

Delta IV Heavy CBC Sub Assembly


A. Insert Parts.


Step 1. Click File Menu > New, click **Assembly** and OK.

Step 2. Click **Keep Visible**  in the Property Manager, **Fig. 1**.

Step 3. Click **Browse** in the Property Manager, **Fig. 1**.

Step 4. Select your **ENGINE NOZZLE** file and click Open.

Step 5. Click OK  in the Property Manager. This will place the Engine Nozzle origin at the assembly origin and fix the position of the Engine Nozzle so that it cannot move. This fixed component should have a **(f)** before its name in the Feature Manager

 **(f) ENGINE NOZZLE<1>**.

Step 6. Click **Browse** in the Property Manager, **Fig. 1**.

Step 7. Select your **ENGINE SHIELD** file and click Open.

Step 8. Place the Engine Shield above the Engine, **Fig. 2**.

Step 9. Continue and place **BOOSTER** and **NOSE CONE**, **Fig. 3**.
Click OK  in the Property Manager when done.

B. Save as "CBC ASSEMBLY".

Step 1. Click File Menu > Save As.

Step 2. Key-in **CBC ASSEMBLY** for the filename and press ENTER.

C. Mate: Engine Nozzle and Engine Shield.

Step 1. Rotate view to view **bottom inside edge of Engine Shield**, hold down middle mouse button (wheel) and drag to rotate view, **Fig. 3**.

Step 2. Zoom in around **Engine Nozzle and Engine Shield**, **Fig. 3**.
To zoom, place the cursor over the area and spin the wheel on mouse back. While spinning the wheel keep cursor on the area.

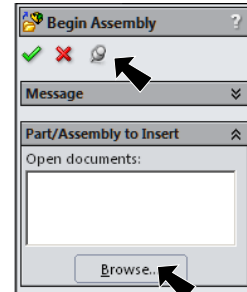


Fig. 1

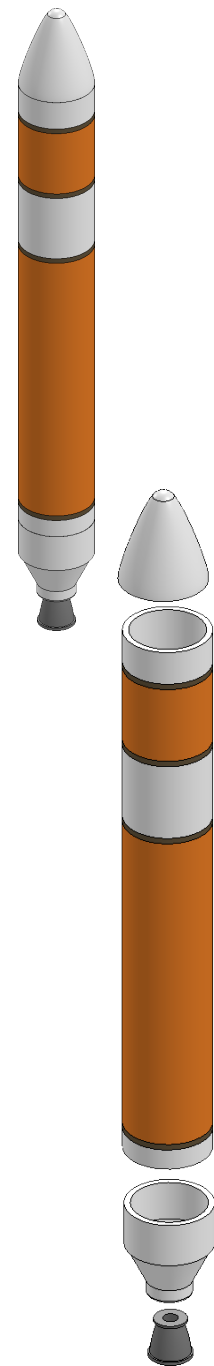


Fig. 2

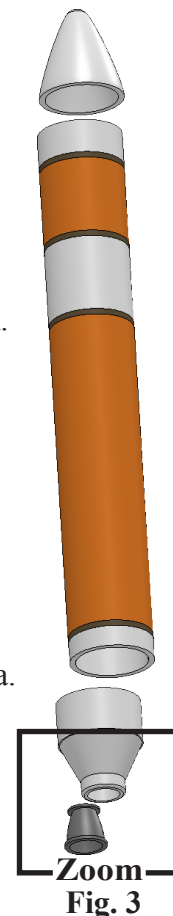




Fig. 3

Step 3. Click **Mate**  on the Assembly toolbar.

Step 4. Click **second edge from top outside edge of Engine Nozzle and bottom inside edge of Engine Shield**, Fig. 4.

Step 6. Click Add/Finish Mate  in Mate pop-up toolbar to add a **Coincident** mate, Fig. 5.

D. Mate: Engine Shield and Booster.

Step 1. Click **Trimetric**  on the Standard Views toolbar.


Step 2. Click **top end outside edge of Engine Shield and bottom outside edge of Booster**, Fig. 6.

Step 3. Click Add/Finish Mate  in Mate pop-up toolbar to add a **Coincident** mate, Fig. 7.

E. Mate: Booster and Nose Cone.

Step 1. Click **top end outside edge of Booster and bottom outside edge of Nose Cone**, Fig. 9.

Step 2. Click Add/Finish Mate  in Mate pop-up toolbar to add a **Coincident** mate, Fig. 8.

Step 3. Click OK  in the Property Manager when done.

Step 4. Save. Use **Ctrl-S**.

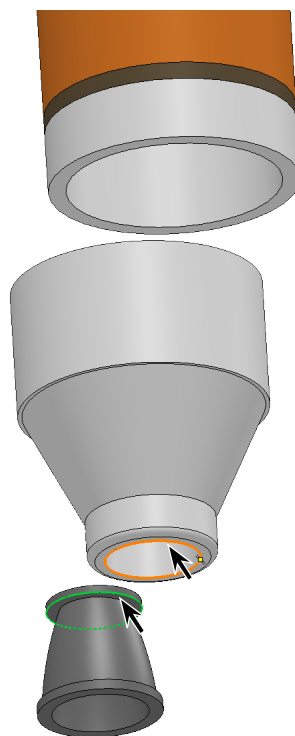


Fig. 4

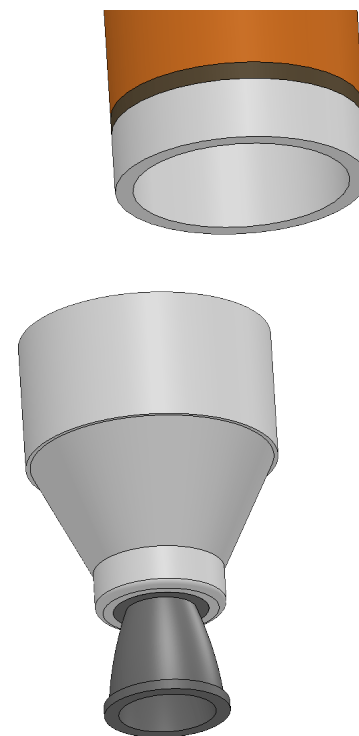


Fig. 5

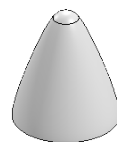


Fig. 6

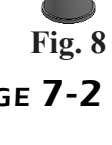
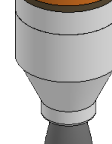
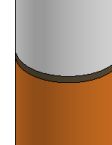
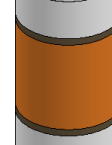
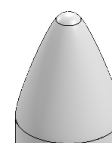
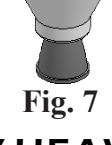
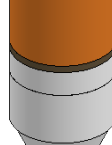
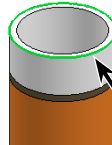
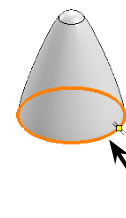


Fig. 6

Fig. 7

Fig. 8