



IBEX Spacecraft

Assembly Instructions

1/12th Scale

By

Space Cadet Models

We would like to thank you for your consideration and purchase of our fourteenth kit. This is a 1/12th scale model of a spacecraft that was flown to gather information about the boundary layer and bow shock between our Sun's solar wind and the Interstellar Medium.

Please note that there are sections of the instructions, indicated by a blue background, that suggestions are made that might help your construction of the kit.

It is left up to you to decide if these will help you or not. However, the kit was designed with these methods in mind.

PAINT LEGEND



Black Foil



Gold Paint



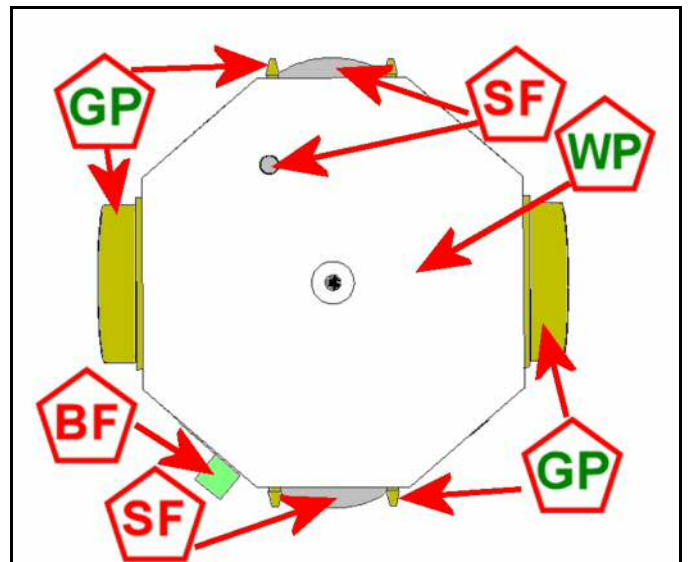
Silver Paint



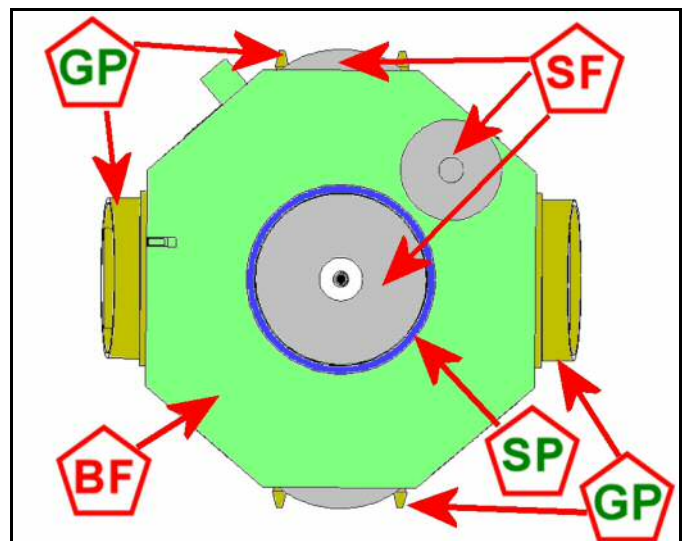
Dull Silver Foil



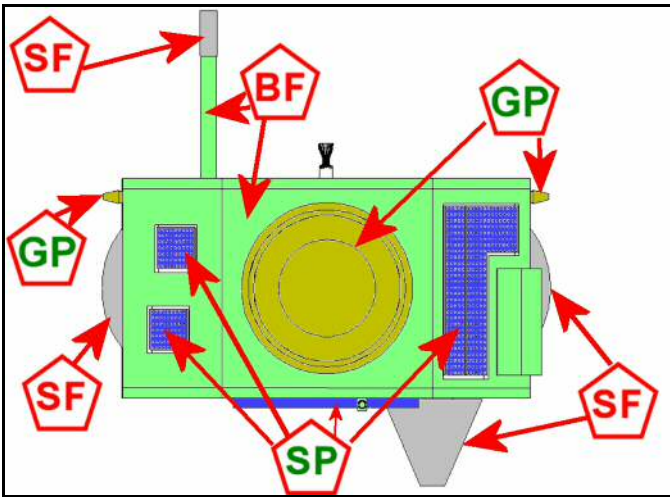
White Paint



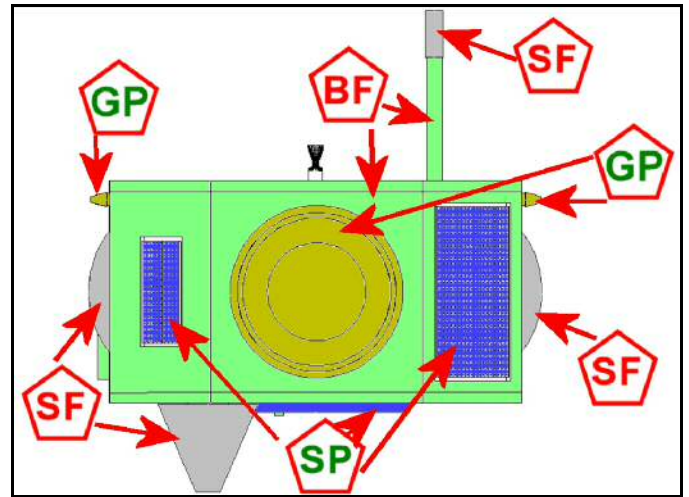
Figure# 1



Figure# 2

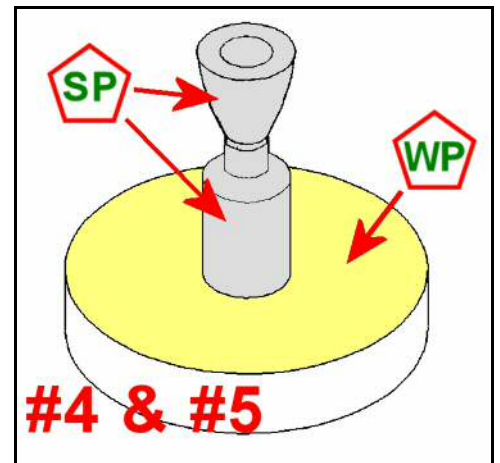


Figure# 3



Figure# 4

Please Note: Before you glue Part# 4 and Part# 5 into their respective places, it will be easier to paint the parts as shown in Figure# 5. Paint only the side facing the thruster, white and the thruster silver. At this time it would also be the best time to paint the top surface of Part# 1 white.

