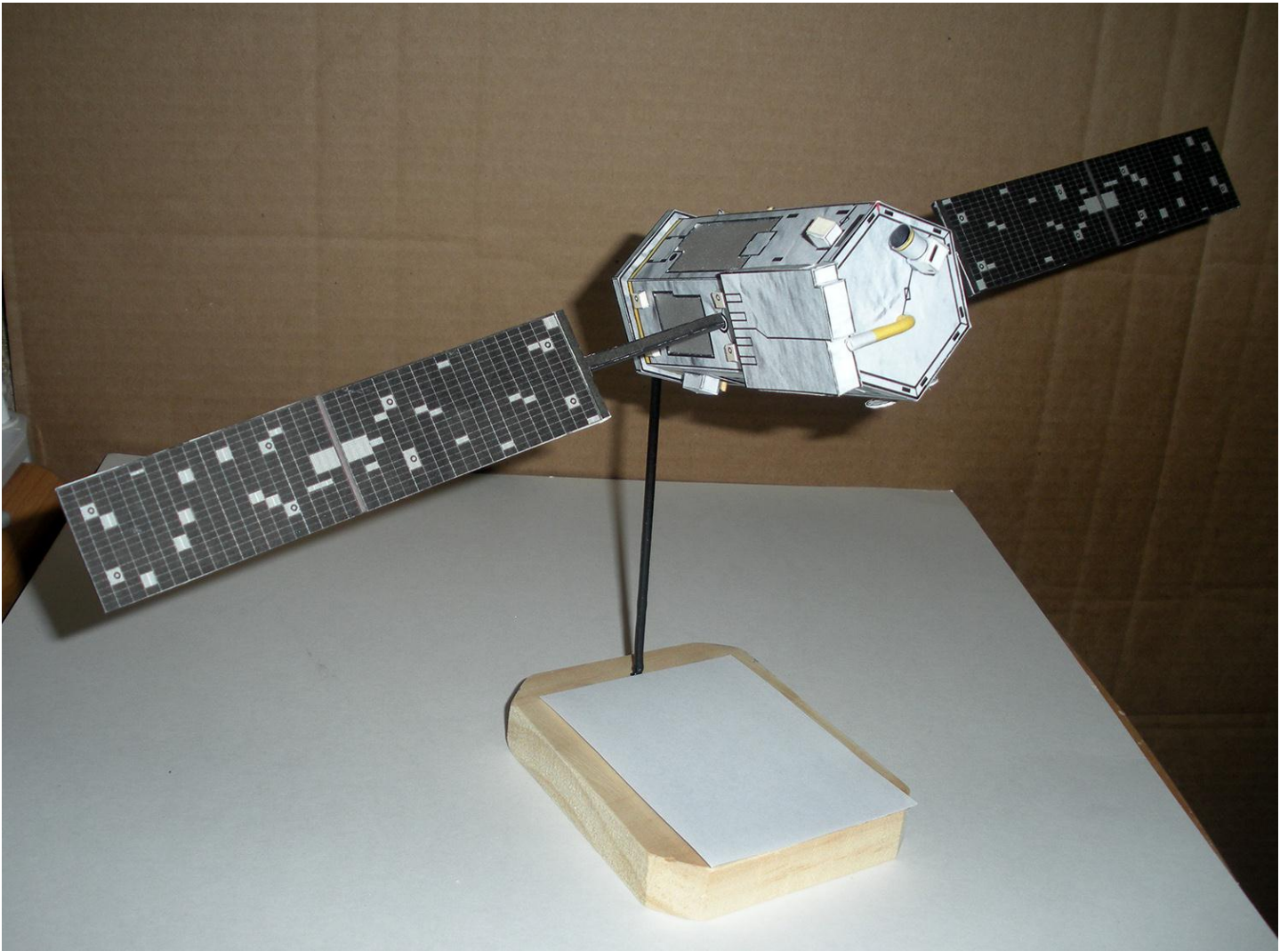
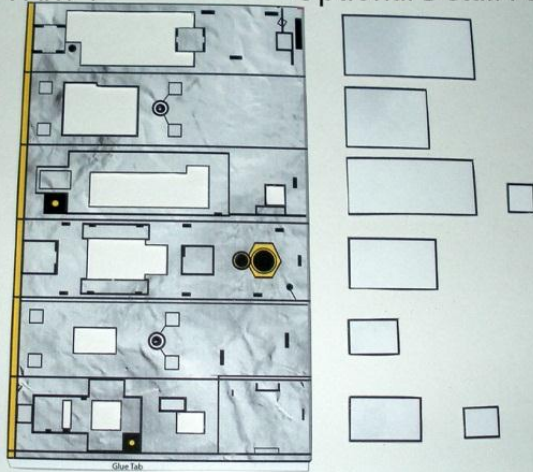


