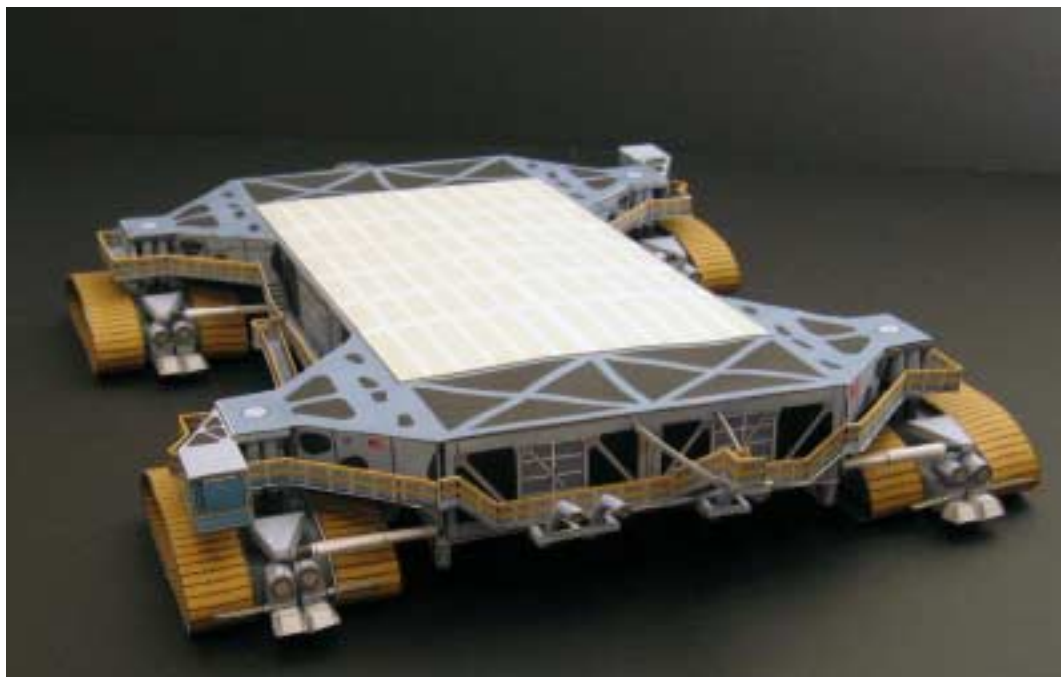




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Assembly Instructions for Shuttle Crawler –Transporter (Part 2)



Introduction

This Part 2 Crawler Manual will cover the assembly of all crawler variants, the difference between all crawlers, the assembly of the walkways and stairs and the old and new undercarriage. **Very important is to identify all sides of the crawler.** The photos below show the real Shuttle stack with the Mobile Launch Platform and Crawler from all sides. Numbering applies to both MLP and Crawler.



Side 1



Side 3

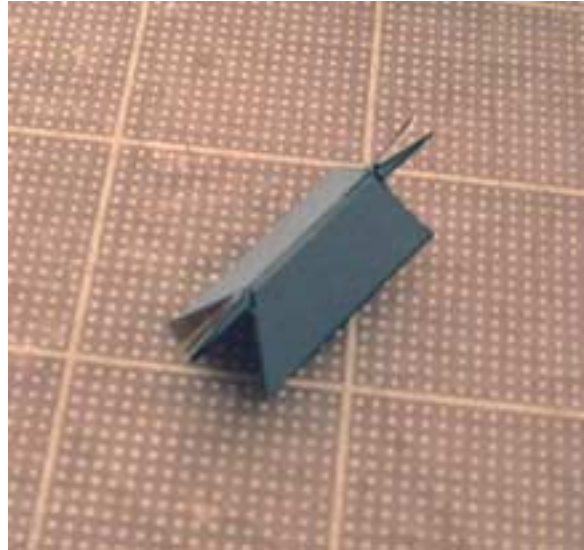
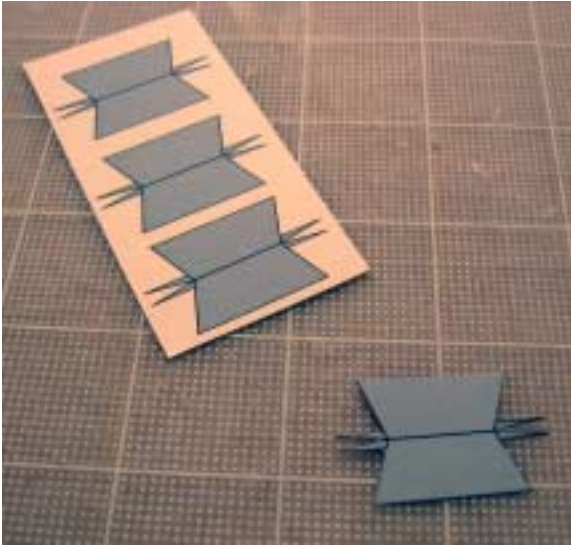


Side 4

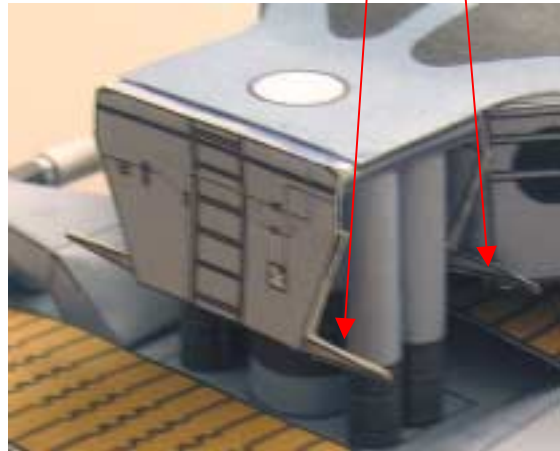


Side 2

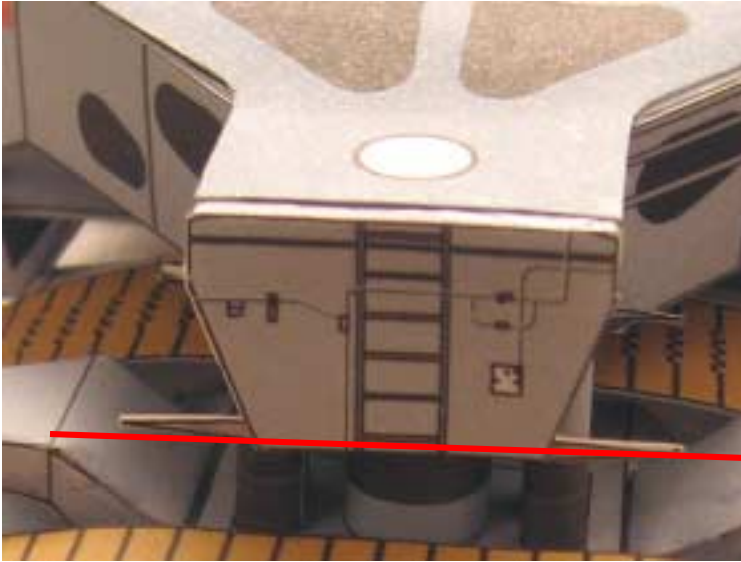
Building the Crawler corners walkways



These are the **most important** parts needed to assemble the walkways. These are the walkways support parts. There are 8 in total for the model, 2 for each corner. Glue each one to both corner walls, as indicated by the arrows.



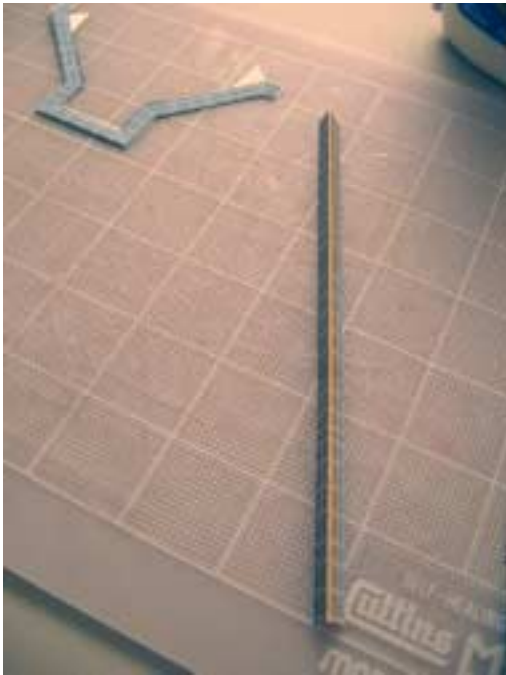
This photo is only to demonstrate the purpose of this support part.



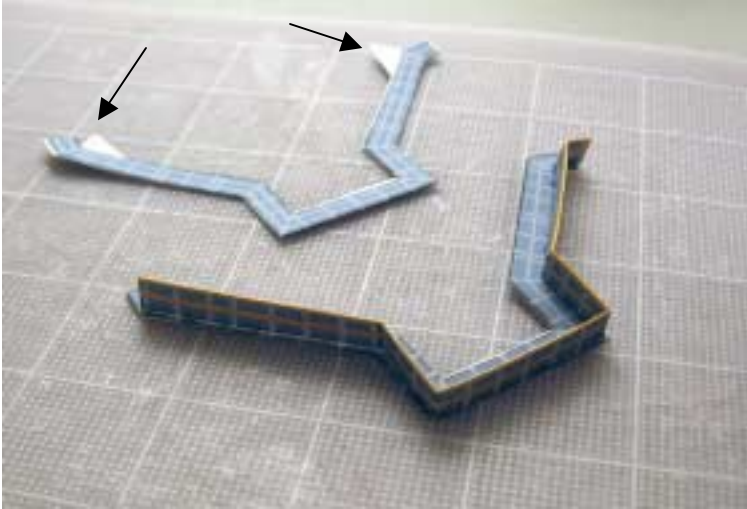
Close-up of how the corner will look after the support parts are glued. Let it dry well. The red line in the photo indicates that both the wall and the support part are at same level.



