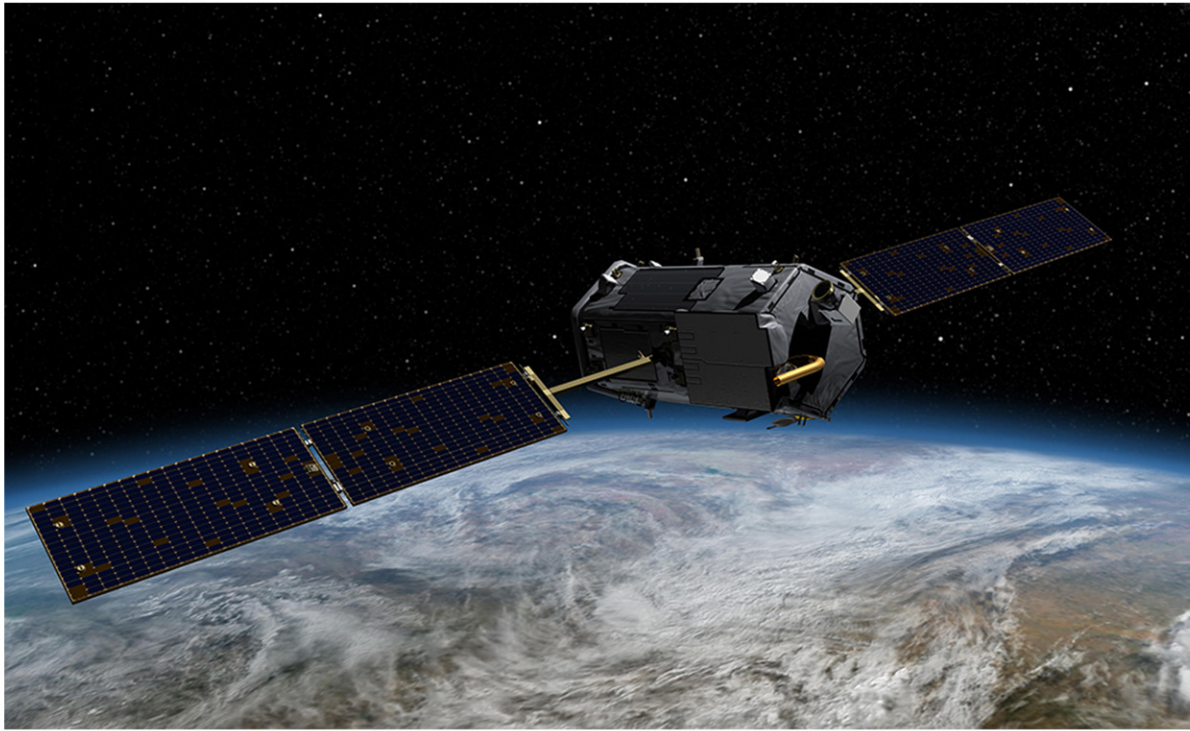


OCO-2 - Orbiting Carbon Observatory 2



Mission Overview

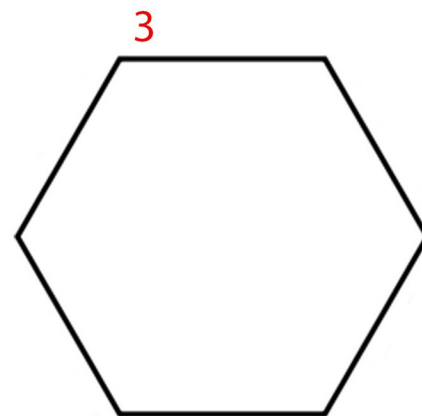
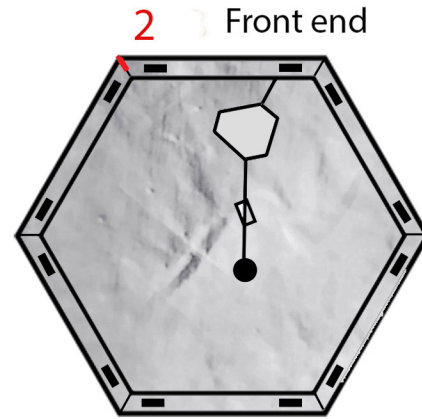
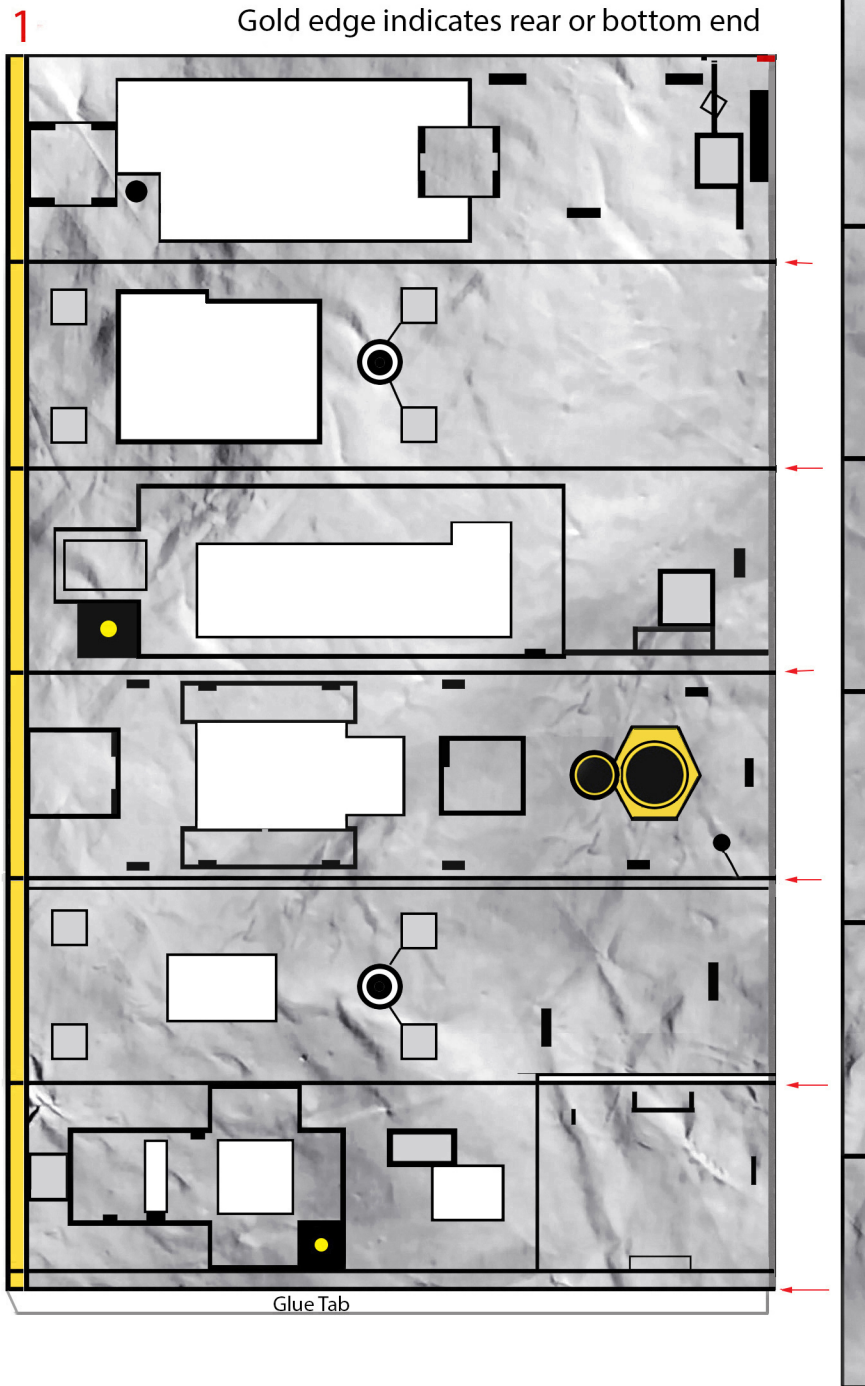
OCO-2 – the Orbiting Carbon Observatory 2 is a NASA mission studying carbon dioxide in Earth's atmosphere on a global scale for a better understanding of the carbon cycle, and the natural processes and human activities that have an effect on the abundance and distribution of CO₂, the most important greenhouse gas. Tracking and quantifying CO₂ sources and sinks on a global scale over time and will allow scientists to improve forecasts of climatic changes.