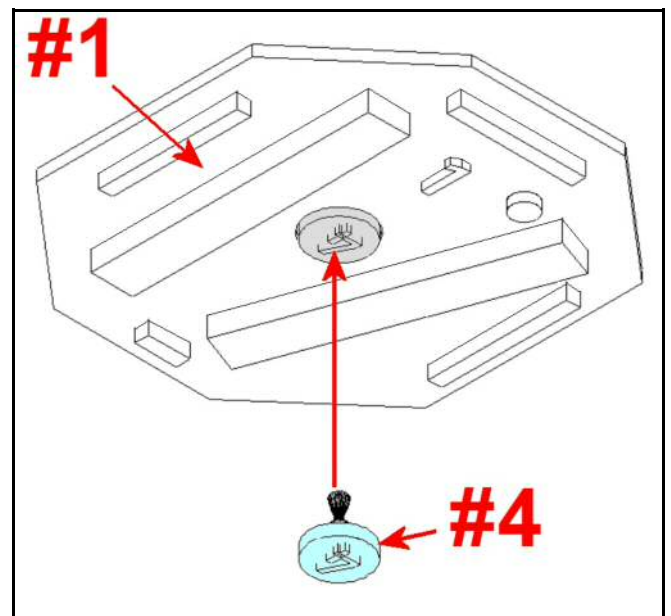


Figure# 5

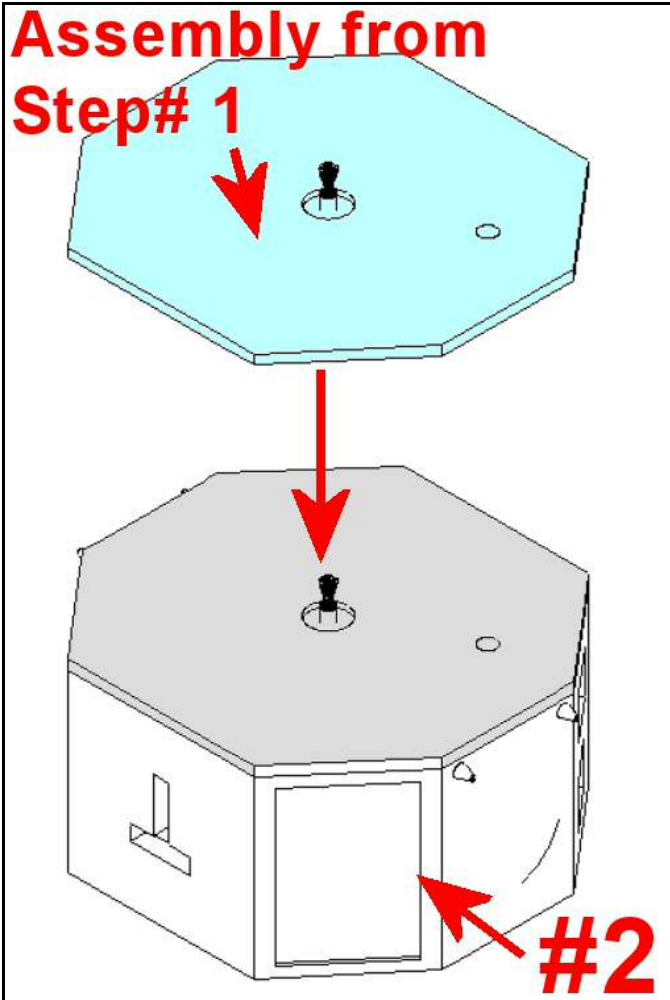
STEP# 1

Find Part# 1 and Part# 4 and glue Part# 4 into place on Part# 1 as shown in Figure# 6.

We would suggest placing Part# 4 into the hole in Part# 1 and apply glue to the backside to avoid glue intruding into the front side.



