



## A. Insert Side, Top and Isometric Views.

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

Step 2. Click **Model View**  on the View Layout toolbar.

Step 3. Click **Browse** in the Property Manager.

Step 4. Select your **E-CAR ASSEMBLY** file and click Open.

Step 5. In the Property Manager, under **Orientation** click **Right**  check **Preview** under **Scale** select **Use custom scale** and set scale to **1:1**, Fig. 1.

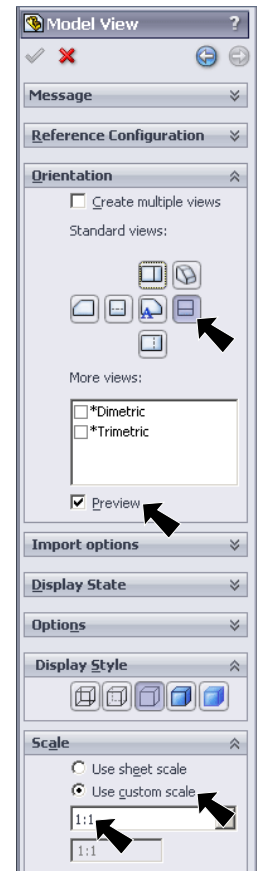


Fig. 1

Step 6. Move the cursor into the graphic area and click to place the right side view as shown in Fig. 2. Align the left edge of the preview with the left border line and align the bottom edge with the top of the title block.

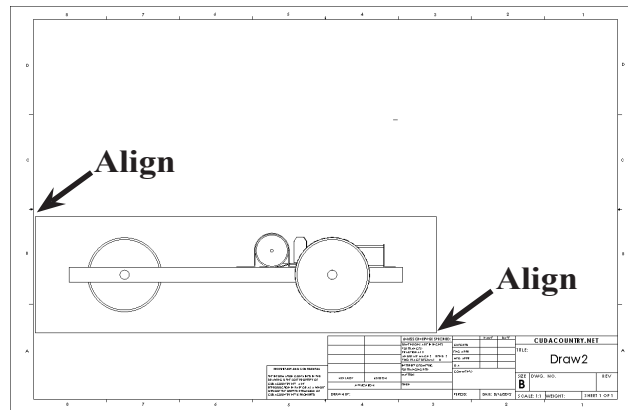


Fig. 2

Step 7. **Move the cursor straight up** and click to place the top view as shown in Fig. 3. Center the preview between the side view you just placed and the top border line.

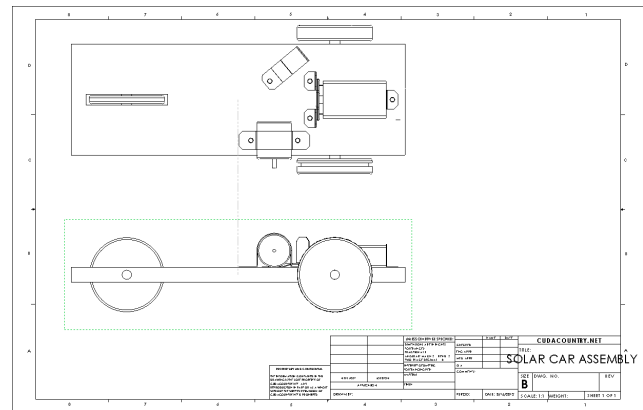
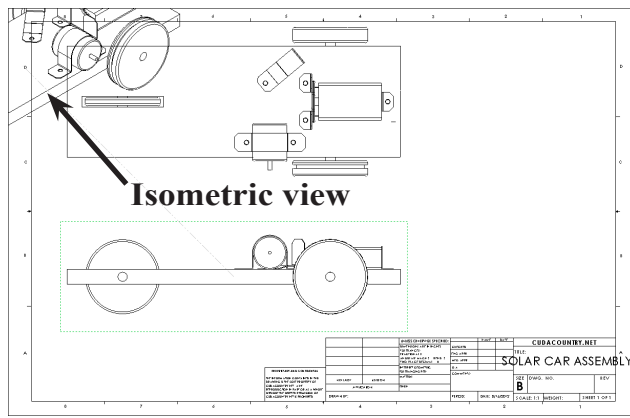


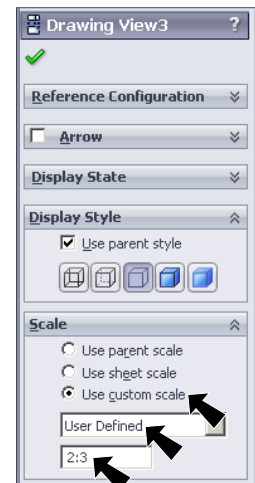
Fig. 3

Step 8. Move the cursor to the top left corner of the drawing and click to place the Isometric view, **Fig. 4**.