OCO-2 – Orbiting Carbon Observatory 2 - 1/20 scale Instruction Manual



PART 1 Optional Detail Parts

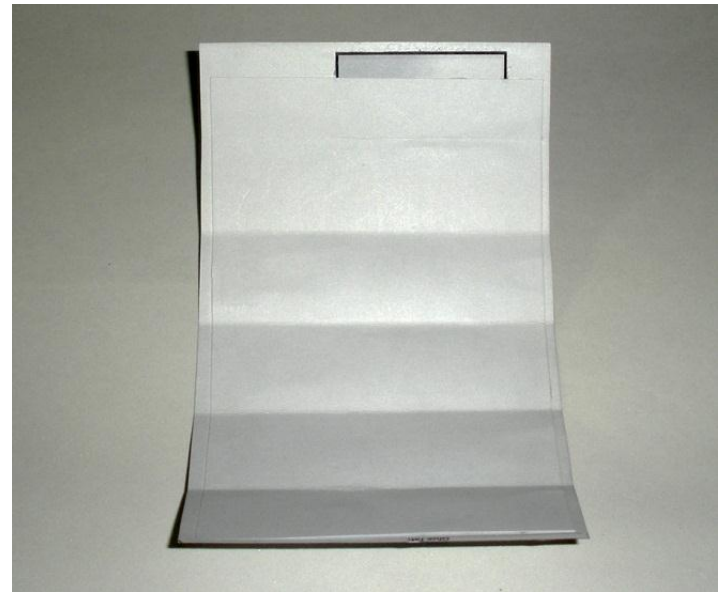


Cut out and score PART 1.

To make your model stand out, cut out the white areas shown (See the directions on Page 3 in parts file).

NOTE...The BACK or rear side is indicated by the gold stripe in the edge of PART 1.

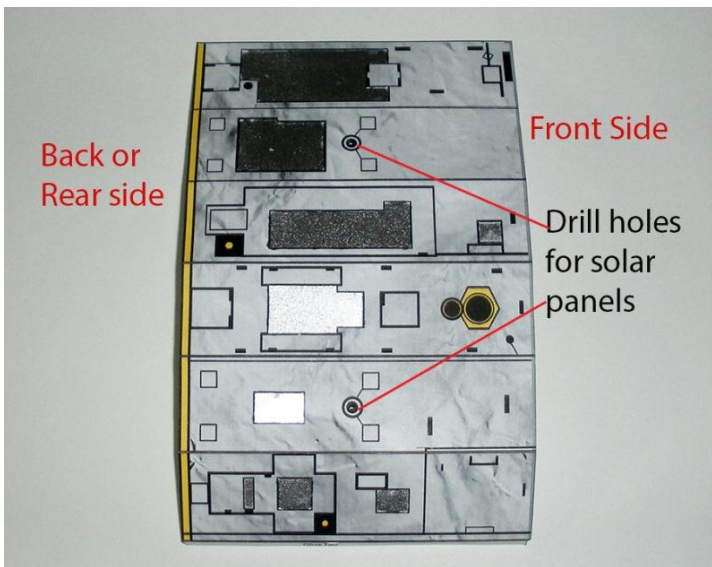
The FRONT side is indicated by the thin grey line in the edge.



Back side of PART 1 after the optional parts and re-inforcement is installed.

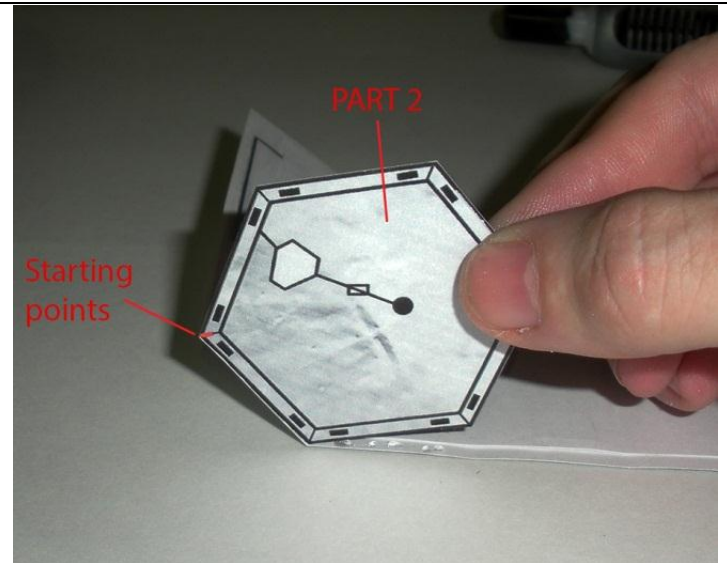
IMPORTANT...