The mission will uncover the processes that control the distribution of carbon dioxide in the atmosphere, quantifying the sources (natural and man-made) that emit CO₂ into the atmosphere and also study the sinks of carbon dioxide. The CO₂ sinks are of great importance as they absorb about half the carbon dioxide emitted by human activities, but it is not known how long this reduction of CO₂ can continue which has significant implications for the rate of the CO₂ build-up and its impact on Earth's climate.

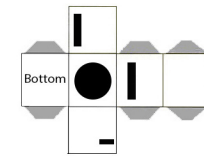
After its launch on July 2, 2014, OCO-2 joined the A-train satellite constellation, becoming the sixth satellite in the group. Members of the A-train fly very close together in sun-synchronous orbit, to make nearly simultaneous measurements of Earth.



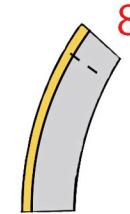
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Glue 2, 3, 5, 6 on another layer of cardstock

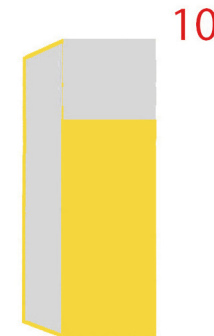
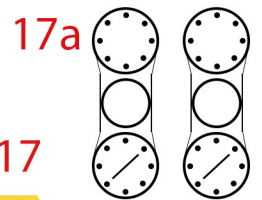


Glue this on a couple layers of thick cardstock.