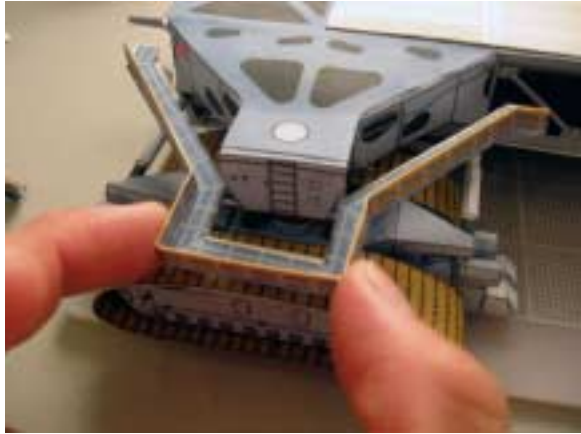
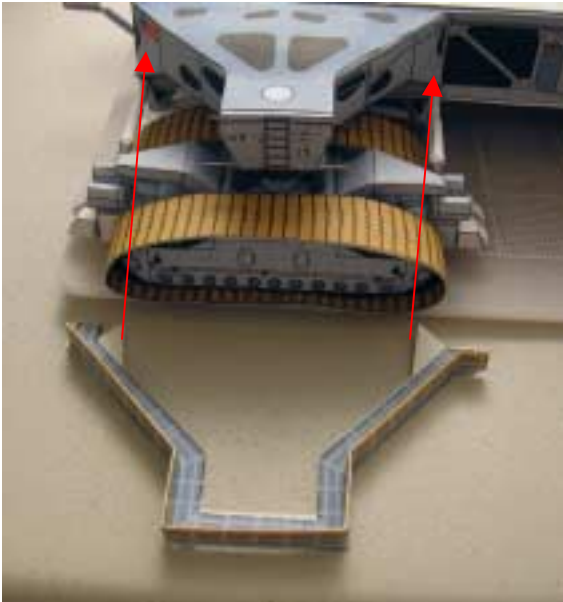
Each walkway has 2 mirror sides, one is the walkway floor (gray) and the other is the underside of the walkway floor (black). This photo shows the walkway for **corners A and C** (corners that have NO cabs)



Each railing has 2 mirror sides as well, indicated as OUTSIDE and INSIDE in the parts sheets. Photo show how a railing is folded before is glued to the walkway floor.

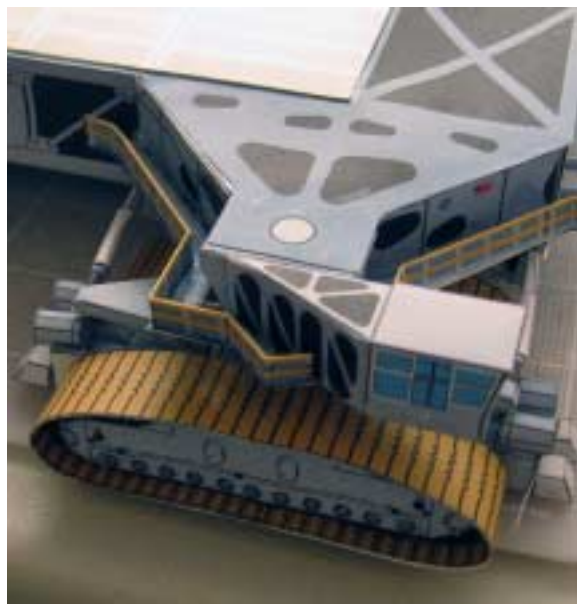
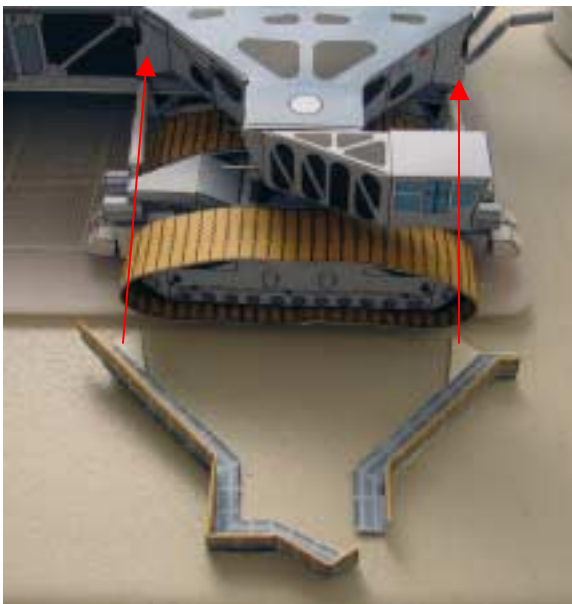


This is how each railing is glued to the correspondent walkway floor. Each corner walkway has 2 triangular faces that are glued to the crawler. (arrows)

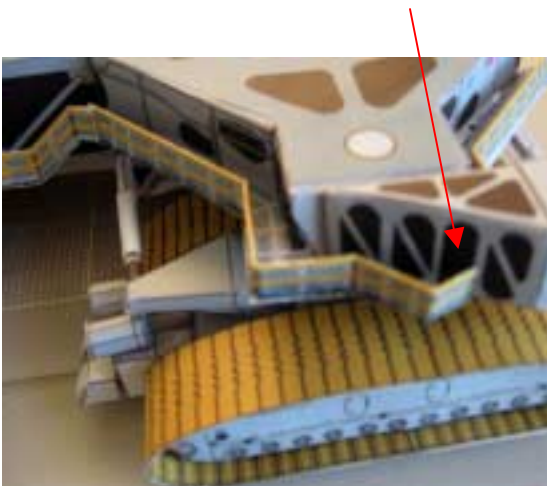


Red arrows indicate where the triangular faces are glued to the crawler.

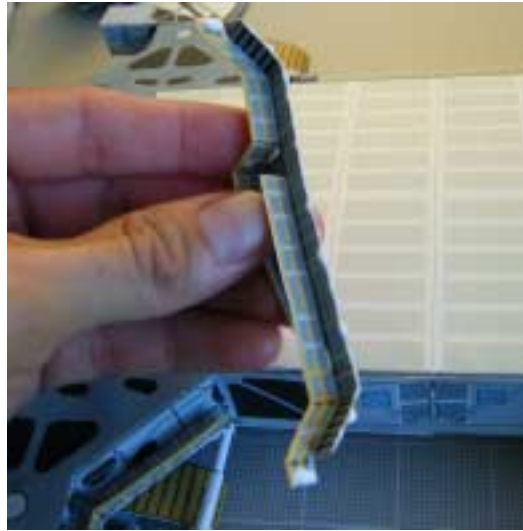
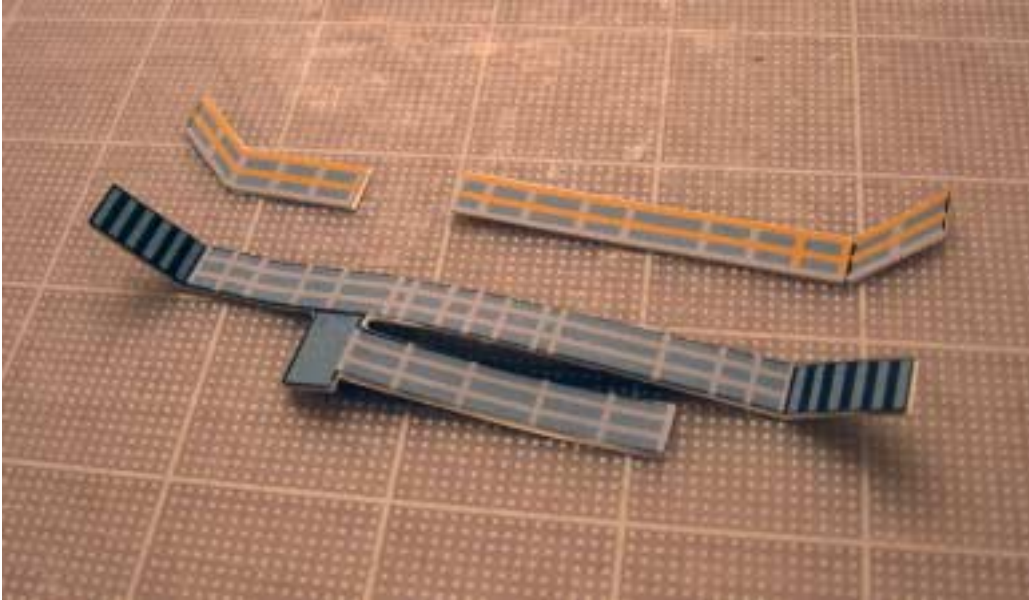




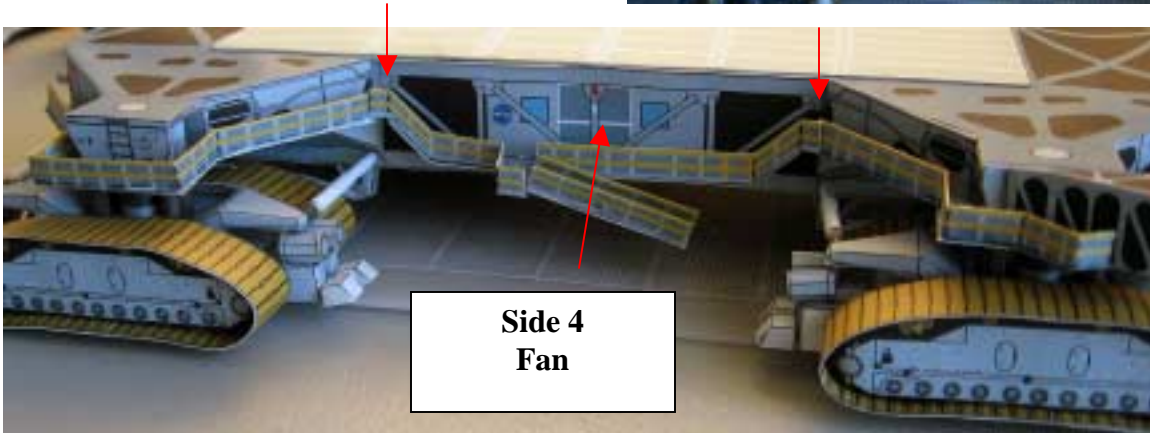
These photos show the corner with the cab (**corners B and D**). Use the same procedure to glue the walkway. Notice reference points indicated by arrows where the parts should be glued.