Re-inforcement should be about ¼-inch from both edges of PART1 for gluing PARTS 2, and 3 as shown above.



Printed side of PART 1.

Make sure you cut a hole on the two small black circles for the solar panel installation.



Roll-Glue PART 1 around the OUTER edges of PART 2 on the FRONT SIDE (thin grey line).

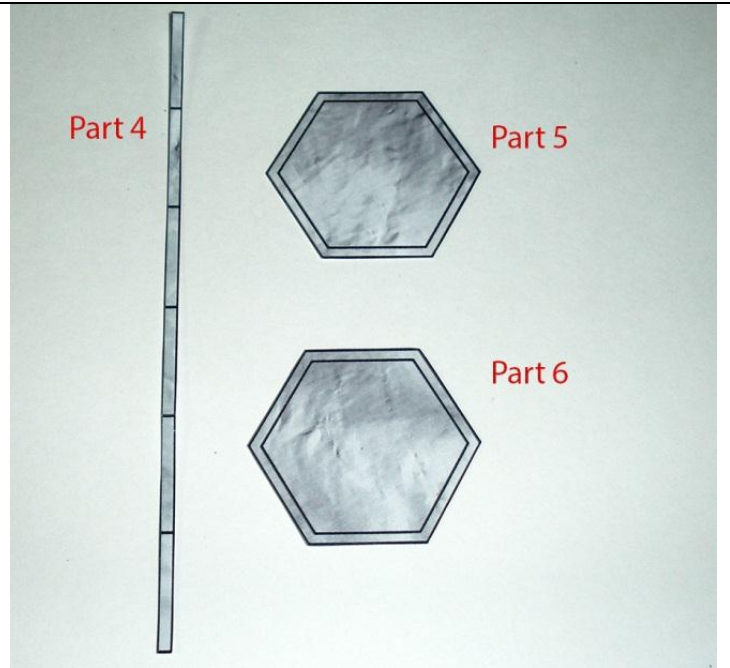
Note the TWO STARTING POINTS (Marked with a small red line) on both parts 1 and 2. This is important for the proper alignment of the spacecraft body and its front end (PART 2).



1st pic shows PART 2 on the front side.

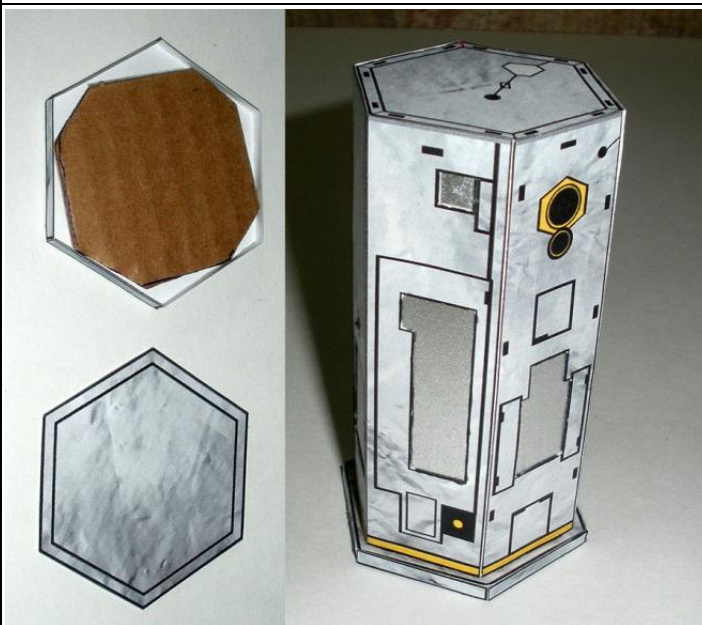
2nd pic shows PART 3 on the REAR side, this also makes the model stronger and allows it to keep its hexagon shape on both ends.

