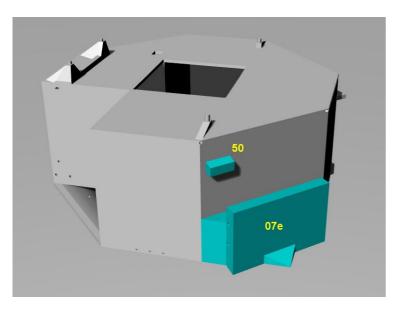
1/48 LM: http://spacemodels.nuxit.net/1-48-LM/index.html

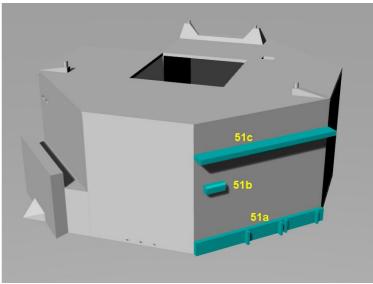
All parts are also available on **Shapeways** 

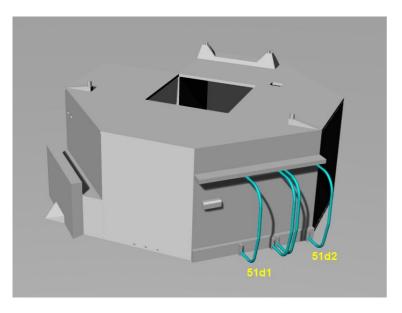
If you want to display your model in flight, please refer to the next mission instructions for landing probes and folded landing gears



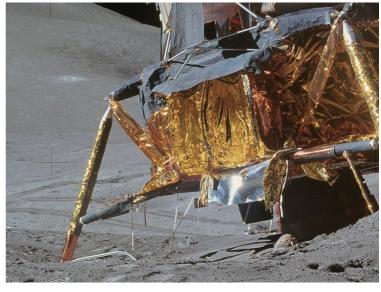




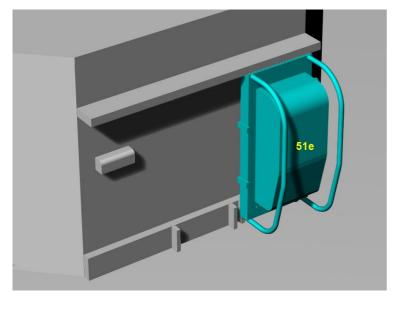


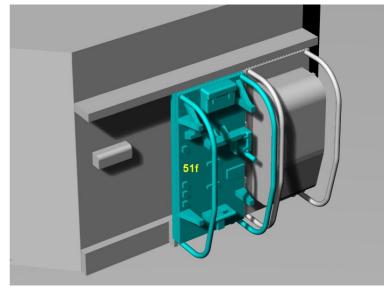


If you intend to build your LM in flight, parts 51d1 and 51d2 will be sufficient to give the shape of Quadrant 3.

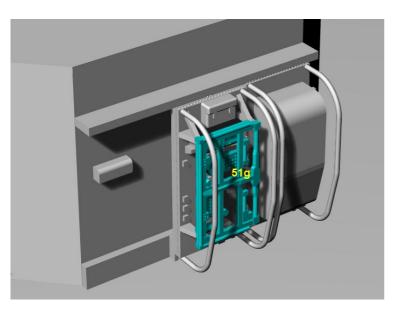


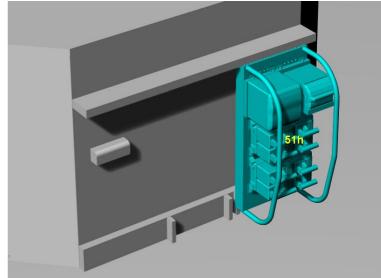
Apollo 15 image showing the arrangement of Quad 3 blankets.



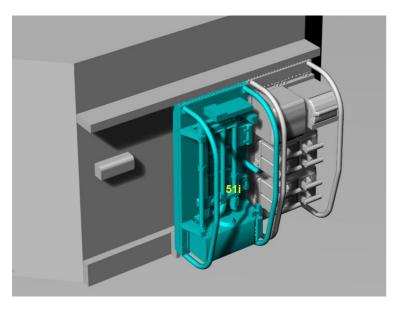


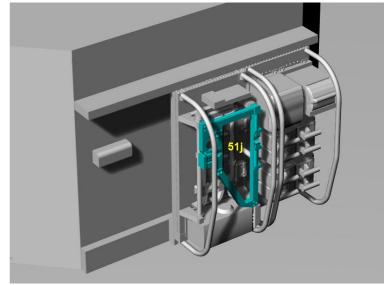
Complete Pallet assembly for Apollo 15 & 16.





