



Delta IV Heavy Booster

A. Sketch Circles.

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

Step 2. Click **Top Plane**  in the Feature Manager and click **Sketch**  on the Context toolbar, **Fig. 1**.

Step 3. Click **Circle**  (S) on the Sketch toolbar.

Step 4. Draw **two circles** starting at the Origin , **Fig. 2**.

Step 5. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 6. Dimension the circles **1** and **.86**, **Fig. 2**.

Step 7. Click **Features**  on the Command Manager toolbar.

Step 8. Click **Extruded Boss/Base**  on the Features toolbar.

Step 9. In the Property Manager set:
under Direction 1, **Fig. 3**

Depth  **6.7**
click OK .

B. Save as "BOOSTER".

Step 1. Click File Menu > Save As.

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

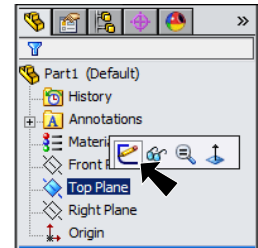


Fig. 1

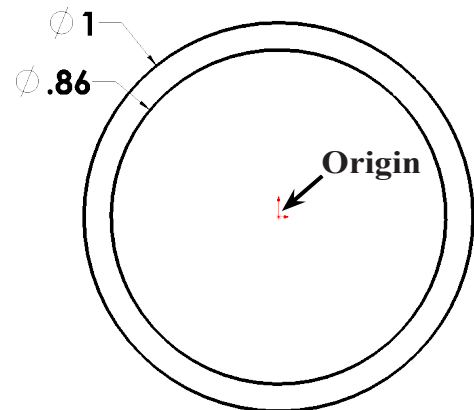


Fig. 2

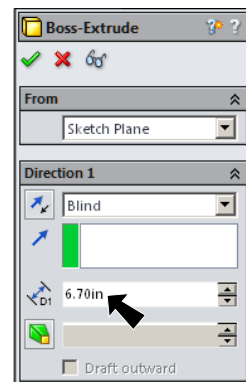




Fig. 3



Fig. 4

C. Split Line.

Step 1. Click **Front Plane**  in the Feature Manager and click **Sketch**  on the Context toolbar, **Fig. 5**.

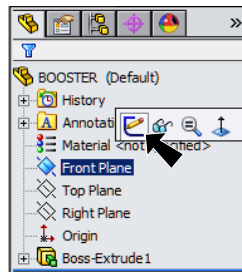


Fig. 5

Step 2. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)

Step 3. Click **Line**  (**L**) on the Sketch toolbar.

Step 4. Draw **4 sets of horizontal double lines** across extruded tube, **Fig. 6**. Keep lines horizontal and coincident to silhouette edge of tube. To terminate chain, double click back on the horizontal line you have just drawn.



Fig. 6

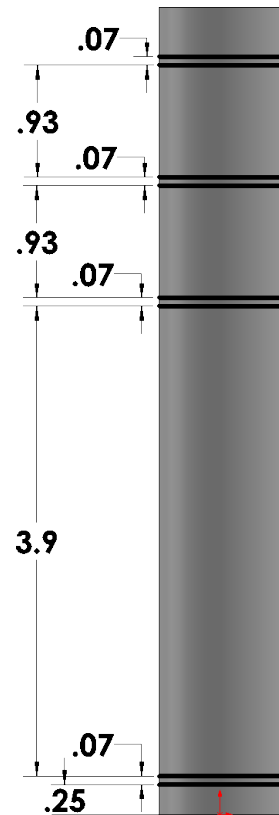





Fig. 7

Step 5. Click **Smart Dimension**  (**S**) on the Sketch toolbar.

Step 6. Add dimensions, **Fig. 7**. Dimension all the .07 first.

Step 7. Click Insert Menu > Curve > Split Line.

