


# Chapter 10 E-Car Drawing

## 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**

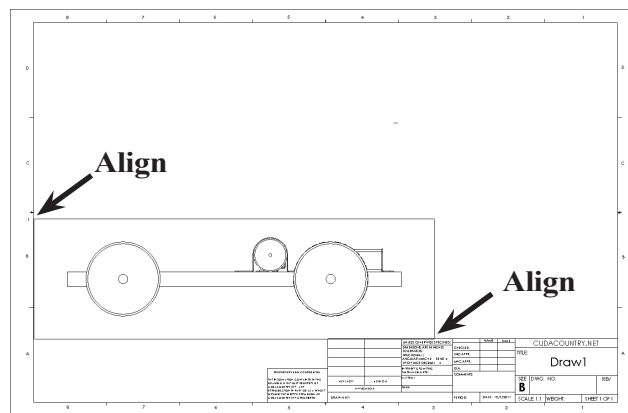
click **Right** 

check **Preview**

under **Scale**

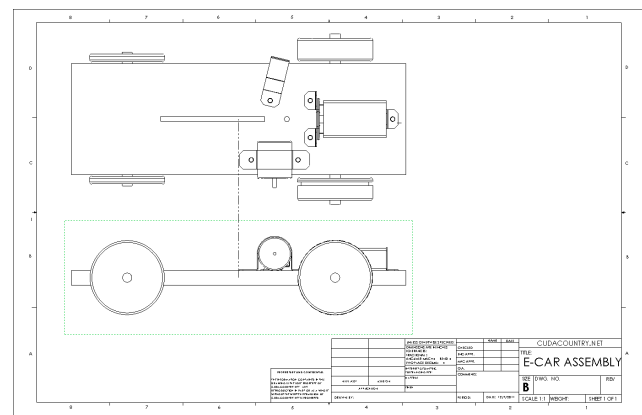
select **Use custom scale** and set scale to **1:1**, **Fig. 1**.

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.

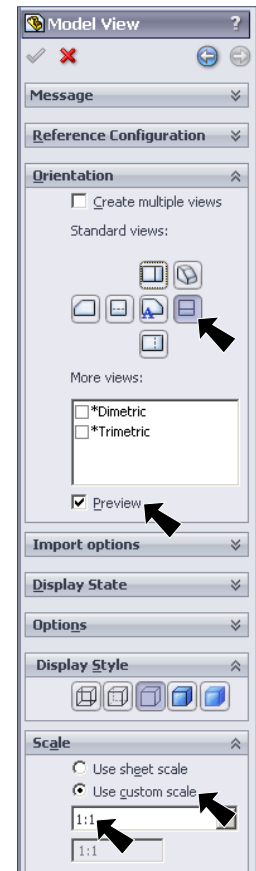
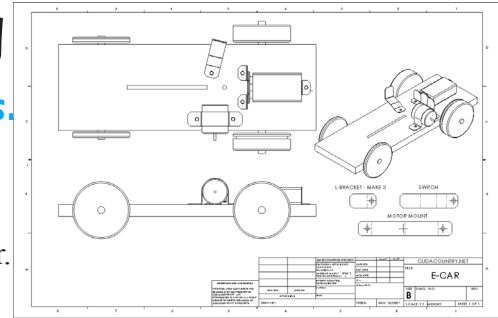


**Fig. 2**

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.

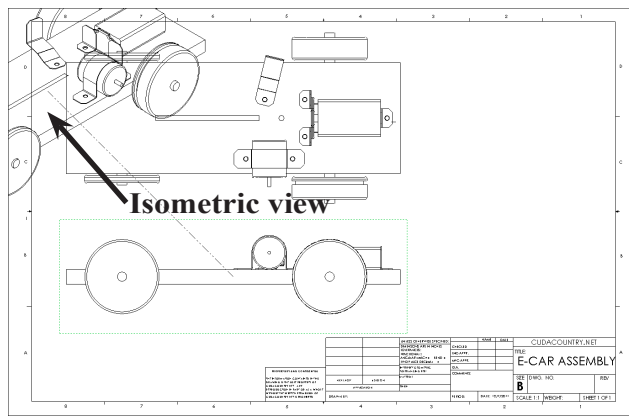


**Fig. 3**



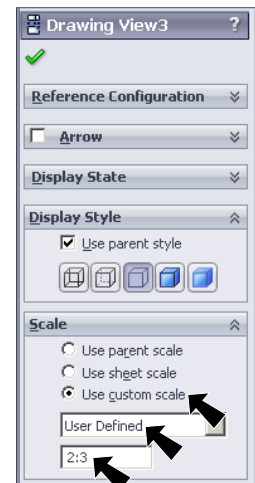
**Fig. 1**

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.