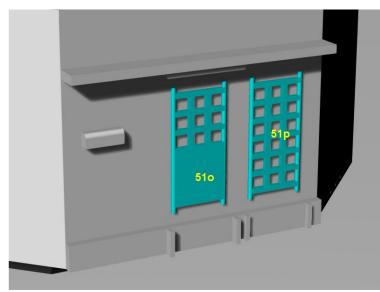
Complete Pallet assembly for Apollo 17.



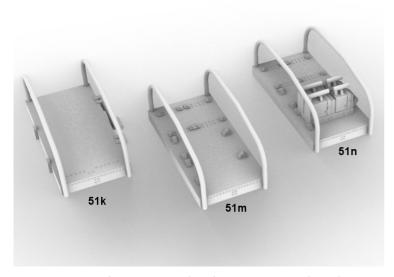




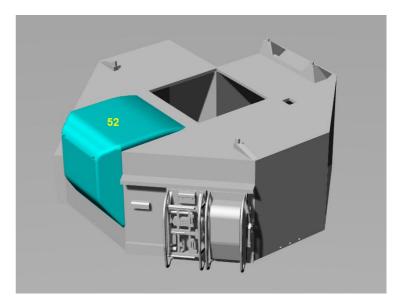
Empty pallets for Apollo 16.

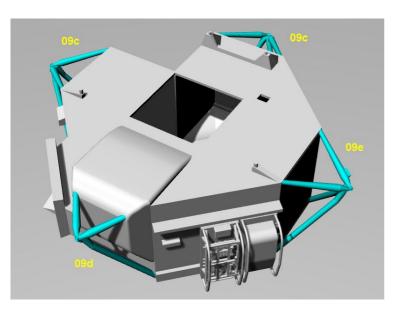


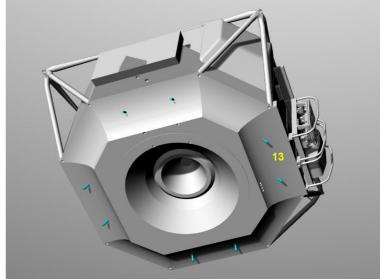
Empty pallets for Apollo 15 & 17.



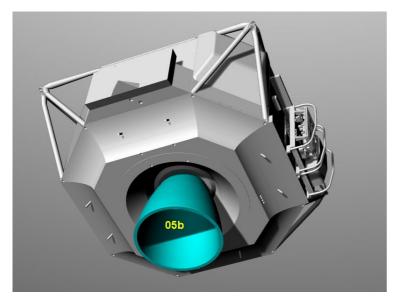
Empty pallets for Apollo 15 (51k) and Apollo 17 (51m) and semi-empty pallet for Apollo 17 (51n) were left on the lunar surface.

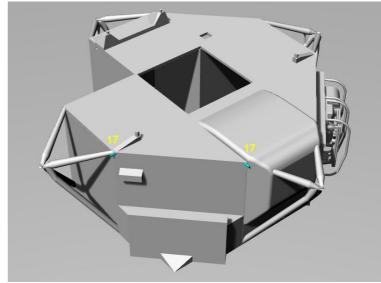




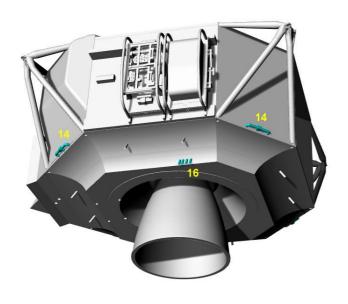


Parts 13 (landing gear chock mounts) can be replaced by 0,75 mm styrene rods. The outside lenght is 3 mm.

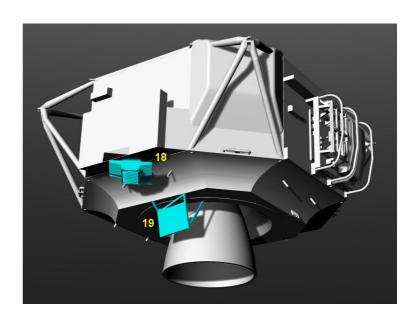


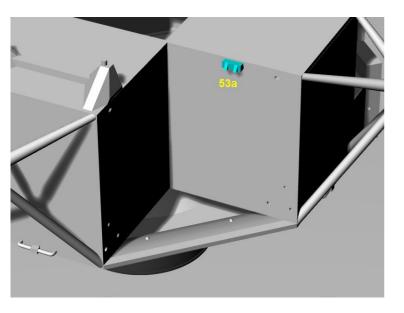


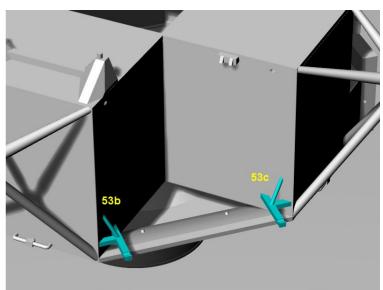
Parts 17 (helium vents) can be replaced by 0.75 mm styrene rods. The outside lenght is 1.5 mm.