On the pictures of the actual spacecraft, the shinny-mirror areas are shown to be installed under the thermal foil coving as simulated here with the optional detail parts.



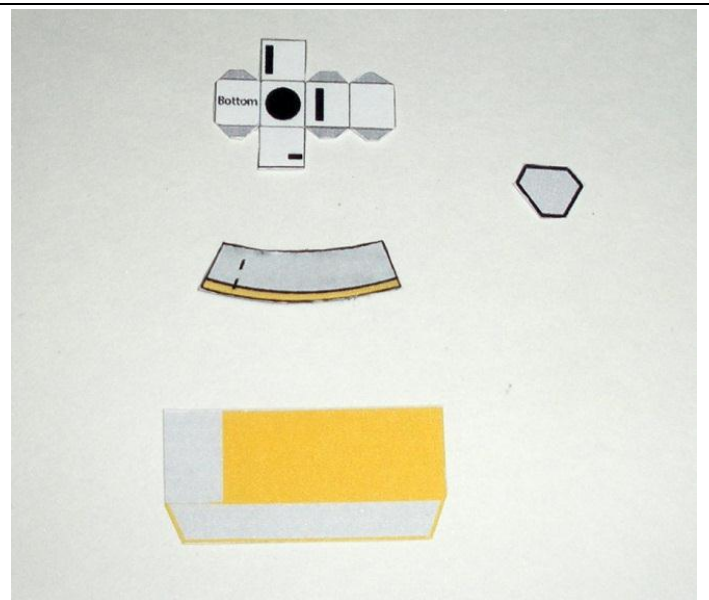
Prepare PARTS 4, 5 and 6

Roll-Glue PART 4 around PART 5 the same way you did with PART 1 around PART 2.



Add cardboard into the PART 4-5 assembly to keep it from collapsing in and glue PART 6.

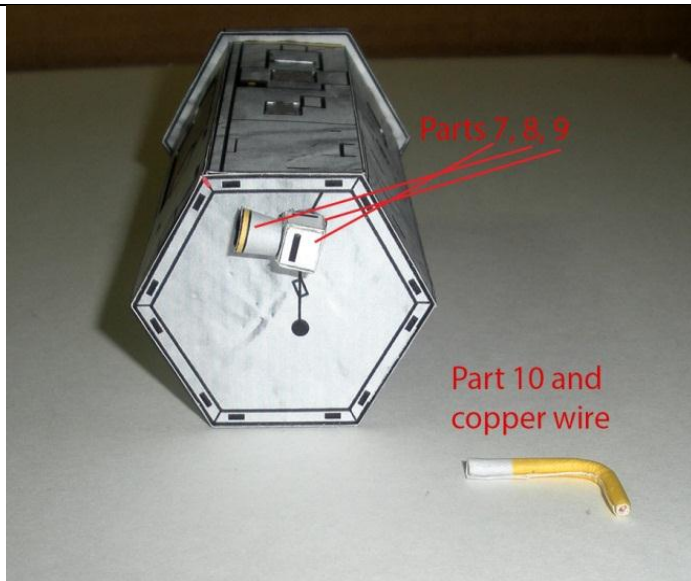
Glue and center the assembly on the BOTTOM SIDE (Gold line) of the spacecraft body as shown above.



Prepare PARTS 7, 8, 9 and 10 for installation.

Prepare and stiff copper wire about 1 ¼ inch long for PART 10.

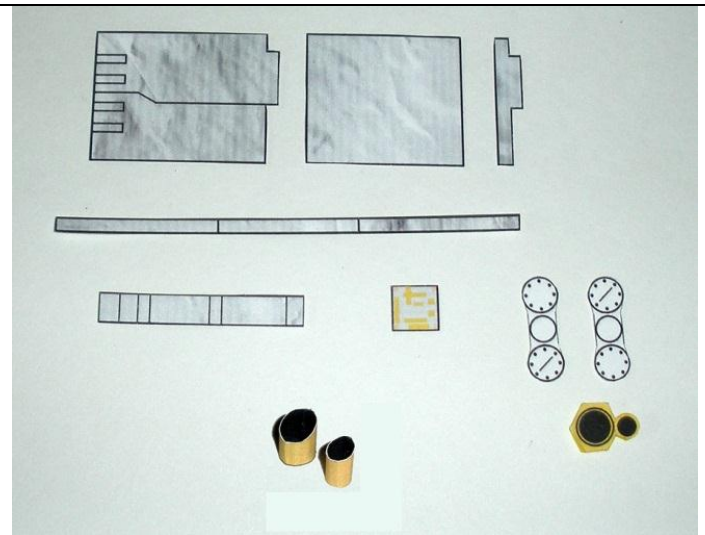
Tightly roll PART 10 around the copper wire and bend the side WITHOUT the grey area 90-degrees – See next picture.



