Apollo Service Module

Apollo 7 to Apollo 17, ASTP and Skylab

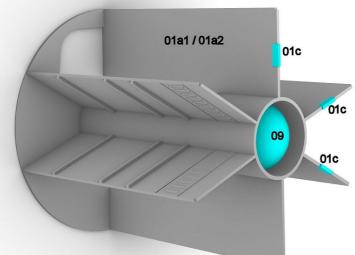
Closed model

For further information on building this model check

<u>http://spacemodels.nuxit.net/1-</u> <u>32%20complete%20CSM/index.html#The_cutaway_version</u> <u>http://spacemodels.nuxit.net/1-32%20CM/index.htm</u>

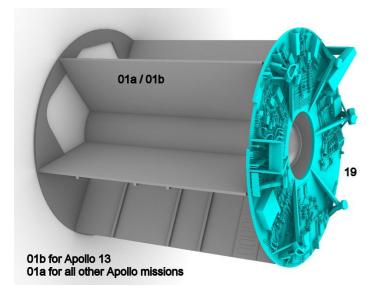
Decals available here

https://www.culttvmanshop.com/Apollo-CSM-132-scale-decalsfrom-Space-Model-Systems p 884.html

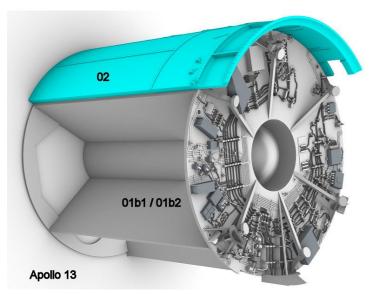


All Apollo missions except Apollo 13

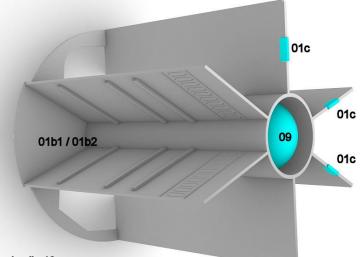
Helium tank. A special stand has been designed for this model, if you want to use it you need part 01a2, in the other case it is part 01a1.



SM - CM interface. A special stand has been designed for this model, if you want to use it you need part 01a2 or 01b2, in the other case it is part 01a1or 01b1.

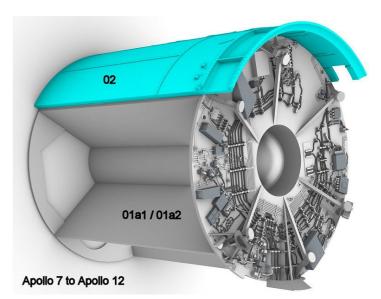


Part 01b1 or 01b2 are for Apollo 13, Part 02 is for missions from Apollo 7 to Apollo 13. A special stand has been designed for this model, if you want to use it you need part 01b2, in the other case it is part 01b1. Page 2

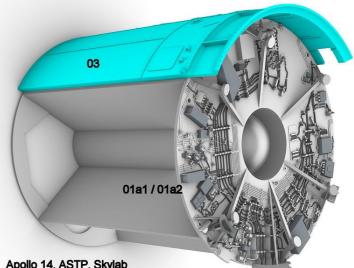


Apollo 13

Helium tank. A special stand has been designed for this model, if you want to use it you need part 01b2, in the other case it is part 01b1.

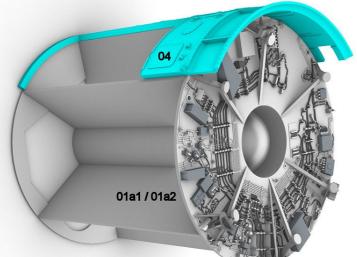


Part 01a1 or 01a2 are for all missions except Apollo 13, Part 02 is for missions from Apollo 7 to Apollo 13. A special stand has been designed for this model, if you want to use it you need part 01a2, in the other case it is part 01a1.



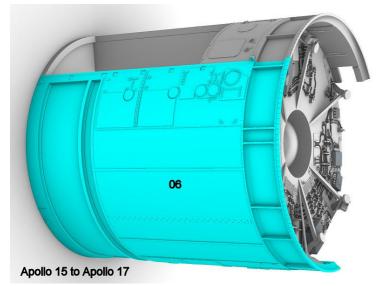
Apollo 14, ASTP, Skylab

Part 01a1 or 01a2 are for all missions except Apollo 13, Part 03 is for Apollo 14, ASTP and Skylab. A special stand has been designed for this model, if you want to use it you need part 01a2, in the other case it is part 01a1.