Color back black

Glue these back-to-back

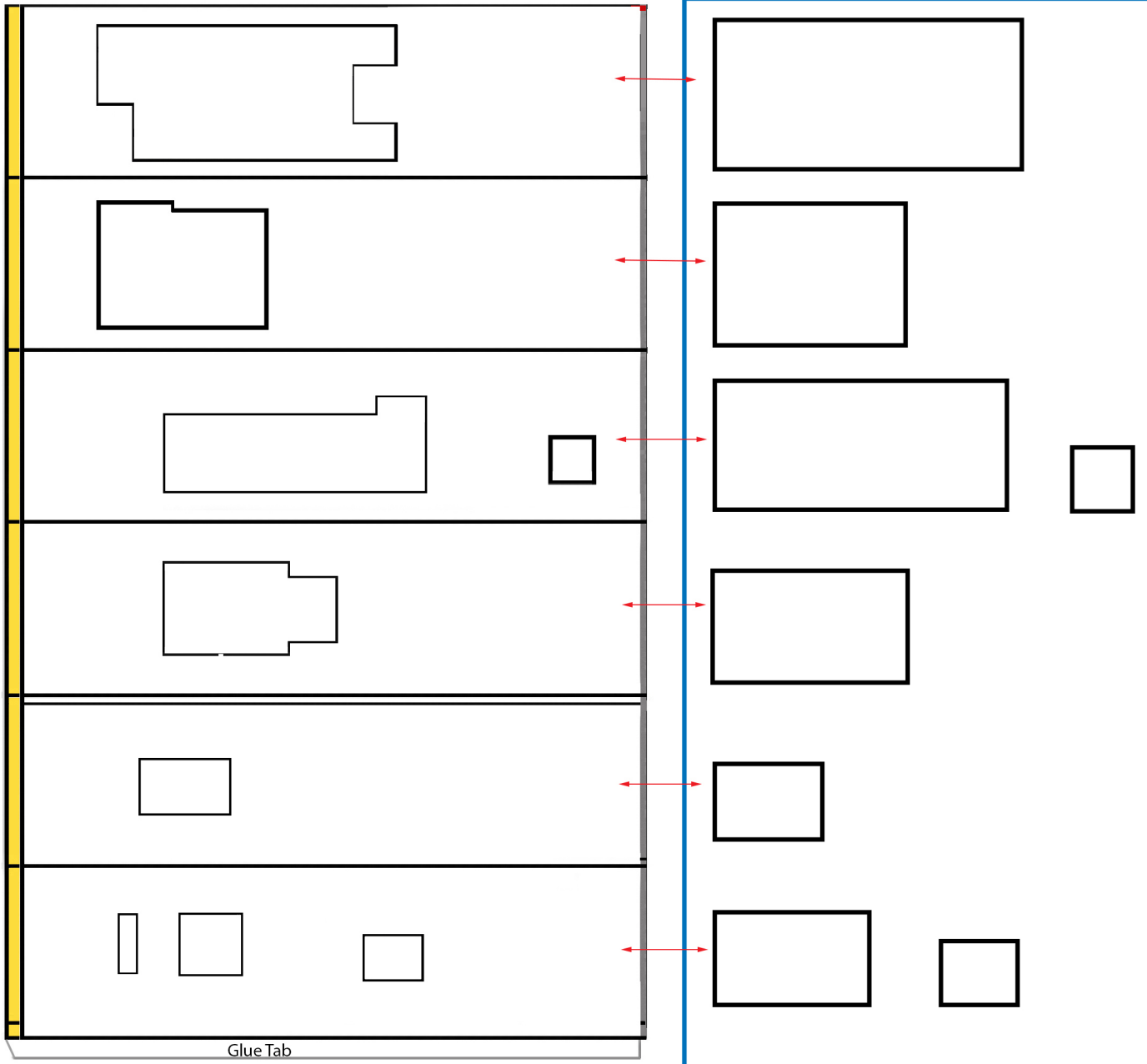


Glue this on a couple layers of cardstock, color edges gold.



Back end

Gold edge indicates rear or bottom end



Optional Detail parts.

Remove the rectangles and squares from the main body. The diagram on the far left shows which ones to remove.

Cut out each of the rectangles inside the blue box.

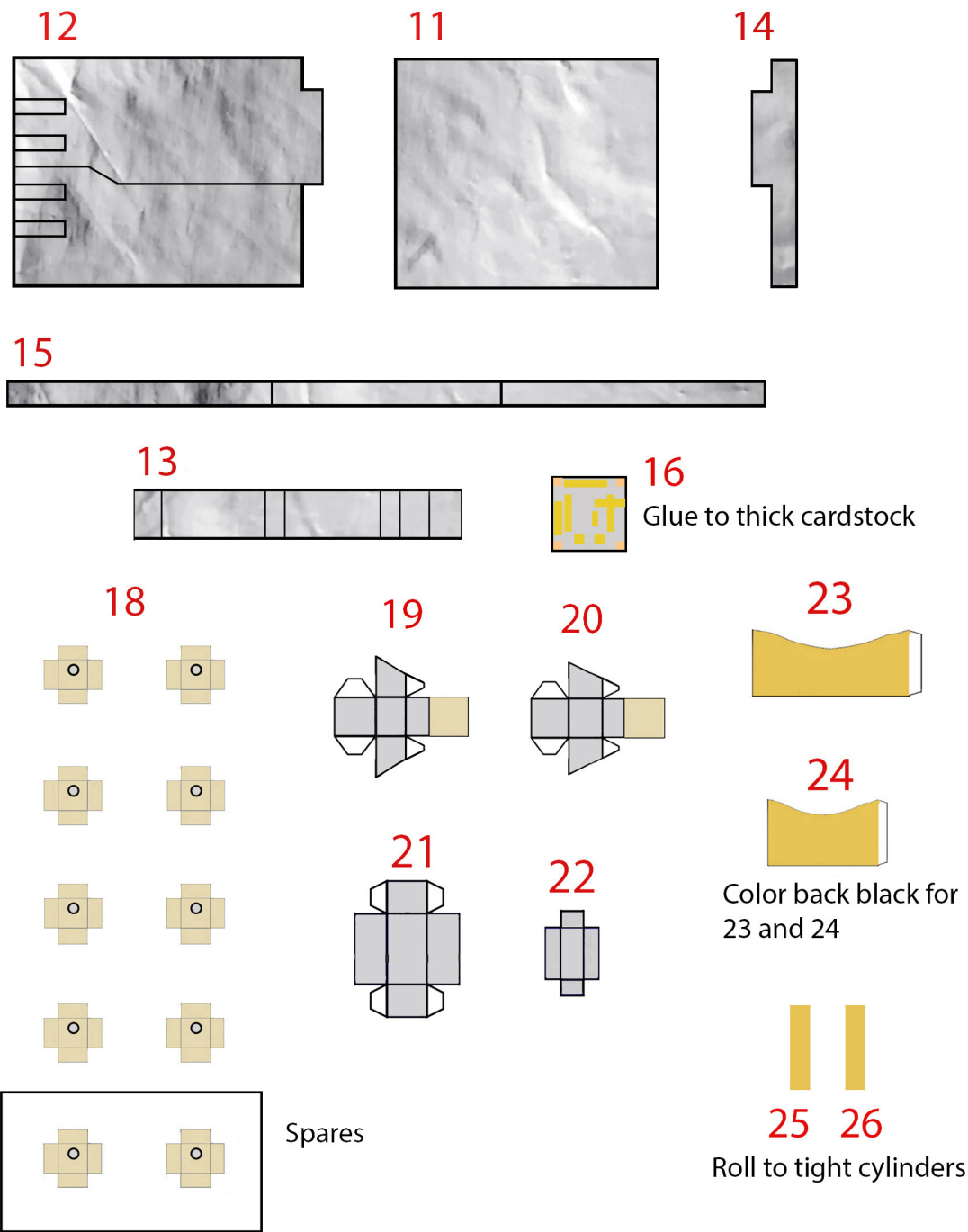
Glue aluminum foil on each one and glue them to the indicated places on the backside of the mainbody.