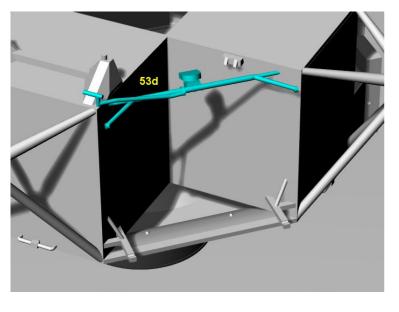


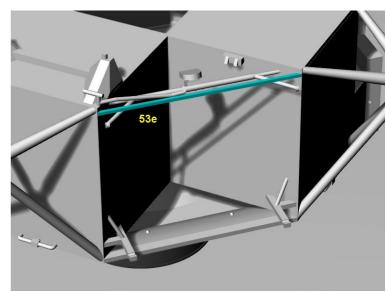
Parts 16 (propellant drains) can be replaced by 0.75 mm styrene rods. The outside lenght is 2 mm.

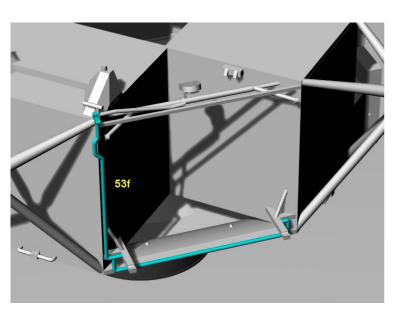


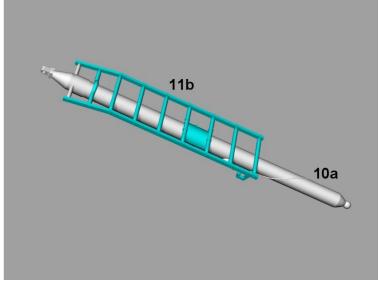


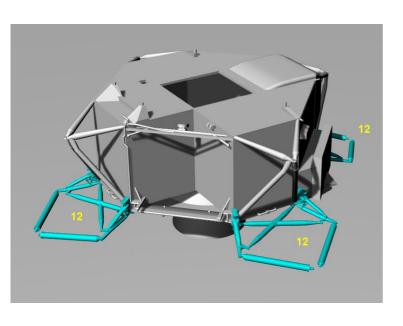


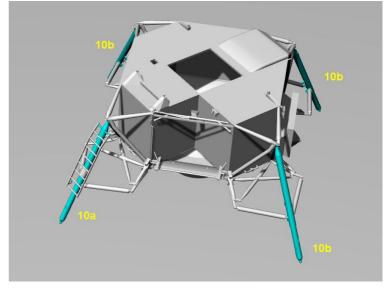


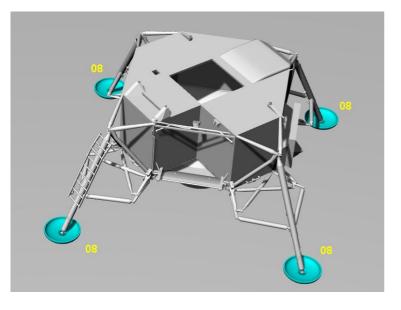


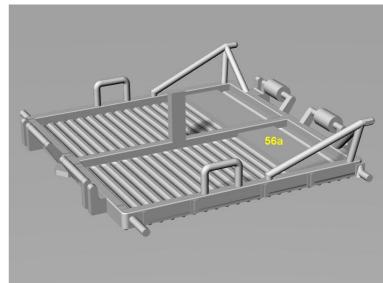




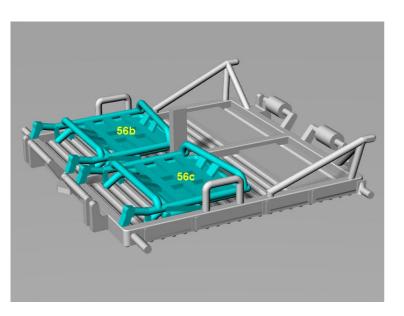


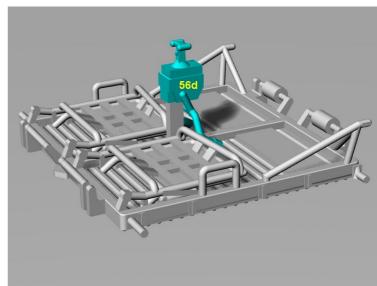


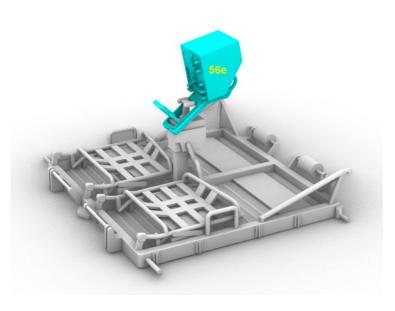


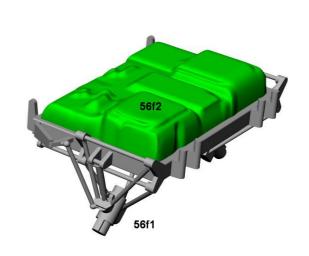


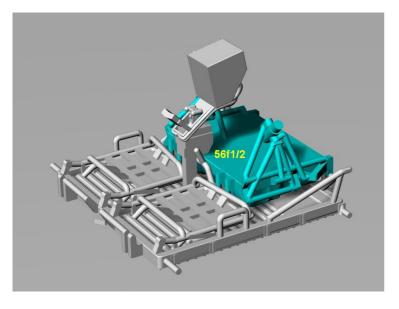