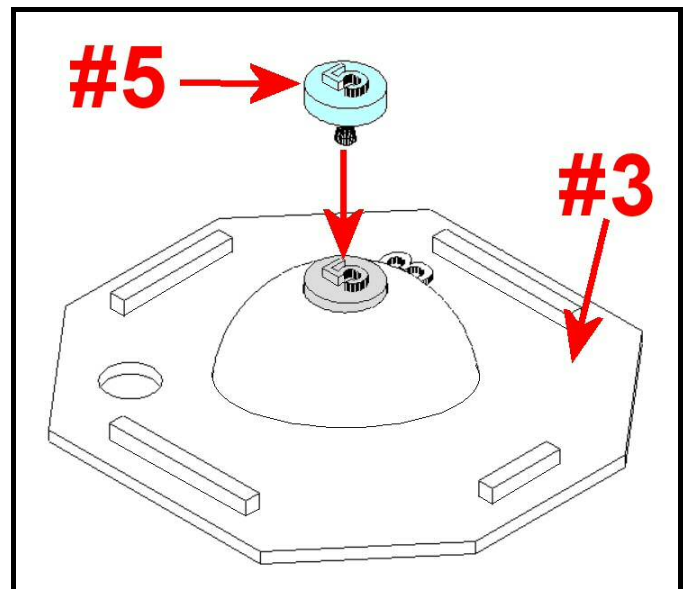
Figure# 6



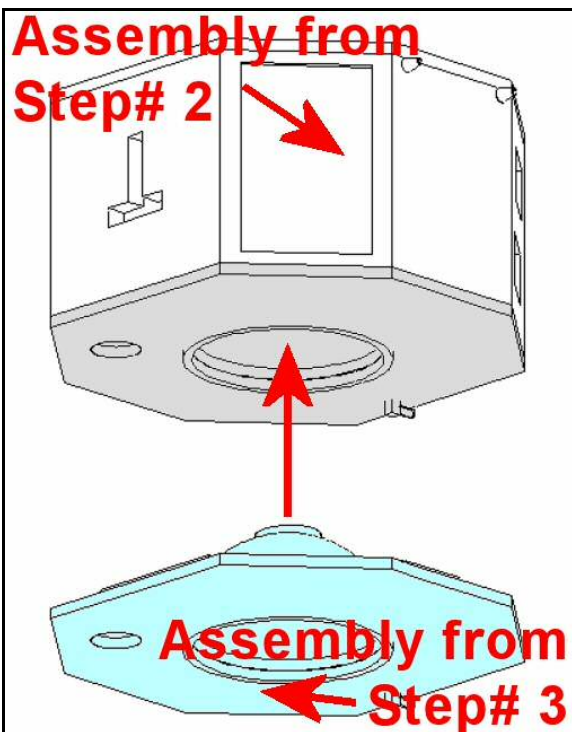
Figure# 7

STEP# 2

Find the assembly from Step# 1 and Part# 2 and assemble, as shown in Figure# 7. Please note that IBEX did not have a perfect octagon shape. Almost all sides had a different length. The parts have been keyed so that the sides should align properly.