Color backside of PART 8 black.

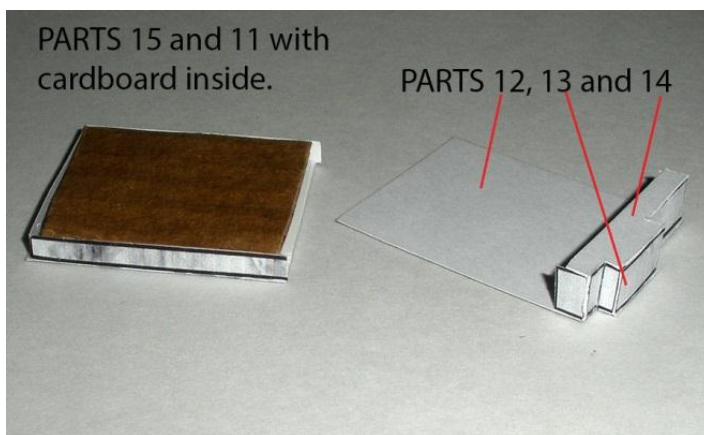
Glue PART 8 over the black circle on PART 7.
 Glue PART 9 on couple layers of thick cardstock, cut and glue on the matching graphic.
 Glue part 7-8 assembly on top of part 9 facing the direction shown above.
 The word "Bottom" is printed on the bottom of part 7.

NOTE...Don't glue PART 10 on the black circle yet.



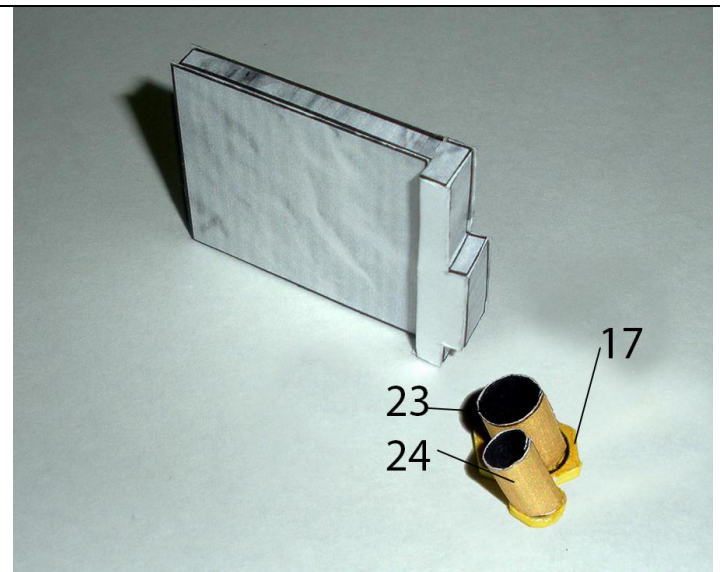
Prepare PARTS 11, 12, 13, 14, 15, 16, 17, 17a, 23, and 24.

Color backside of PARTS 23 and 24 black and roll-glue into angled tubes.
 Glue PART 17 onto couple layers of thick cardstock, cut and color the edges yellow.
 Glue PARTS 17a back-to-back for 2-sided part.
 Glue PART 16 into another layer of cardstock and cut.

