Apollo Command Module Flight configuration

For further information on building this model check <u>http://spacemodels.nuxit.net/1-32 complete</u> <u>CSM/index.html#The_flight_version</u>

http://spacemodels.nuxit.net/1-32%20CM/index.htm

Decals available here

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



Cutaway version 1 : parts of the equipment bay, forward cabinets as well as panels 7 to 8 are not shown for better viewing.



Cutaway version 2 : all parts inside the command module are shown.



Closed version : all parts inside the command module are shown.



The couches can be represented in different configurations with the leg and foot pans either in launch configuration or retracted.



Another configuration with the center couch folded and stored. It will be installed later on in the aft bulkhead.







Part 28 is the safety belt buckle, you will need to create the belt out of paper strips as shown in the following image.





Installation of the astronaut couches (shown here for the closed version, installation is the same for all versions).



In this flight configuration the center couch is removed and will be folded and placed later-on under the right-hand couch.





Stowages A3 to A7 installed in the aft bulkhead section of the Command Module (part 11).



Extinguisher fixed onto the side of the A3 stowage.



Stowages A7 (14), A9 (16), K2 (17), K3 (18) and K4 (19) installed in the aft bulkhead section of the Command Module.



Stowage A1 (12) installed in the aft bulkhead section of the Command Module.



J box (21) installed in the aft bulkhead section of the Command Module.



Stowage K5 (20) installed in the aft bulkhead section of the Command Module.



Stowage A8 (15) installed in the aft bulkhead section of the Command Module.



Emergency O2 (22) and stowages U1 (23), U2 (24), U3 (25) and U4 (26) installed in the aft bulkhead section of the Command Module.



Side displays and astronaut couches assembly fixed into the aft bulkhead section of the Command Module (cutaway version 1 here and all couches in launch configuration).



In this flight configuration the center couch is removed, folded and placed under the right hand couch.



Parts 29 and 30 are shown here for the cutaway version 1. Installation of these parts is identical for the other versions.



Depending on your version (here is Cutaway version 1), the main display part is different.



For the Cutaway version 2, part 31b needs to be used.



Part 31c is used if you want represent the closed version of the Command Module.



Installation of the head struts.



Option 1 : Part 39 is used for the closed version of the Command Module during flight.



Option 2 : Part 40 is used for the cutaway versions of the Command Module.



The upper hatch (part 37) is installed for each option of the parachute section.



Stringer attached (part 52).



Installation of Panel 16 (part 54).



Installation of Panel 15 for the cutaway model (part 53b).



Installation of Panel 15 for the closed model (part 53a).



The aft compartment (part 42) is only necessary if you want to build a cutaway model.



Installation of the heat shield.



Prior to install the outer shell, it is a good idea to fit the astronauts inside. Such astronauts can be found on NewWare

(https://mek.kosmo.cz/newware/index.htm#nw051)



For a cutaway capsule, half hatch (part 45b1), side window (part 47), rendezvous window (part 49) and floodlight (part 51) need to be installed on the main shell (Part 44b1 if you have a small printer).



If you intend to display only one astronaut while the other two are on the Moon, you need the the center couch configuration and the Max Grueter astronaut available on Shapeways (http://shpws.me/QEG2)



If you intend to have the hatch open then part 45b1 needs to be replaced by part 45a1.



If your printer is large enough, parts 44b1 and 44b2 can be replace by part 44b.



Parts 44b1 and 44b2 form the outer shell of the Command Module. Again if your printer is large enough these two parts can be replaced by part 44b.



Parts 44b1 and 44b2 form the outer shell of the Command Module. Again if your printer is large enough these two parts can be replaced by part 44b.



The outer part of the hatch (part 45c1) is now fixed on the inner part of the hatch if you intend to show the hatch closed. **Don't use part 45c1 if you want a closed capsule**.



Hatch and EVA Handles (parts 55 and 57) are fitted around the outer shell of the command module and the main hatch. **Part 55 is only for Apollo 9 to 17.**



The parachute compartment is now fixed on top of the Command Module, this is only for option 2 (cutaway version of the Command Module).



The retrorocket (part 60) and the EVA handle (**part 61 only for Apollo 9 to 17**) are now fixed onto the parachute compartment.



If you want you can print the cutaway part of the outer shell, just make sure you dont glue it so it will removable to show the interior. Parts 45b2 is needed if you want a closed hatch.



If you want you can print the cutaway part of the outer shell, just make sure you dont glue it so it will removable to show the interior. Parts 45a2 is needed if you want an open hatch.



Make sure not to glue part 44b3 if you want to remove it to show the interior of the Command Module.



Part 45c2 is only needed if you want to represent the closed hatch. **Part 55 is only needed for Apollo 9 to 17**.



If you want a closed capsule part 44b3 needs to be replaced by part 44b4. Parts 45b2 is needed if you want a closed hatch.



If you want a closed capsule part 44b3 needs to be replaced by part 44b4. Parts 45a2 is needed if you want an open hatch.



Parts 44b4 is the last part of Command Module outer shell.

Page 10



Part 45c is only needed if you want a closed Command Module with a closed hatch.



Part 58 is added for a closed Command Module.



Parts 55 and 61 are only for Apollo 9 to 17.



Part 62 is the handle that was meant to be used in case of an EVA transfer between the LM and the CM, it is needed only for Apollo 9 to 17.



If you intend to represent the CM after the LM was jettisoned or Apollo 7 and Apollo 8 you need part 63 without the docking ring.



If you intend to represent the CM before the LM was jettisoned, you then need to use part 64 with the docking ring (part not needed for Apollo 7 and 8).



Docking probe attached (not needed for Apollo 7 and 8).



Command Module with its hatch open.



If you left the hatch open you may want to add the 16 mm and TV camera that were used during the trans-Earth EVA (Apollo 15 to 17). The astronaut was designed by Max Grueter ans is available here : <u>https://tinyurl.com/y95j63ht</u>