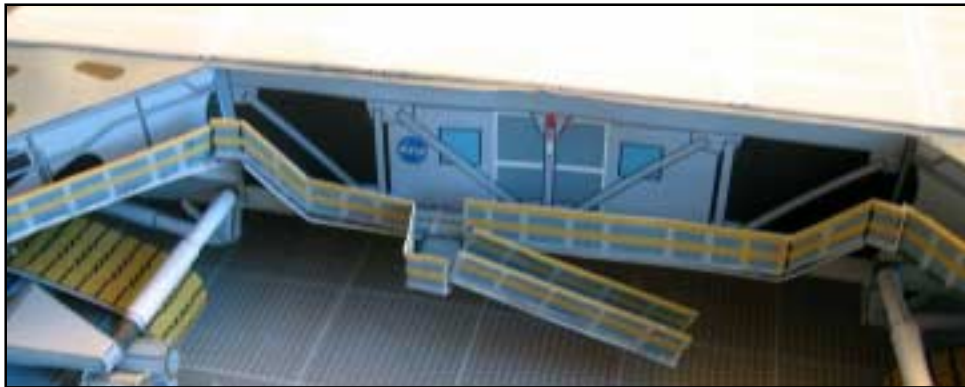
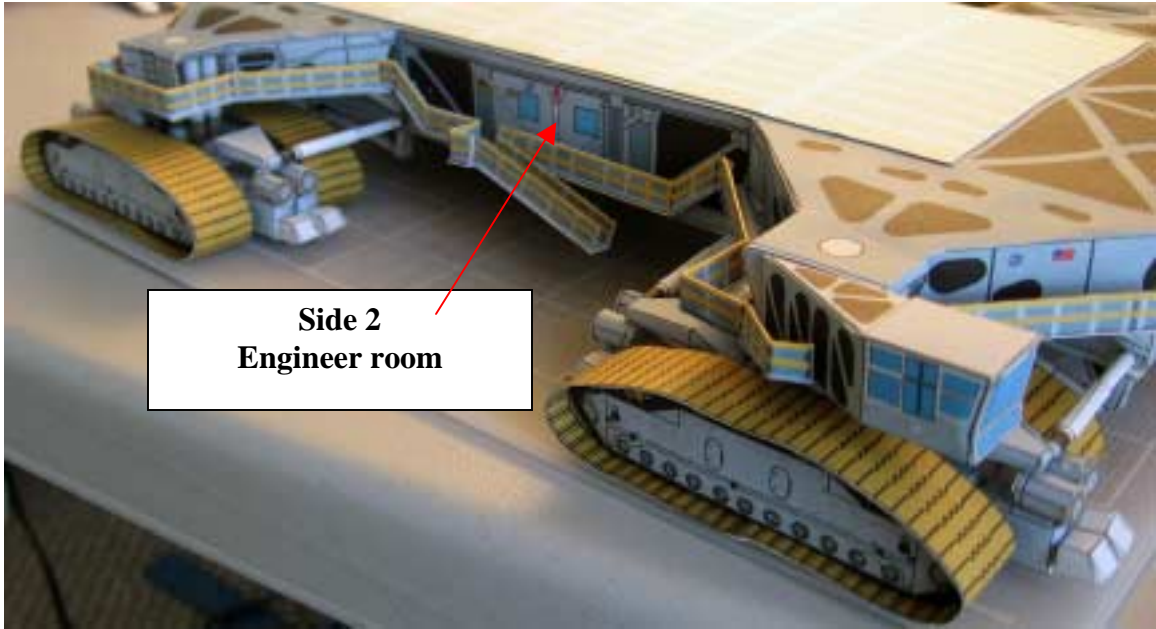
Building Sides 2 and 4 walkways and stairs (walkways are identical)



Arrows indicate where railings are connected to each other

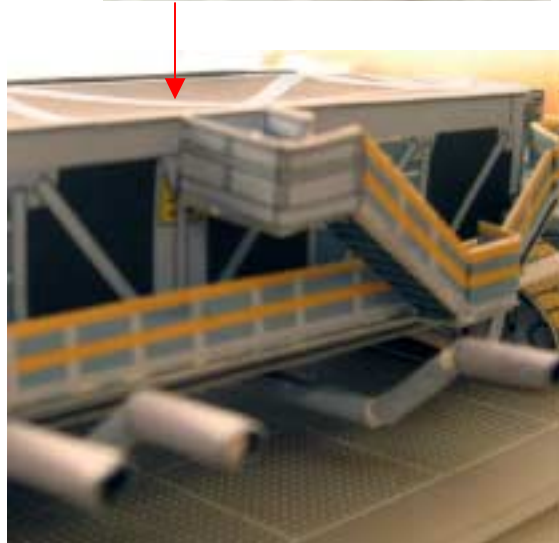
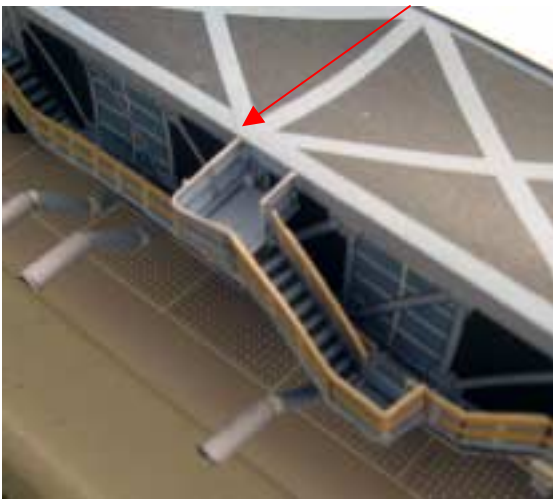
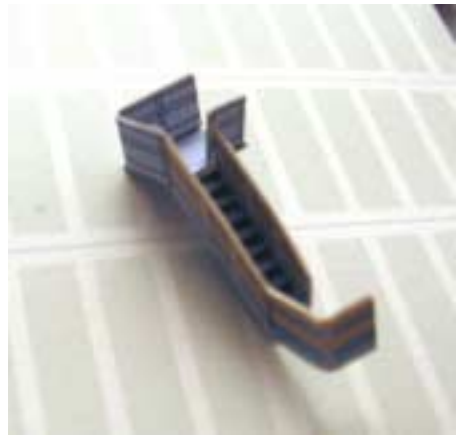
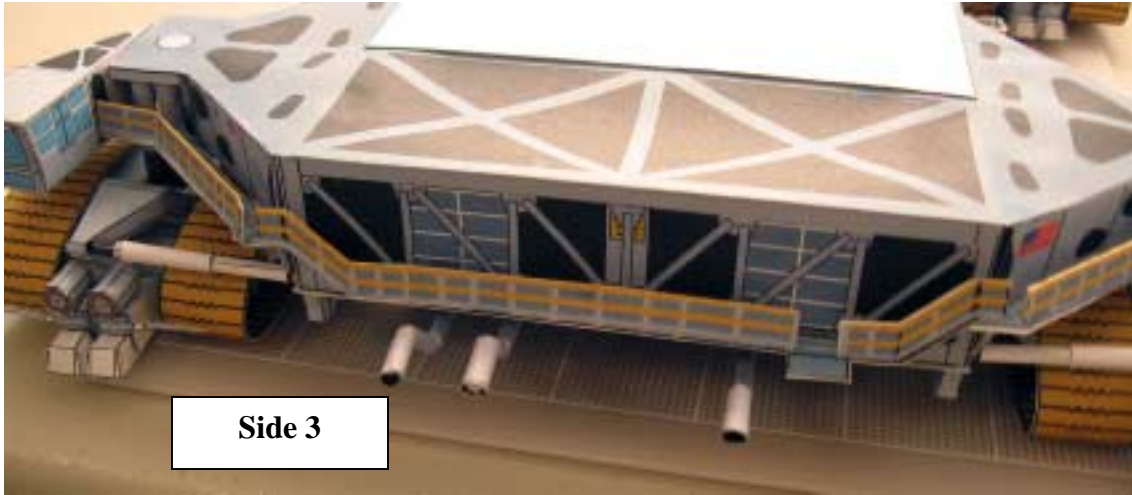


**Side 4
Fan**

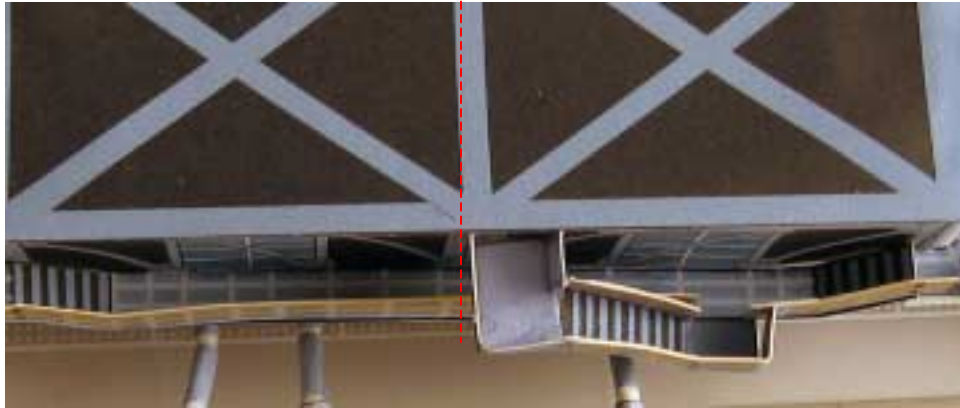
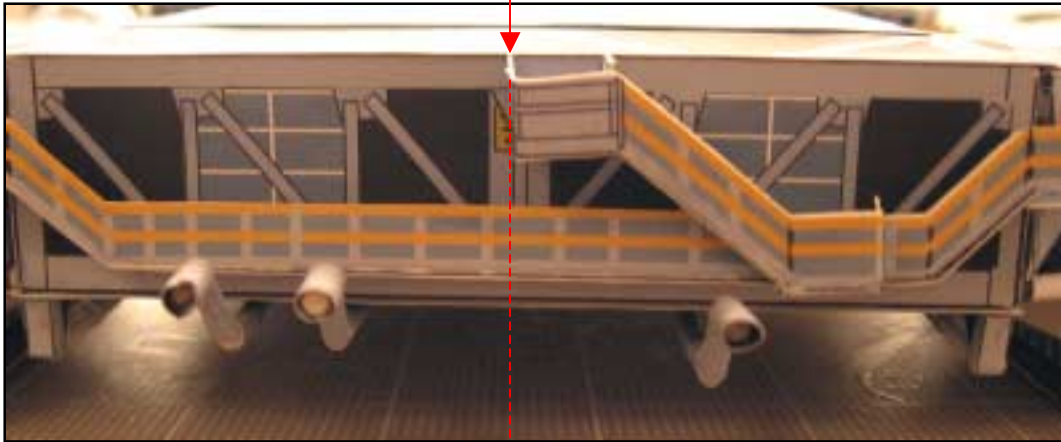


The access stair can be positioned as photos show.