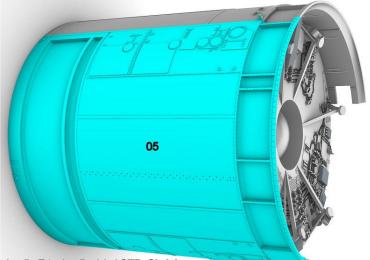


Apollo 15 to Apollo 17

Part 01a1 or 01a2 are for all missions except Apollo 13, Part 04 is for Apollo 15 to Apollo 17. A special stand has been designed for this model, if you want to use it you need part 01a2, in the other case it is part 01a1.

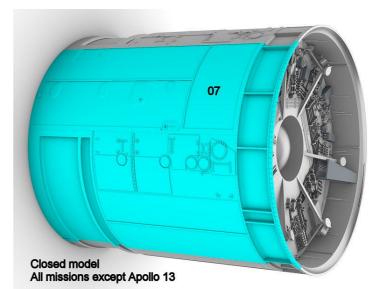


Part 06 is for Apollo 15 to Apollo 17.

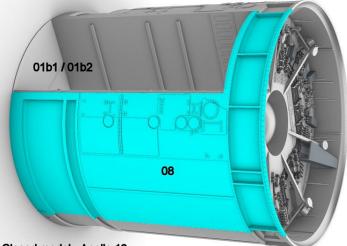


Apollo 7 to Apollo 14, ASTP, Skylab

Part 05 is for Apollo 7 to Apollo 14, ATSP and Skylab missions.

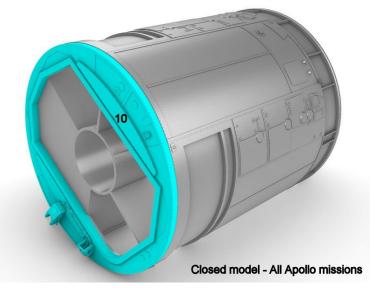


Part 07 is for all missions except Apollo 13 if you want to depict the SM after the explosion. For Apollo 13, Part 07 needs to be replaced by Part 08.

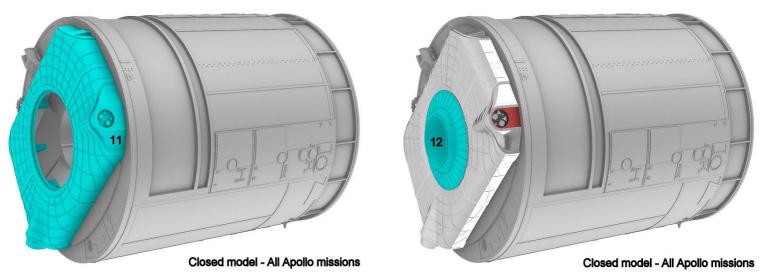


Closed model - Apollo 13

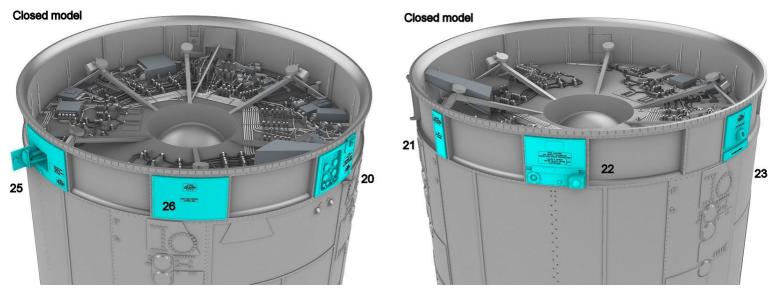
Part 08 should be used for Apollo 13 if you want to depict the SM after the explosion. A special stand has been designed for this model, if you want to use it you need part 01b2, in the other case it is part 01b1.



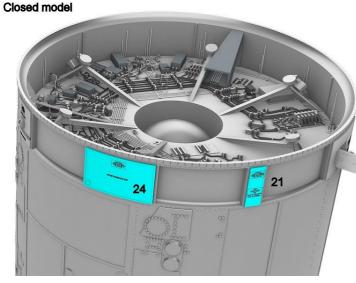
Part 10 is used for a non cutaway model.



