

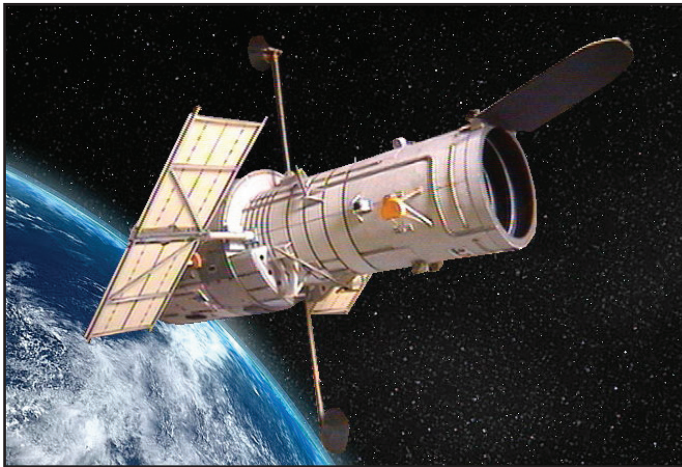
# Hubble Space Telescope Expert Model — Interior



**HUBBLESITE**

**Pattern Pieces:** Print this document on 32lb paper

Complete assembly directions and more information  
can be found online at [www.hubblesite.org/go/model](http://www.hubblesite.org/go/model)



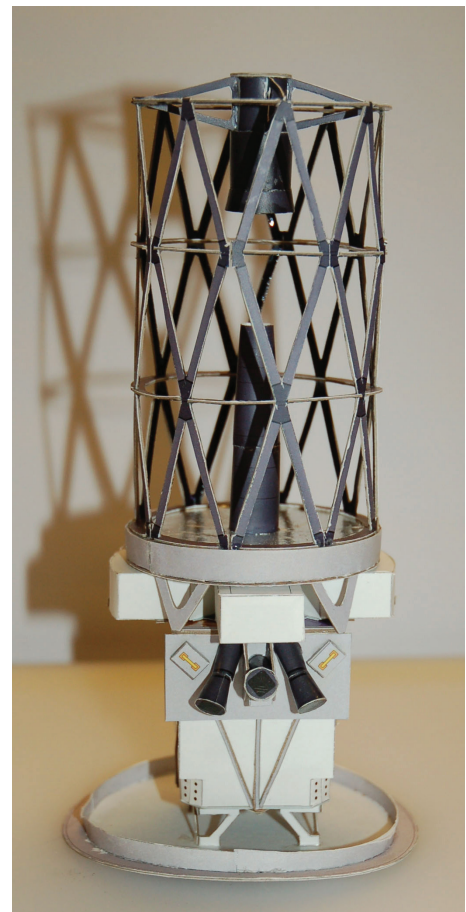
*Completed model, exterior (display suggestion)*

## About this model

This highly-detailed model of the Hubble Space Telescope is intended for experienced model-builders. This portion represents the internal structure of the telescope, including the mirror and the instrument bay, which fits inside of the external shell.

The details of this model are currently based on the telescope's configuration after Servicing Mission 3B in 2002.

This project is not appropriate for young children because of the high level of detail and the use of dangerously sharp tools. The estimated completion time is 30 hours.



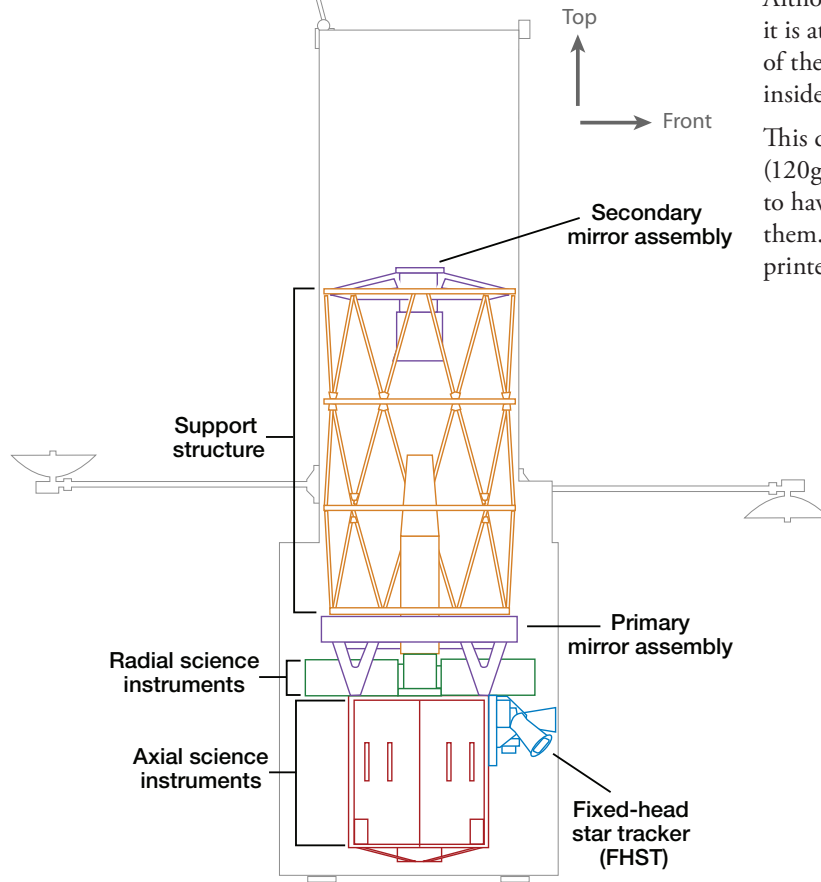
*Completed model, interior*

**Model design by Ton Noteboom**

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[www.hubblesite.org](http://www.hubblesite.org)

## Hubble Space Telescope Interior cutaway side view

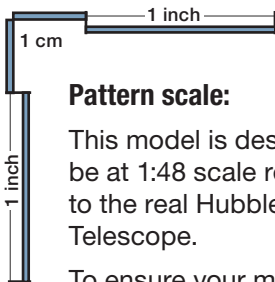


When assembling your model, keep track of which pieces are which by only cutting out the pieces you need for the particular part you are assembling, and lightly write the number of the piece in pencil on the back.

The parts are in sections labeled according to the part of the telescope they belong to.

Although this model can be built on its own, it is attended to accompany the external model of the Hubble Space Telescope and will fit inside of it when both are completed.

This document should be printed onto 32-lb (120g) paper, ideally in color. (You may want to have extra printouts handy in case you need them.) The directions (in a separate file) can be printed on regular paper in black-and-white.

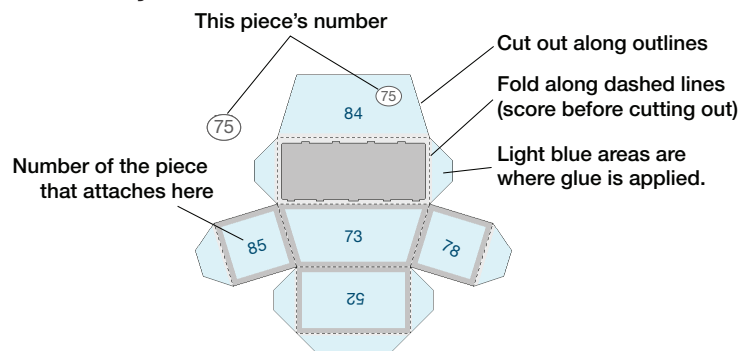


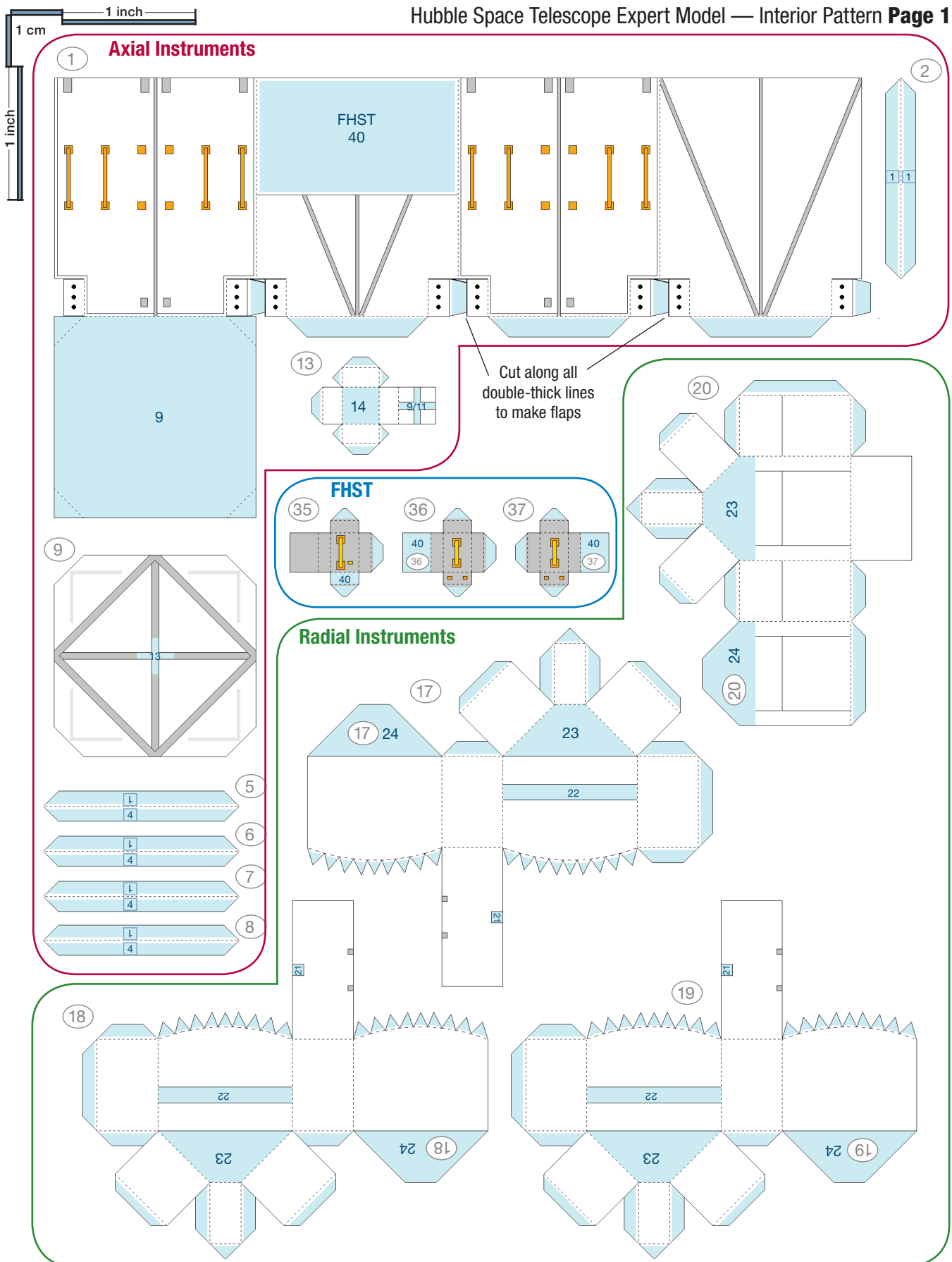
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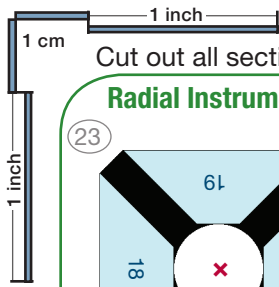
This model is designed to be at 1:48 scale relative to the real Hubble Space Telescope.

To ensure your model hasn't been resized during printing, measure this scale.