Step 8. In the Split Line Property Manager:
 under Type of Split, **Fig. 8**
 select **Projection**
 under Selections 
Sketch should be selected
 in the Faces to Split field 
 click **cylindrical face**, **Fig. 9**
 click OK .

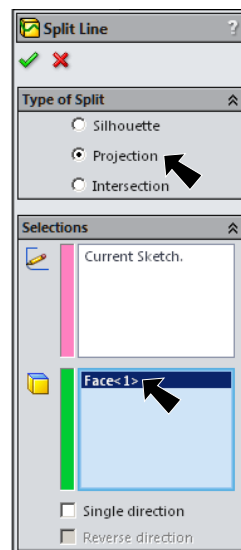


Fig. 8

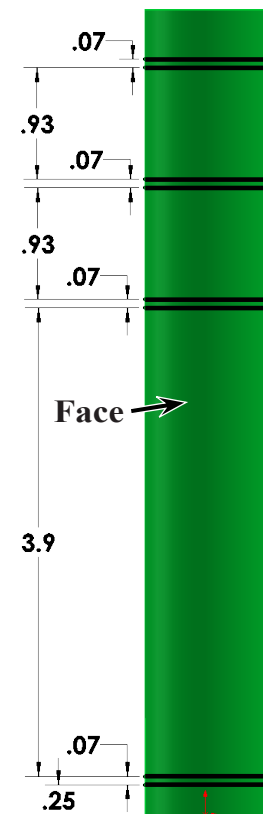




Fig. 9


D. Appearance Colors.

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

Step 2. Click PhotoView 360 Menu > Edit Appearance.

Step 3. In the Appearances Task pane, expand **Painted**, click **Car** and in the lower pane select **white**, Fig. 10.

Step 4. In the Appearances Property Manager, click **Keep Visible**  and **OK** , Fig. 11.

The Push Pin  on allows selection of other appearances (foam and spacers).

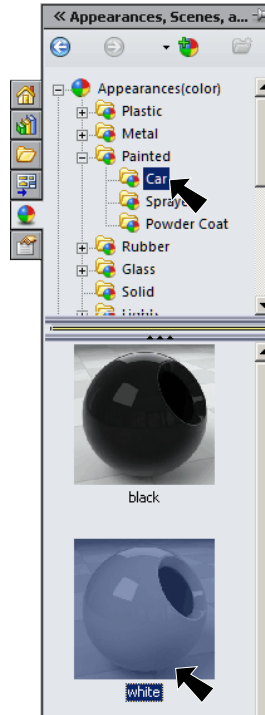


Fig. 10

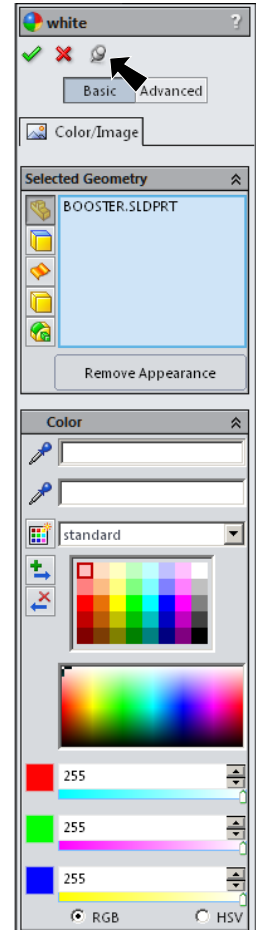


Fig. 11



Fig. 12

Step 5. In the Appearances Task pane, expand **Painted**, click **Car** and in the lower pane select **black**, **Fig. 13**.

Step 6. In the Appearances Property Manager, under Selected Geometry, **Fig. 14**

click **Select Faces** 

click the **4 narrow band faces**, **Fig. 15**.