Building Sides 1 and 3 walkways and stairs (different)

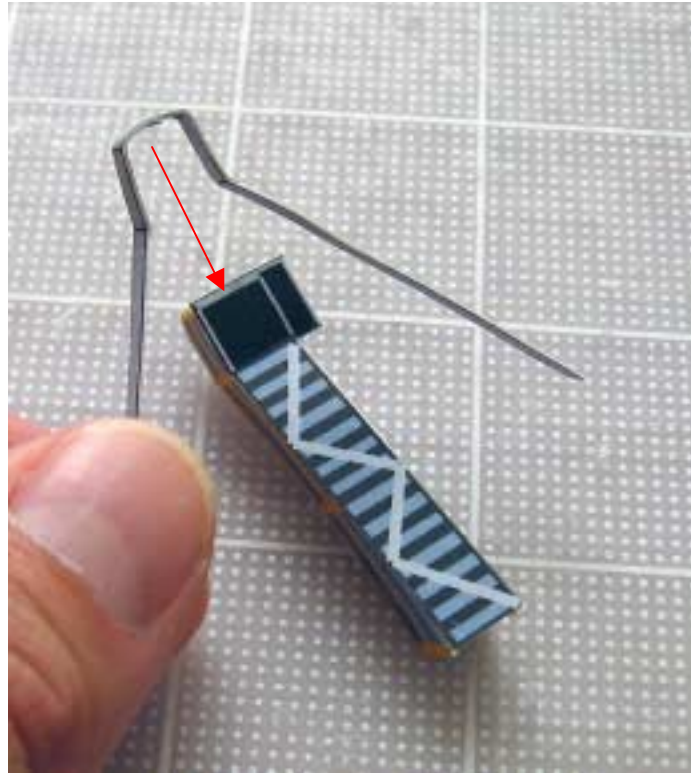
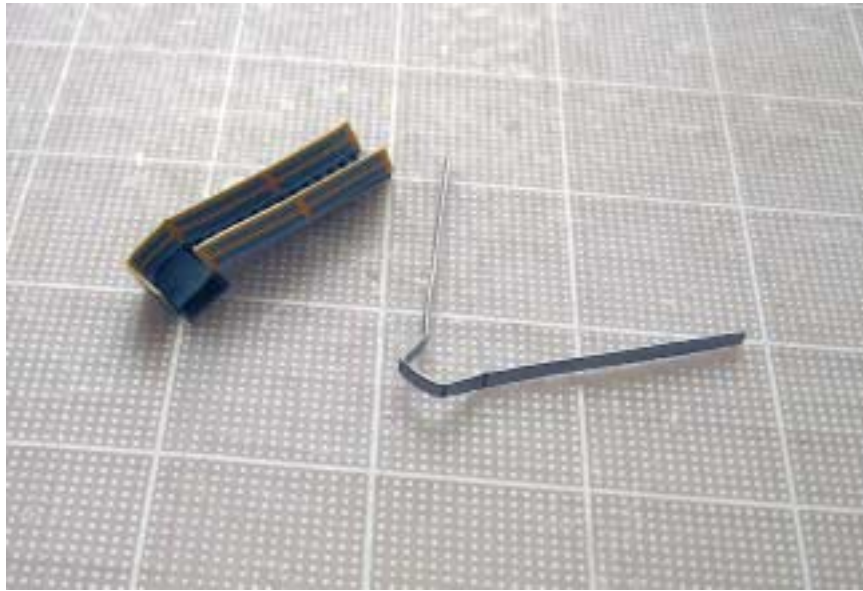


Arrows indicate reference points where to glue.



Side 1 walkway and stairs





Arrow indicates where the support beam is glued to the underside of the stairs floor.

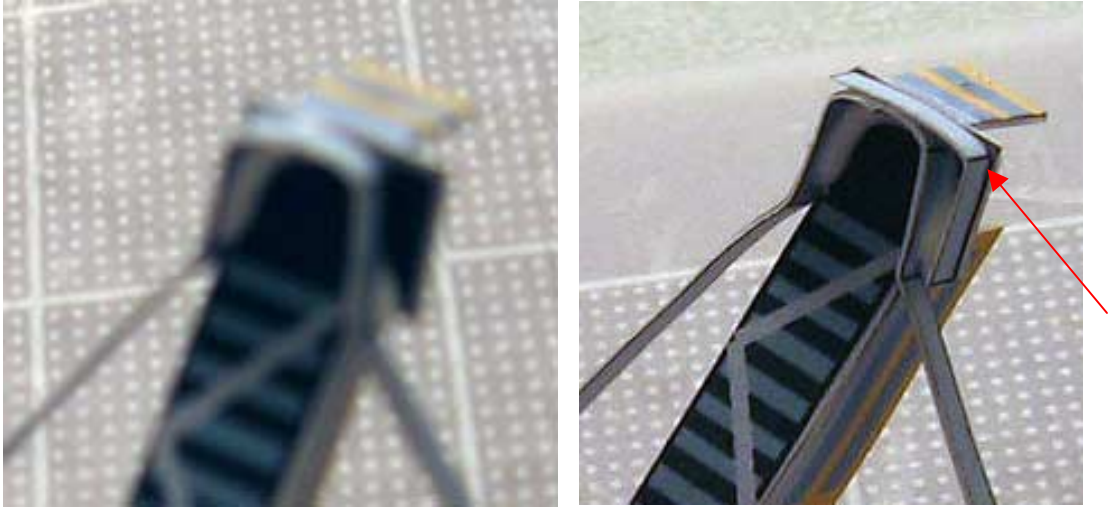
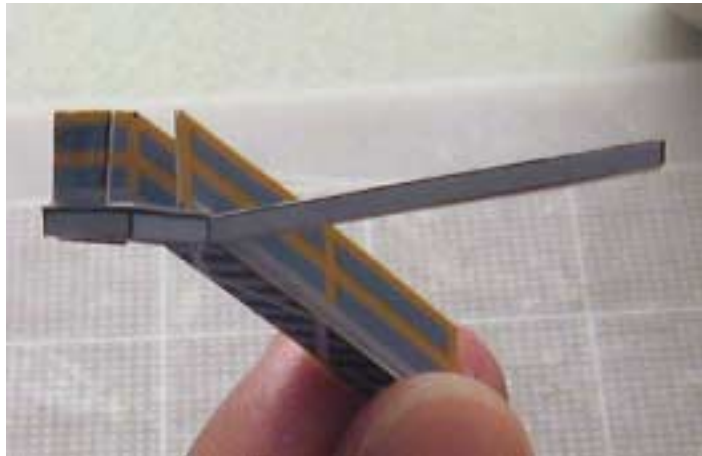
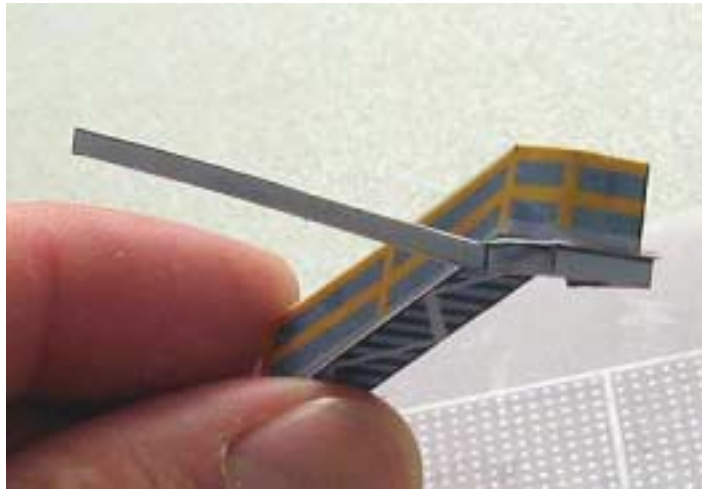
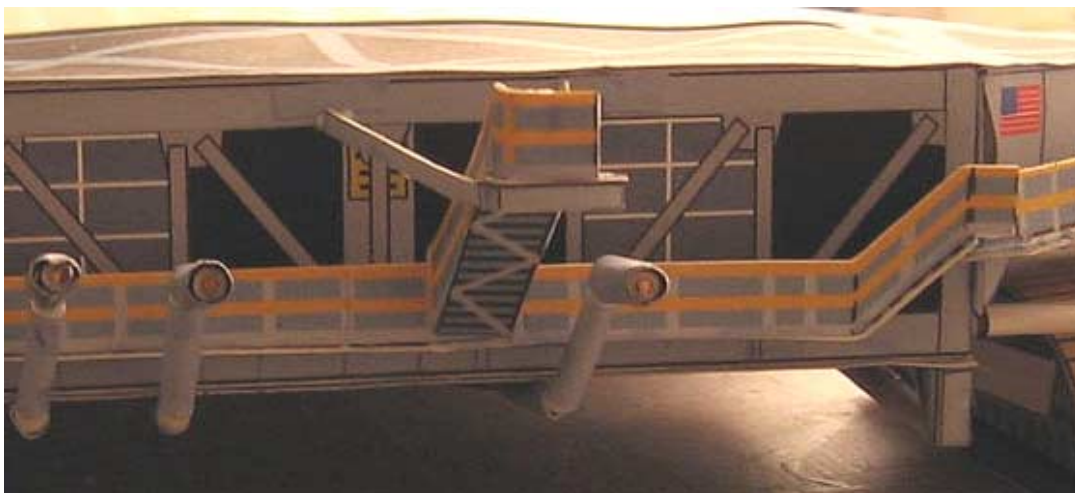
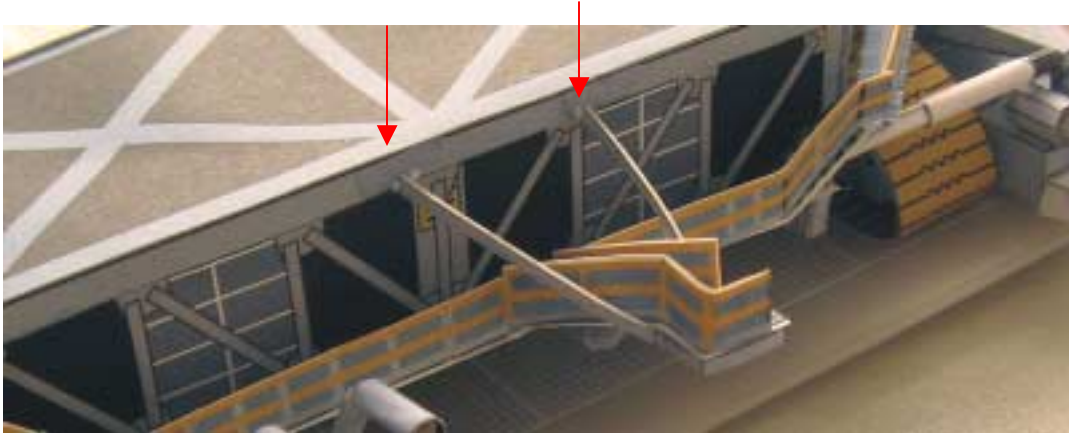


Photo shows extra part that will complete the sides of the floor.





