Chapter 5 Motor Mount Pattern

A. Create Rectangle.

Step 1. If necessary start a new Mastercam file, click **New** on the Quick Access Toolbar QAT (**Ctrl-N**).

Step 2. On the Wireframe tab WIREFRAME click **Rectangle** Rectangle.

Step 3. In the Rectangle function panel:
under Dimensions, **Fig. 1**
Width 3.3
Height .5
Click the down arrow of AutoCursor on the Selection Bar and select **Origin** from menu, **Fig 2**. (O key on keyboard)
Click OK.

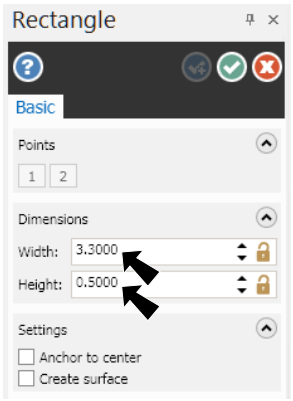


Fig. 1

Step 4. **Right click** the graphics window and click **Fit** (**Alt-F1**).

Fig. 2

Fig. 3

B. Save As "MOTOR MOUNT PATTERN"

Step 1. Click **Save As** (**Ctrl-Shift-S**) on the Quick Access Toolbar QAT.

Step 2. Key-in **MOTOR MOUNT PATTERN** for the filename and press ENTER.

C. Set Grid And Snap .1.

Step 1. On the View tab VIEW click **Show Grid** Show Grid and **Snap to Grid** Snap to Grid.

Step 2. Click the **Dialog Box Launcher** (**Alt-G**), **Fig. 4**.

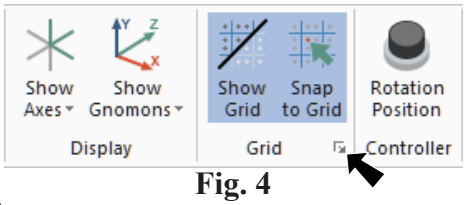


Fig. 4

Step 3. In the Grid Settings dialog box:
under Spacing, **Fig. 5**
X and Y Spacing .1
Click OK.

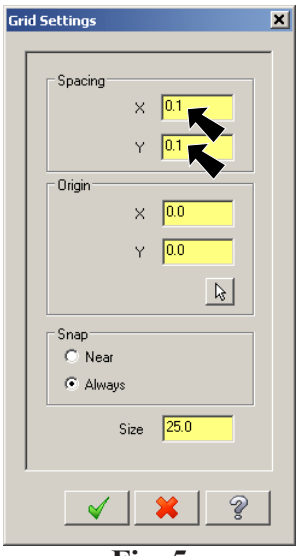


Fig. 5

D. Set Attributes-Cyan/Dash.

Step 1. Sketch the next lines, the bend lines a different color and line style. **Right click** in the graphics window and on the Mini Toolbar click **Wire-frame Color** drop down arrow, set line style to **dashed** and select **cyan**, **Fig. 6**.

Fig. 6

E. Sketch Bend Lines.

Step 1. On the Wireframe tab WIREFRAME click **Line Endpoints** Line Endpoints.

Step 2. Sketch the lines in **Fig. 7**.
Use grid to determine location of lines.
Click OK.

Fig. 7

F. Set Attributes-Red/Solid.

Step 1. Sketch the holes **red** color and change line style back to **solid**. **Right click** in the graphics window and on the Mini Toolbar click **Wireframe Color** drop down arrow, set line style to **solid** and select **red**, **Fig. 8**.

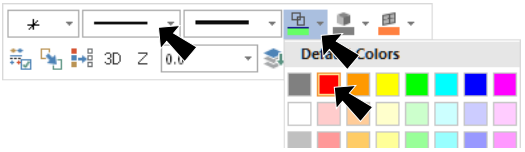


Fig. 8

G. Holes.

Step 1. On the Wireframe tab WIREFRAME click **Circle Center Point** Circle Center Point.

Step 2. In the Circle Center Point function panel:
under Size, **Fig. 9**
Click **Locked**
Diameter .125 and press ENTER

Press **spacebar** to activate AutoCursor **Fast Point**
Key-in **.3**, **.25** .3,.25 and press ENTER

Press **spacebar** to activate **Fast Point**
Key-in **3**, **.25** 3,.25 and press ENTER **twice**

Click OK.