Step 9. Click OK  in the Property Manager.

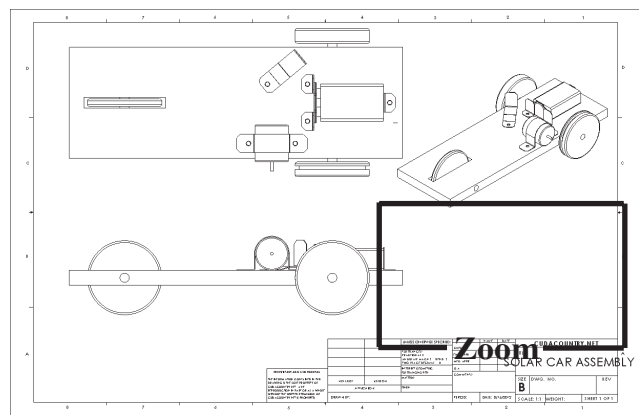
Step 10. Click the Isometric view to select it, **Fig. 4**.



**Fig. 5**

Step 11. In the Property Manager under **Scale**  
 select **Use custom scale**  
 select **User Defined**  
 key-in **2:3** for scale, **Fig. 5**  
 click OK 

Step 12. Grab any geometry of the Isometric view and move view to space right of Side and Top views, **Fig. 6**. Click OK  in the Property Manager.




**Fig. 6**

## B. Save as "E CAR".

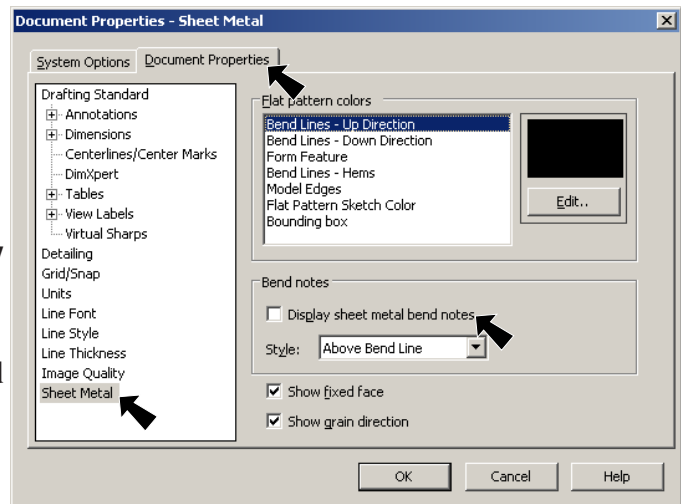
Step 1. Click File Menu > Save As.

Step 2. Key-in E CAR for the filename and press ENTER.

## C. Insert L-Bracket Flatten View.

Step 1. Use the **Zoom to Area**  in the View toolbar to drag a zoom window around the **bottom right corner of the drawing**, **Fig. 6**.

Step 2. Click Tools Menu > Options.  
 Click **Documents** tab at top, **Fig. 7**  
 click **Sheet Metal** in left panel,  
 under Bend notes,  
 uncheck **Display sheet metal bend notes** and click OK.



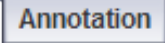
**Fig. 7**

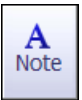
Step 3. Click **View Layout**  on the Command Manager toolbar





## F. Add Sheet Metal Notes.

Step 1. Click **Annotation**  on the Command Manager toolbar.

Step 2. Click **Note**  on the Annotation toolbar.

Step 3. In the Note Property Manager, under Leader:  
click **NO Leader**  (red X), Fig. 13

click just above L-Bracket  
to place the note

lock the caps  
key-in:

**L-BRACKET - MAKE 3**  
Fig. 14

click OK  in Property  
Manager.

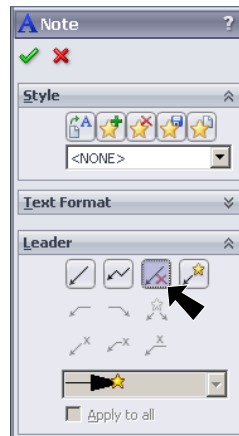


Fig. 13

Step 4. Click **Note**  on the Annotation toolbar.

Step 5. In the Note Property Manager, under Leader:  
click **NO Leader**  (red X), Fig. 13

click just above Switch to place the note

lock the caps and key-in **SWITCH**, Fig. 15

click OK  in Property Manager.

Step 6. Repeat and place note above **MOTOR MOUNT** flatten  
pattern, Fig. 16.