### Pattern key:

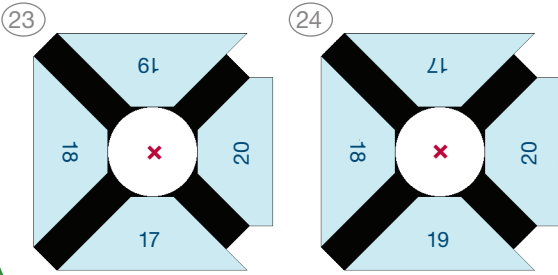




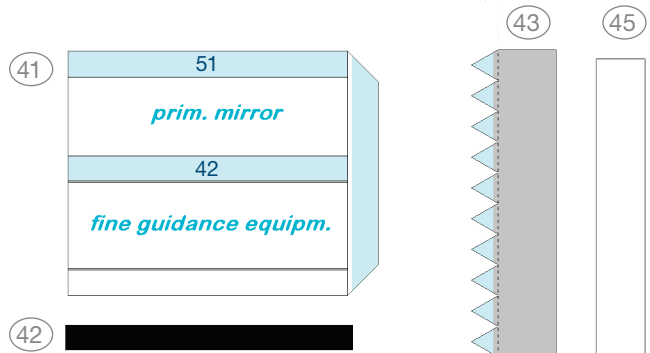


Cut out all sections marked with ✕

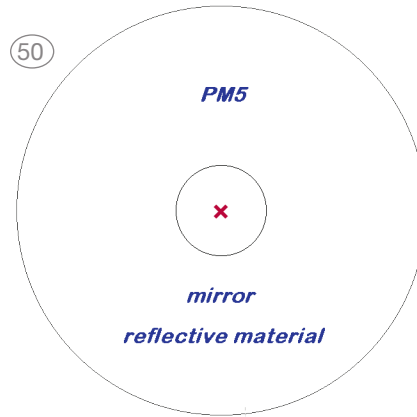
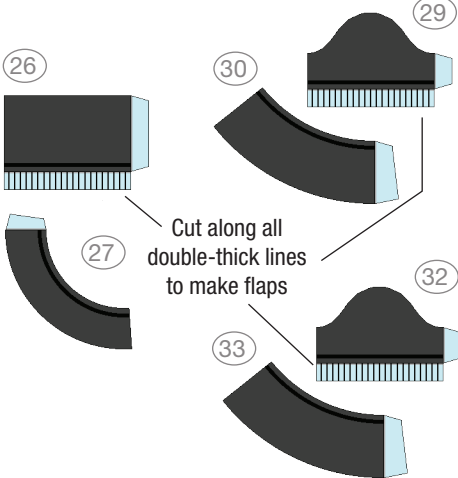
### Radial Instruments



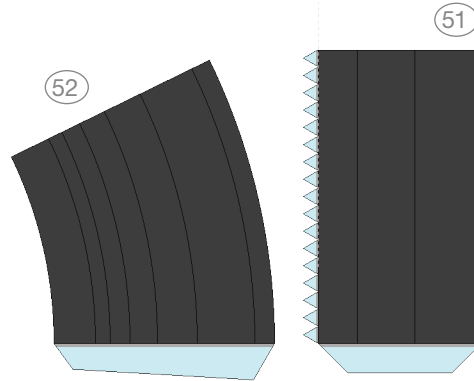
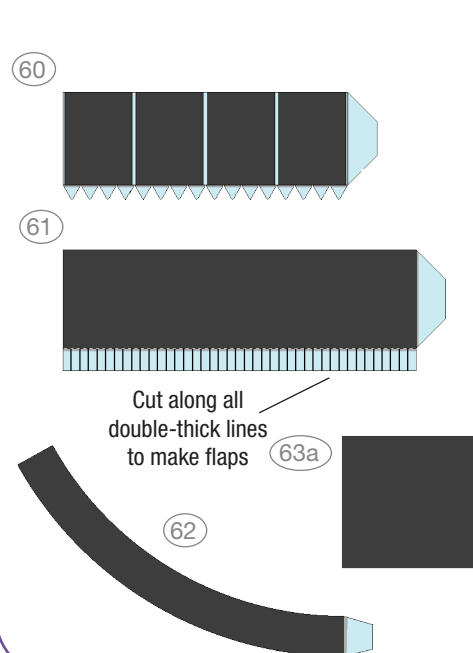
### Primary Mirror Assembly

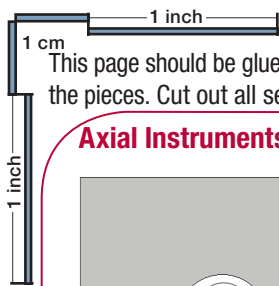


### FHST



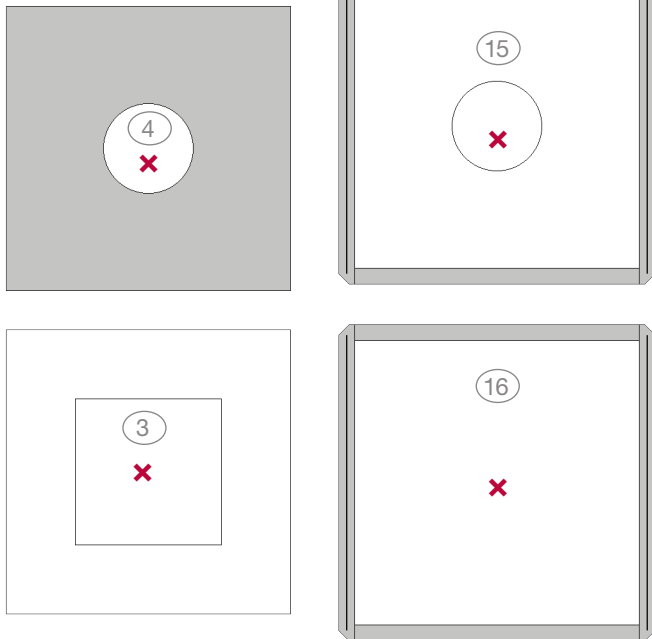
### Secondary Mirror Assembly



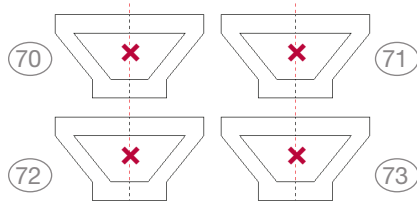
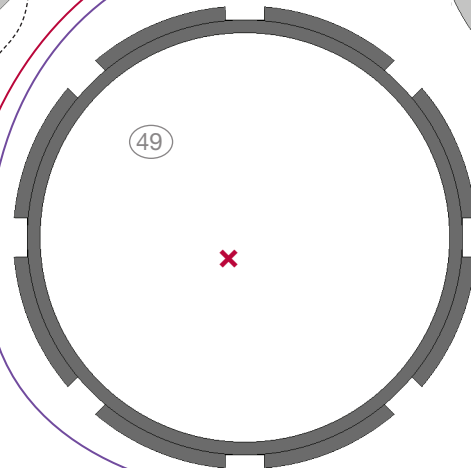
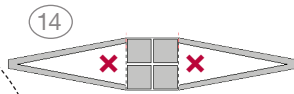
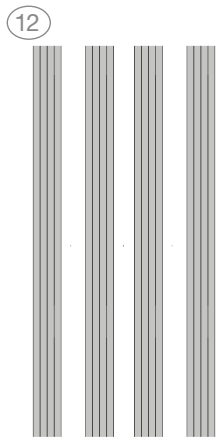
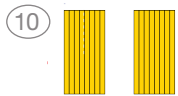
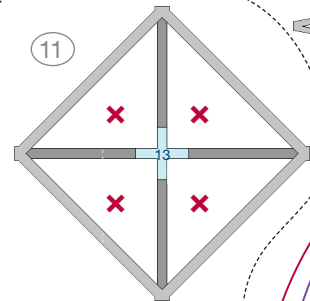


This page should be glued to cardboard before cutting out the pieces. Cut out all sections marked with ✕

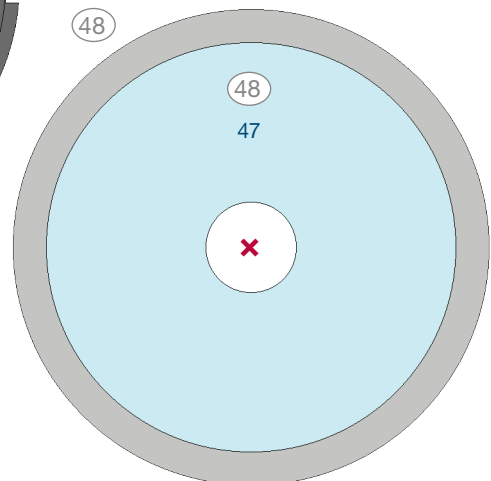
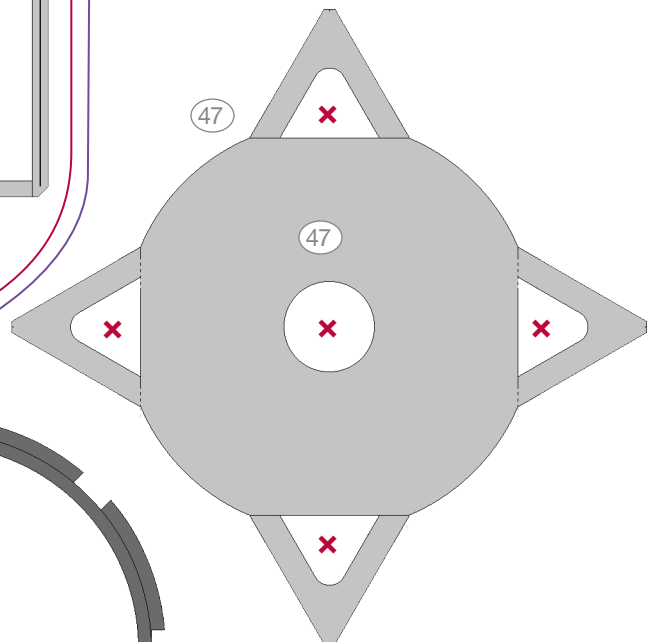
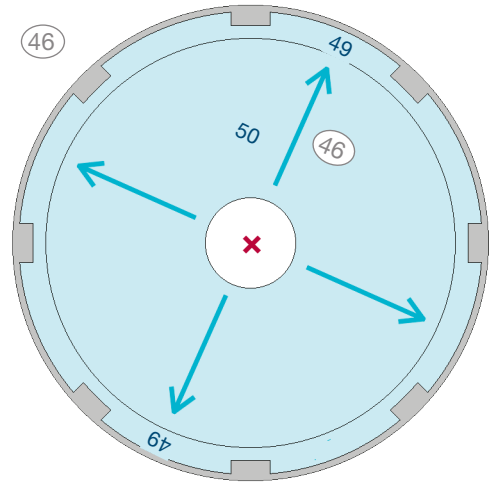
### Axial Instruments