Scenario 1 :.The LRV is fully folded

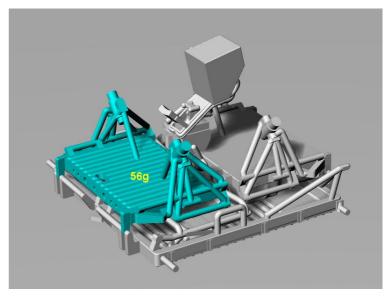


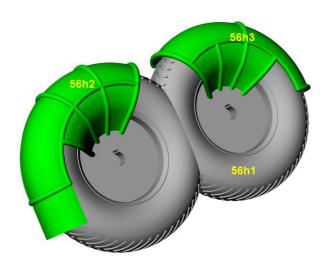






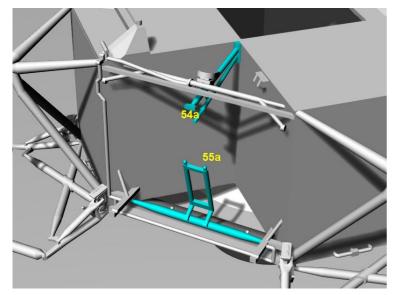




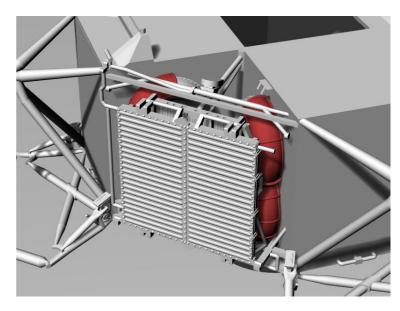


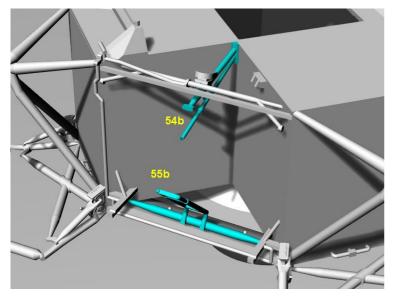
Left wheels configuration, the same configuration applies to the right wheels with parts 56i1, 56i2 and 56i3.



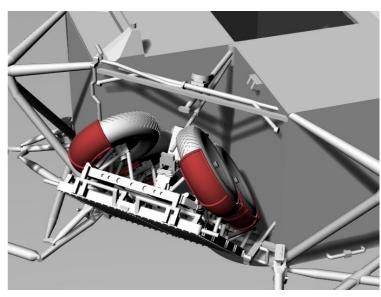


Scenario 1a :.The LRV is fully packed in Quad 1

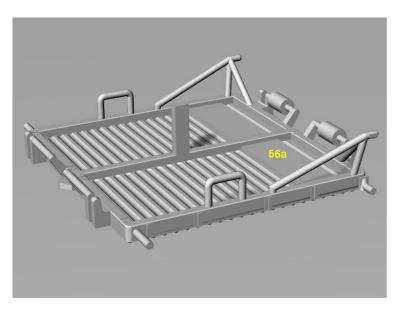




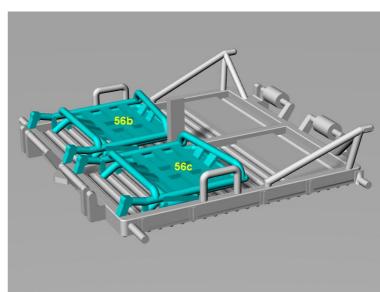
 $\label{eq:conditional} \textbf{Scenario 1b} :. \\ \textbf{The LRV at the start of the deployment sequence}$ 

