

Delta IV Heavy Interstage

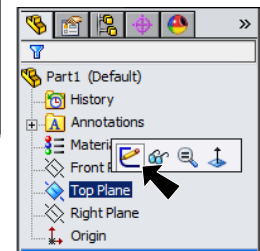




Fig. 1

A. Sketch Circles.

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

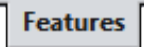
Step 2. Click **Top Plane**  in the Feature Manager and click **Sketch**  on the Context toolbar, **Fig. 1**.

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  **2**
click OK .

Step 10. Click Zoom to Fit  (F) on the View toolbar.

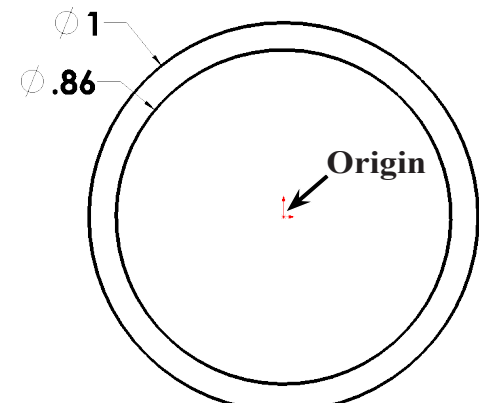


Fig. 2

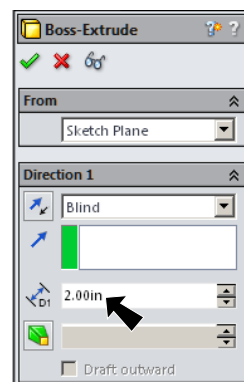


Fig. 3



Fig. 4


B. Save as "INTERSTAGE".

Step 1. Click File Menu > Save As.

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

C. Split Line.

Step 1. Click the **top face** and click **Sketch**  on the Context toolbar, **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 **vertical line from outer edge across extrude**, **Fig. 6**.

Step 5. Click **Trimetric**  on the Standard Views toolbar.

Step 6. Click Insert Menu > Curve > Split Line.

Step 7. In the Split Line Property Manager:
under Type of Split, **Fig. 7**
select **Projection**
under Selections 
Sketch should be selected
in the Faces to Split field 
click **cylindrical face**, **Fig. 8**
click OK .

Note: The Split Line will allow the Label decals to be positioned properly with out projecting on back side of cylinder and will not leave artifacts.

