OV 105 Endeavour STS-88 Assembling Guide

Cut out and bend the parts following the line. For best results use a sharp hobby knife and a metal straight edge. For some parts a pair of small scissors is better. Glue together the parts using a thin, even coat of ordinary white glue. Print the sheets on a color printer. The format should be compatible with both A-4 or US Letter sheet size. I used an EPSON 750 Color ink-Jet Printer with a resolution of 1440 dpi with excellent results.

Space Shuttle "Endeavour" parts are printed on 12 separate sheets. The sheets marked Glossy should be printed on glossy paper (available for any ink-jet printer). The numbered parts belonging to the sheet are identified by the sheet number followed by the part number.

The Card Board sheets should be printed on cardboard paper (or EPSON Photo Paper) and its parts are identified in the same way



Cut the 1-1 part and all the other pieces up to the number 1-16. Roll the 1-1 on a table edge and, once the shape is similar to the shuttle fore part start to glue all the glueing tabs provided

The parts 1-15 and 1-16 represent the Carbon-carbon nose. Paint the paper edge grey to avoid the white lines. To improve the realism you can cover the paper nose with an homogeneous layer of white glue or filler and paint it grey when dry

Follow the numbering of the gluing tabs indicated in the following drawings









To improve the realism you can cut all the thrusters gray holes and include the nozzles using the parts 1-17 for Vernier thrusters (the small ones) and the 1-18 for the primary thrusters of Reaction Control System. All the nozzles have to be glued inside the part 1-1 with the black side visible through the holes



Drawings of the Space Shuttle nose-cockpit area show how it is assembled.







You can also cut the two star-sensors gray holes and gluing the two additional starsensors 1-12 and 1-13 internally for a more realistic 3-D shape.



Cut the parts 1-19 and 1-20 and glue them together. To improve the stiffness of this part add two more cardboard layers 1-21 on the back of it (not on the tabs). The reason why the fore cargo wall is divided into two parts is that in the future it will be available also the Shuttle cockpit (upper deck and mid-deck)connected directly with the upper part 1-19. The cockpit will be visible through the transparent window.



Cut the cargo-bay 3-1. Roll the 3-1 on a table edge and, once the shape is similar to a half pipe, glue the aft wall (the one with flag on it). To improve the stiffness of this part add one more cardboard layer on the back of the flagged wall. The cardboard should not cover the upper part where the back wall is glued with its upper part that is inserted in the Shuttle Motor block. Glue the 1-19/20 to it to form the entire cargo bay.



Cut the two 2-1 parts, bend them along the centerline and glue them with the painted part external. The gray boxes are the internal wall of the landing gear that at the moment is not included in this kit. Keep the part flats gluing the parts and keeping them under a big book during drying. Cut the two 3-3 and 3-4 parts, bend them as indicated in the above drawing. Use a 1,5 x 1,5 mm strip styrene stick to shape the paper with the illustrated edge. A sharp ruler can also be used for this purpose. The two 3-3 and 3-4 parts have then to be glued on the 2.1 parts with the word "United" that are aligned with the landing gear housing. and 1-20.



Cut the two 2-2 parts and glue them together. Do the same with 2-3 parts and 3-2 with 4-2 and 4-3 with 4-4. The boxes painted on some of them represent the landing gear housing.



Glue all the parts to form the cargo bay structure. Check the parts before gluing them. The painted parts of the pieces 4-3+4-4, 3-4+4-2, 4-8 and 4-6 should appear as the internal structure of the internal left landing gear housing. Similar is the right housing.





Glue the cargo bay structure with the cargo bay. Try to keep the parts aligned during glue drying.



Cut the right wing 6-1 and start to bend it as indicated in the above picture. Try to bend it very smoothly and gently, step by step, avoiding to fold the paper until you reach a sort of U shaped wing with the black tiled part as lower side. Repeat the same procedure with the leftt wing.



Glue the left and right wing to the orbiter under surface 4-1. Once it is dried, glue the gluing table 6-2,6-4 and 6-5 on the right wing in the open slot. Bend the additional leading edge Reinforced Carbon-Carbon (RCC) panel parts included in the 4-1 piece and glue them on the gluing tabs. Glue the tab 6-3 on the back of the leading edges panel once it it attached to the wing. Glue on the tabs the additional RCC Panel part 6-7 on the open slot. Repeat the procedure with the similar part of the left wing right wing and the 7-7 on the left wing.