Step 7. Back over in Appearances Property Manager

under Color, **Fig. 14**

set **RGB values** to:

R 108

G 91

B 65

click **OK** 

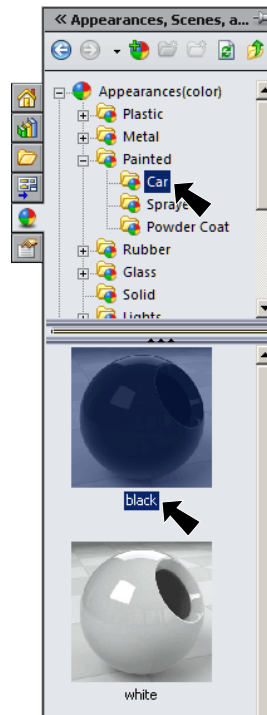


Fig. 13

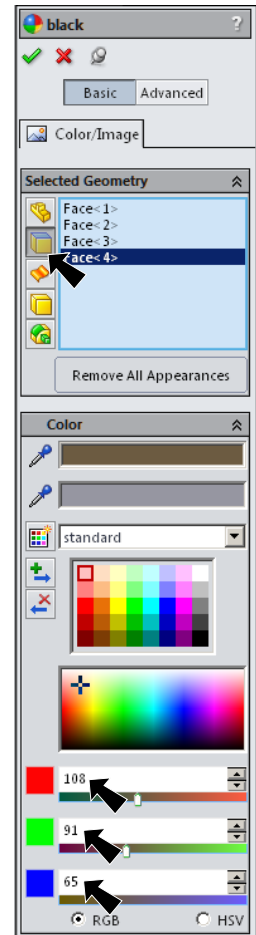


Fig. 14

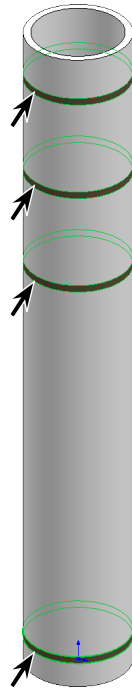


Fig. 15

Step 8. In the Appearances Task pane, expand **Solid** and in the lower pane select **orange**, **Fig. 16**.

Step 9. Back over in Appearances Property Manager under Color, **Fig. 17**
set **RGB values** to:
R 238
G 128
B 39

click the **2 wide band faces**, **Fig. 18**

click OK  and click Cancel .

Step 10. Save. Use **Ctrl-S**.

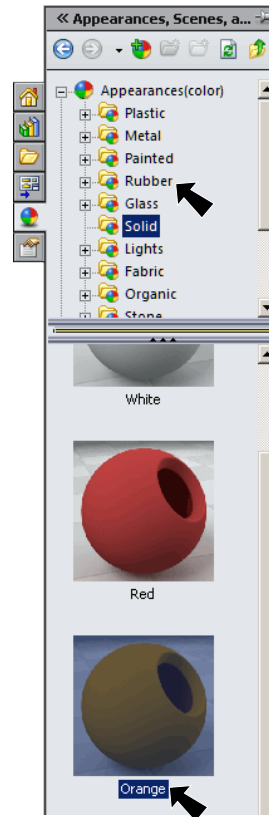


Fig. 16

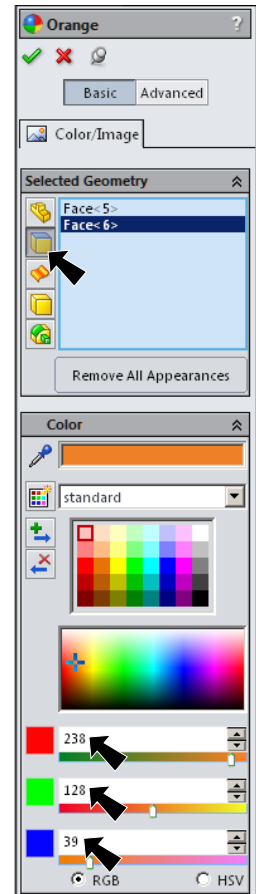


Fig. 17



Fig. 18