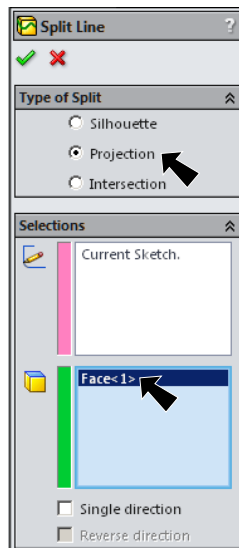


Fig. 7

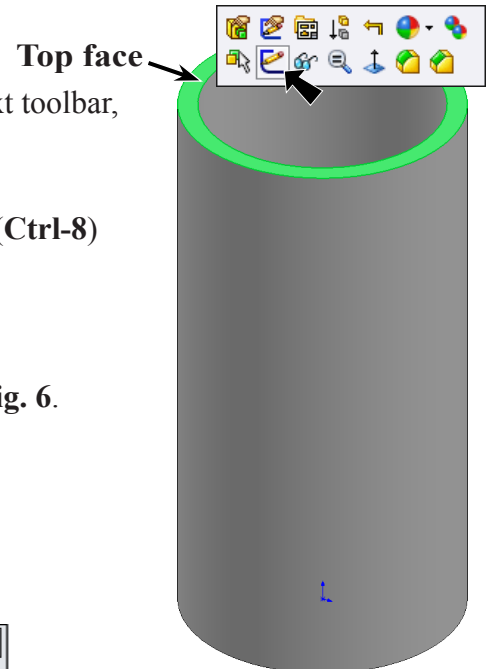


Fig. 5

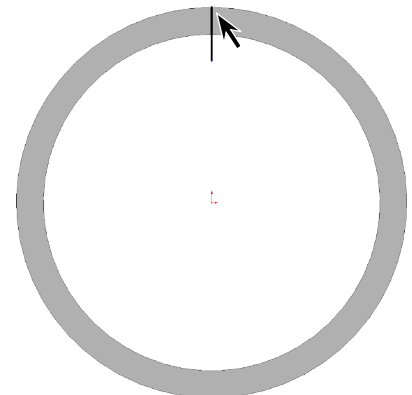


Fig. 6

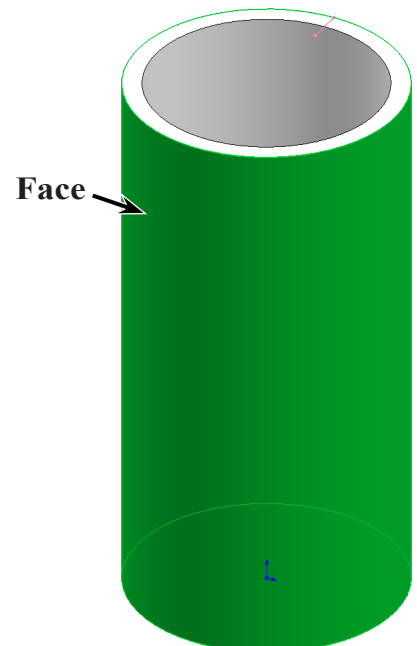


Fig. 8

D. Appearance Color.

Step 1. Click PhotoView 360 Menu > Edit Appearance.

Step 2. In the Appearances Task pane, expand **Painted**, click **Car**, in the lower pane select **white**, **Fig. 9**.

Step 3. In the Appearances Property Manager click OK , **Fig. 10**.

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

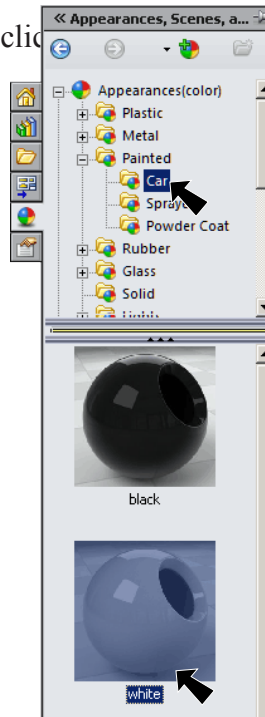


Fig. 9

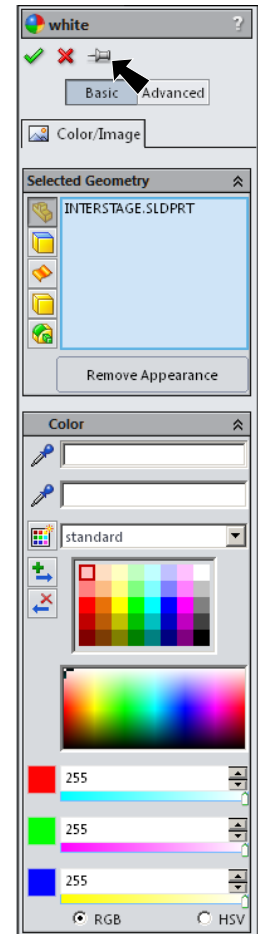


Fig. 10




Fig. 11

E. US Flag Decal.

Step 1. Click **Front**  on the Standard Views toolbar. (Ctrl-1)

Step 2. Click PhotoView 360 Menu > Edit Decal.

Step 3. In the Decals Property Manager Image tab:
under Decal Preview, **Fig. 12**
click **Browse** and **My Documents** buttons
open **us-flag.png**


Step 4. Click **Mapping** tab at top of Decals Manager
under Selected Geometry, **Fig. 13**
unselect all but Select Faces 
click **cylindrical face**, **Fig. 14**.

Step 5. In the Decals Property Manager Image:
under Mapping, **Fig. 13**
Mapping type **Label**

Horizontal location  **0**

Vertical location  **-.7**

under Size/Orientation

Width  **.45**

Rotation  **180**

click **Keep Visible**  and **OK** ,

Fig. 13.

The Push Pin  on allows adding another decal.