SPS aft heat shield for a closed service module model.

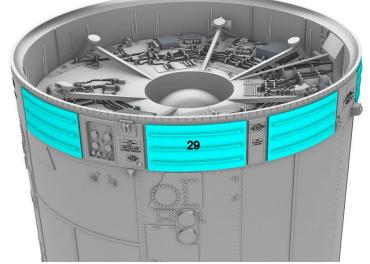


The various control boxes are glued on the upper part of the Service Module.

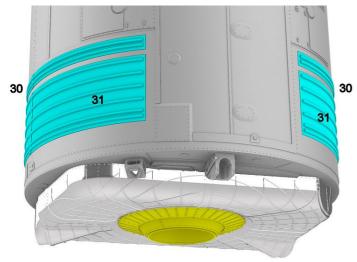


The various control boxes are glued on the upper part of the Service Module.

Closed model

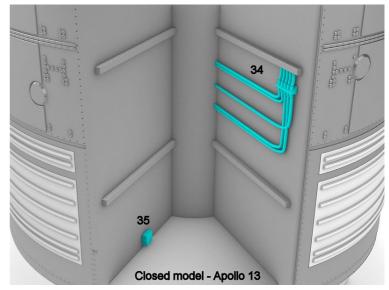


The EPS radiators are painted separately in flat white (Tamiya TS-27) and then assembled to the SM.

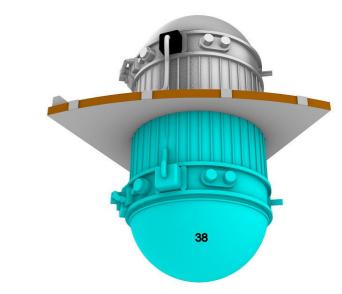


Closed model

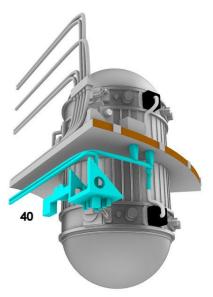
The lower radiators are painted separately in flat white (Tamiya TS-27) and then assembled to the SM.



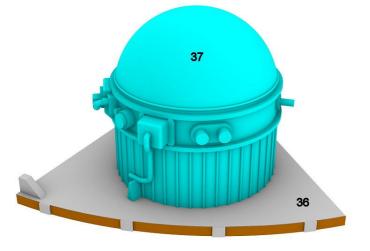
Cables and electronic box are installed on the upper part of the H2 tanks compartment.



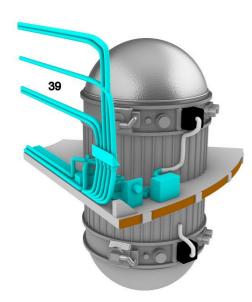
The lower H2 tank is fixed on the platform.



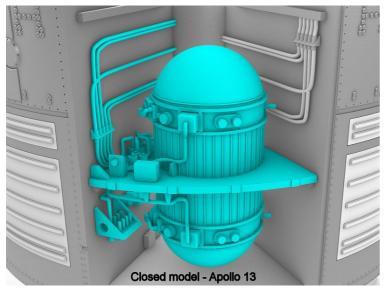
Cables to be installed on the lower part of the H2 tanks compartment are attached to the platform.



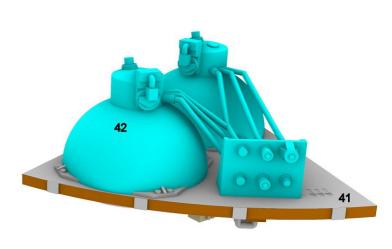
The upper H2 tank is fixed on the platform.



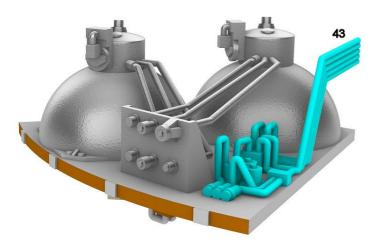
The valve module is fixed on the platform.



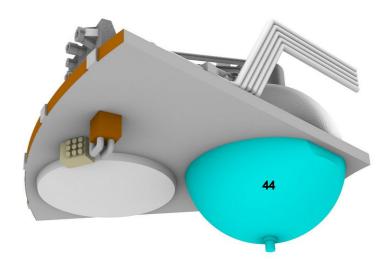
The H2 tanks are now attached inside the service module.