OR

Cut out the blue area, paint the BACKSIDE with brilliant silver paint, let dry and cut out each rectangle and glue to the indicated places on the backside of the mainbody with the painted area showing.

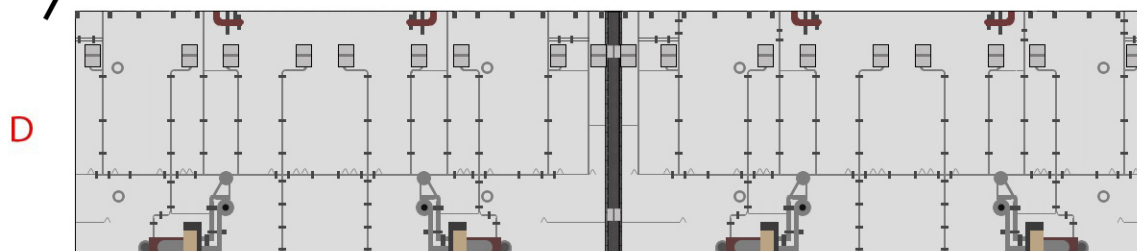
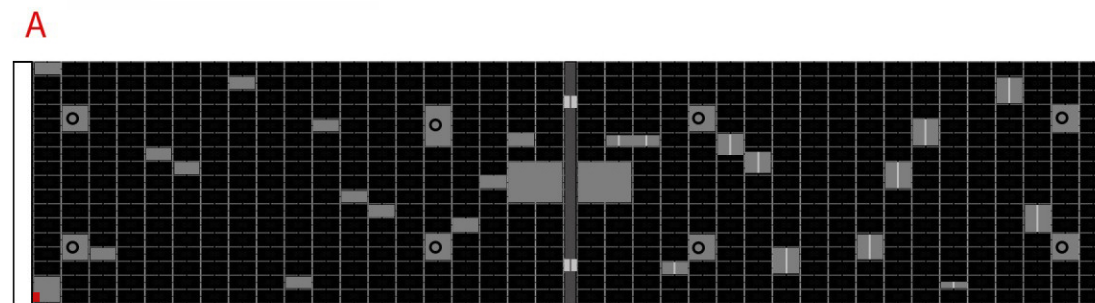
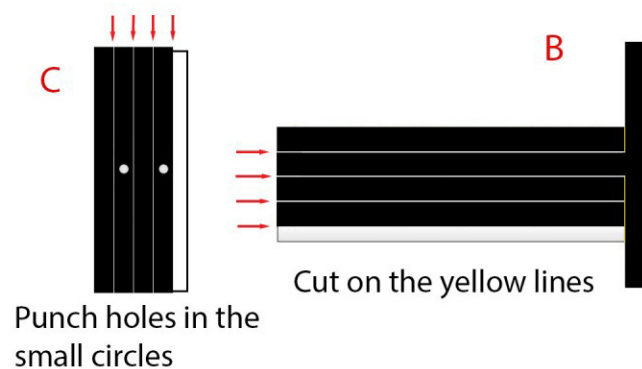
Glue another layer of cardstock to the back leaving about 1/4 inch from each end for a stronger model.