Close-up photos of **Side 1** showing the access stairs to the Mobile Launch Platform.

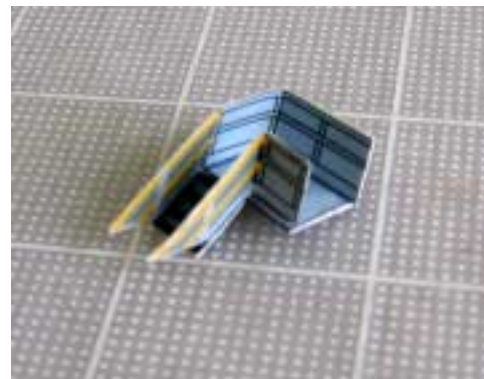
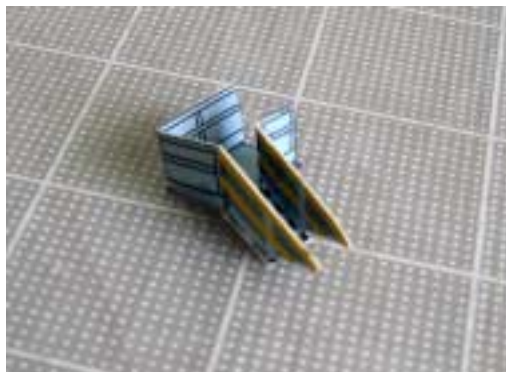
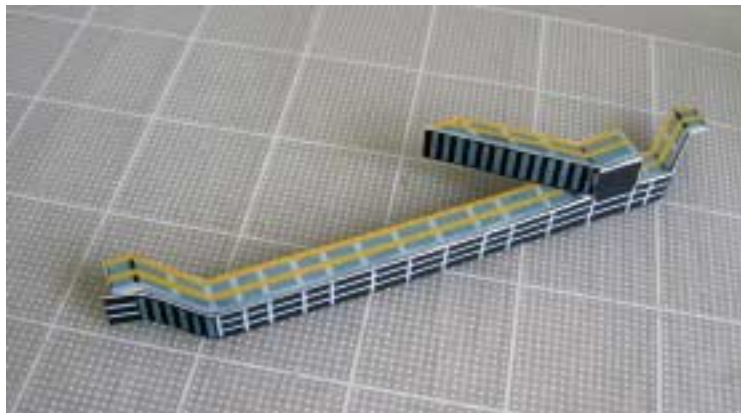
Sides 1 and 3 variations for Apollo Crawlers



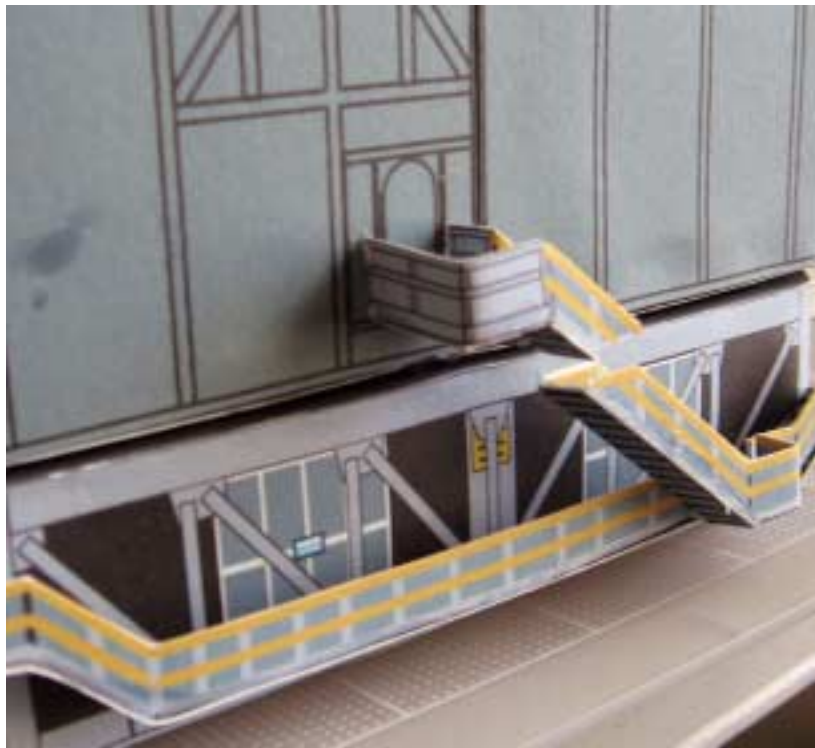
Note Side 1 railings for the Apollo Crawler. There is no access stairs to the Mobile Launch Platform.



Note Side 3 railings for the Apollo Crawler. The access to the Mobile Launch Platform is through this stair. The rest of the stair continues with a shorter stair in the MLP.



Top photos show different views of the Side 3 access stairs, while the photos at the bottom shows the stairs from the Mobile Launch Platform.



Note how both stairs are put together. The gap in between the stairs is based on photos of the real hardware.

Building the undercarriage

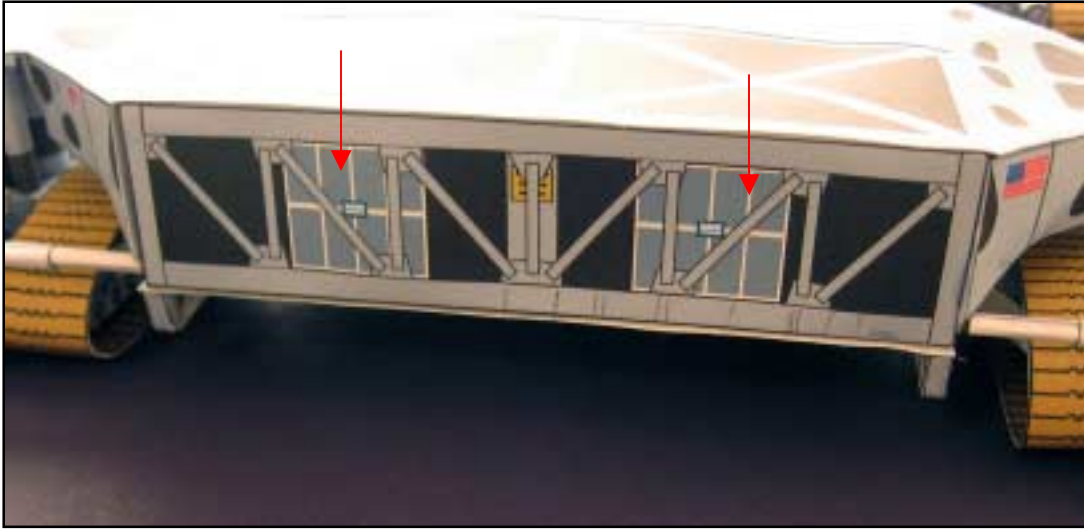
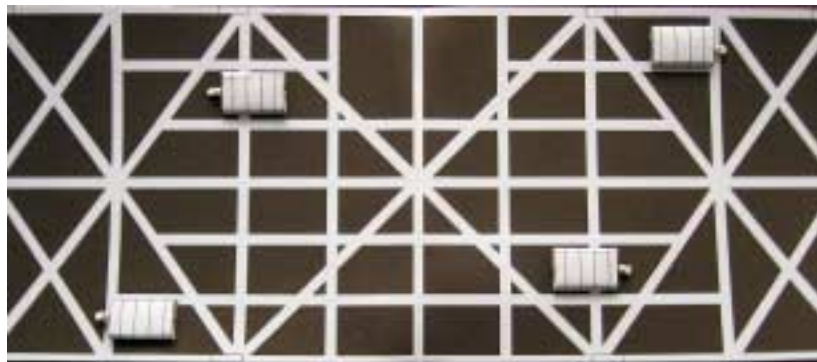
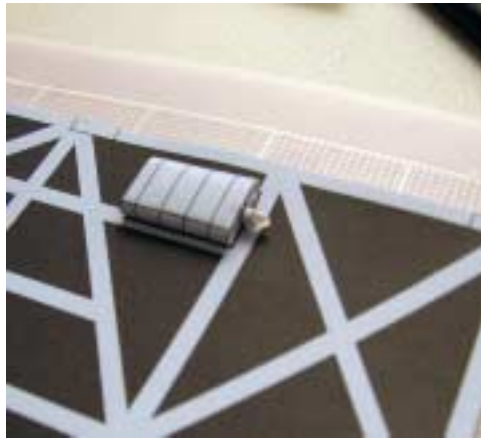
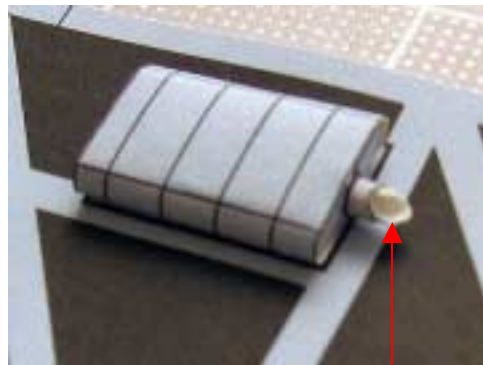
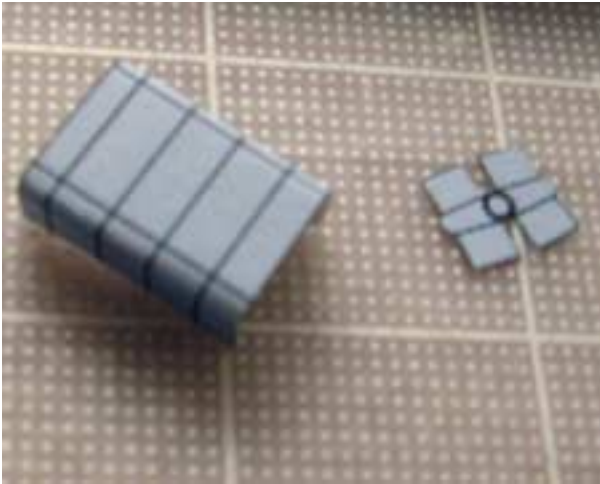
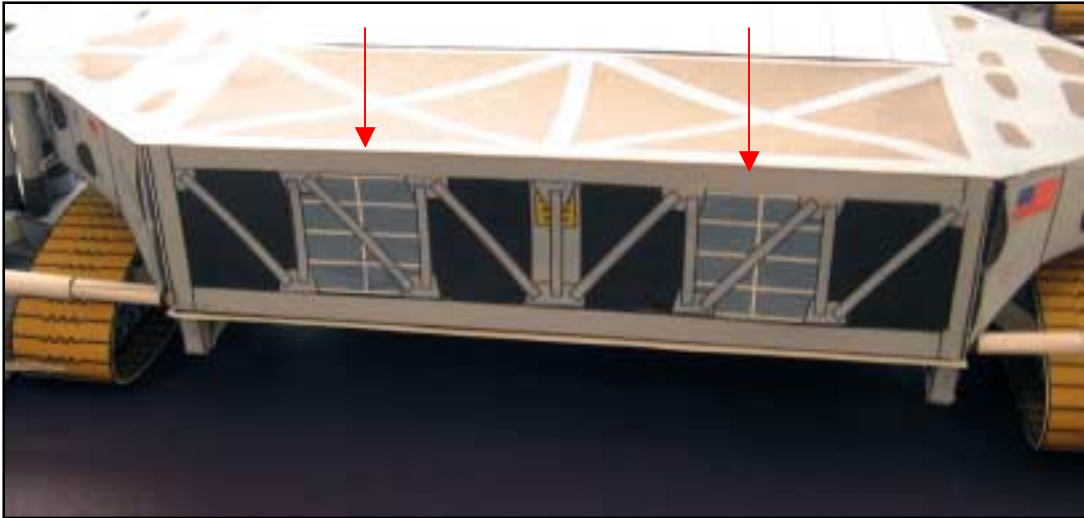


Photo shows how Sides 1 and 3 look like for the Apollo and Old Shuttle Crawlers. Notice the position of the fans (off centered). This serves as a reference for differentiating all crawler variants. The crawlers with these sides have the original old exhaust mufflers.