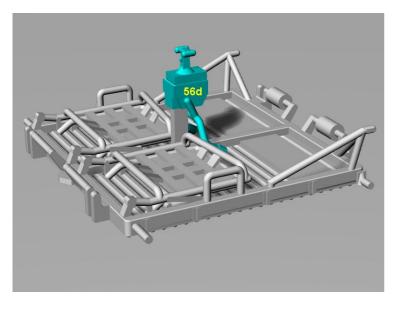


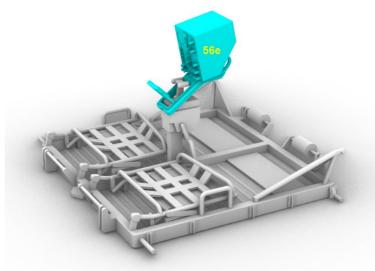
Inclination of the LRV is about 45°.

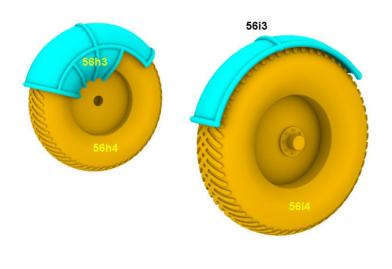


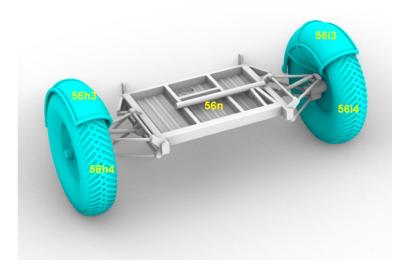
Scenario 2 :. The LRV is half deployed

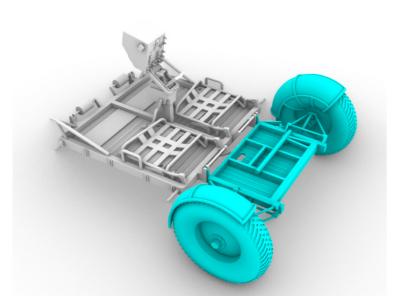


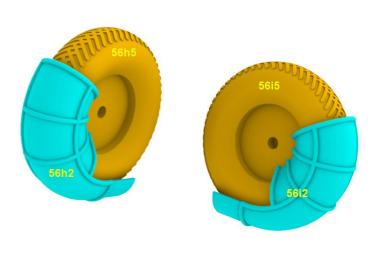


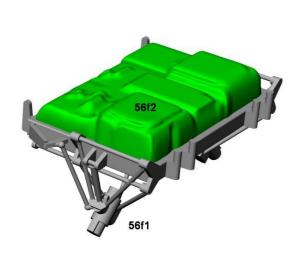


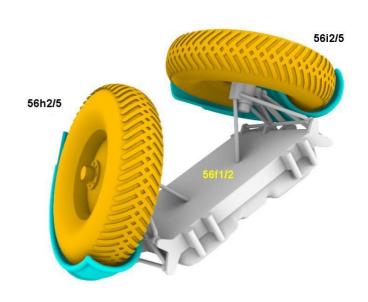


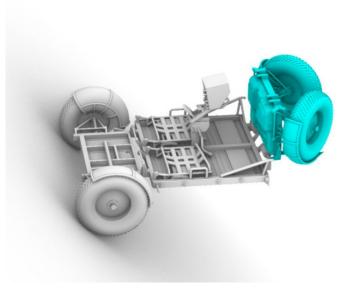




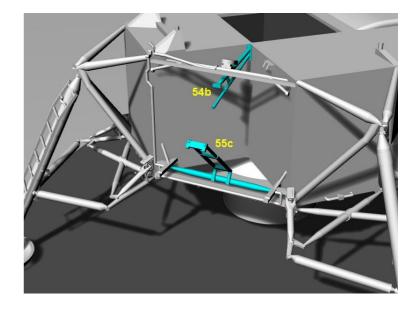


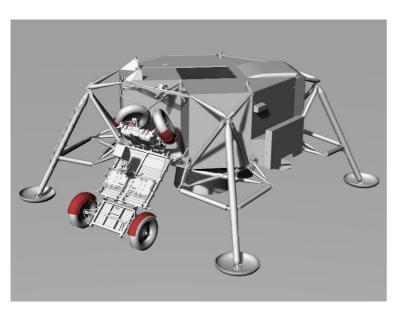


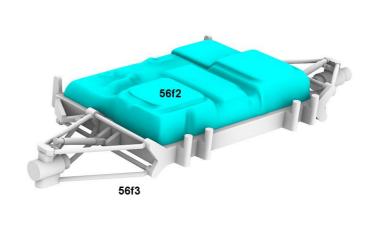




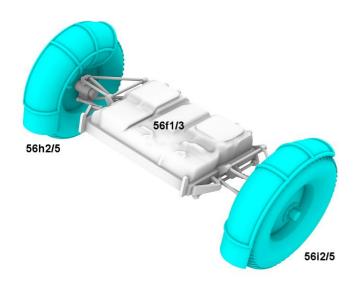
The LRV forward platform is inclined 90°.