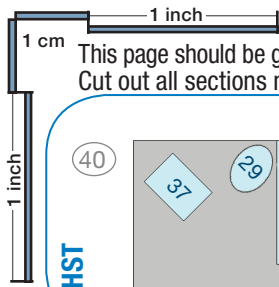


### optional details

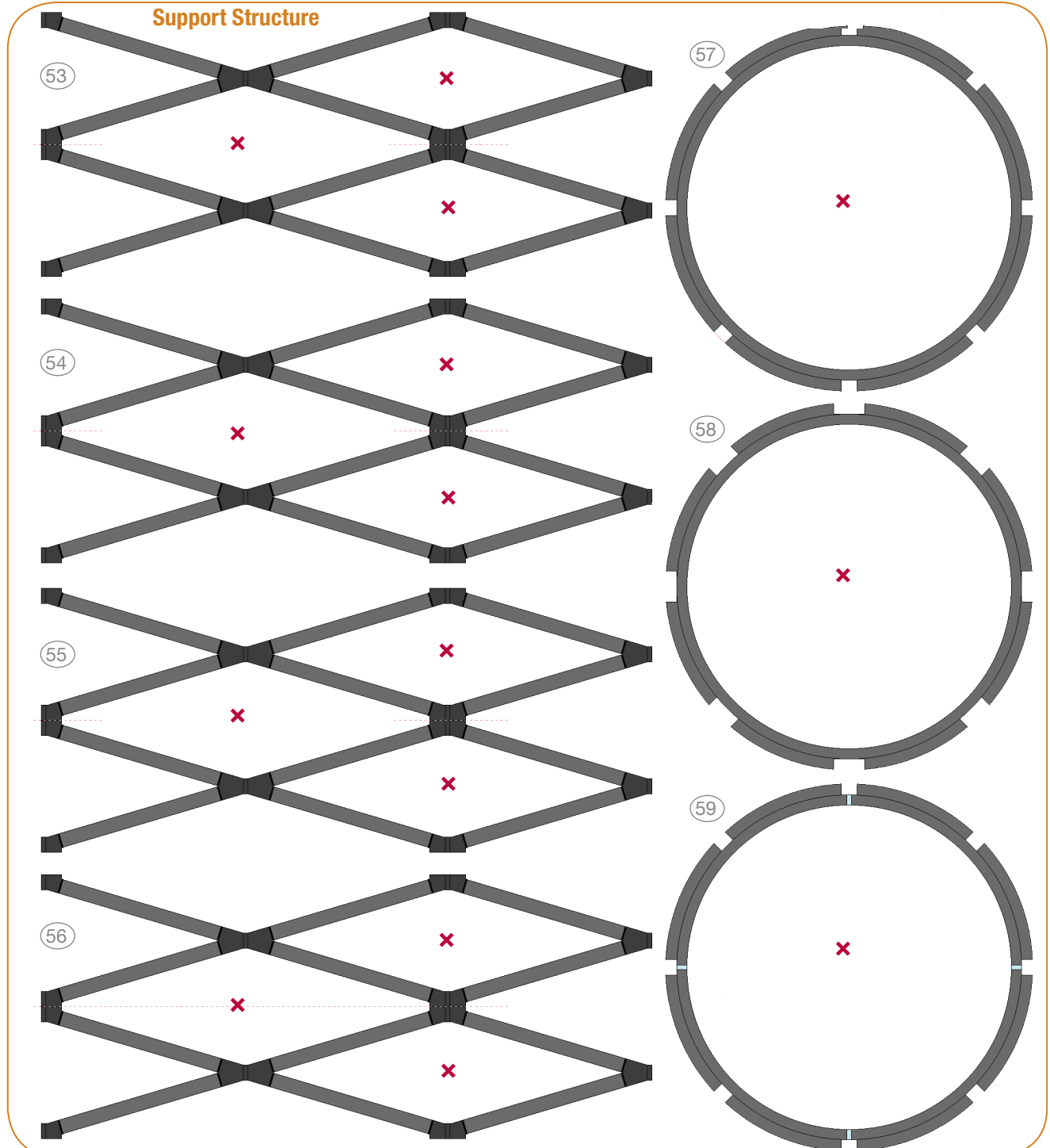
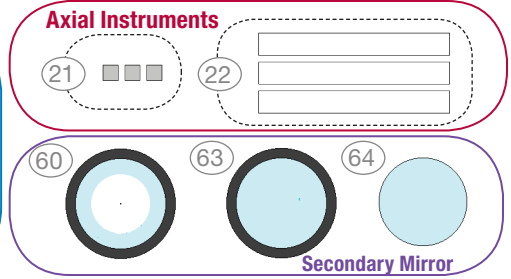
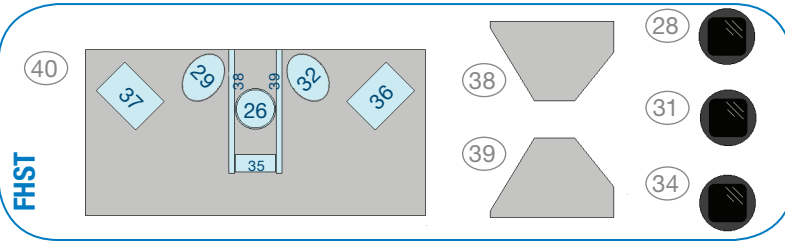


### Primary Mirror Assembly





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Cut out all sections marked with ✕





# Hubble Space Telescope Expert Model — Exterior



**HUBBLESITE**

**Pattern Pieces:** Print this document on 32lb paper

Complete assembly directions and more information  
can be found online at [www.hubblesite.org/go/model](http://www.hubblesite.org/go/model)



*Completed model (display suggestion)*

## About this model

This highly detailed model of the Hubble Space Telescope is intended for experienced model-builders. You have the option of also assembling the internal structure of the telescope, including the mirror and the instrument bay, which fits inside the external shell.

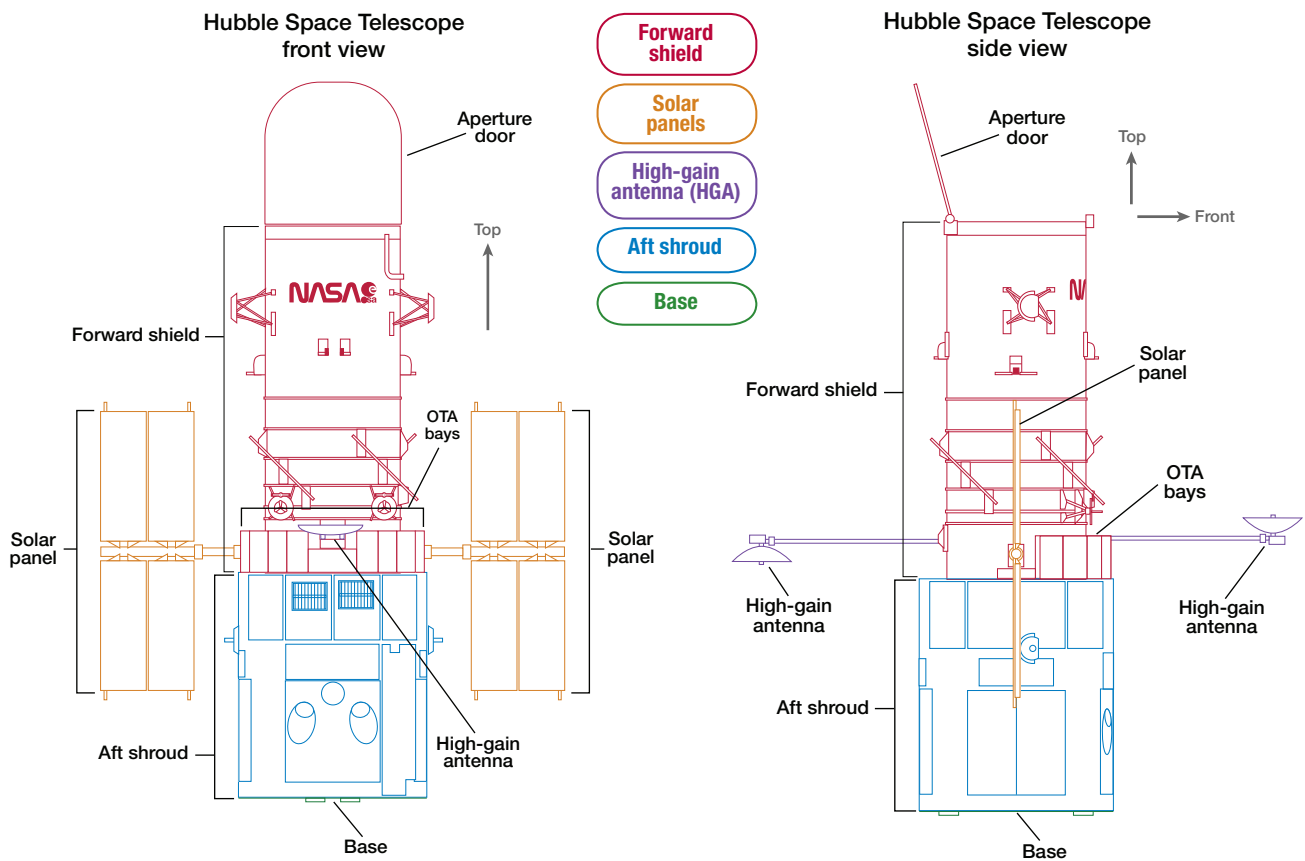
The details of this model are based on the telescope's configuration after Servicing Mission 3B in 2002.

This project is not appropriate for young children because of the high level of detail and the use of dangerously sharp tools. The estimated completion time is 30 hours.

**Model design by Ton Noteboom**

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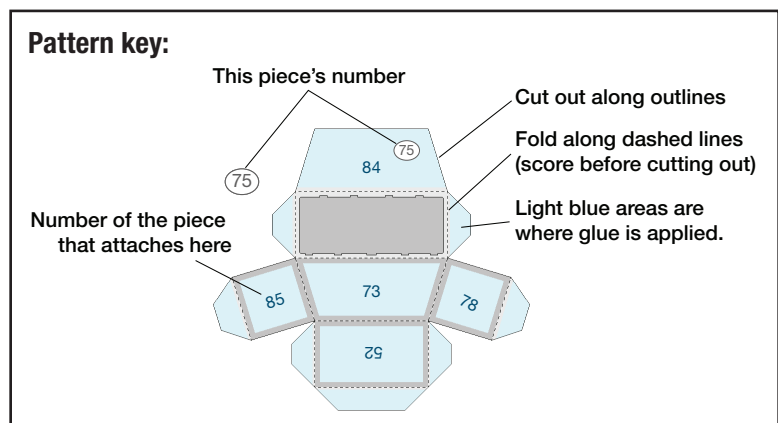
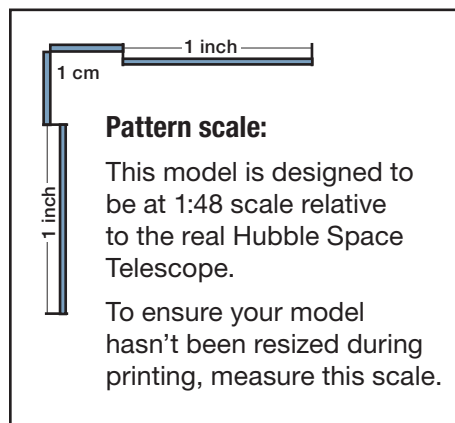
[www.hubblesite.org](http://www.hubblesite.org)