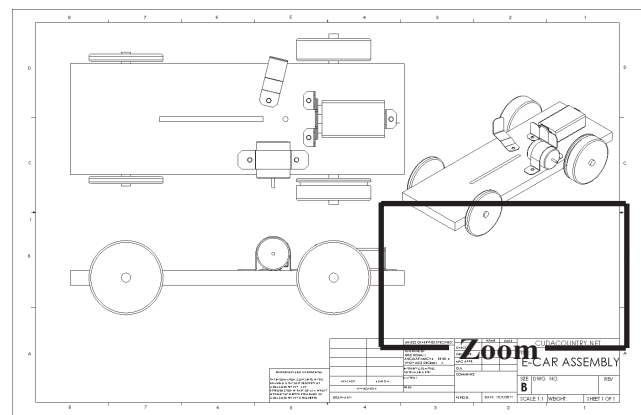
Step 10. Click the Isometric view to select it, **Fig. 4**.



**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.

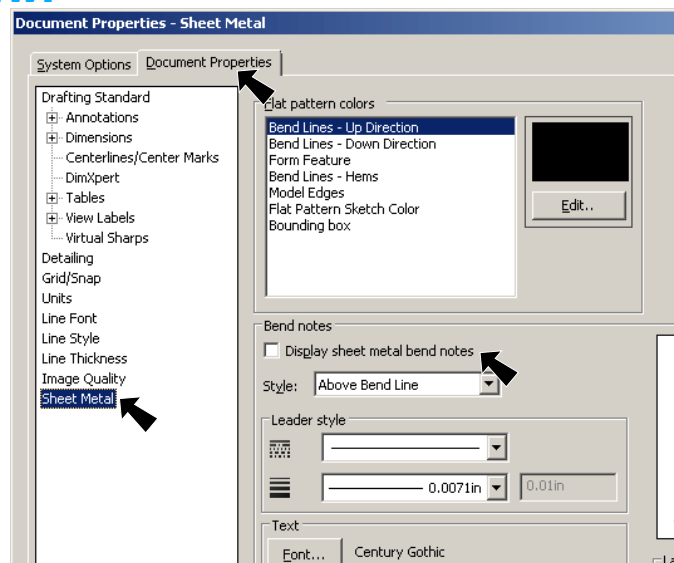
Step 2. Key-in E CAR for the filename and press ENTER.

## 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.

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




**Fig. 7**

Step 4. Click **Model View**  on the View Layout toolbar.

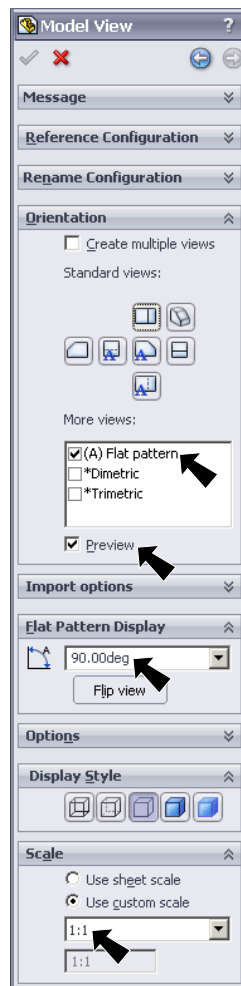
Step 5. Click **Browse** in the Property Manager.

Step 6. Select your **L-BRACKET** file and click Open.

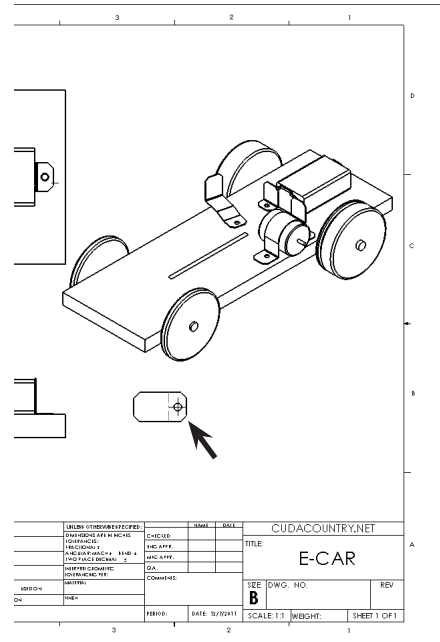
Step 7. In the Property Manager set,  
 under **Orientation More Views**  
 check **Flat Pattern**, **Fig. 8**  
 check **Preview**  
 under **Flat Pattern Display**  
 Angle  **90°**  
 under **Scale**  
**Scale 1:1**

Step 8. Move the cursor into the graphic area and click to place the L-Bracket flat pattern view as shown in **Fig. 9**.