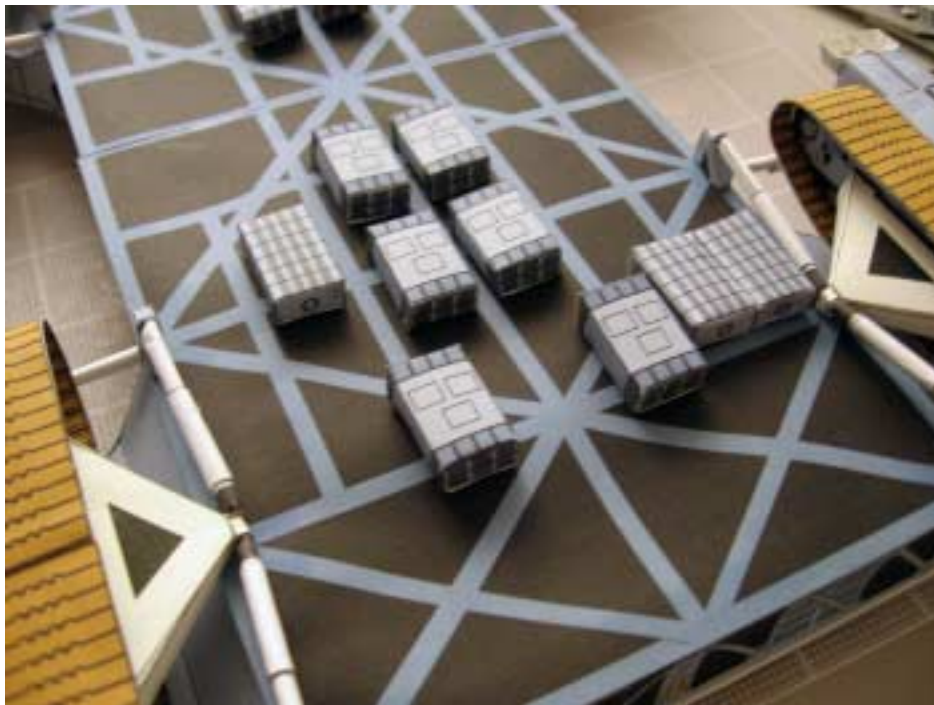




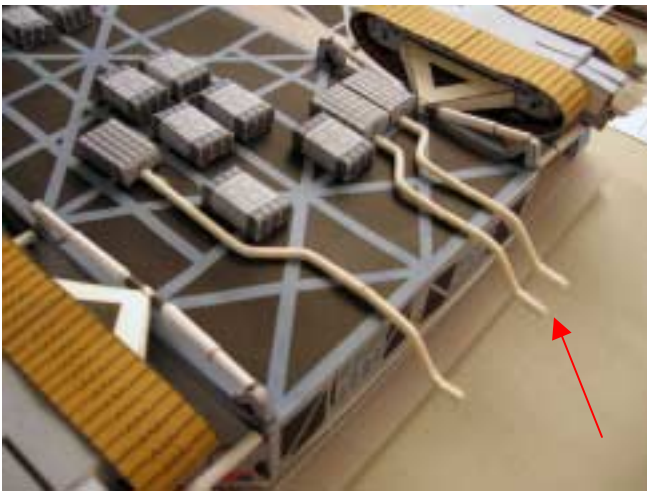
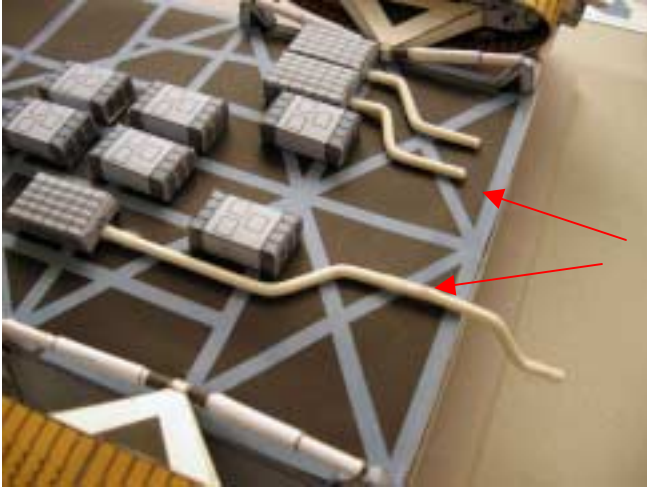
Use black marker to paint the inside of the exhaust tip.



With the re-design of the crawler starting with STS-114 for the Return to Flight mission, the fans were moved from their original position to a more centered position on Sides 1 and 3. This new crawler has the new and upgraded exhaust and ventilation system in the undercarriage.

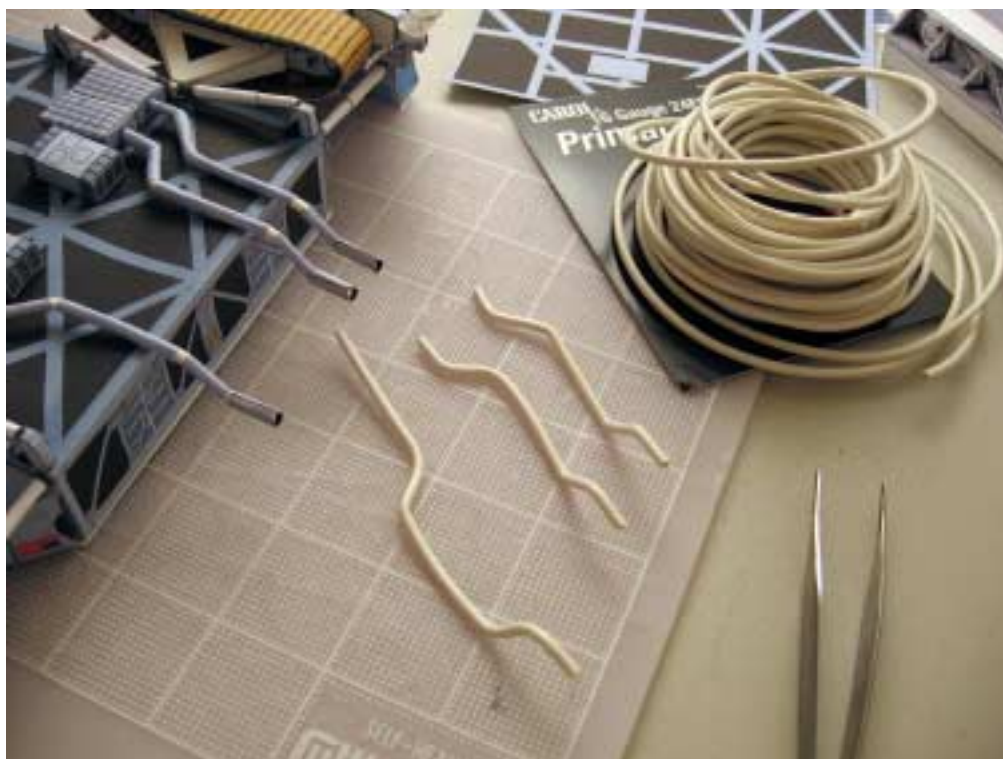


Glue the correspondent boxes to the undercarriage where indicated. This photo is from the prototype model and does not show where the pipes go. See next photo.



These photos show the assembly of the exhaust pipes on one end of the crawler. Notice that I have used cotton swabs for the pipes because of the width compared to the scale used.

Top photo shows that the each pipe is formed out of 2 swab parts, as second photo shows. The modeler can use whatever approach to building these pipes as long as they have a width of 2 mm.



Another approach is using electrical wire that can be found in a hardware or depot store. Use **16 gauge** for the pipes. This width is the same as the cotton swab 2mm.