Figure# 8



Figure# 9

STEP# 3

Find Part# 3 and Part# 5 and Glue them together as shown in Figure# 8.

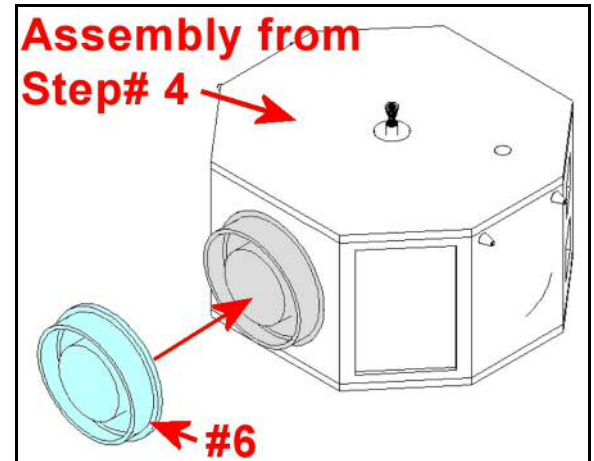
We would suggest placing Part# 5 into the hole in Part# 3 and apply glue to the backside to avoid glue intruding into the front side.

STEP# 4

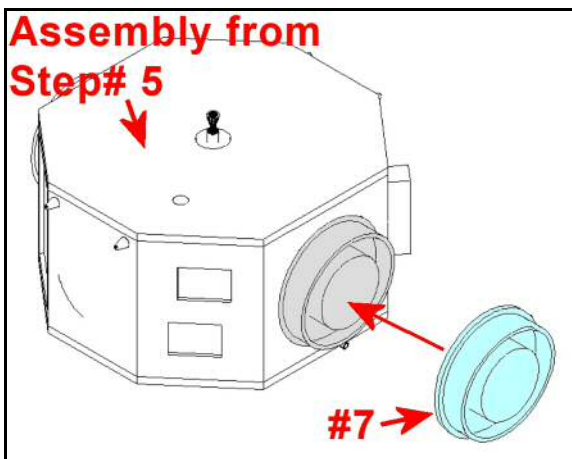
Take assembly from Step# 2 and Step# 3 and assemble as shown in Figure# 9. As in Step# 2, the parts are keyed to make sure they align properly.

STEP# 5

Take the body assembly, completed in Step# 4 and find Part# 6 and glue in place as shown in Figure# 10. Part# 6 is keyed to only mount on the correct side of the body.



Figure# 10



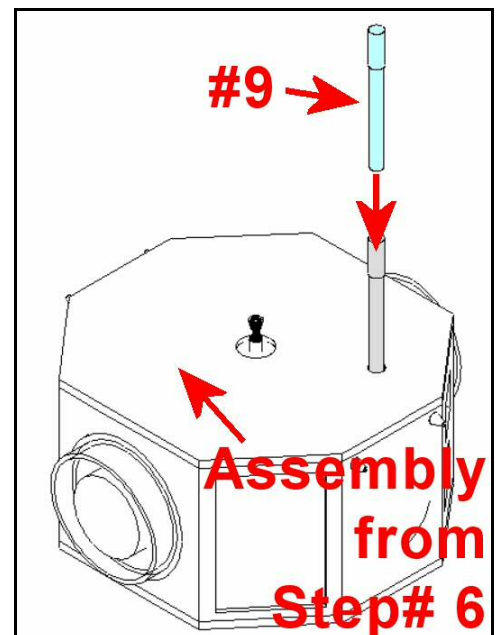
Figure# 11

STEP# 6

Take the body assembly and find Part# 7 and glue in place, as shown in Figure# 11. Part# 7 is keyed for the proper placement on the body.