Step 9. Click OK  in the Property Manager.




**Fig. 8**




**Fig. 9**


## D. Insert Switch Flatten View.

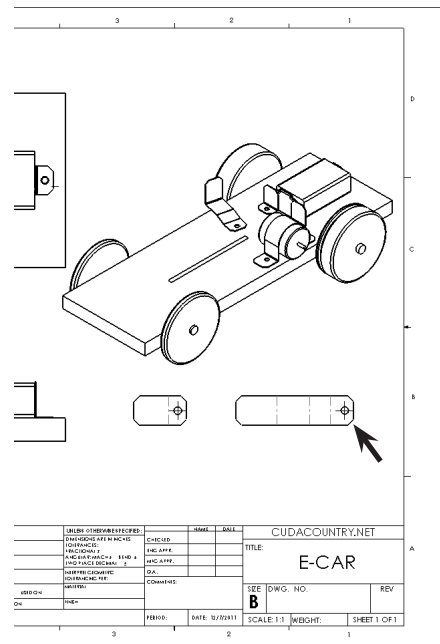
Step 1. Click **Model View**  on the View Layout toolbar.

Step 2. Click **Browse** in the Property Manager.

Step 3. Select your **SWITCH** file and click Open.

Step 4. In the Property Manager set,  
 under **Orientation More Views**  
 check **Flat Pattern**, **Fig. 8**  
 check **Preview**  
 under **Flat Pattern Display**  
 Angle  **90°**  
 under **Scale**  
**Scale 1:1**

Step 5. Move the cursor into the graphic area and click to place the Switch flat pattern view as shown in **Fig. 10**. Click OK  in the Property Manager.



**Fig. 10**


## E. Insert Motor Mount Flatten View.

Step 1. Click **Model View**  on the View Layout toolbar.

Step 2. Click **Browse** in the Property Manager.

Step 3. Select your **MOTOR MOUNT** file and click Open.

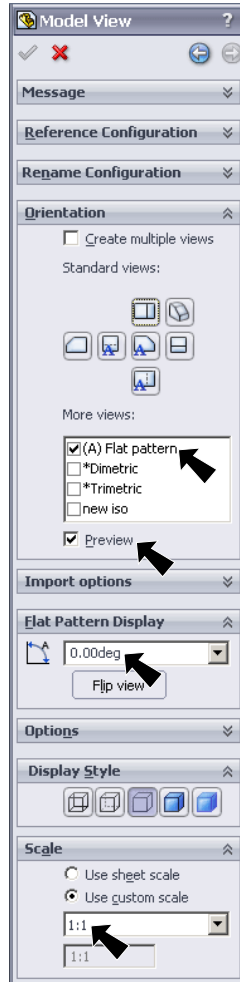
Step 4. In the Property Manager set,  
 under **Orientation More Views**  
 check **Flat Pattern**, **Fig. 11**  
 check **Preview**  
 under **Flat Pattern Display**

Angle  0°  
 under **Scale**  
**Scale 1:1**

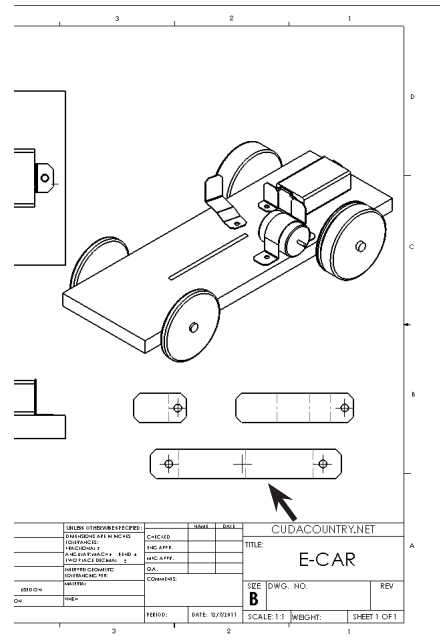
Step 5. Move the cursor into the graphic area and click to place the motor mount flat pattern view as shown in **Fig. 12**.

Step 6. Click OK  in the Property Manager.

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

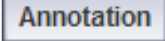


**Fig. 11**



**Fig. 12**

## 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 Manger, 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.

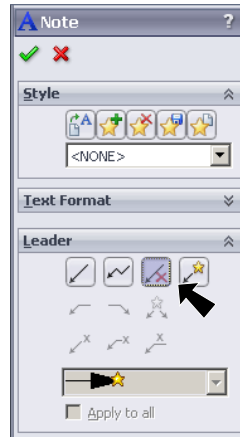



Fig. 13

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

Step 5. In the Note Property Manger, 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**.