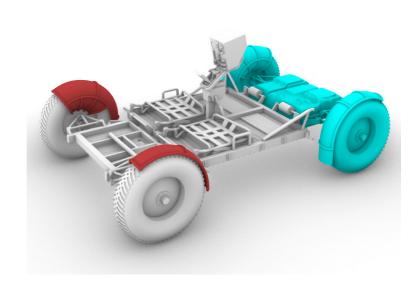


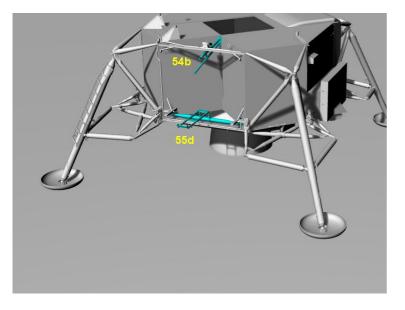




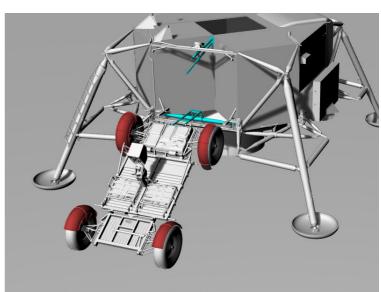
**Scenario 3**: the LRV is fully deployed. Assembly of the aft and central platform is identical to scenario 2.





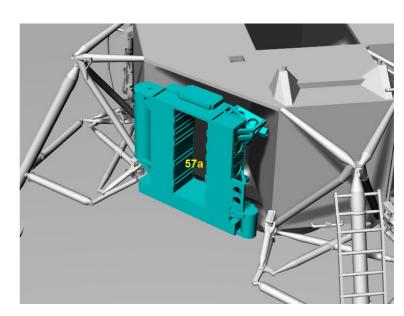


Scenario 3a: The LRV is still attached to the LM.

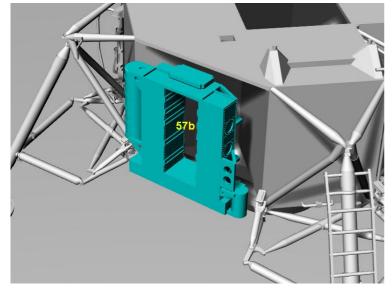


54b

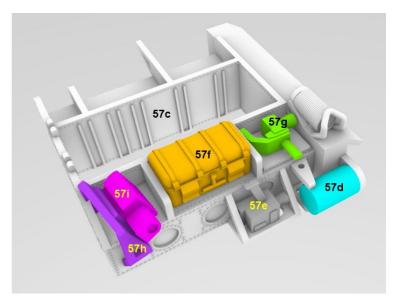
**Scenario 3b**: The LRV is now on the lunar surface.



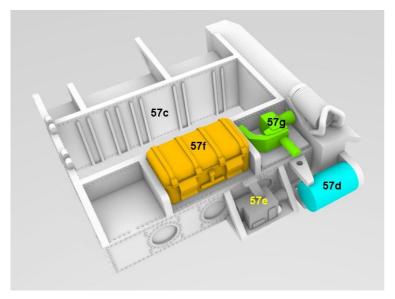
Part 57a is only for Apollo 15 and 16 while the MESA is still unopened. It is completely covered with kapton (see <a href="https://pfinspace.com/lmdata/otherlms.html">https://pfinspace.com/lmdata/otherlms.html</a> for coating).



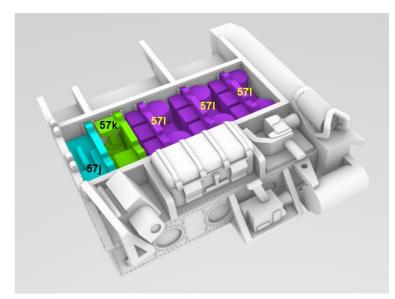
Part 57b is only for Apollo 17 while the MESA is still unopened. It is completely covered with kapton (see <a href="https://pfinspace.com/lmdata/otherlms.html">https://pfinspace.com/lmdata/otherlms.html</a> for coating).