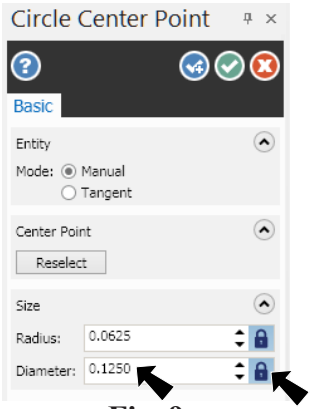


Fig. 9

Step 3. Save (**Ctrl-S**).

Fig. 10

H. Chamfer Chain.

Step 1. Set color for chamfers to color of rectangle. Use **Alt-X**, then click a line of rectangle.

Step 2. On the Wireframe tab WIREFRAME click **Chamfer Chains** on **Chamfer Entities** drop down.

Step 3. Click a line of rectangle to chain rectangle, **Fig. 11**.

Fig. 11

Step 4. Click OK  in the Chaining dialog box, **Fig. 12**.

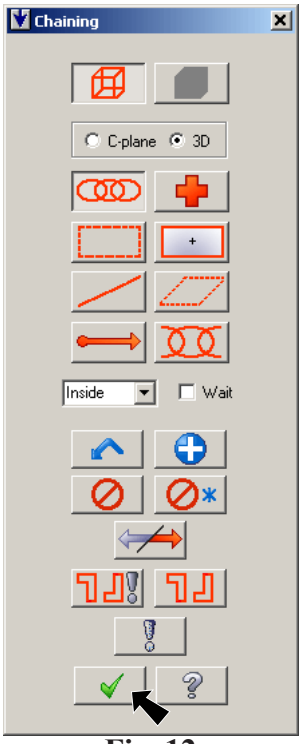


Fig. 12

Step 5. In the Chamfer Chains function panel:
under Entity, **Fig. 13**
Distance .1
Click OK  .

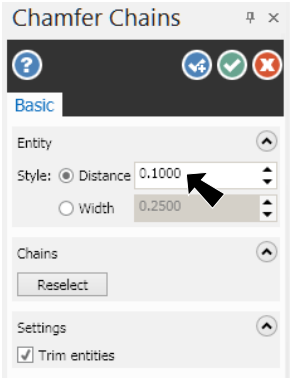
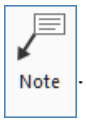


Fig. 13

Step 6. Save  **(Ctrl-S)**.

Fig. 14

I. Label Bend Lines.

Step 1. On the Drafting tab DRAFTING click **Note** 

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Step 2. In the Note dialog box:
Lock the Caps, key-in: **BEND**
Select **Label with Multiple Leaders**
Click OK, **Fig. 15**.

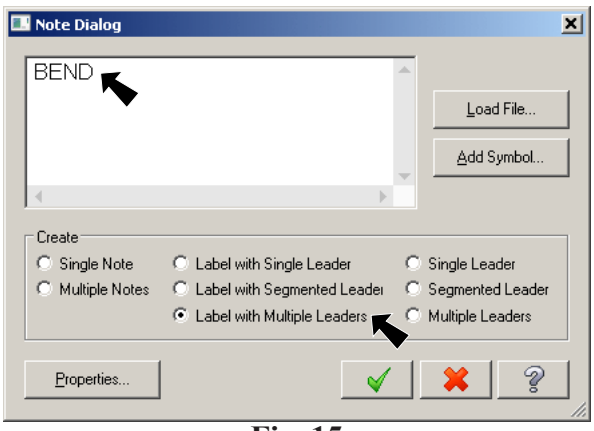

Fig. 15

Step 3. Click **left green bend line at Position 1** for the arrowhead position, **Fig. 16**.

Step 4. Click **right green bend line at Position 2** for the arrowhead Position 2, **Fig. 16**.

Step 5. Press the **ESC** key.

Step 6. Click **Position 3 for the text position**, **Fig. 17**.

Step 7. Save  **(Ctrl-S)**.

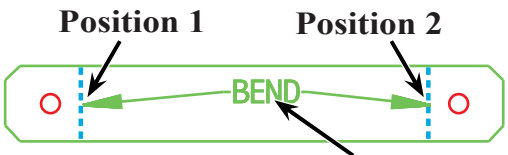

Fig. 16

J. Add Your Names And The Period To The Drawing.

Step 1. On the Drafting tab DRAFTING click **Note** Note.

Step 2. Lock the Caps, key-in: DRAWN BY: FIRST AND LAST NAME AND FIRST AND LAST NAME AND PERIOD 1 (your period) and click OK.

Step 3. Use **Page Down** key to zoom out. Center text at bottom of drawing and click, **Fig. 17**.

Step 4. Save (**Ctrl-S**).

DRAWN BY: MR. HALEY PERIOD 1

Fig. 17