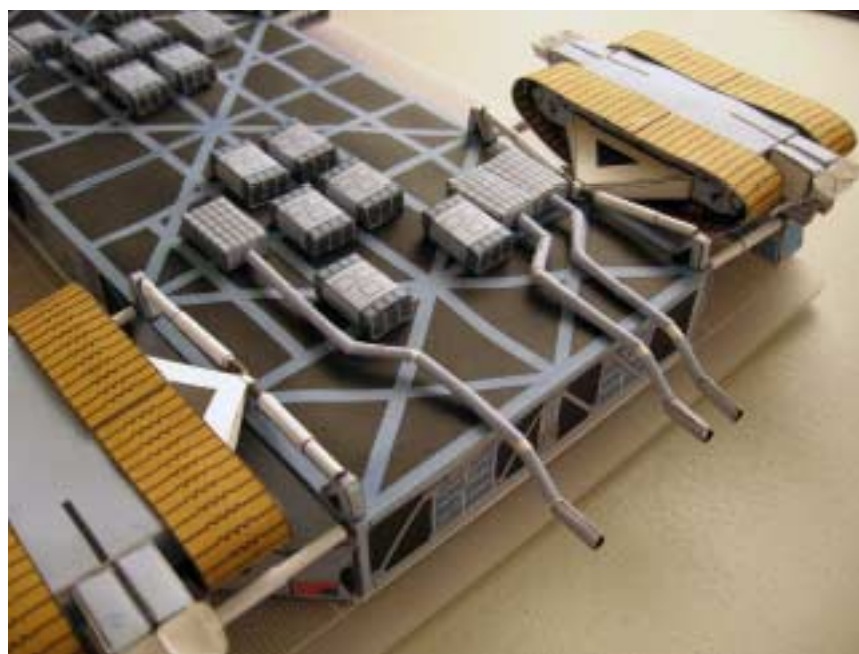
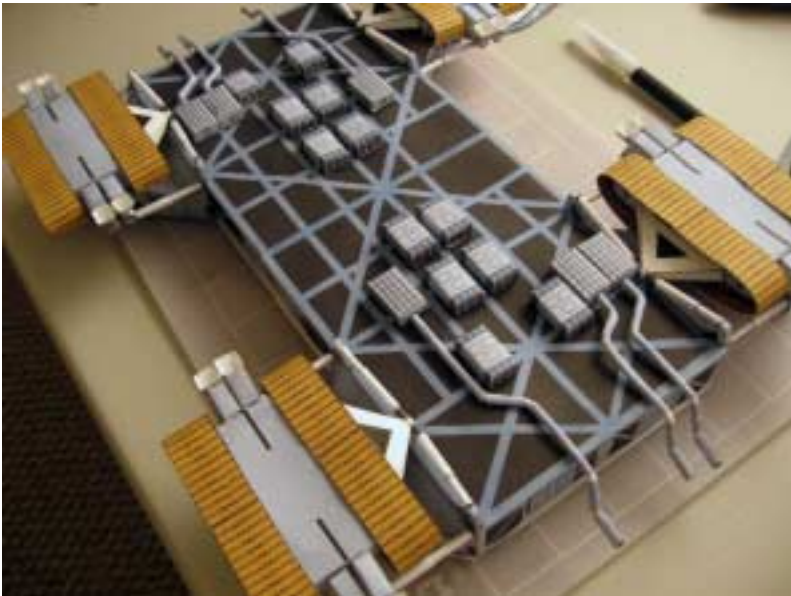
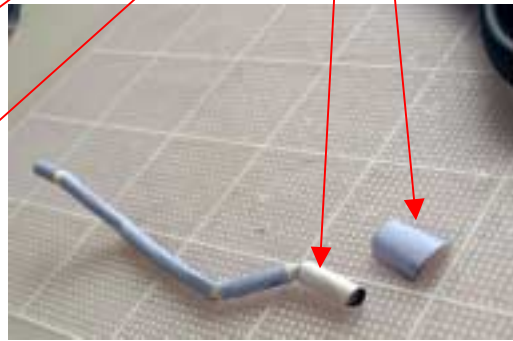
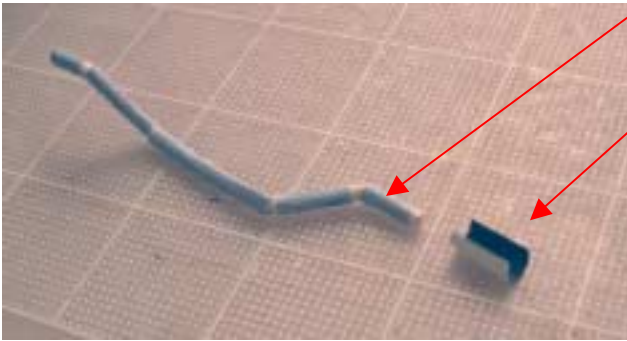
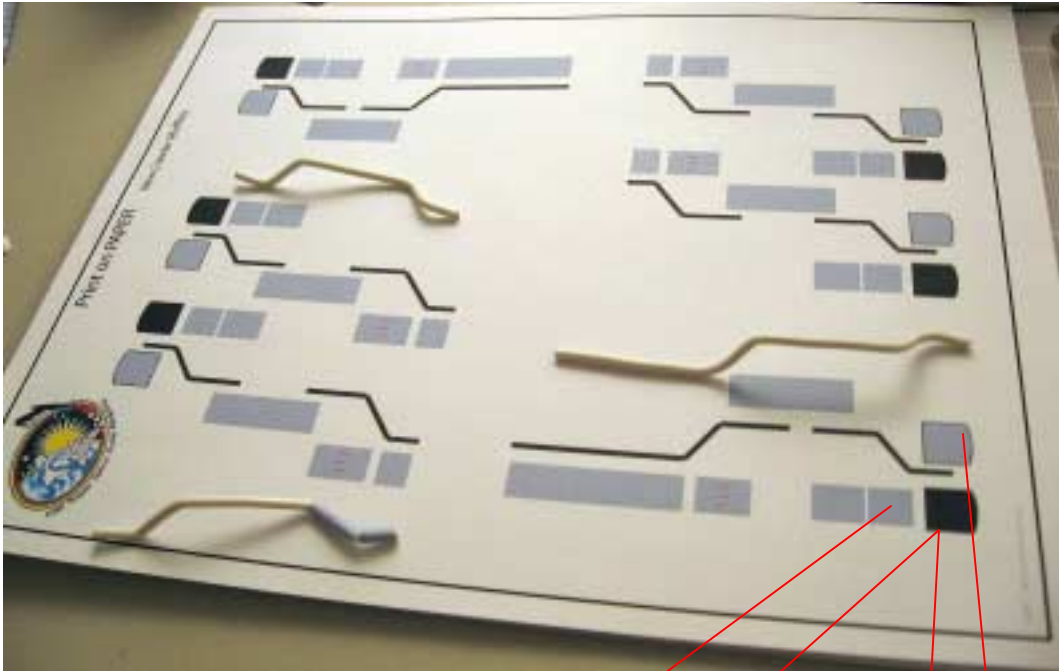


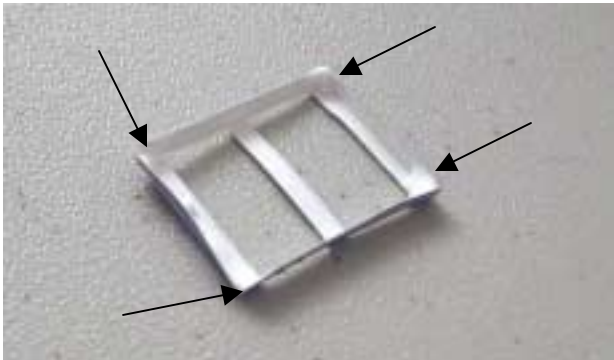
Photo shows that the pipes are covered with colored paper. (Use sheet that has the pipe covers and follow the pattern indicated) See next photo.



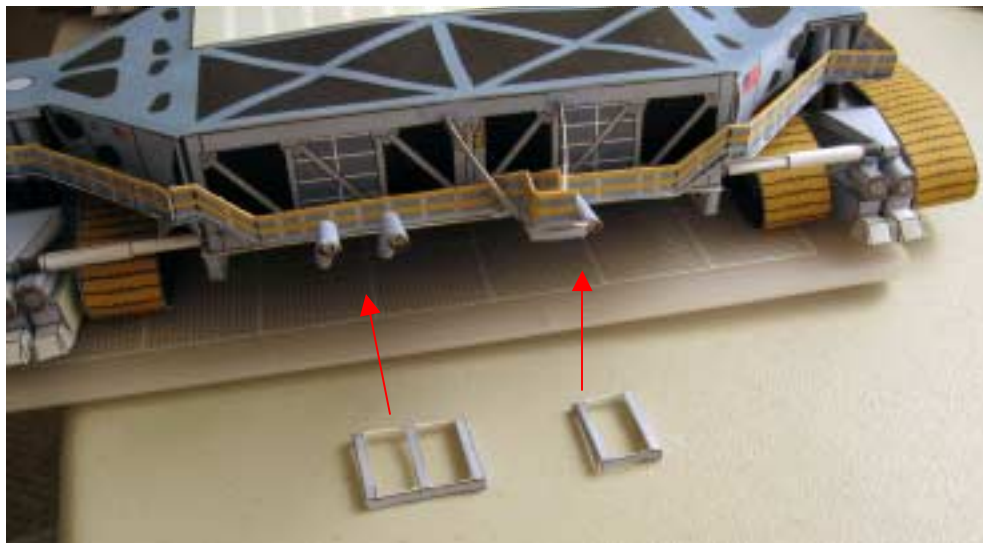
Arrows indicate the parts needed to build the tip of the new muffler.

This photo shows the complete new re-designed ventilation and exhaust system.

Building the exhaust pipes support (only for new current crawler)



Apply glue in each corner to reinforce the whole part.