Deployed MESA, right section configuration for Apollo 15 and 16. You choose to insert elements depending on your diorama

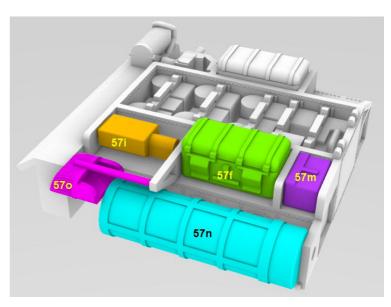


Deployed MESA, right section configuration for Apollo 17. You choose to insert elements depending on your diorama

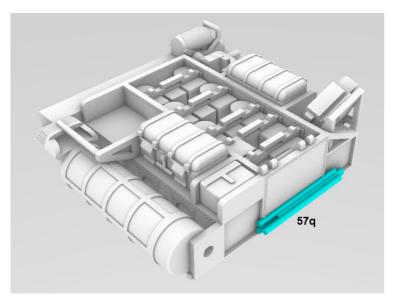


570 57n 57n

Deployed MESA, left section configuration for Apollo 15 and 16.



Deployed MESA, left section configuration for Apollo 17.



Part 57q (tripod) is only for Apollo 15 and 16.

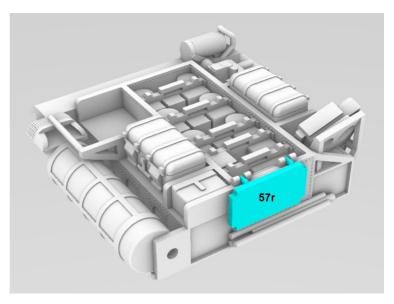
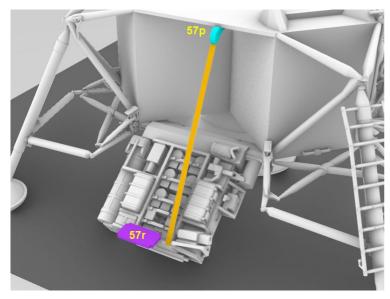
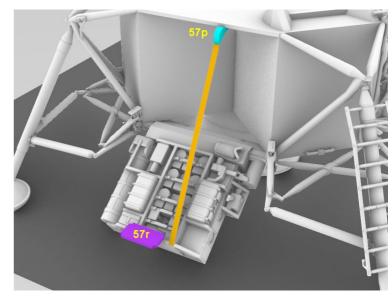
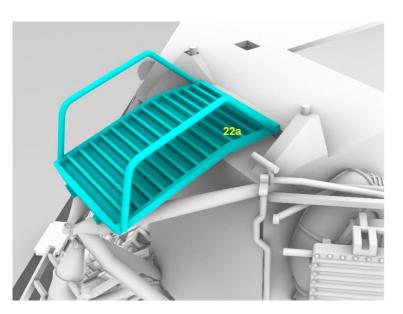


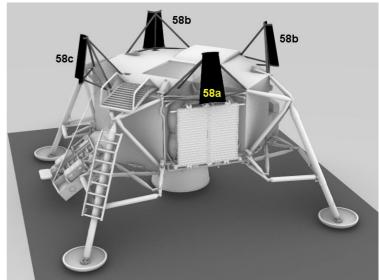
Table in stored postion.

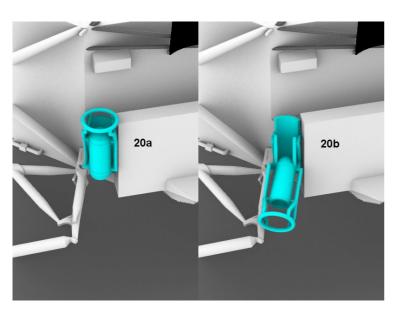




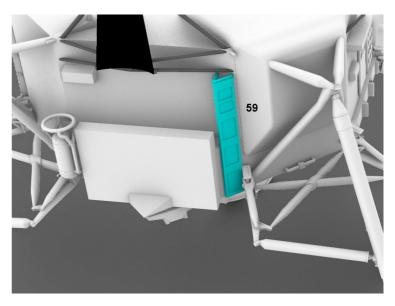
The deployed MESA is attached to the descent stage and part 57p. The orange belt is a 1.5 mm wide and 53 mm long strip of paper. Here the table is represented deployed. The left configuration is for Apollo 15 and 16, the right configuration for Apollo 17.







The RTG can be displayed undeployed (part 20a) or deployed (part 20b).