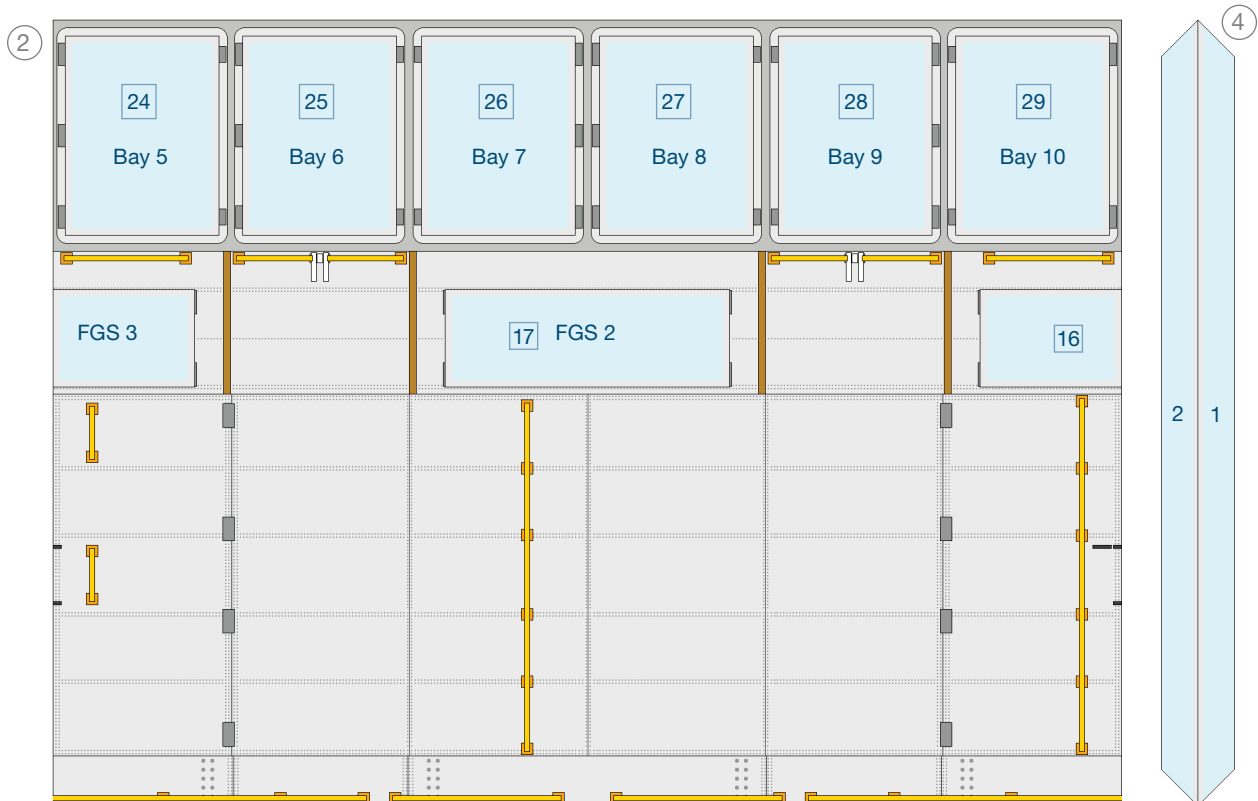
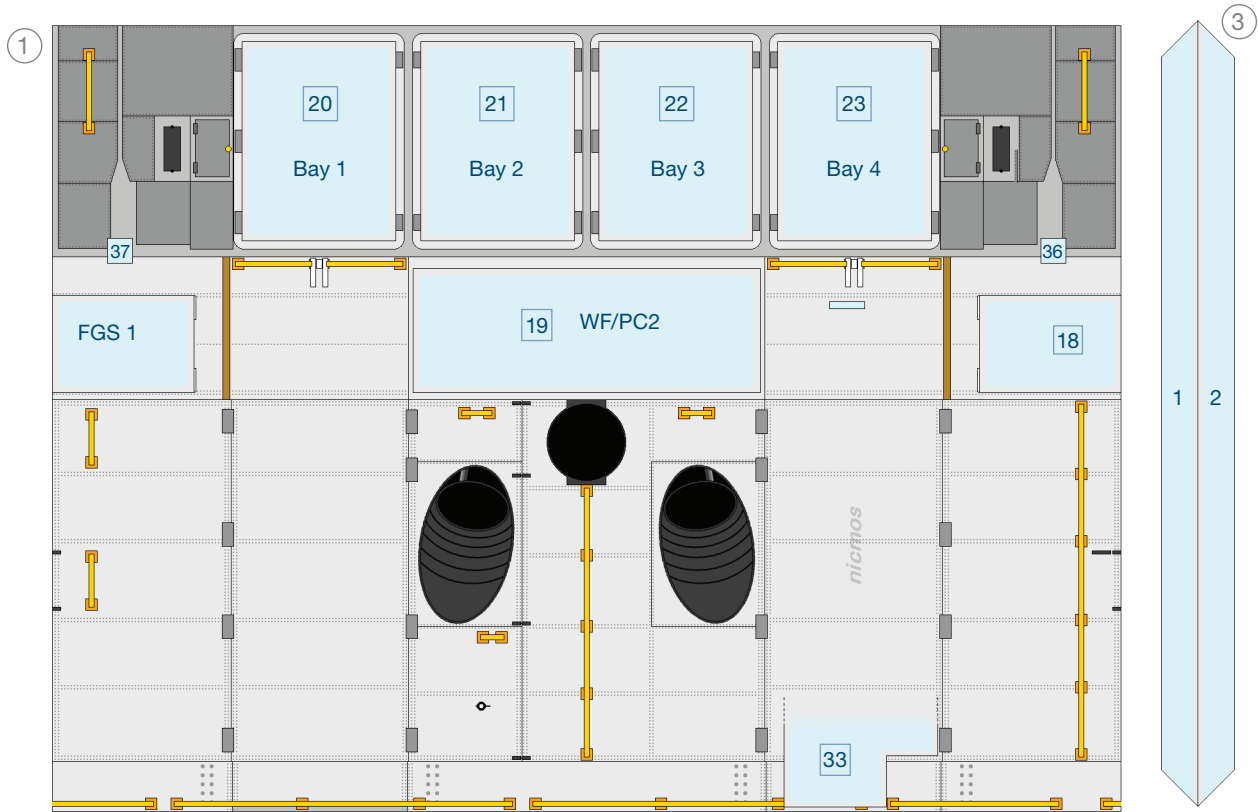
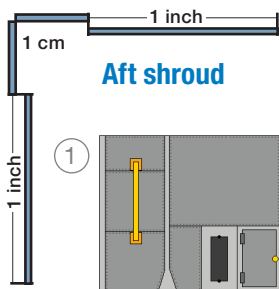
When assembling your model, keep track of which pieces are which by only cutting out the pieces you need for the particular part you are assembling, and lightly write the number of the piece in pencil on the back.

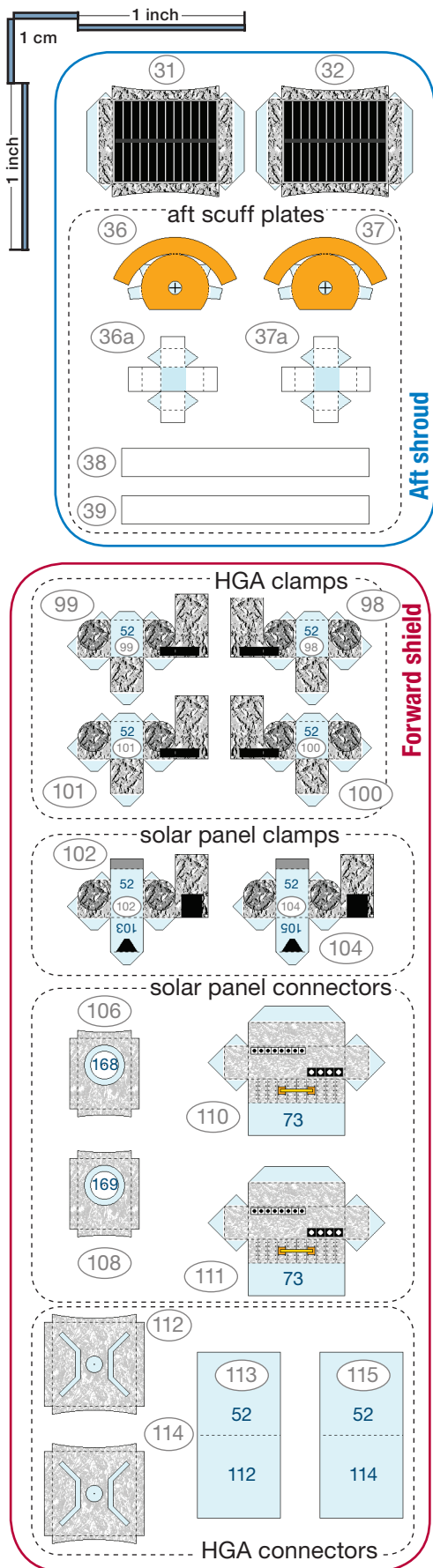
The parts are in sections color-coded by the part of the telescope they belong to.

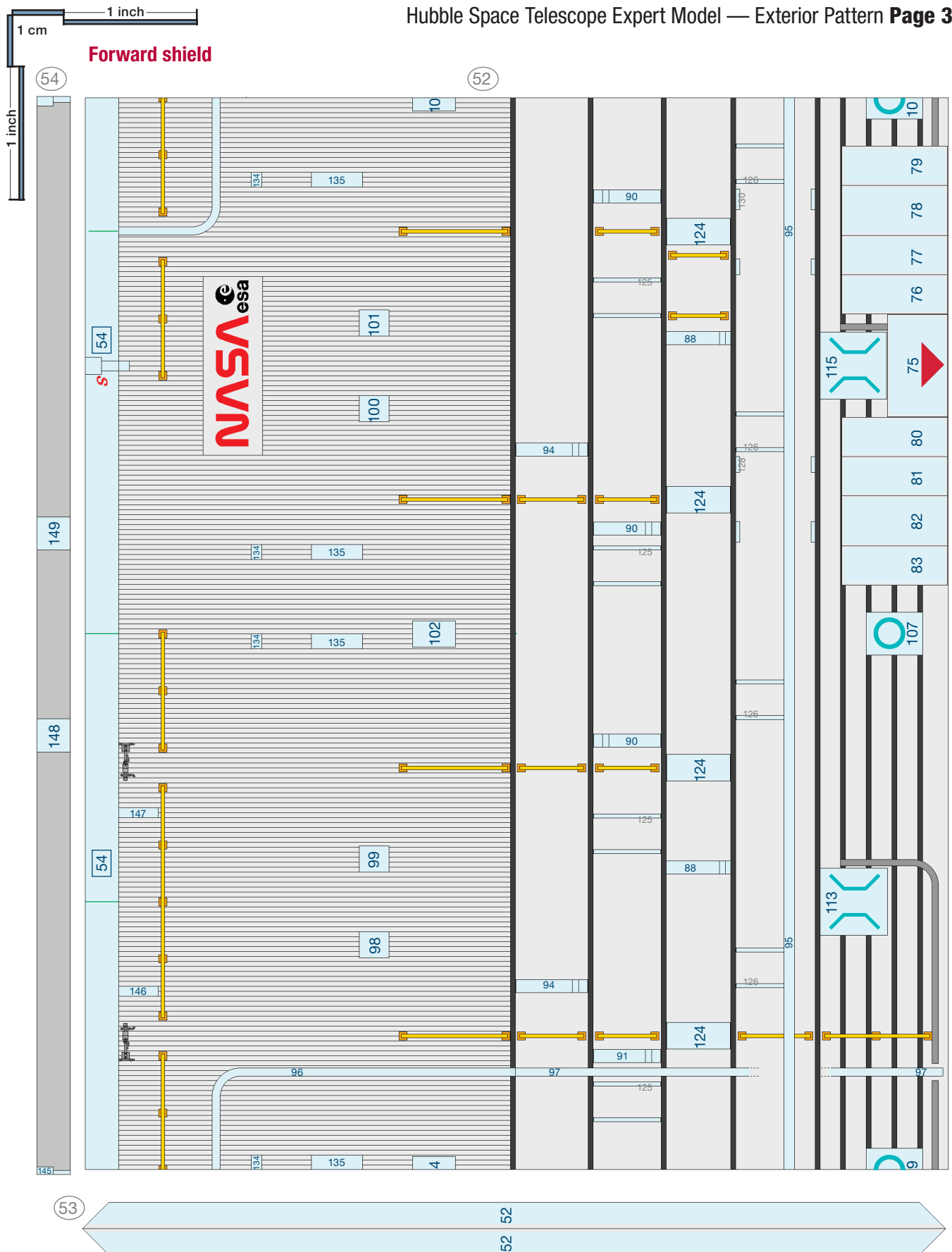
This document should be printed onto 32-lb (120g) paper, ideally in color. (You may want to have extra printouts handy in case you need them.) The directions (in a separate file) can be printed on regular paper in black-and-white.