Step 7. Save. Use **Ctrl-S**.

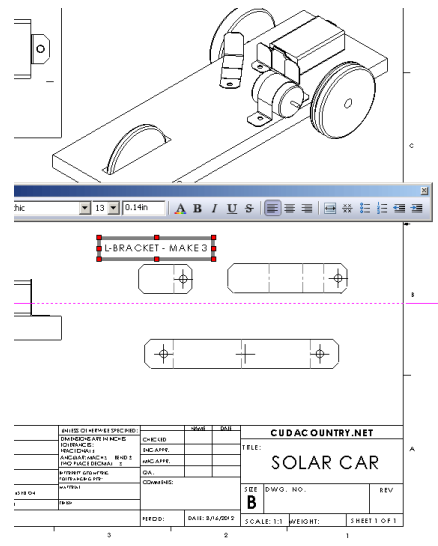


Fig. 14

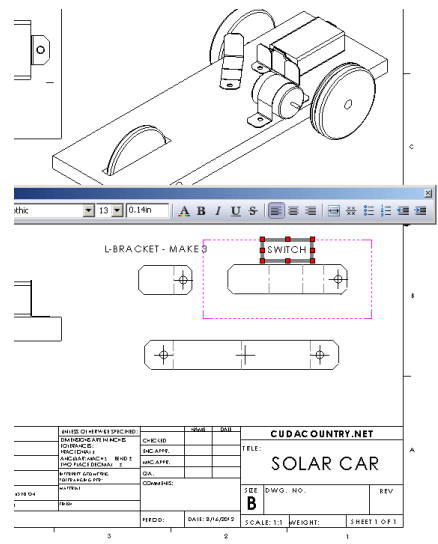


Fig. 15

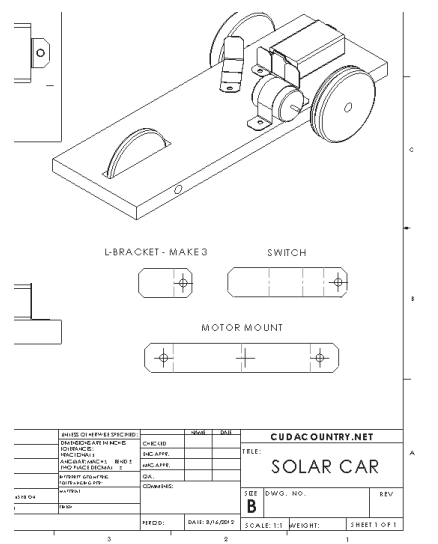



Fig. 16

## G. Draw Splines for Wires.

Step 1. Use **F** key on keyboard to **fit** drawing.

Use the **Zoom to Area**  in the View toolbar to drag a zoom window around the **switch, motor and L-Brackets in the top view, Fig. 17**. Press **Escape** to unselect Zoom to Area.

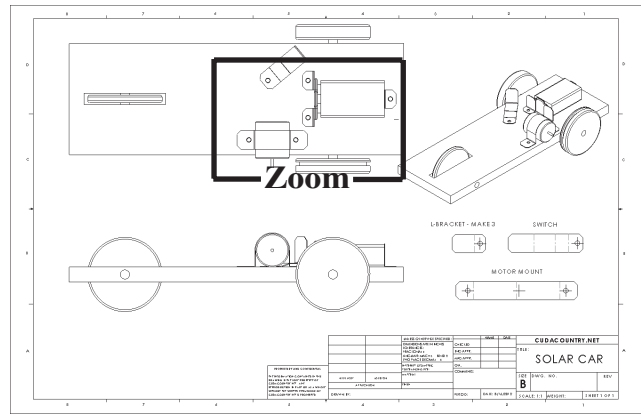



Fig. 17

Step 2. Click **Sketch**  on the Command Manager toolbar.

Step 3. Click **Line Thickness**  on the Line Format toolbar and select the **.0197** thickness, Fig. 18.

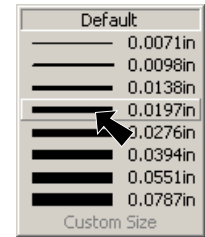


Fig. 18

Step 4. Click **Spline**  on the Sketch toolbar.

Step 5. Click the 4 Points in **Fig. 19** to draw a spline for the wire between the **left L-Bracket and the left side of battery clip**. Press **Escape** key to end the spline.