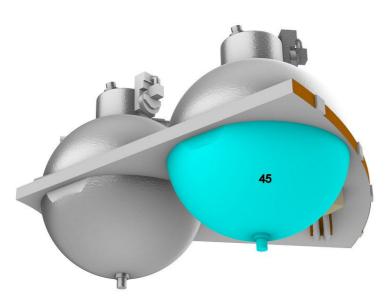
The upper parts of the O2 tanks are fixed onto the platform.



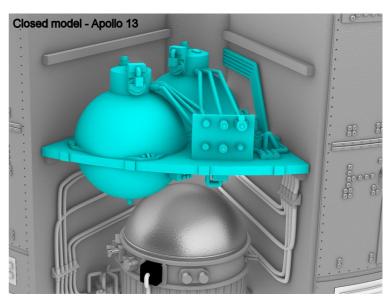
The valve module is then fixed on the platform.



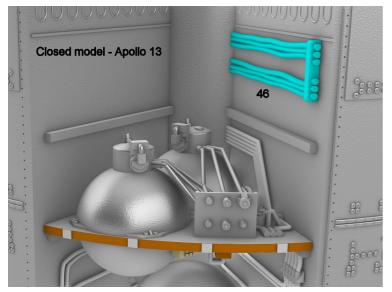
The lower parts of the O2 tanks are attached to the platform.



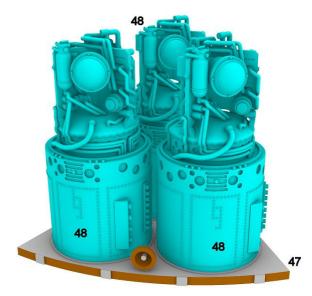
The lower parts of the O2 tanks are attached to the platform.



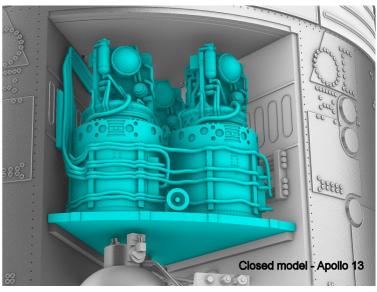
The O2 tanks are now attached inside the service module.



Cables for the fuel cells compartment are installed on the wall.



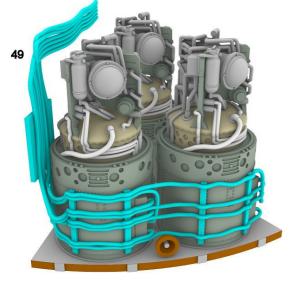
After painting, the three fuel cells are glued onto the platform. Note that the bottom of the platform is covered with aluminized mylar.



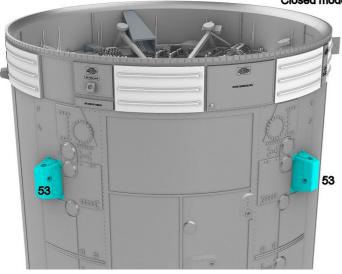
The fuel cells are now attached inside the service module.



Support structure for the SIM bay.



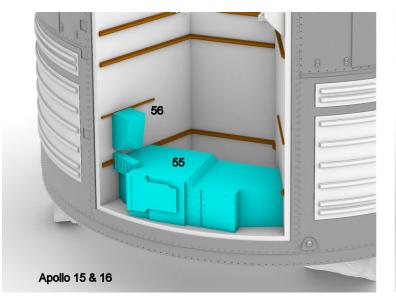
Cables are then glued around the fuel cells after painting.



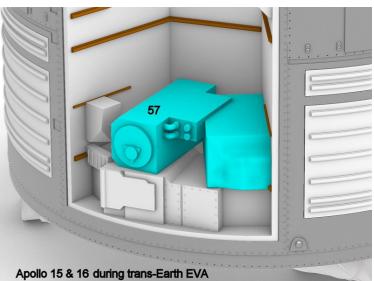
The 4 RCS quads are now fixed on the service module.