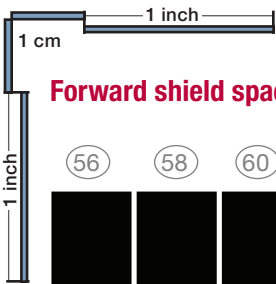




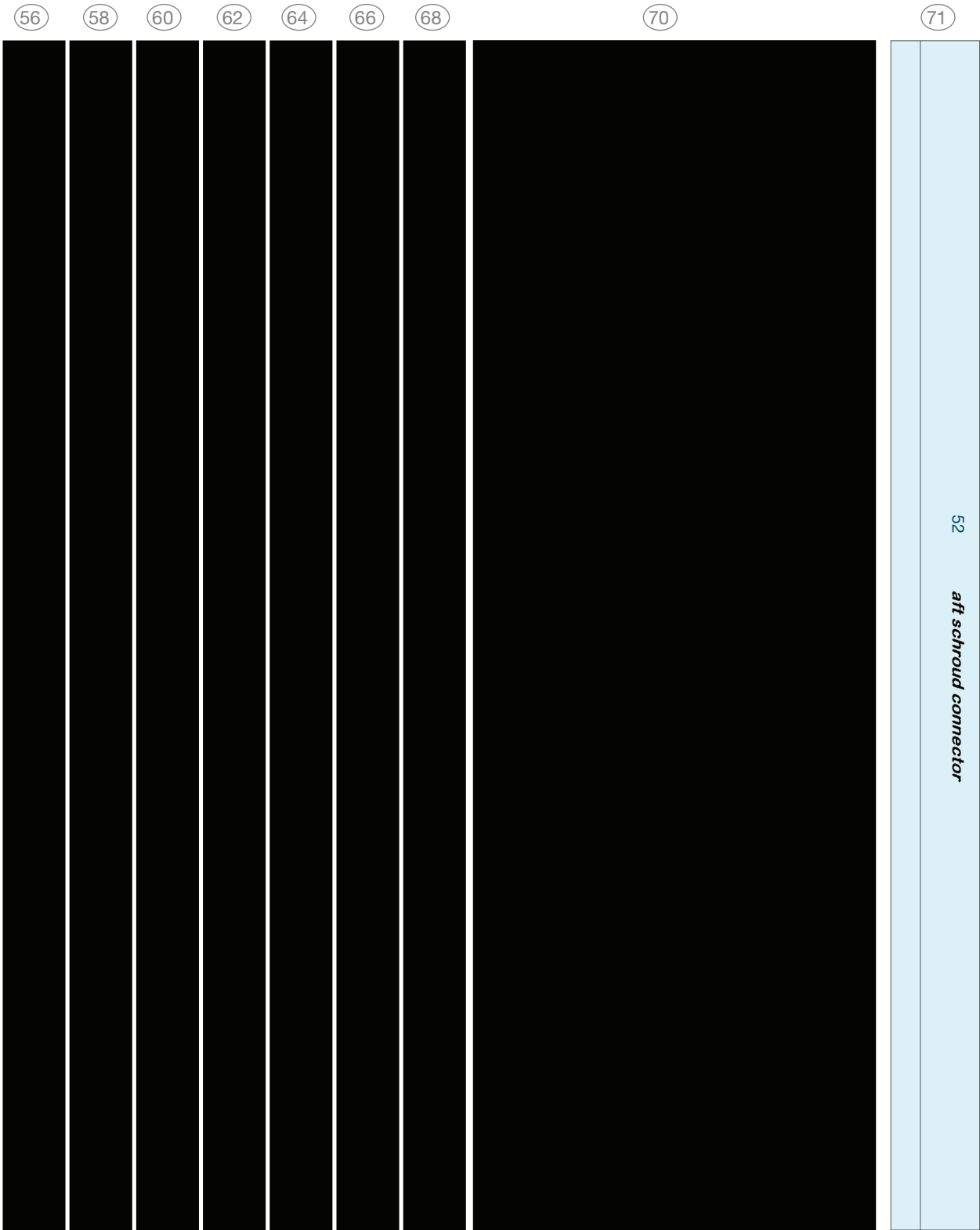


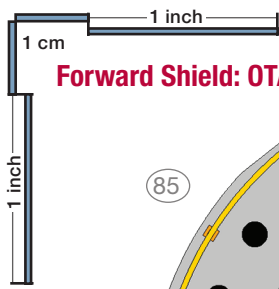




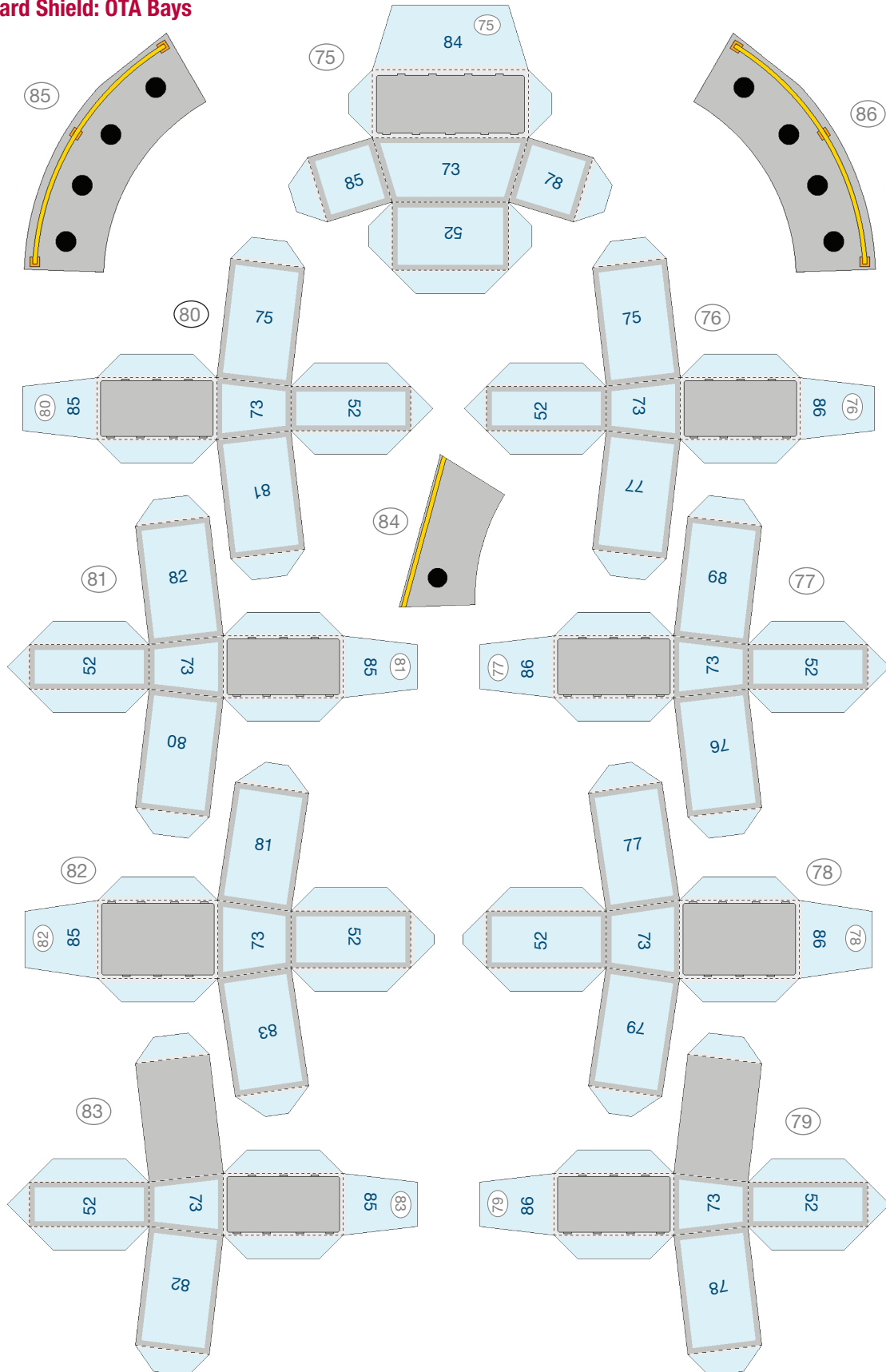


**Forward shield spacers**

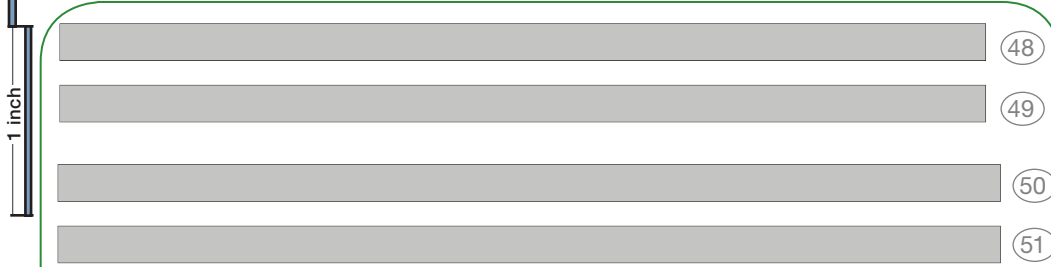




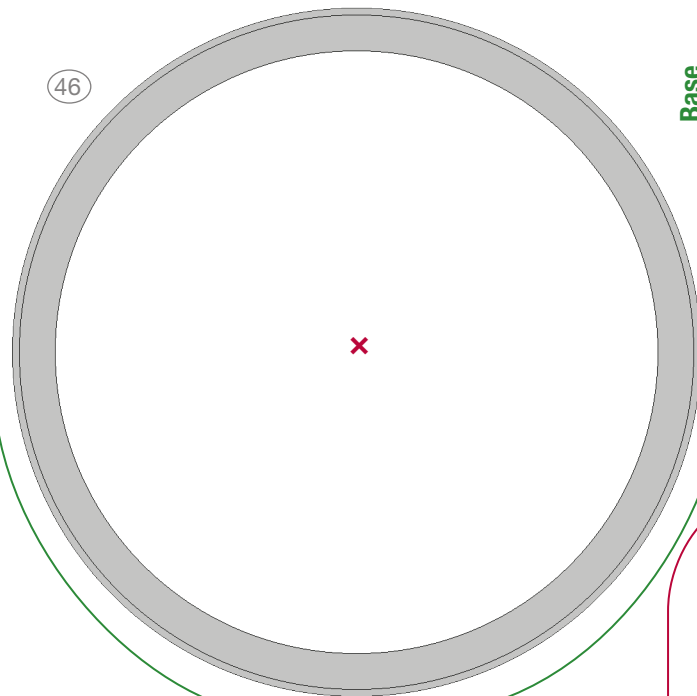
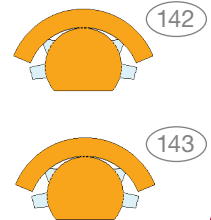
**Forward Shield: OTA Bays**



1 cm 1 inch  
Cut out all sections marked with ✕

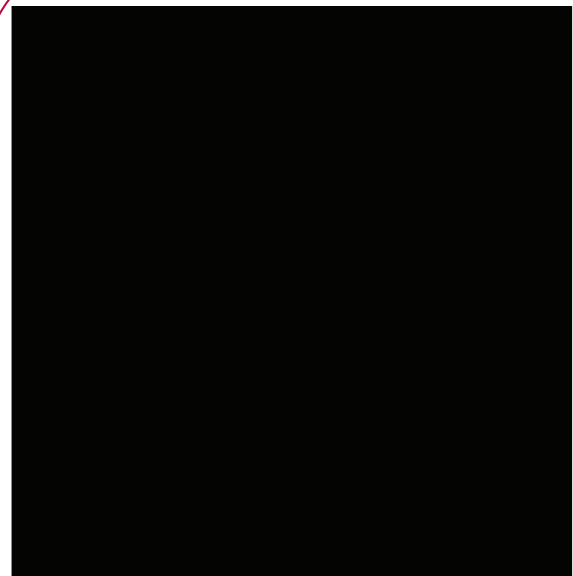
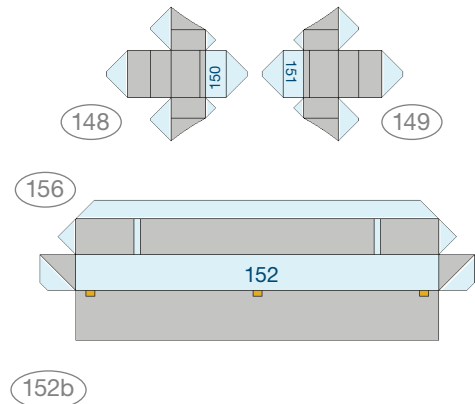