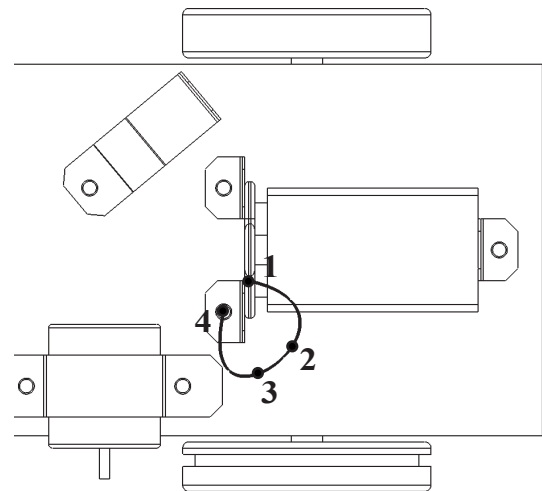


Fig. 19

Step 6. Click **Line Color**  on the Line Format toolbar and select **red**. Click **OK**, Fig. 20.

Step 7. Click **Spline**  on the Sketch toolbar.

Step 8. Click the 4 Points in **Fig. 21** to draw a **RED** spline for the wire between the **right L-Bracket and the right side of battery clip**. Press **Escape** key to end the spline.



Fig. 20

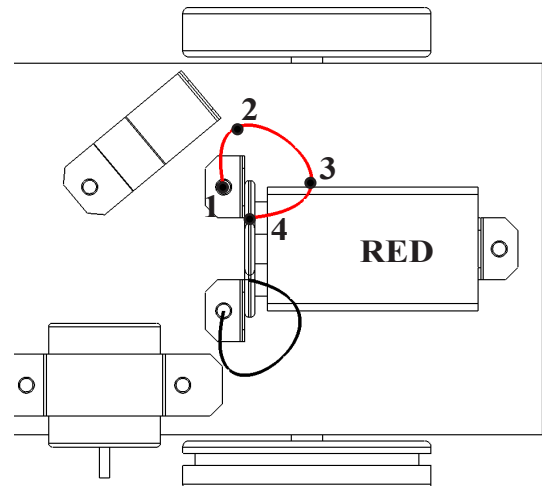


Fig. 21

Step 9. Click **Line Color**  on the Line Format toolbar and select **green**. Click OK.

Step 10. Click **Spline**  on the Sketch toolbar.

Step 11. Click the 3 Points in **Fig. 22** to draw a **GREEN** spline for the wire between the **left L-Bracket** and the **rear of motor**. Press **Escape** key to end the spline.

Step 12. Draw a **ORANGE** spline between **front of motor** and **switch**, **Fig. 23**.

Step 13. Draw a **BLUE** spline between **switch** and **rear edge of Chassis**, **Fig. 24**. The Solar Panel will be connected to this wire.

Step 14. Draw a **PURPLE** spline between **left L-Bracket** and **rear edge of Chassis**, **Fig. 25**. The Solar Panel will be connected to this wire.

Step 15. Save. Use **Ctrl-S**.