Page 7

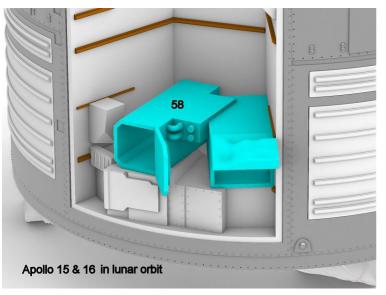
Closed model



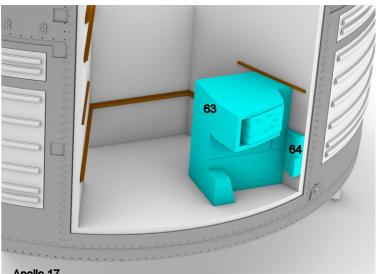
X-Ray spectrometer only for Apollo 15 and 16.



Only present on Apollo 15 and 16, these are the containers for the undeployed spectrometers (during trans-Earth EVA for instance).

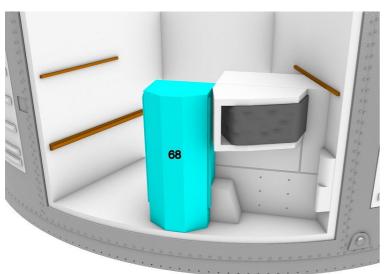


Only present on Apollo 15 and 16, these are the containers for the deployed spectrometers (during lunar orbit for instance).

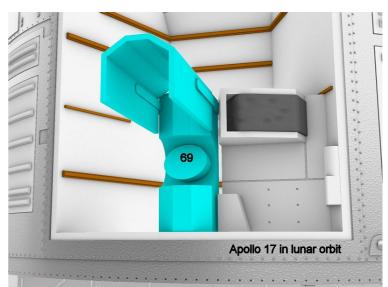


Apollo 17

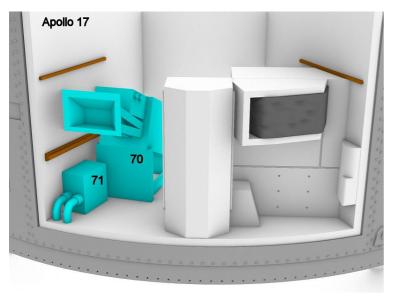
Only present on Apollo 17, this is the sounder optical recorder.



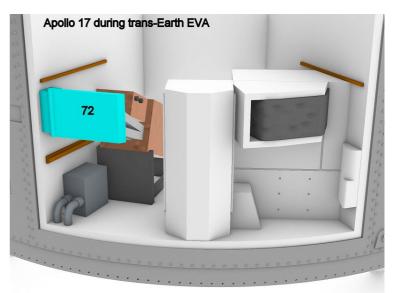
Apollo 17 during trans-Earth EVA



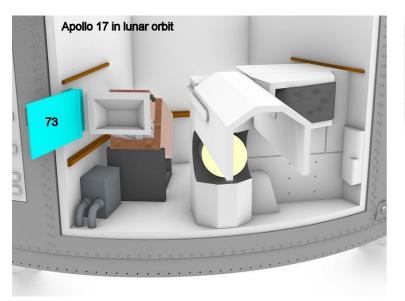
Only present on Apollo 17. This is the IR scanning radiometer represented retracted during the trans-Earth EVA (part 68) or deployed during lunar orbit (part 69).



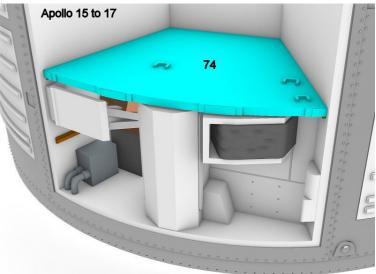
Only present on Apollo 17. These are parts for the UV spectrometer.



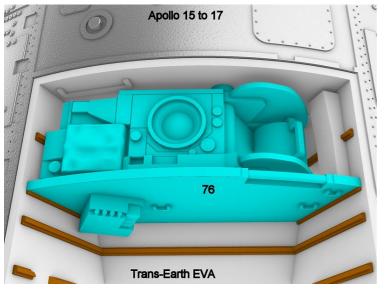
Only present on Apollo 17, this is the UV spectrometer cover that is closed during the trans-Earth EVA.



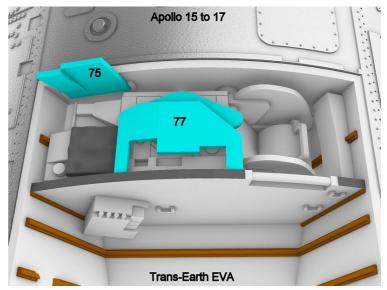
Only present on Apollo 17, this is the UV spectrometer cover that is open during lunar orbit.