**Forward  
Scuff Plates**

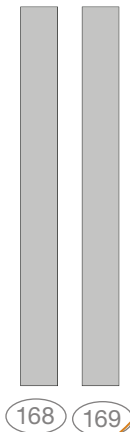


Base

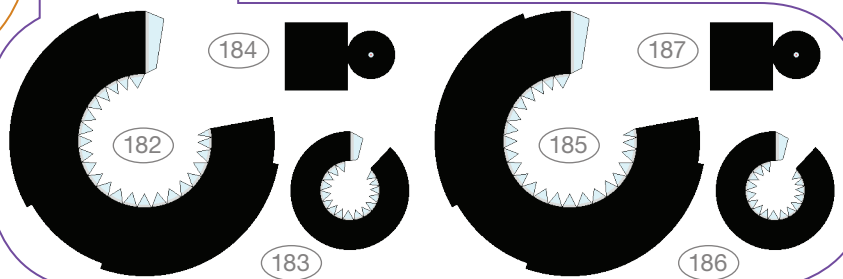
**Forward Shield: Door**



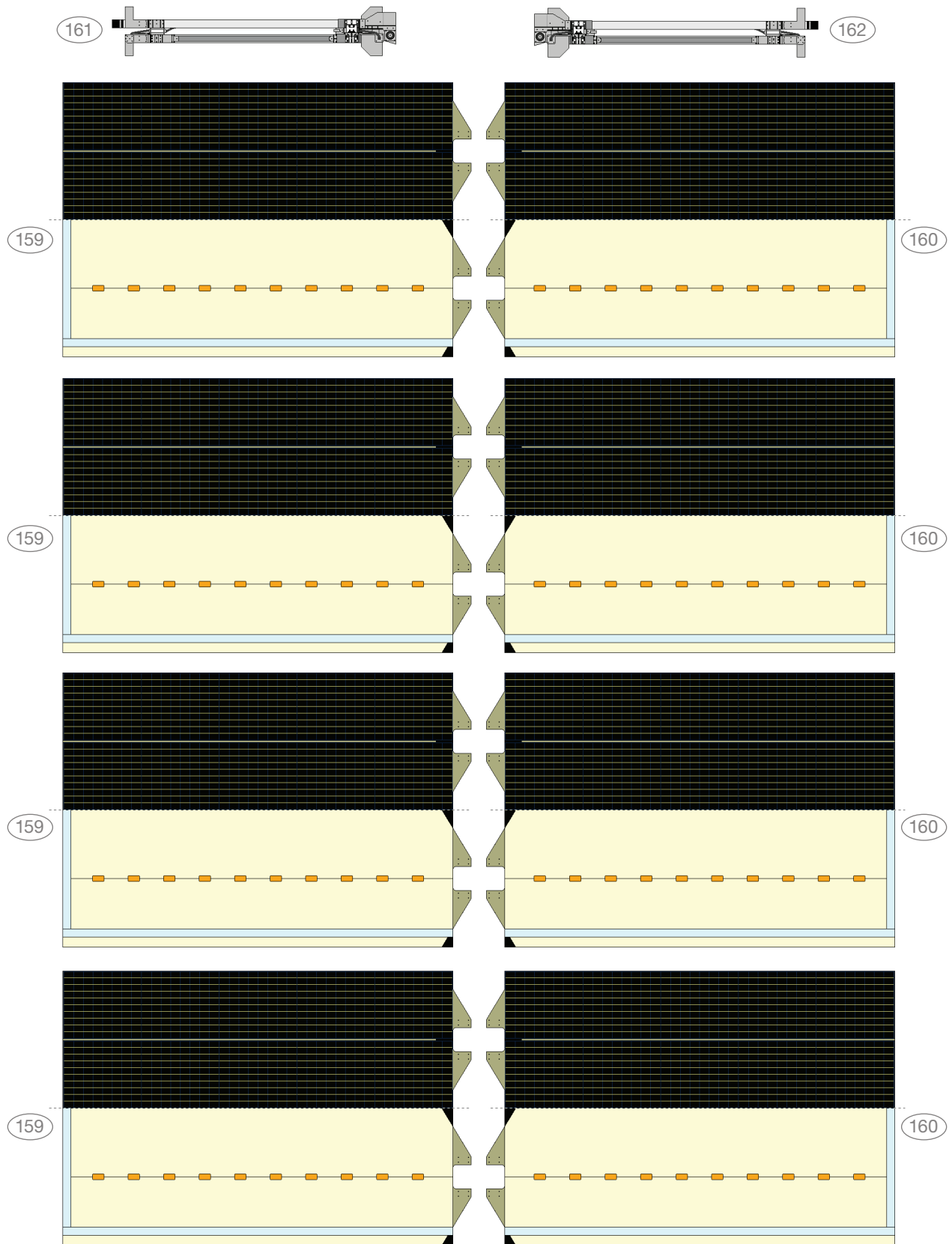
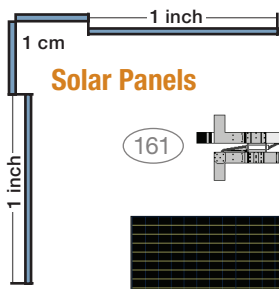
**Solar Panels**



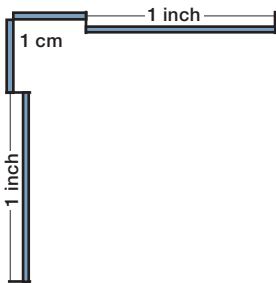
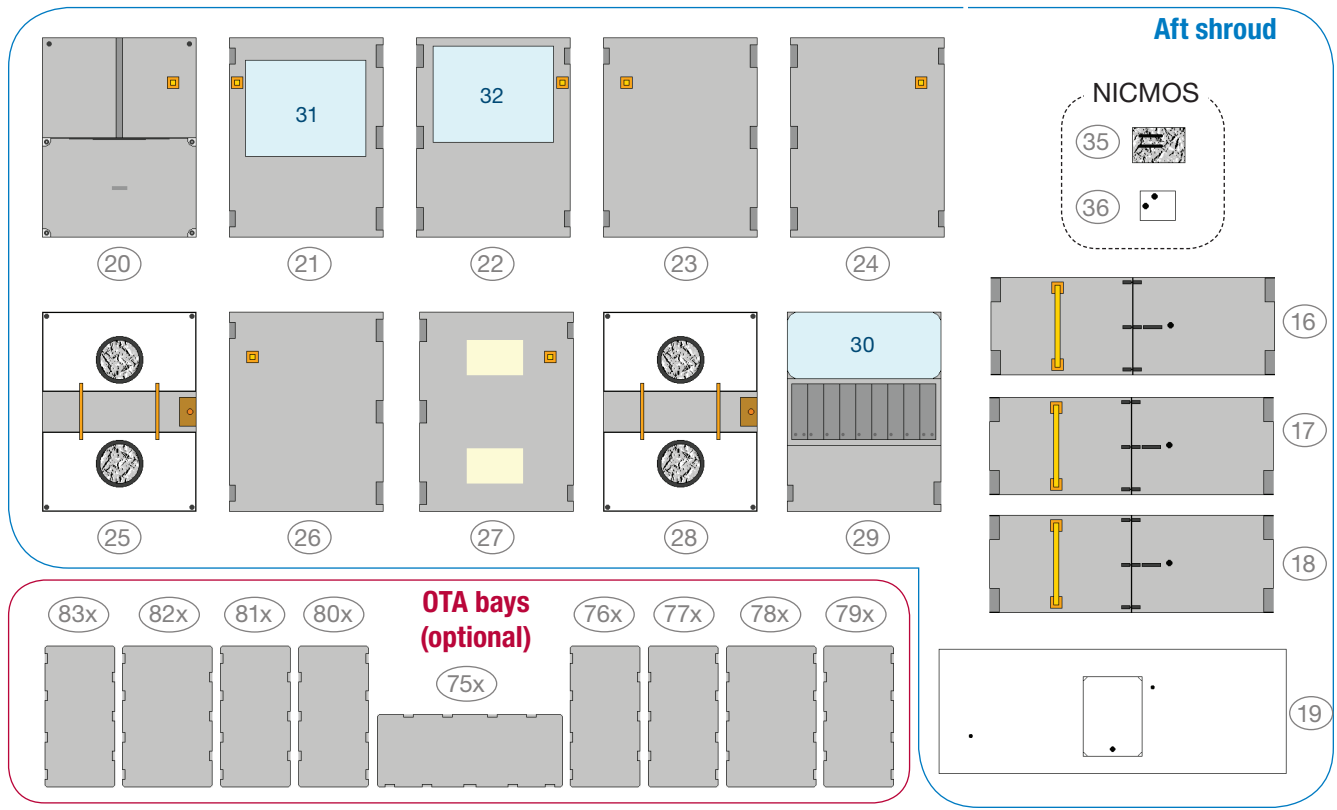
**HGA dishes**

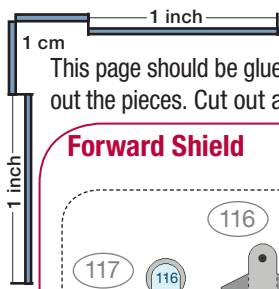






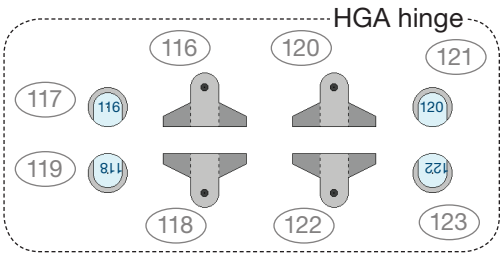
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This page should be glued to cardboard before cutting out the pieces. Cut out all sections marked with ✕

### Forward Shield



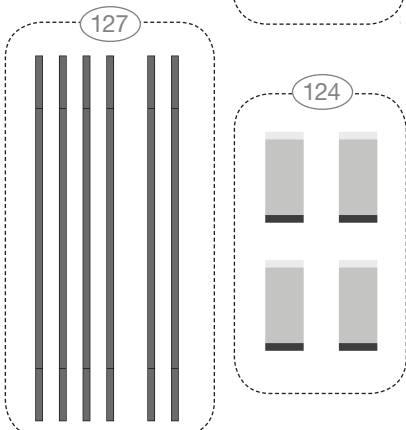
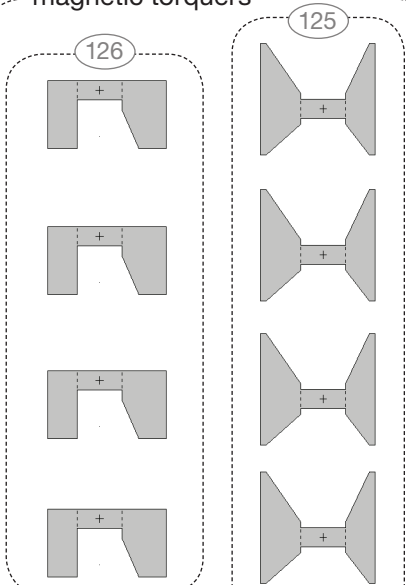
### solar panel connectors