STEP# 7

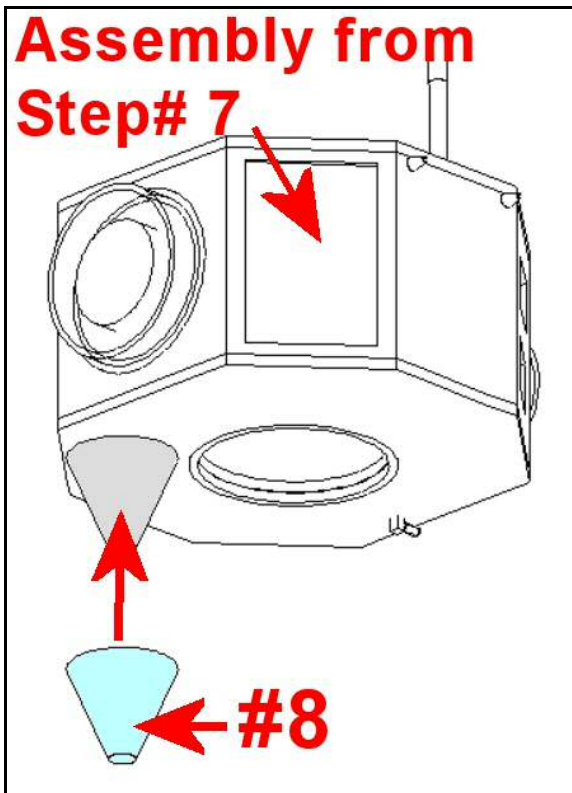
Please Note: We would suggest applying the solar panel decal to the top surface of the body before completing Step# 7. It was VERY hard to align the center hole and the hole for the antenna (Part# 9).



Figure# 12

It might be possible to make a slit in the decal, allowing the decal to be placed down around the antenna. However, we feel it would be easier to lace the decal, as noted in the decal placement step, and then just push an xacto blade down and through the dimple the hole will make in the decal, once it is applied and dry.

Once you have decided when to do the decal placement, Take the body and find Part# 9 and glue it in place, as shown in Figure# 12.

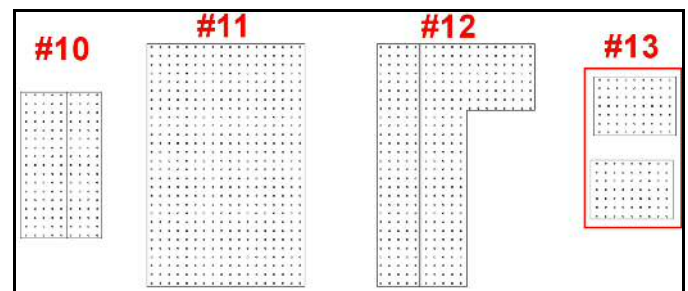


Figure# 13

STEP# 8

We would suggest covering the bottom in Black Foil before completing this step.

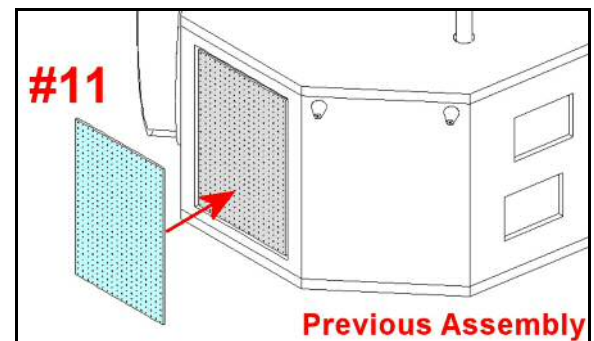
Take the body and find Part# 8 and glue it in place as shown in Figure# 13.