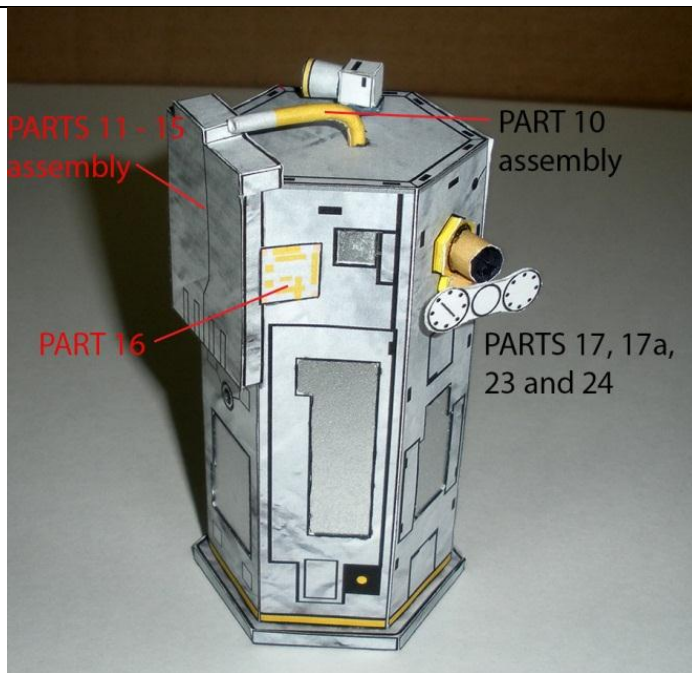


Glue PART 15 on 3 sides of PART 11 (On end will be open). Graphics on parts 11 and 15 are facing OUT.
 Glue cardboard the same thickness inside the part 11-15 assembly to keep it from collapsing in.

Glue PARTS 12, 13 and 14 as shown above. All graphics facing out.



Glue PARTS 23 and 24 onto PART 17.
 Place PART 17 on a table with the SMALL END on the bottom.
 Glue the angled end of PARTS 23 and 24 onto 17. They should be leaning towards the left.
 See above.



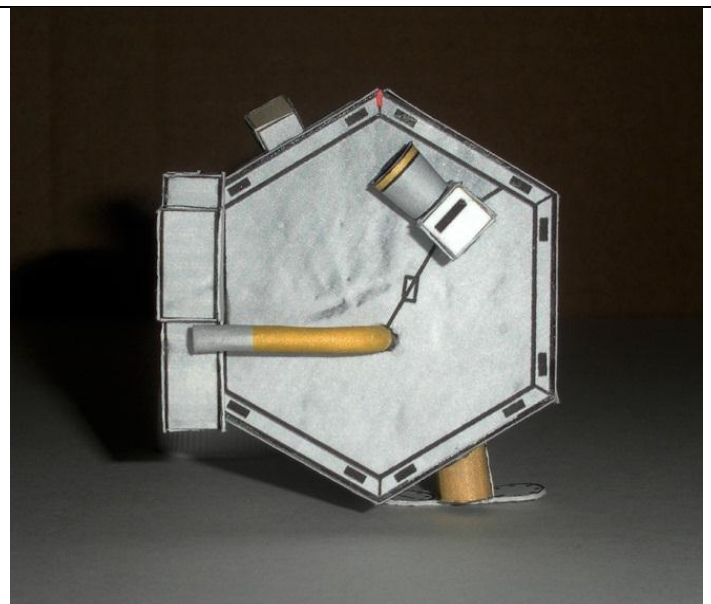
Glue PARTS 11-15 assembly on the side of spacecraft shown, Pay attention of the markings on the body for proper placement location. It will be a little wider than the 6-sides of the body.

Drill a hole into the black circle on PART 2 and glue PART 10 you assembled earlier into the hole, adjust it to proper height and direction shown on the next picture.

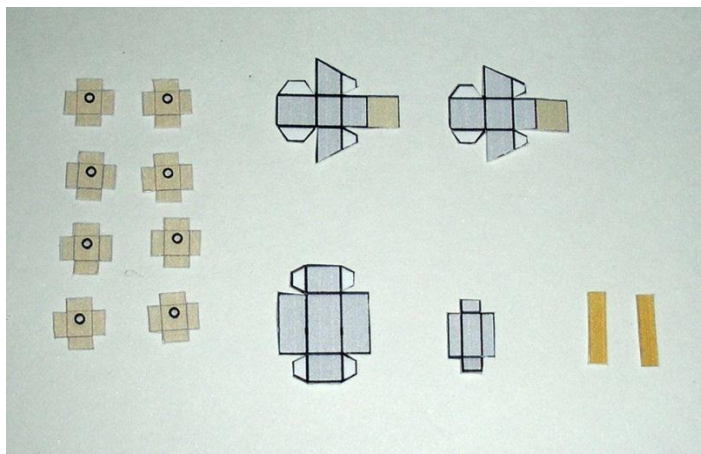
Glue PART 16 as shown.

Glue PARTS 17, 23, 24 assembly onto the spacecraft as shown.

Glue PART 17a on top of the smaller nozzle as shown above.