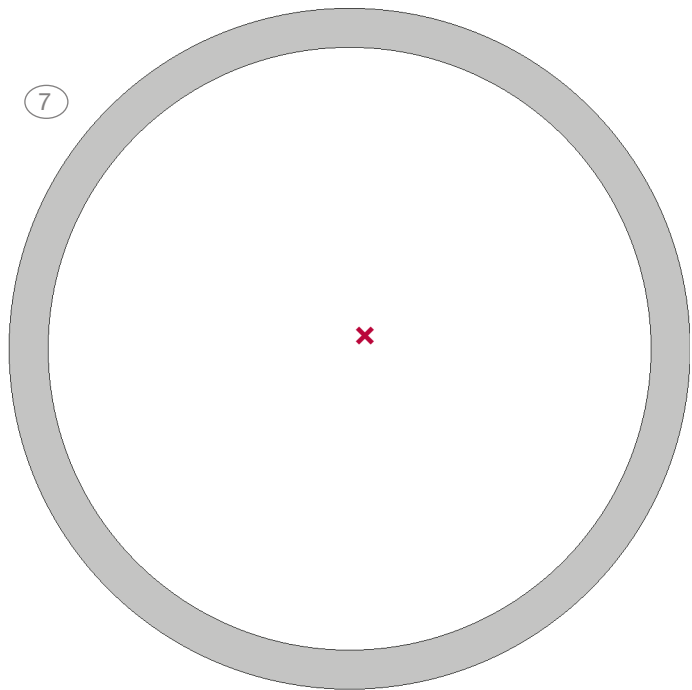
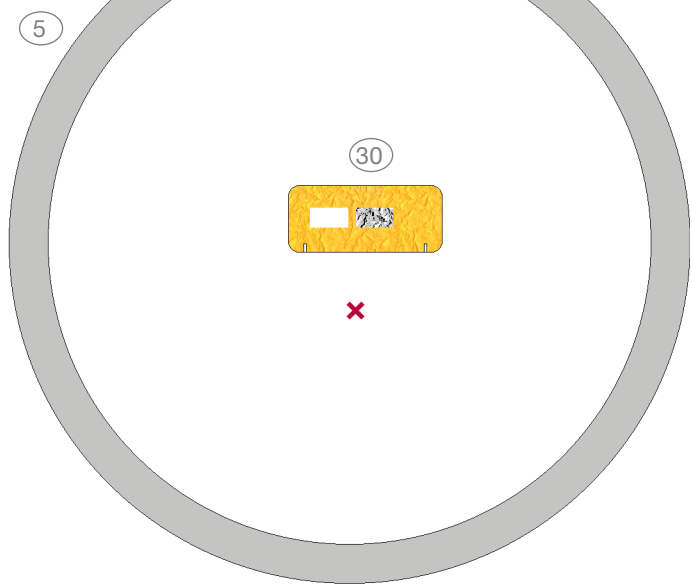
### solar panel clamps



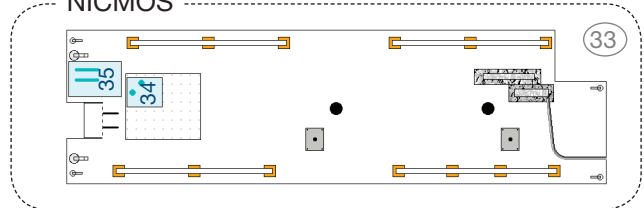
### magnetic torquers

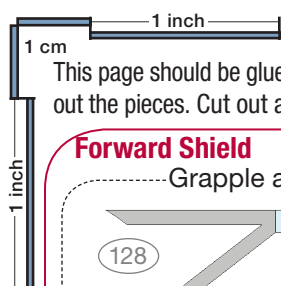


### Aft Shroud



### NICMOS

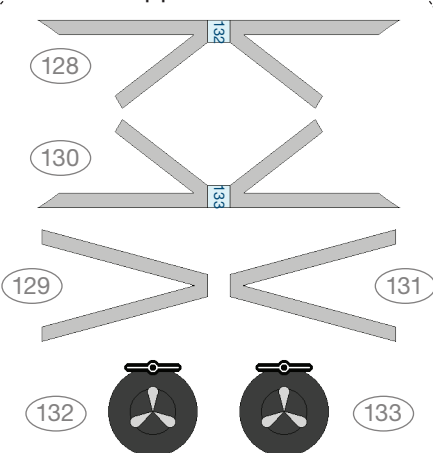




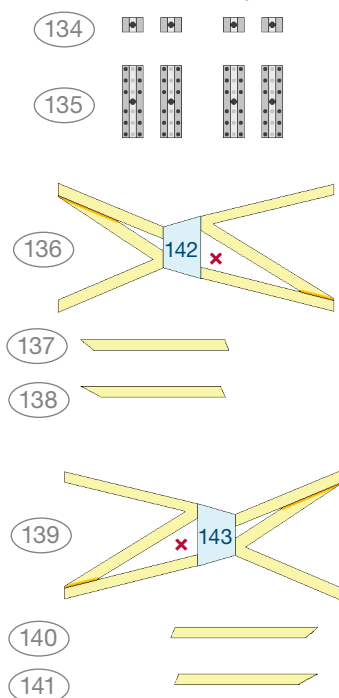
This page should be glued to cardboard before cutting out the pieces. Cut out all sections marked with ✕

### Forward Shield

Grapple attachment



Forward scuff plates



### Handrails (optional)

74

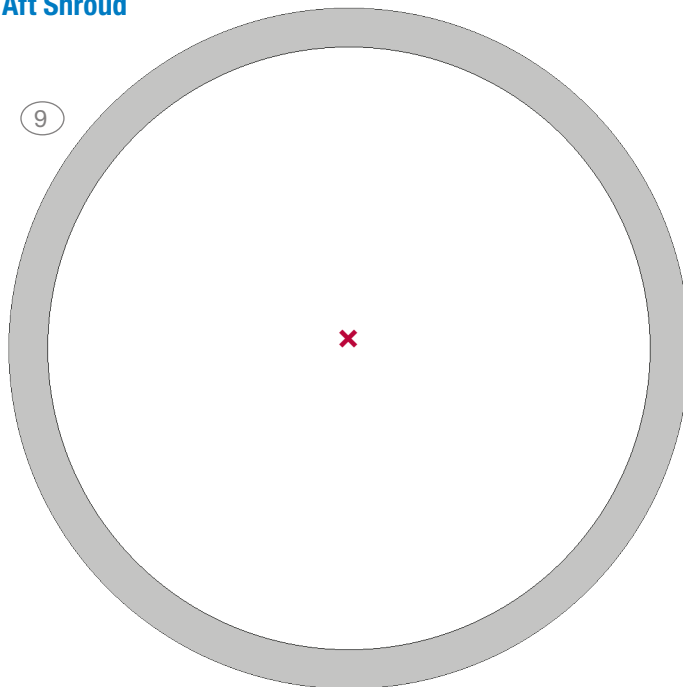


40

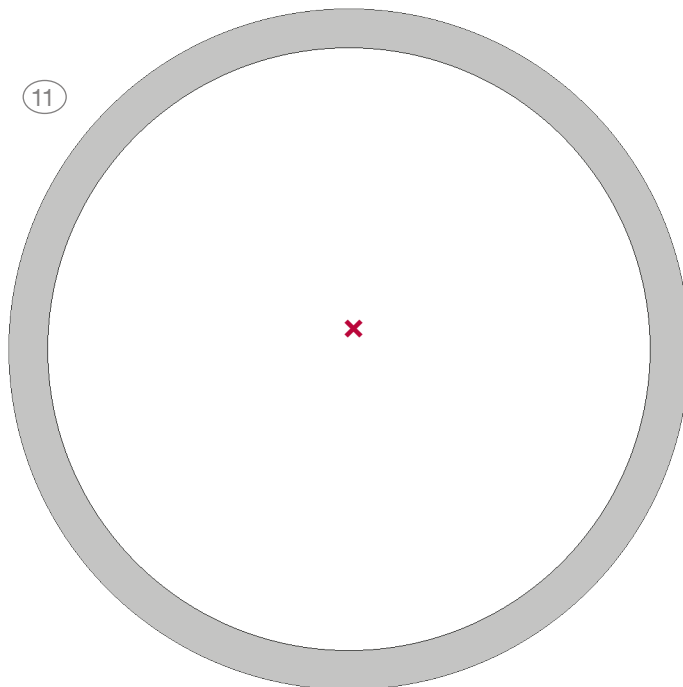


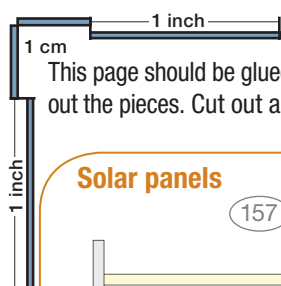
### Aft Shroud

9



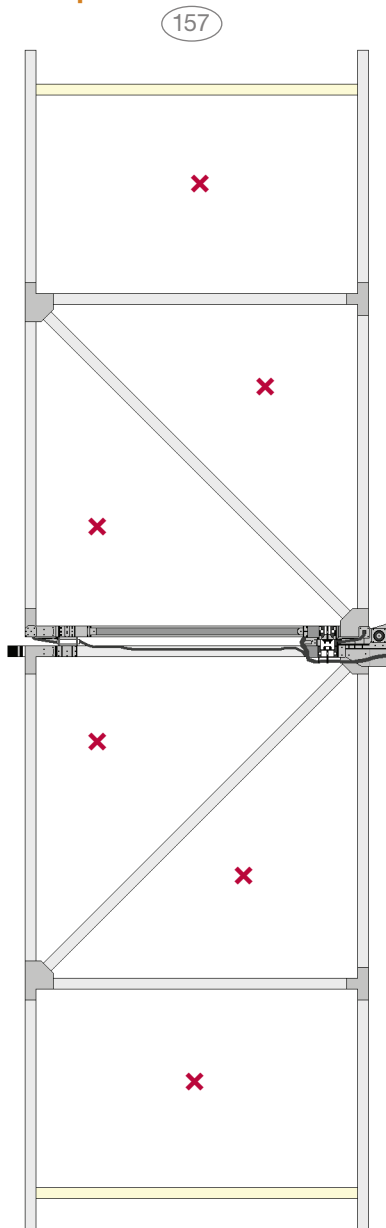
11



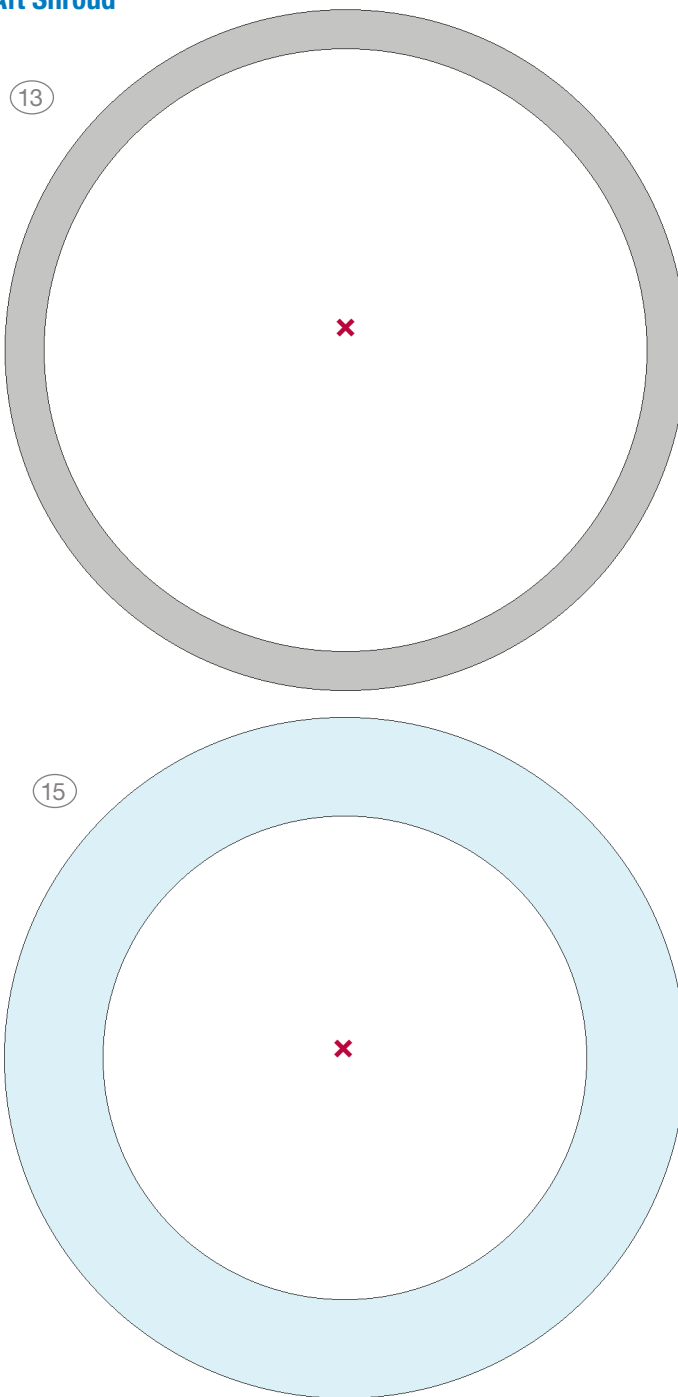


This page should be glued to cardboard before cutting out the pieces. Cut out all sections marked with ✕