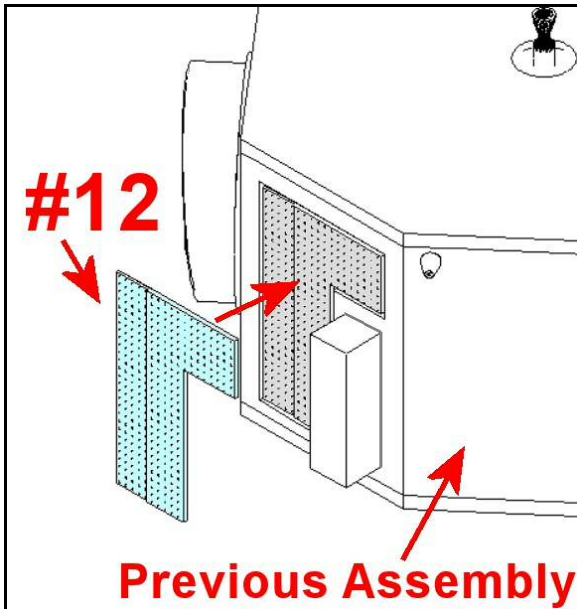
Figure# 14

STEP# 9

Find radiator panel, Part# 11, as denoted in Figure# 14 and glue it into body indentation as shown in Figure# 15.



Figure# 15



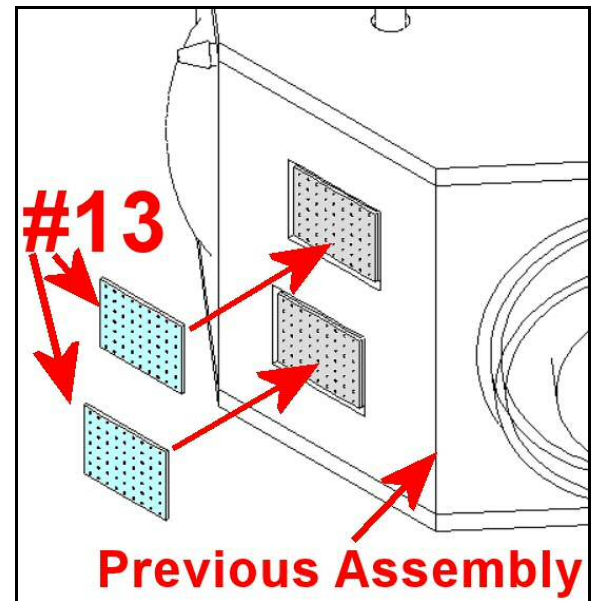
Figure# 16

STEP# 10

Find radiator panel, Part# 12, as denoted in Figure# 14 and glue it into the body indentation as shown in Figure# 16.

STEP# 11

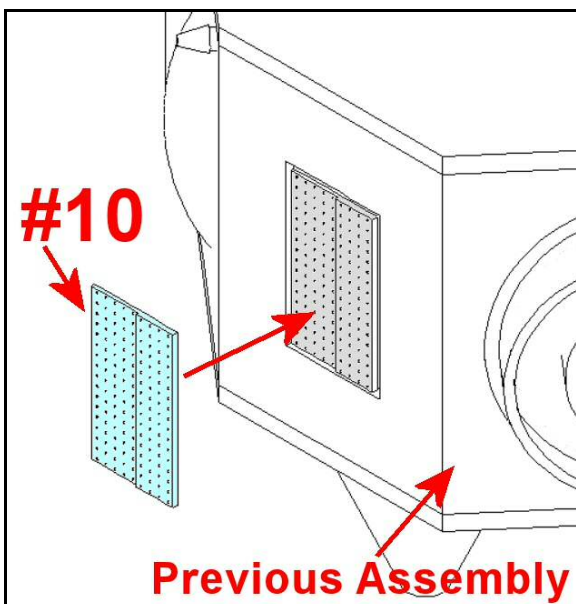
Find Radiator panels, Part# 13, as denoted in Figure# 14 surrounded by a red box. Glue both panels into the recesses in the body as shown in Figure# 17.