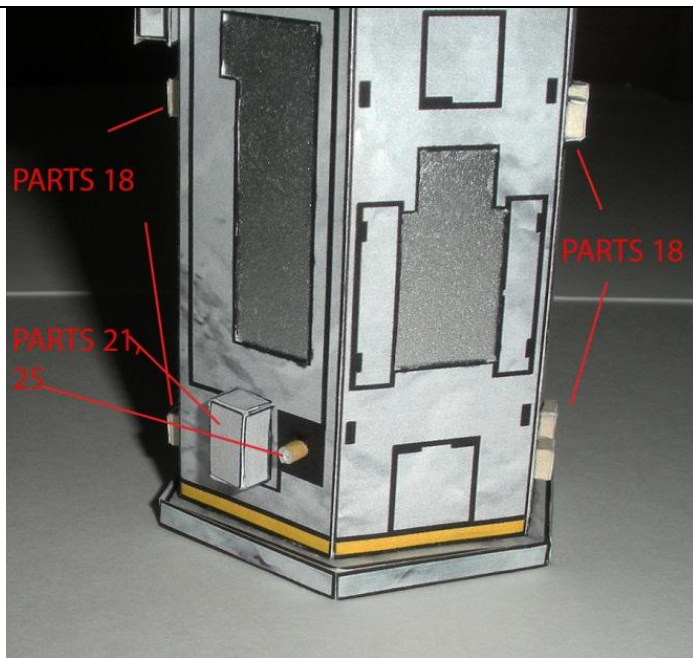
Note the direction of PART 10. On the actual model, it should be a little longer.



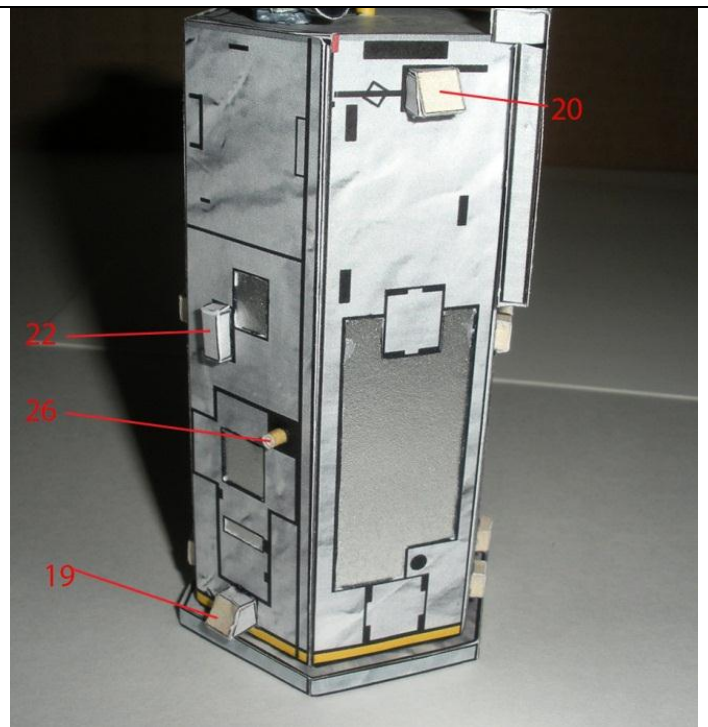
Prepare PARTS 18, 19, 20, 21, 22, 25 and 26.

Glue PART 18 (8 pcs) into small shallow boxes. Glue them on the 4 small square as shown on the next picture on the right. Glue the other 4 on the opposite side on the main body on top of the 4 small squares. Both sides should have the holes made for the solar panel installation.

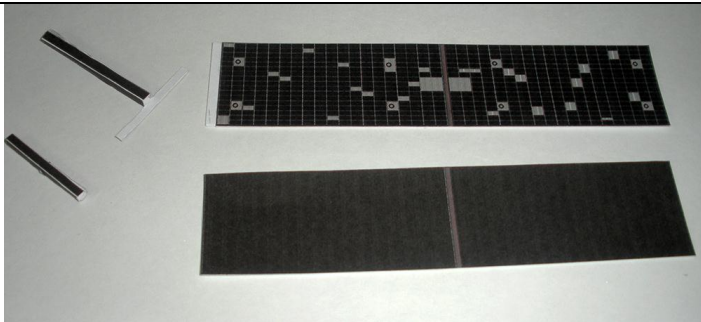




Roll PARTS 25 and 26 into tight short rods.
 Glue PART 21 and 25 on the places shown on the above picture.
 Notice the markings on the spacecraft for proper placement locations.