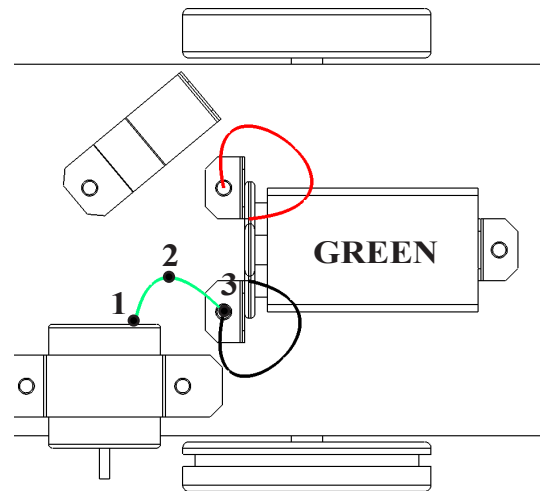


Fig. 22

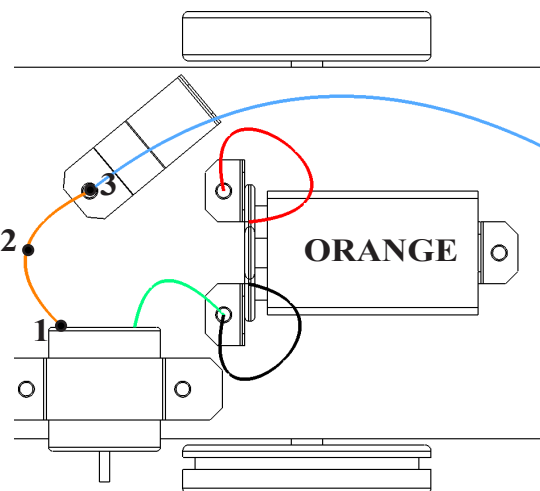


Fig. 23

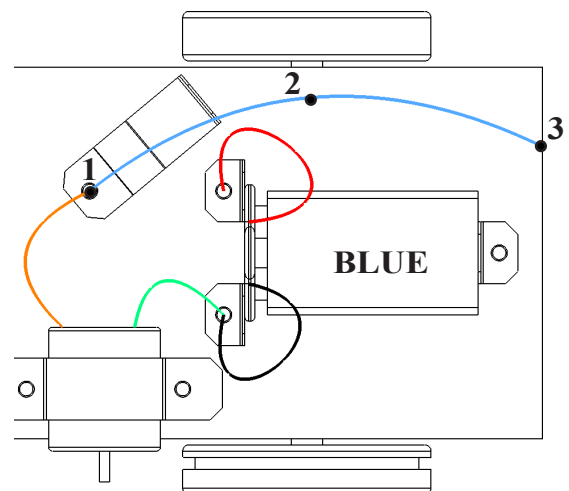


Fig. 24

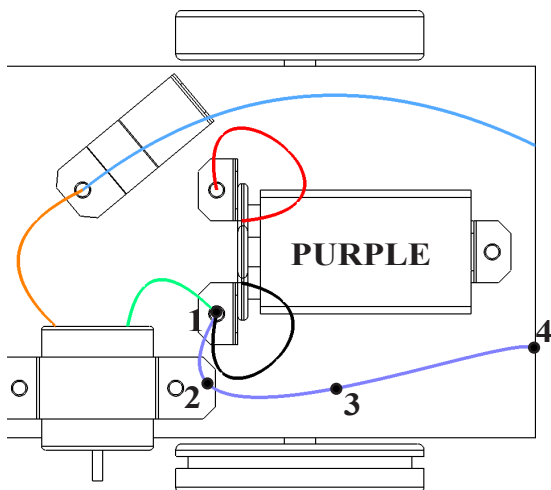

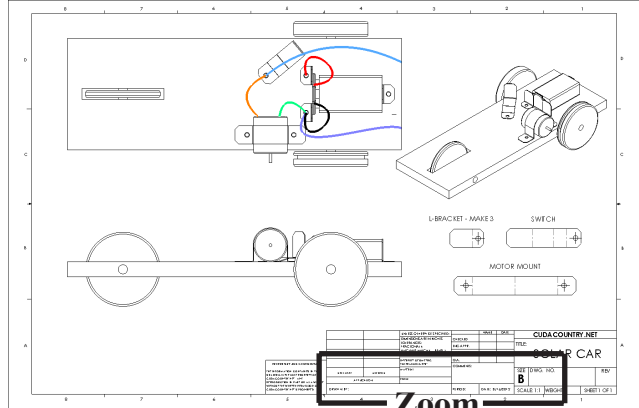


Fig. 25

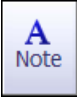
## H. Add Your Name and Period to Title Block.

Step 1. Use **F** key on keyboard to **fit** drawing.

Use the **Zoom to Area**  in the View toolbar to drag a zoom window around the **DRAWN BY** and **PERIOD** in the title block, **Fig. 26**.




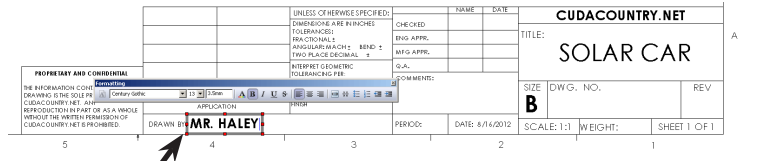
**Fig. 26**

Step 2. Click **Note**  on the Annotation toolbar.

Step 3. Click just to the right of **DRAWN BY**., **Fig. 27**.

Step 4. Lock the Caps and key-in **your first and last names**, **Fig. 27**.


Step 5. Click **OK**  in the Property Manager.



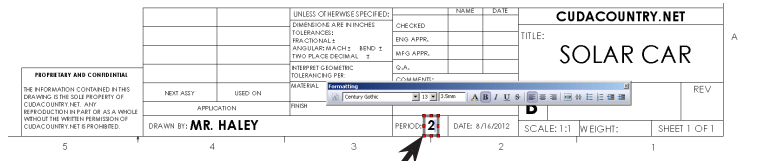
**Fig. 27**

Step 6. Click **Note**  on the Annotation toolbar.

Step 7. Click just to the right of **PERIOD**., click and key-in **your Period number**, **Fig. 28**.

Step 8. Click **OK**  in the Property Manager.

Step 9. Save. Use **Ctrl-S**.



**Fig. 28**