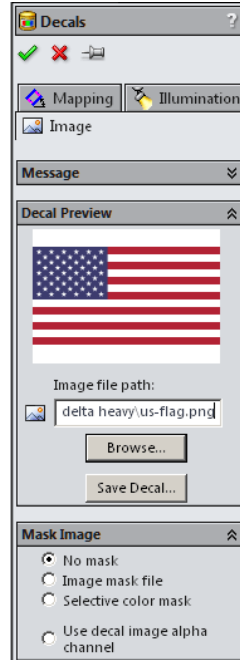


Fig. 12

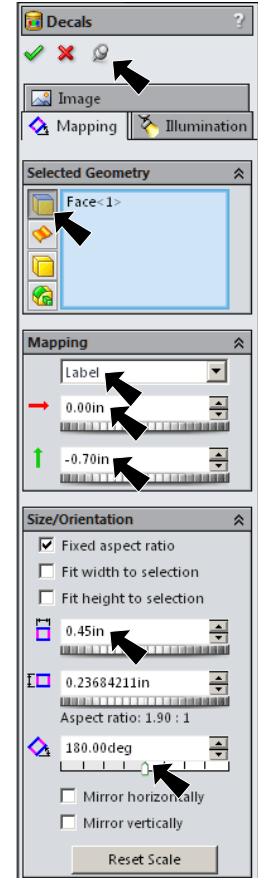


Fig. 13

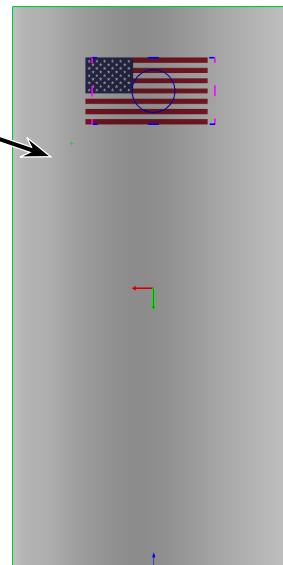



Fig. 14

F. Delta IV Heavy Logo Decal.

Step 1. In the Decals Property Manager:
 click **Image tab**, **Fig. 15**
 under Decal Preview
 click **Browse** and **My Documents** buttons
 open **delta-iv-heavy.png**


under Mask Image
 select **Use decal image alpha channel**

Step 2. Click **Mapping tab** at top of Decals Manager
 under Selected Geometry, **Fig. 16**
unselect all but Select Faces 
 click **cylindrical face**, **Fig. 17**.

Step 3. In the Decals Property Manager Image:
 under Mapping, **Fig. 16**
 Mapping type **Label**

Vertical location ↑ **-3**

under Size/Orientation

Width  **.5**

click **OK** 

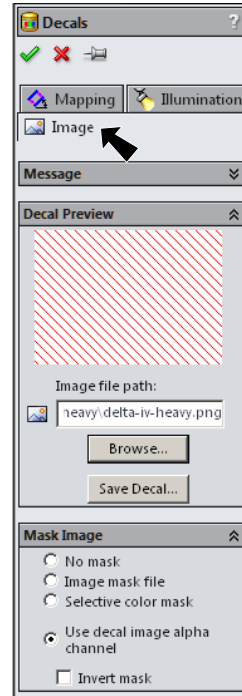


Fig. 15

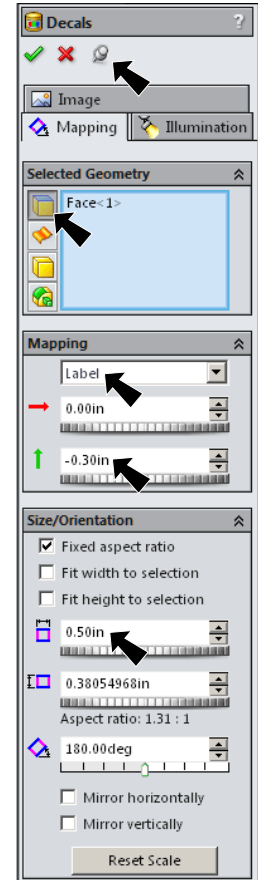


Fig. 16

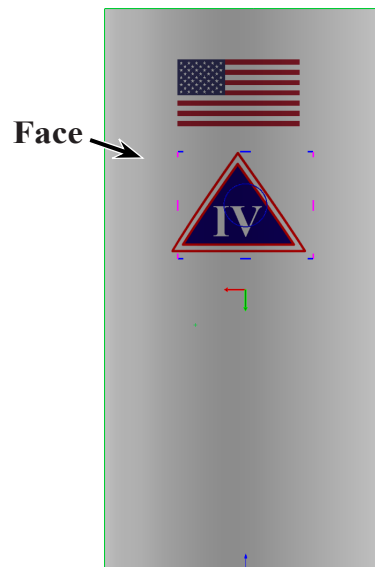



Fig. 17

G. NASA Logo Decal.

Step 1. In the Decals Property Manager:
 click **Image tab**, **Fig. 18**
 under Decal Preview
 click **Browse** and **My Documents** buttons
 open **nasa-logo.png**

under Mask Image
 select **Use decal image alpha channel**


Step 2. Click **Mapping tab** at top of Decals Manager
 under Selected Geometry, **Fig. 19**
unselect all but Select Faces 

click **cylindrical face**, **Fig. 20**.

