# Minotaur IV

Launched 19 Nov 2010 from Kodiak Launch Facility with multiple satellites.

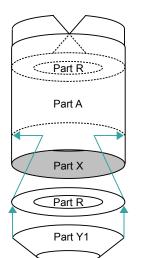








### Step 1: Lower Body, Bulkhead and Engine



Part Y2

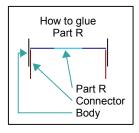
Part Z1

Part Z2

Part Z3

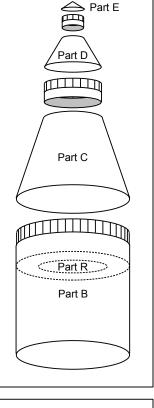
- 1. Roll and glue Part A and the A-B connector. 2. Glue Part R against the connector as shown. 3. Glue Part X in inside
- Part A with the color showing. 4. Assemble the Y parts and glue the bottom as

shown below.

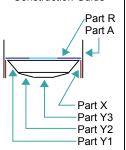


### **Step 2: Upper Body** and Nose Cone

- 1. Roll and glue Part B and the B-C connector. 2. Glue Part R against the connector as shown in Step 1.
- 3. Glue the nose cone parts together starting with Part C.
- 4. When the nose cone is dry, attach it to the main Body.

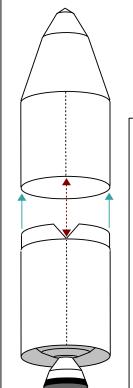


**Bottom Bulkhead** Construction Guide



5. Glue part Z1 to Z2. 6. Roll part Z3 into a cone and glue inside parts Z1 and Z2. 7. Glue the entire nozzle onto the bottom of the lower bulkhead.

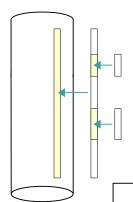
# **Step 3: Body Assembly**



body halves together, making sure you line up the seams.

Carefully, glue the

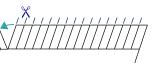
## Step 4: Cable **Runners**



- 1 Glue the cable runners to another layer of card stock and let dry.
- 2. Glue the lone cable runner to the body. with the round end on top.
- 3. Glue the small raised sections to the matching section on the main runner.

#### How to use connectors

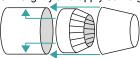
1. Cut out the connector and cut along small lines to make one side a line of 'tabs.'



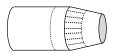
2. Roll into a tube and glue inside the larger diameter tube.

Part Y3

3. Fold the tabs in slightly and apply some glue.



4. Attach the cone, using a small wooden or plastic rod to press the tabs to the inside of the cone.



Find out more about the Minotaur 4 launch vehicle visit the website at http://www.orbital.com/SpaceLaunch/Minotaur/IV/

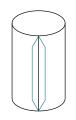


Paper model by Erick Muñoz, ©2011. Find more models at http://www.ericksmodels.com.

Do not copy. Not for commercial purposes. Private use only.

#### **Glue Tabs**

Glue sections into tubes using the connector to keep the joint flush.



Top view