Figure# 17

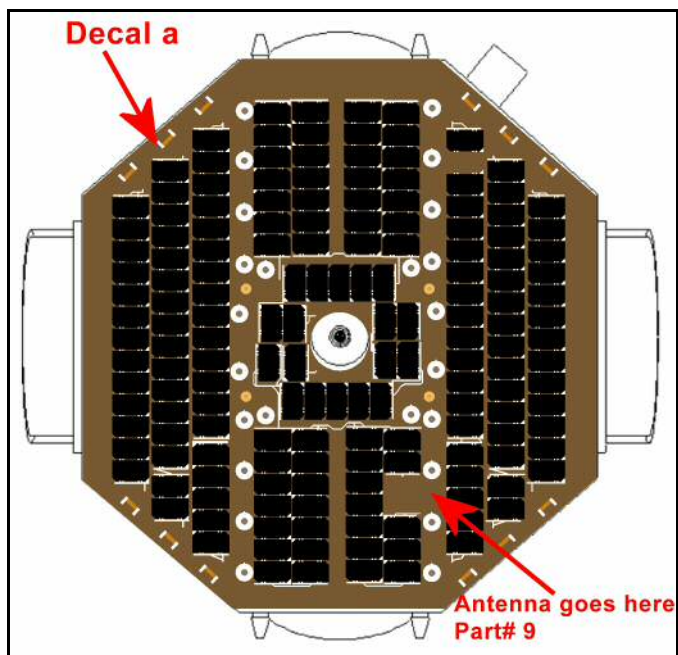
STEP# 12

Find radiator panel, Part# 10, as denoted in Figure# 14. Glue Part# 10 into the indent in the body as shown in Figure# 18.

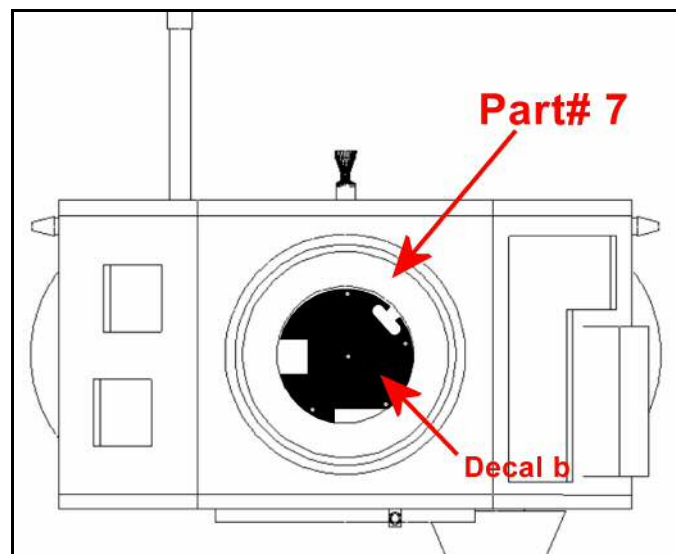


Figure# 18

DECAL PLACEMENT



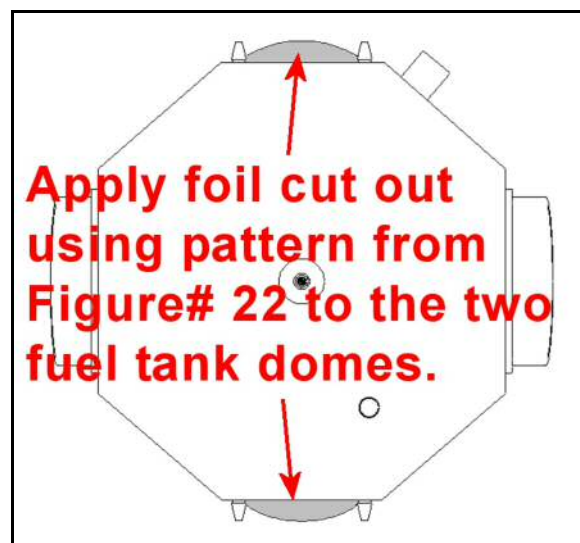
Figure# 19



Figure# 20

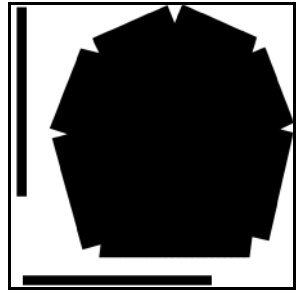
Place decal “a” on the top side of the model. Please not the arrow that shows where the antenna should poke through the decal, as shown in Figure# 19. Place decal “b” on the center cylinder of the Part# 7, as shown on Figure# 20.

IBEX used a uniquely shaped thermal blanket to cover the protruding fuel tank domes. Find the pattern shown in Figure# 22 and print it out. The image has a vertical and horizontal bar in it that, when printed to the correct scale, will be exactly one inch in length. When you have the proper scaled print, cut the pattern out and use it to cut two copies of the pattern using dull silver foil. Bend the foil pattern over the top of the domes on the model body, as located in



Figure# 21

Figure# 21.



Figure# 22

This is the end of the assembly of your IBEX kit. We hope you enjoyed our kit.