Step 3. In the Decals Property Manager Image:
 under Mapping, **Fig. 19**
 Mapping type **Label**

Vertical location  **.15**

under Size/Orientation

Width  **.45**

click **OK** 

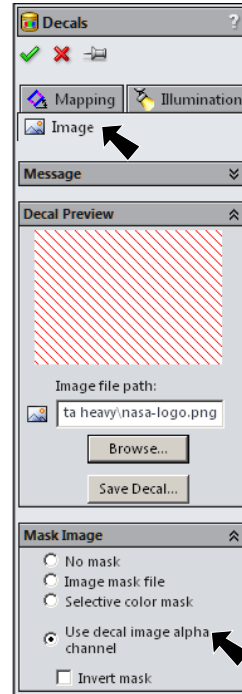


Fig. 18

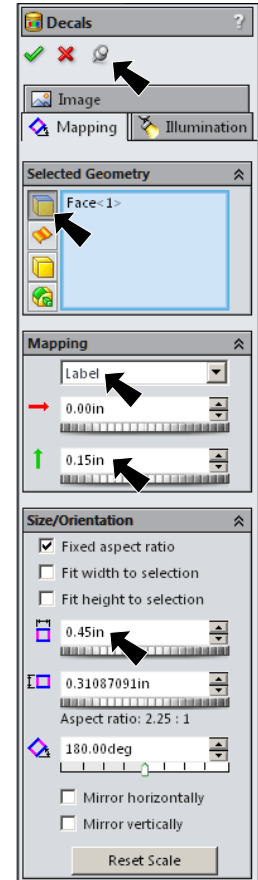


Fig. 19

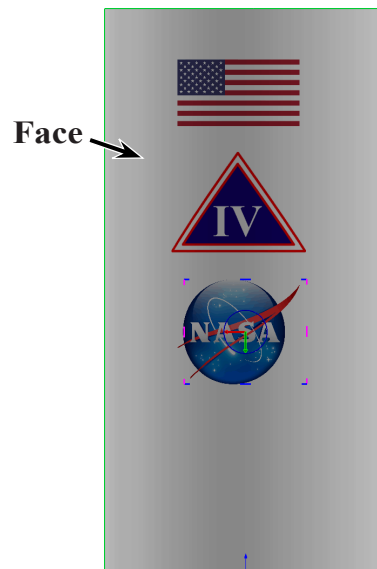



Fig. 20

H. Star Decal.

Step 1. In the Decals Property Manager:
 click **Image tab**, **Fig. 21**
 under Decal Preview
 click **Browse** and **My Documents** buttons
 open **star-red-dark-blue.png**


under Mask Image
 select **Use decal image alpha channel**

Step 2. Click **Mapping tab** at top of Decals Manager
 under Selected Geometry, **Fig. 22**
unselect all but Select Faces 
 click **cylindrical face**, **Fig. 23**.

Step 3. In the Decals Property Manager Image:
 under Mapping, **Fig. 22**
 Mapping type **Label**

Vertical location  **.6**

under Size/Orientation

Width  **.6**

click **OK**  and click **Cancel** .

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



Fig. 24

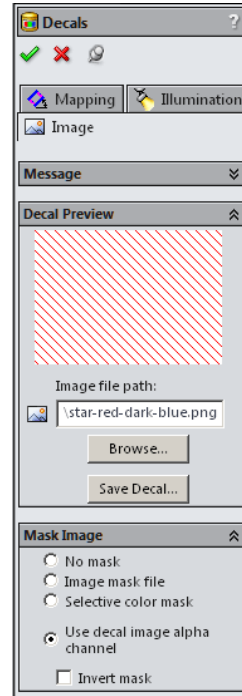


Fig. 21

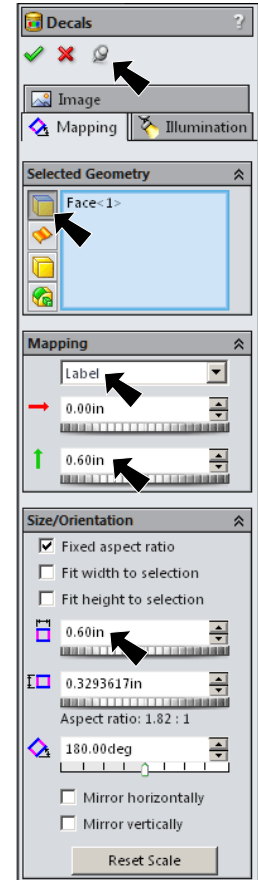


Fig. 22

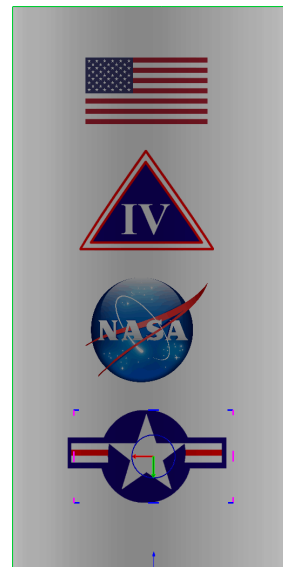


Fig. 23