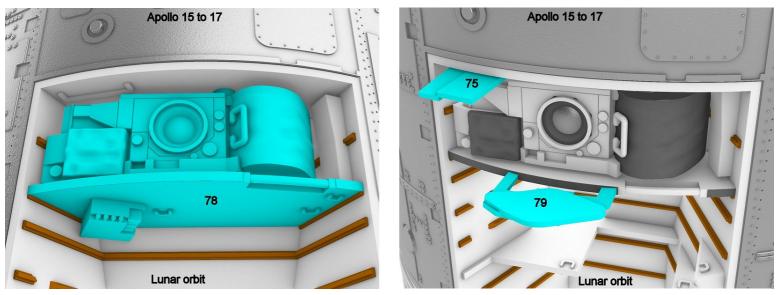
Base for the PanCam.



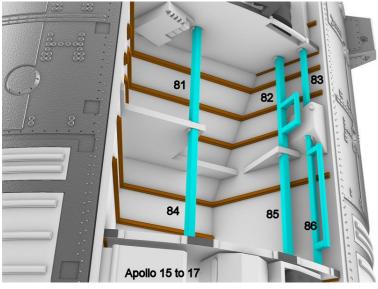
Mapping camera that is represented with the film cassette container open during the trans-Earth EVA.



Mapping camera that is represented covered with the film cassette container open during the trans-Earth EVA.

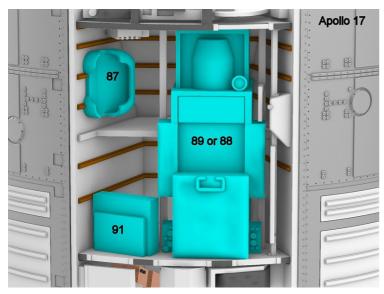


Mapping camera in lunar orbit.

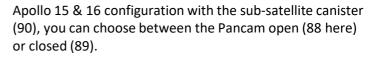


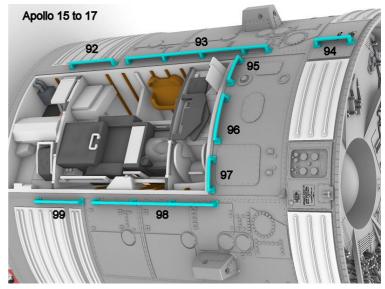
Apollo 15 & 16

Handles.

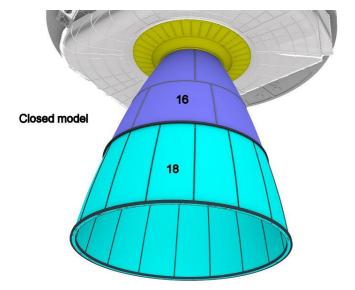


Apollo 17 configuration with the lunar sounder (91), you can choose between the Pancam open (88) or closed (89 here).

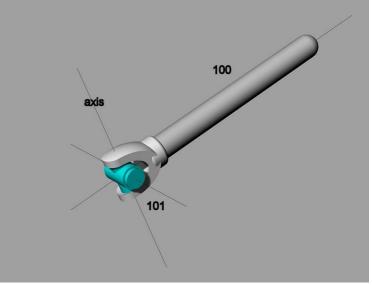




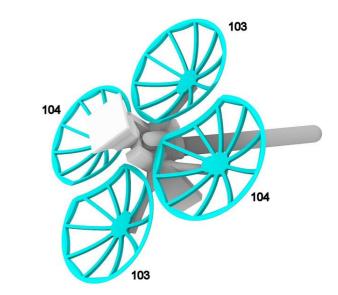
EVA handles.



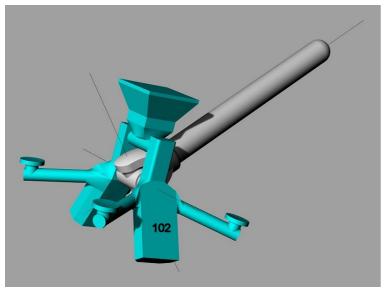
The lower and upper parts of the SPS engine are assembled and installed on the aft heat shield.