OCO-2 - Orbiting Carbon Observatory 2

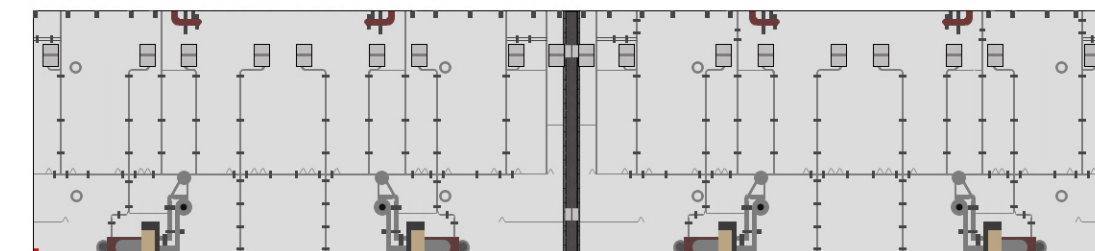
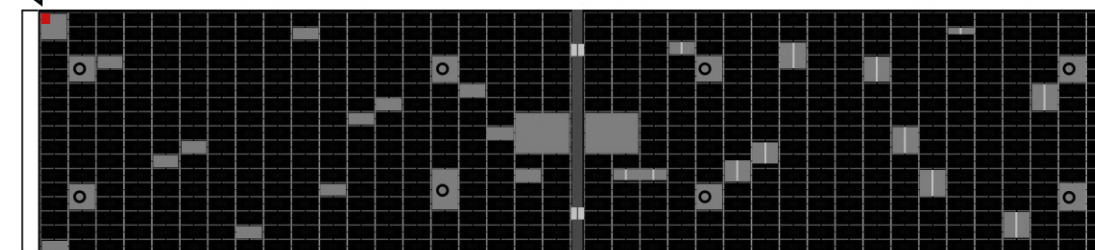
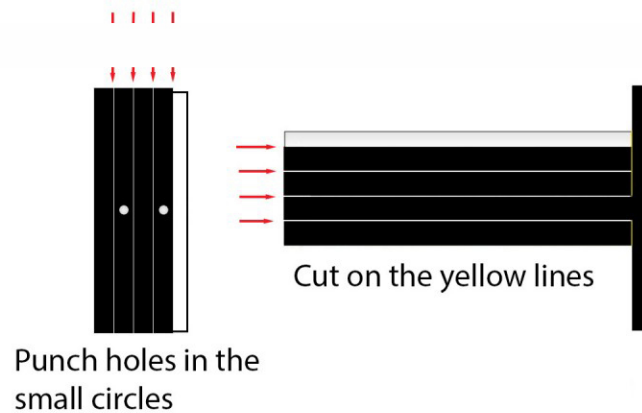


OCO-2 - Orbiting Carbon Observatory 2

SOLAR PANELS



When gluing this to the backside, the corner with the small red marker should match behind the corner with the red marker on the front side solar panel for proper orientation. The marked corners are indicated by the arrows.



When gluing this to the backside, the corner with the small red marker should match behind the corner with the red marker on the front side solar panel for proper orientation. The marked corners are indicated by the arrows.