Part 59, the solar collection strip, is only present on Apollo 16. After EVA 1 it was put on landing pad –Y (see AS16-107-17441)

### Lunar Module Descent Stage

#### Folded Landing Gears

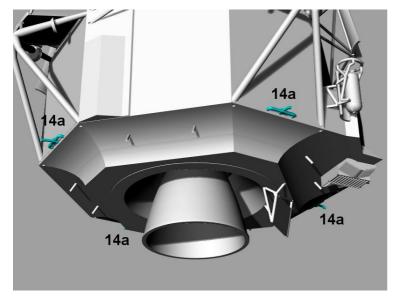
For further information on building this model check

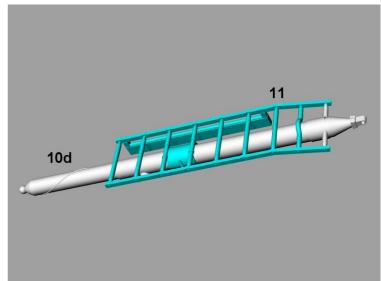
1/24 LM: <a href="http://spacemodels.nuxit.net/LEM-24/index.htm">http://spacemodels.nuxit.net/LEM-24/index.htm</a>

1/32 LM: <a href="http://spacemodels.nuxit.net/1-32 LM/index.htm">http://spacemodels.nuxit.net/1-32 LM/index.htm</a>

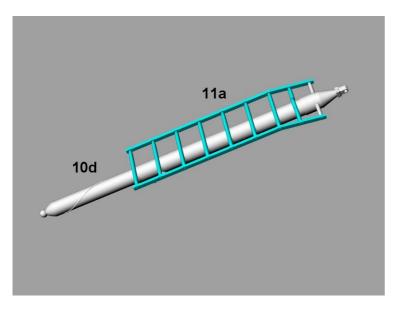
1/48 LM: http://spacemodels.nuxit.net/1-48-LM/index.html

These instructions concern only the landing gears, construction for the rest of the model is identical

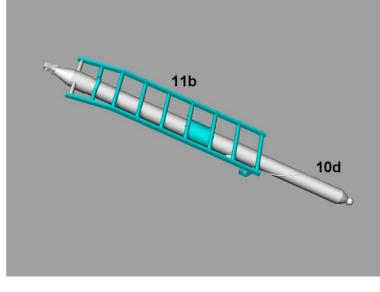




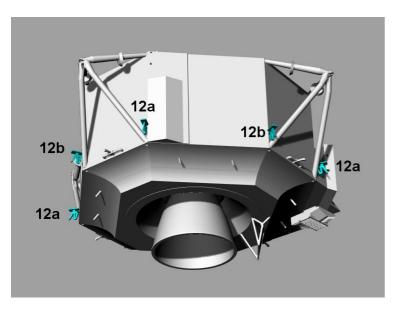
Parts 11 is only for Apollo 11 and Apollo 12 LMs.

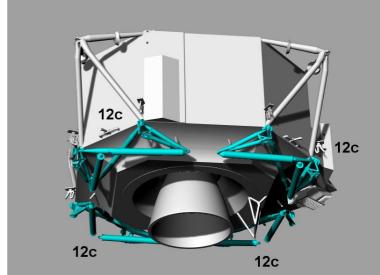


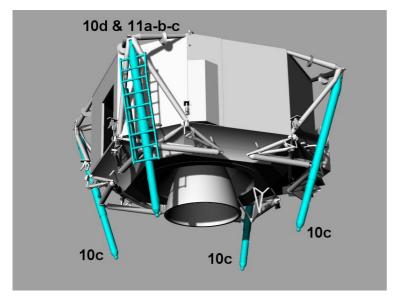
Parts 11a is only for Apollo 9 and Apollo 10 LMs.

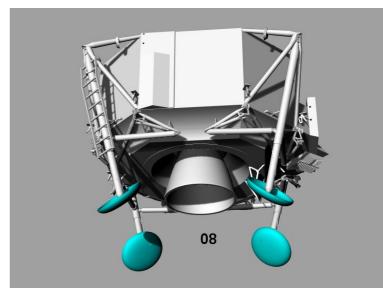


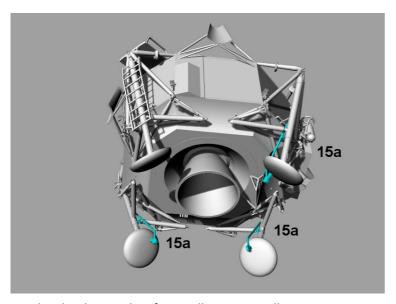
Parts 11b is only for Apollo 13 and Apollo 14 LMs.



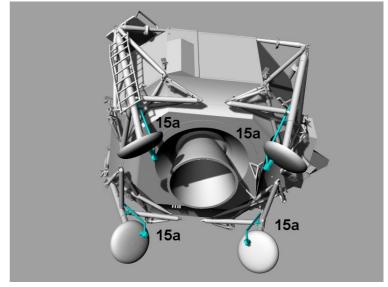








Only 3 landing probes for Apollo 11 to Apollo 14.



4 landing probes for Apollo 9 and Apollo 10.