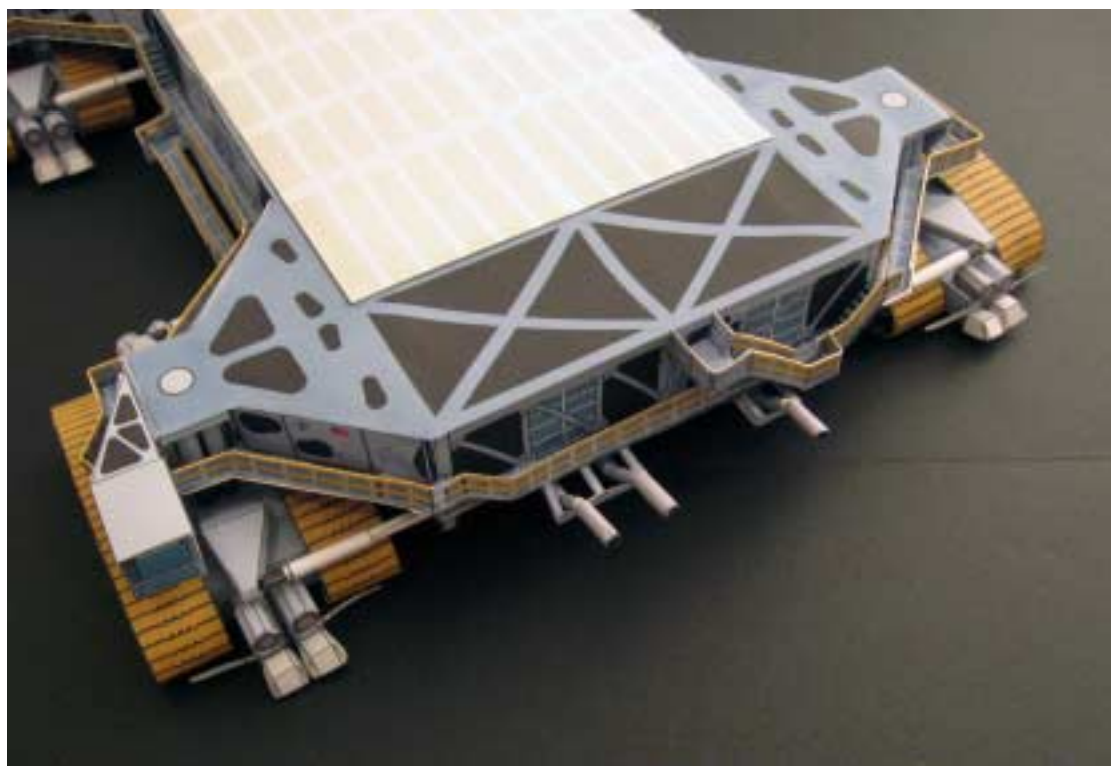
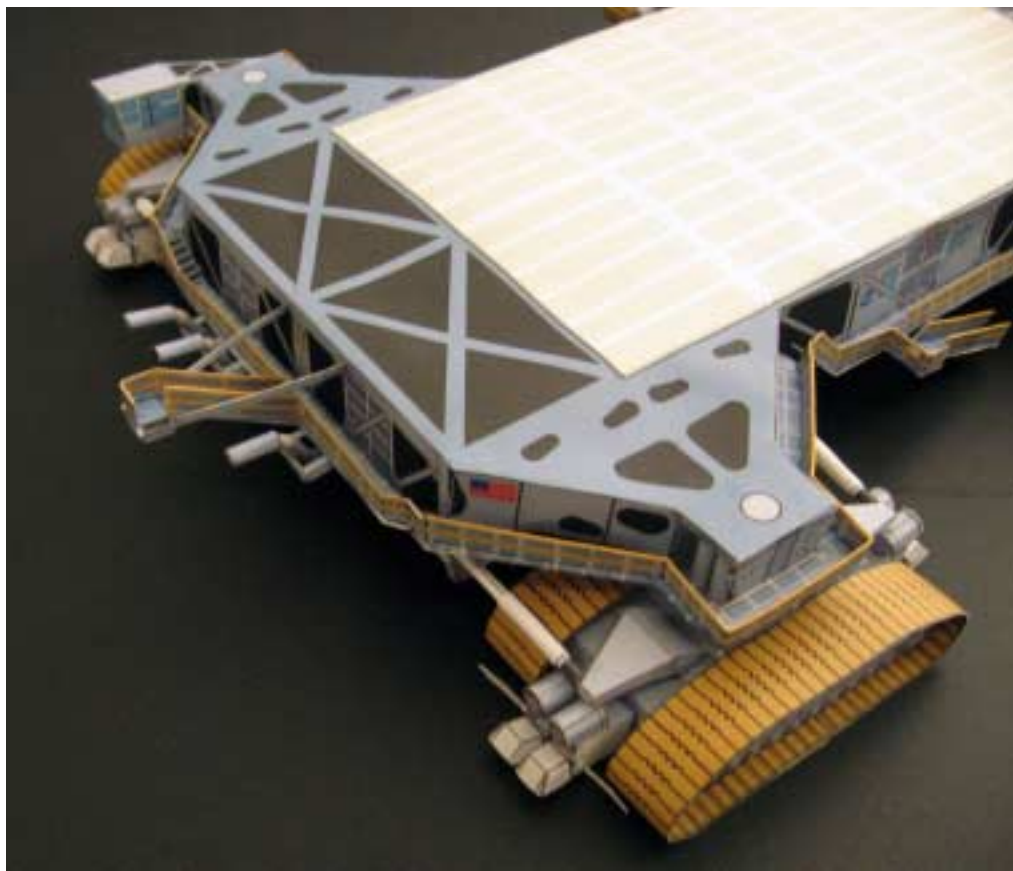
Crawler Cabs

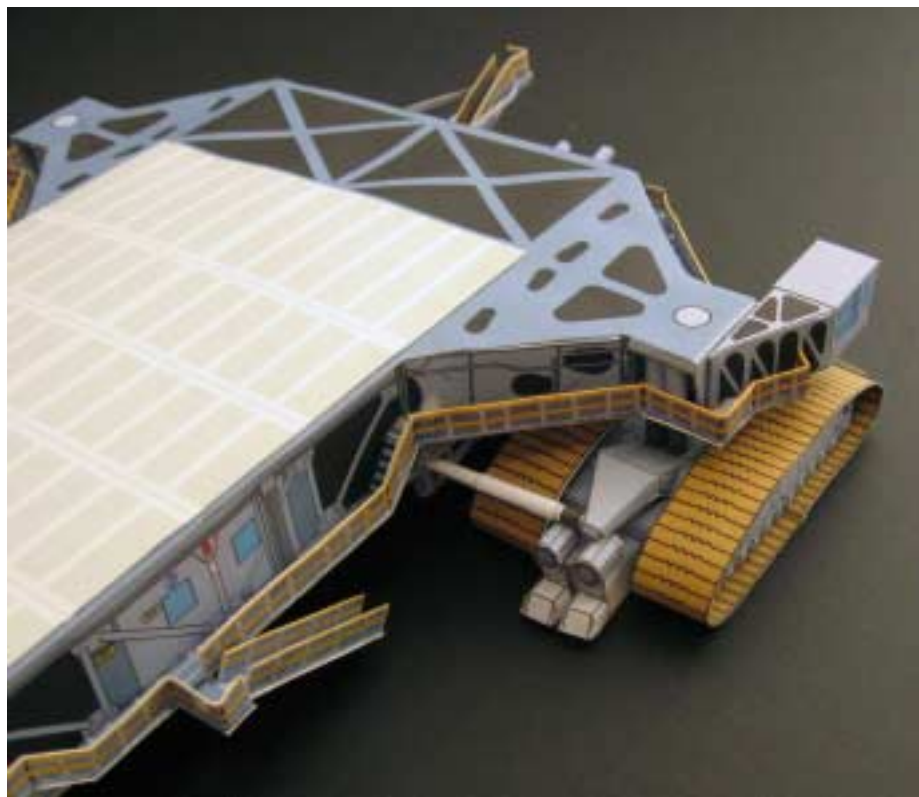
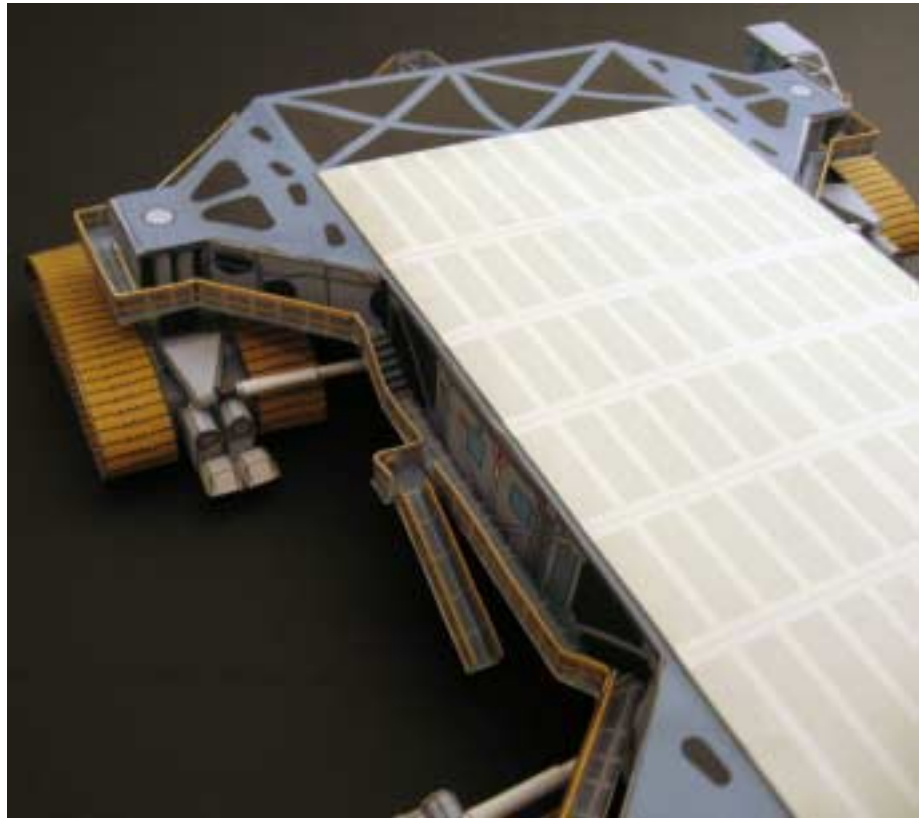


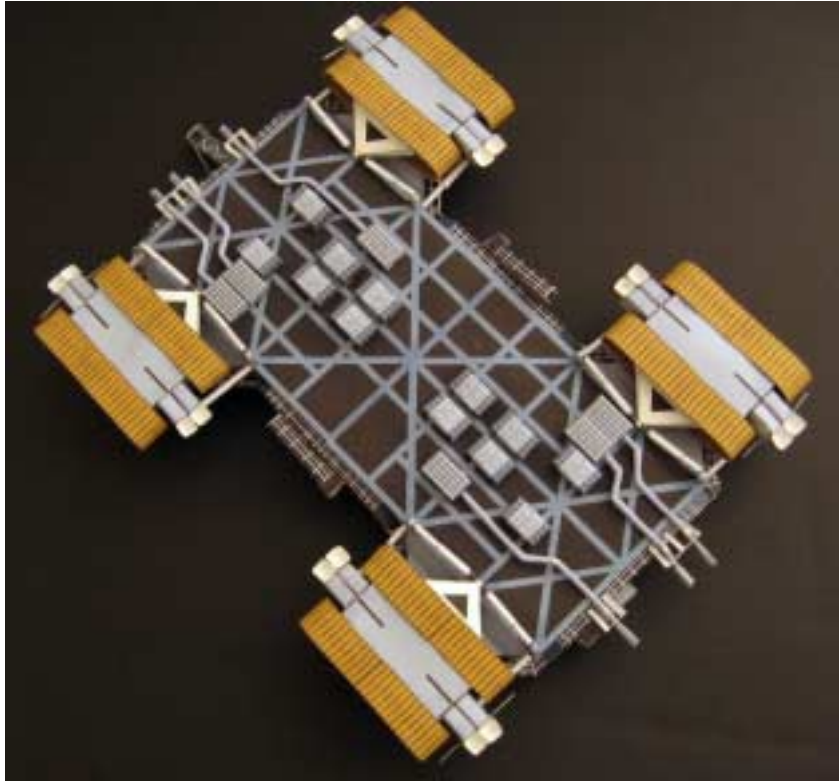
Photo shows the evolution of the cab, from the Apollo era (left) to the Shuttle program (middle and right).

Reference photos









<http://www.axmpaperspacescalemodels.com>