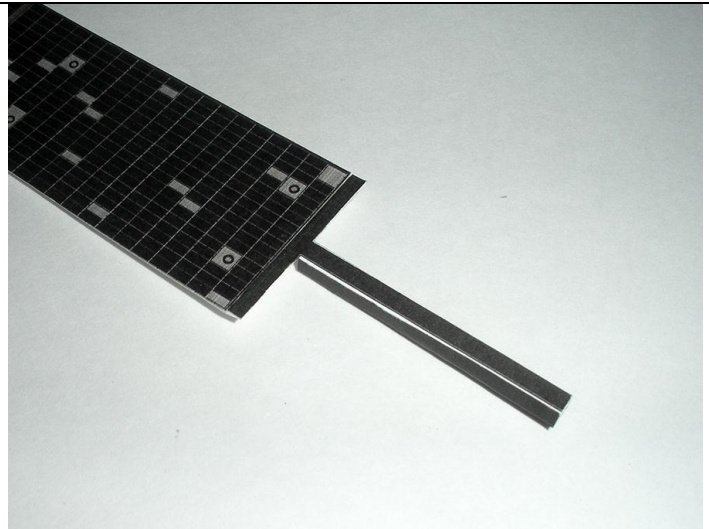
Glue PARTS 22, 26 19 and 20 onto places shown above.
 Note the ANGLES of PARTS 19 and 20 are facing the front side of the spacecraft.



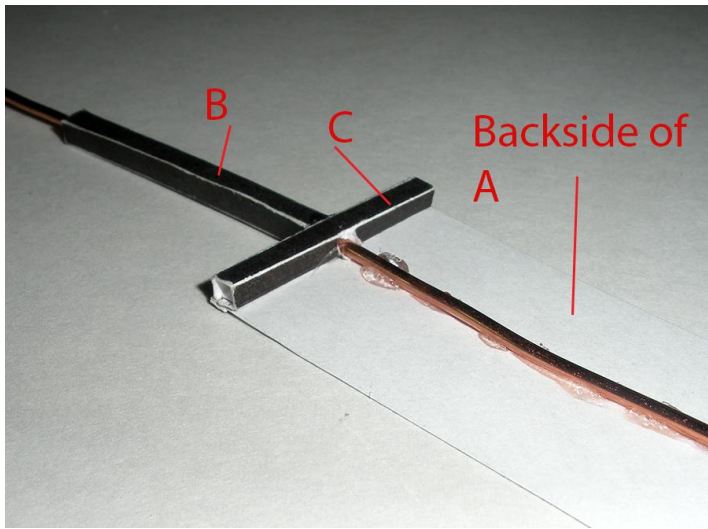
Cut out all solar panel parts.
 Score and fold PART B into a long rectangular box with a "T" cross bar on top.

Punch small holes on the small grey circles on C.

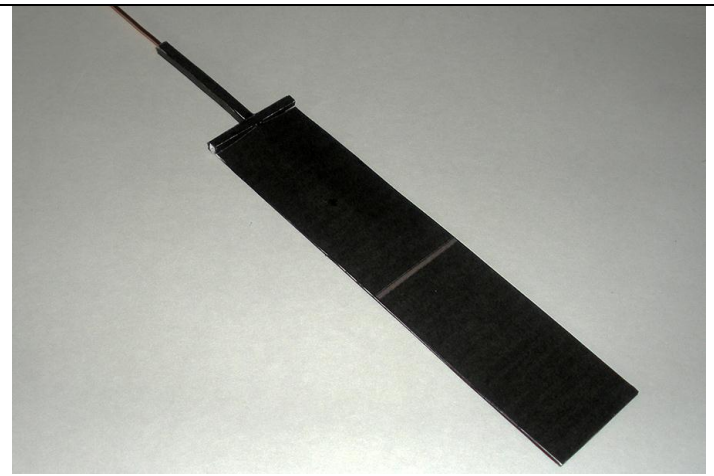
Score and fold PART C into a long rectangular box.



Glue B onto the tab on at the end of A – see above.



Glue C against B on the BACKSIDE of A
 The two small holes on C should line up with the opening of B— see above.
 This should form a “T” shape fixture.
 Slide a thick stiff copper wire through as shown and glue in place.



Glue D to the back of the solar panel.

One side is complete.

Slide the other end of the copper wire through the small holes on the spacecraft and repeat the process for the other solar panel.

Your model is complete – Congrats!