The High Gain Antenna (HGA) is composed of three parts aligned on three different axis allowing the assembly to be moved in every direction but more importantly in the direction of Earth. It is then important when assembling these parts to know in which direction you want the antenna to point. Part 101 can be moved around the "axis".



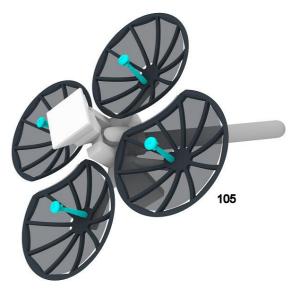
Dishes installed on the antenna support.



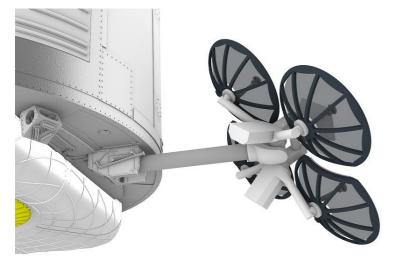
Part 102 is assembled in the position you wish to depict on your model.



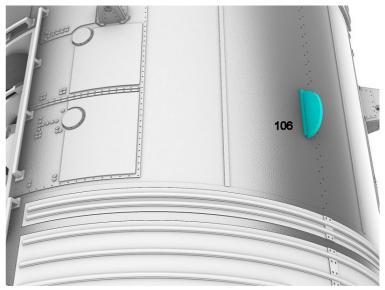
A piece of stocking or tulle can be used to fill the gap on the dishes.



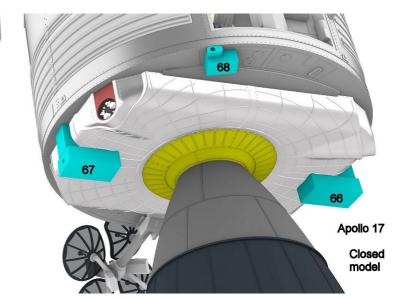
The 4 feedhorns are fixed on the dishes using epoxy glue.



The HGA assembly is then fixed onto the aft part of the service module.



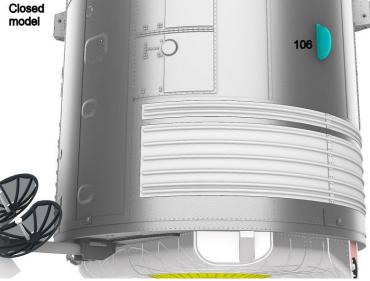
One of the scimitar antennas is installed on the side of the service module.



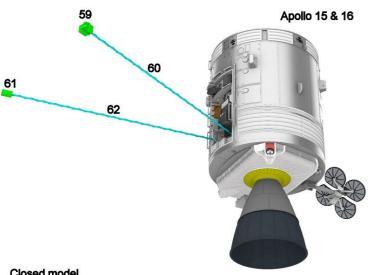
Only for Apollo 17, support for the sounder optical recorder antennas are installed.



This particular configuration is for Apollo 17 during lunar orbit. The long antennas are made out 1 mm styrene rod : diameter 1 mm with a lenght of 339 mm. The Yagi antenna is made out of a 1 mm styrene rod and 6 0.75 mm styrene rods, the pattern is at the end of this instruction booklet.

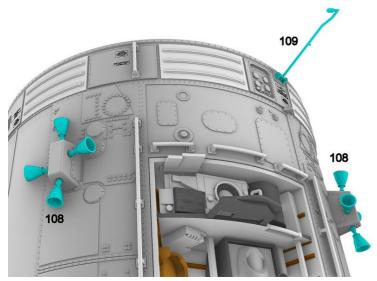


The other scimitar antenna is installed on the other side of the service module.

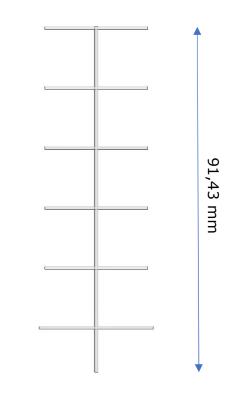


Closed model

This particular configuration is for Apollo 15 & 16 during lunar orbit.



The thrusters (108) are installed on the Reaction Control Systems on the side of the service module. The EVA floodlight (109) is installed on the side close to the Saturn V umbilical.



Pattern for the Apollo 17 Yaggi antenna.