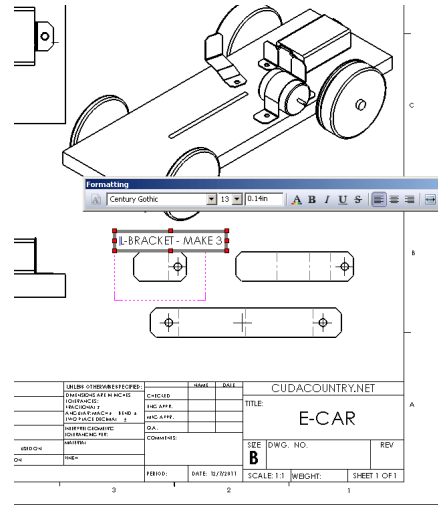


Fig. 14

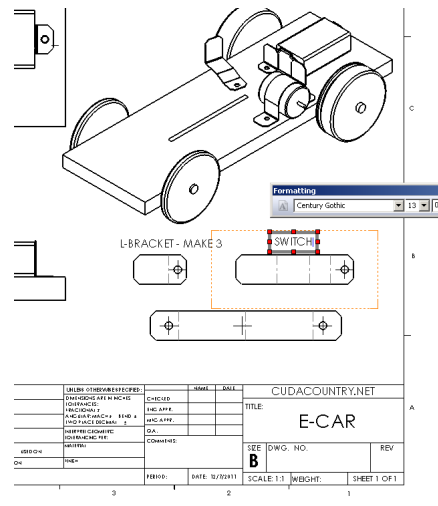


Fig. 15

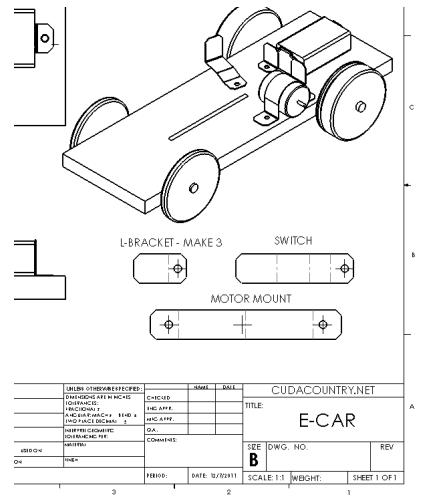

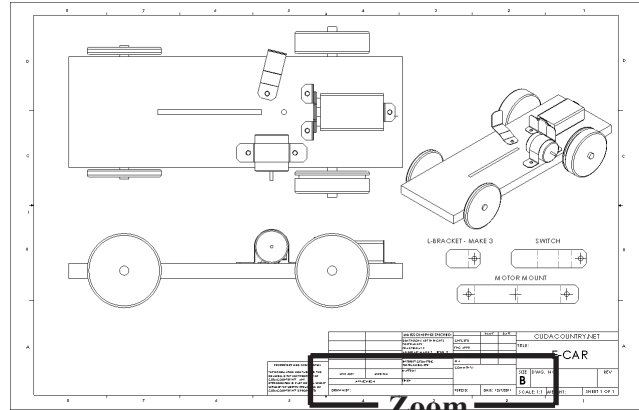


Fig. 16

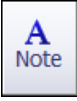
## G. Add Your Name and Period to Title Block.

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. 28**.



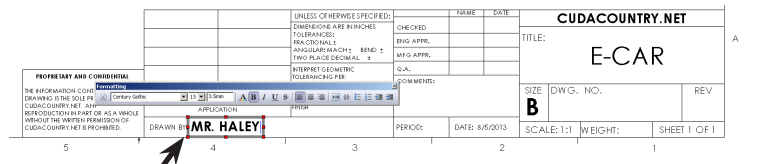
**Fig. 17**

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

Step 3. Click just to the right of **DRAWN BY**:, **Fig. 29**.

Step 4. Lock the Caps and key-in **your first and last names**, **Fig. 29**.

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



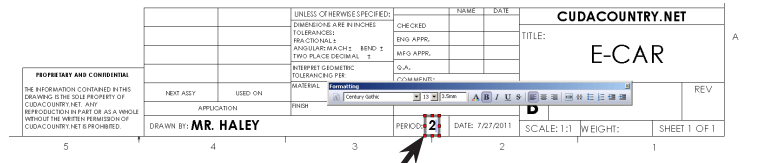
**Fig. 18**

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. 30**.

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

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



**Fig. 19**