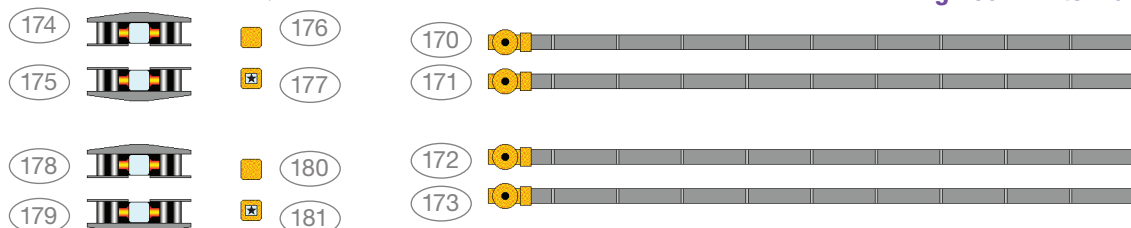
### Solar panels

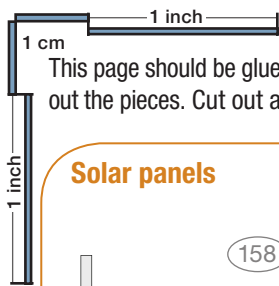


### Aft Shroud



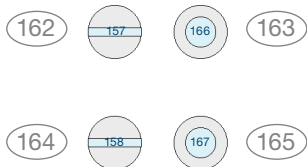
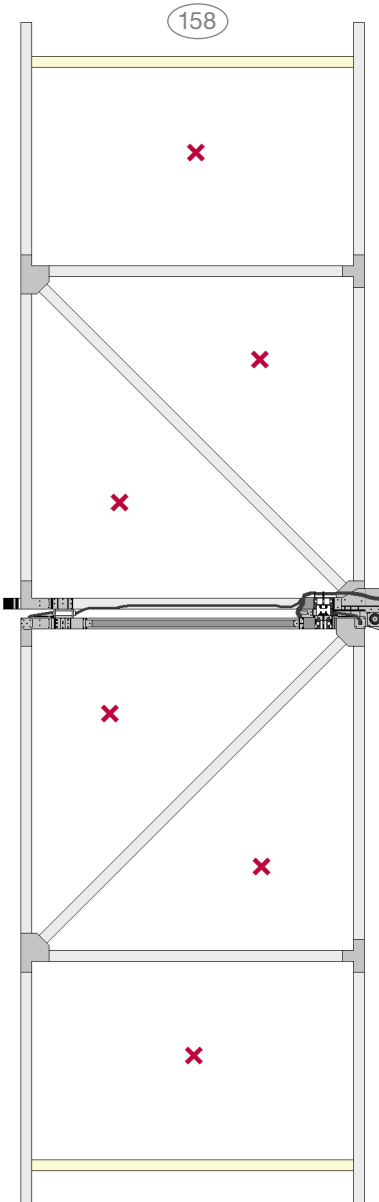
### High Gain Antenna (HGA)



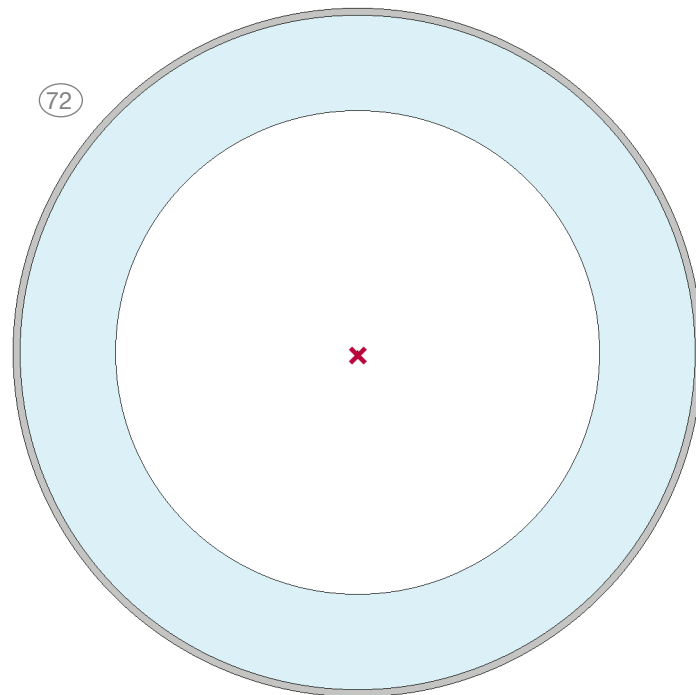
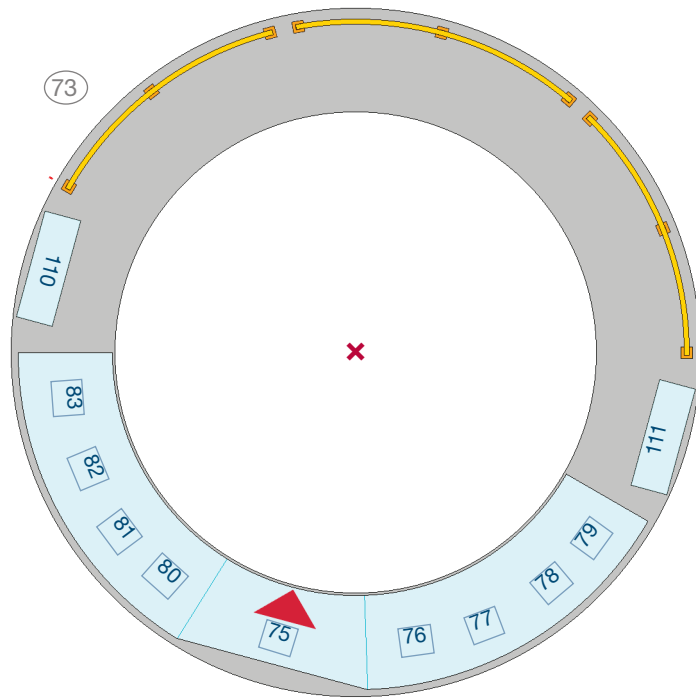


This page should be glued to cardboard before cutting out the pieces. Cut out all sections marked with ✕

### Solar panels



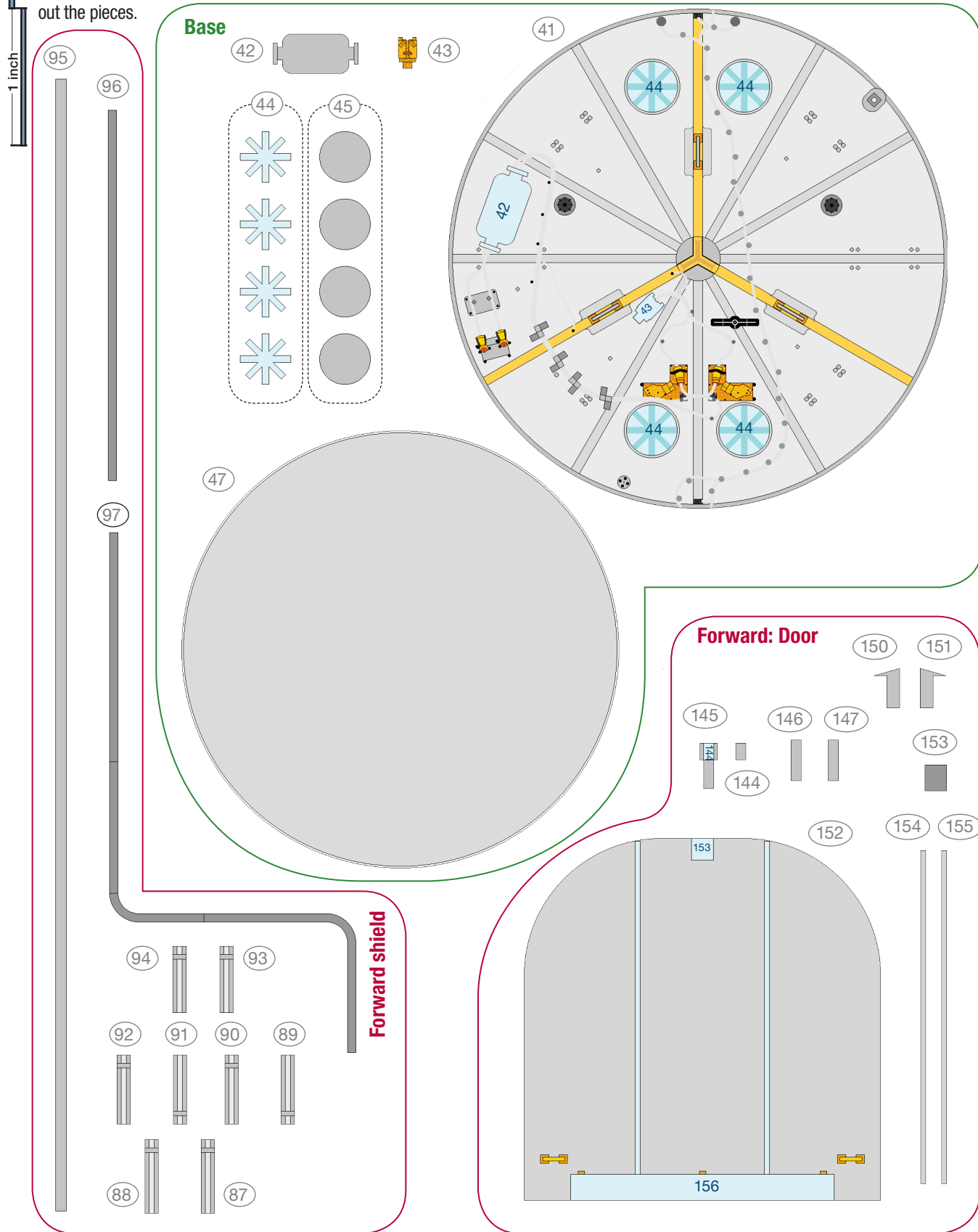
### Forward shield: OTA bays

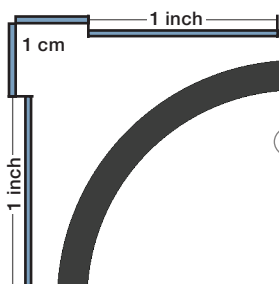




1 cm

This page should be glued to cardboard before cutting out the pieces.





**Forward shield**

This page should be glued to cardboard before cutting out the pieces.

Cut out all sections marked with ✕

