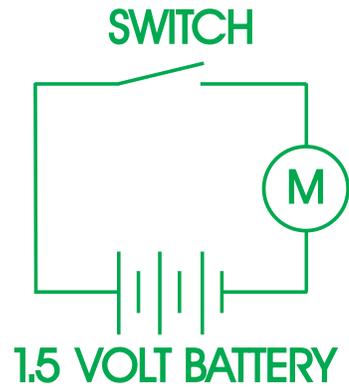
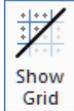


Electric Circuit

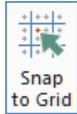


A. Set Grid and Snap .2.

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

Step 2. On the View tab  click **Show Grid**  and **Snap to**

Grid



Step 3. Click the **Dialog Box Launcher**  (Alt-G), **Fig. 1**.

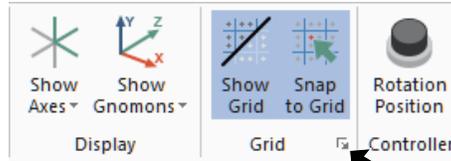


Fig. 1

Step 4. In the Grid Settings dialog box:
under Spacing, **Fig. 2**
X and Y Spacing .2
Click OK .

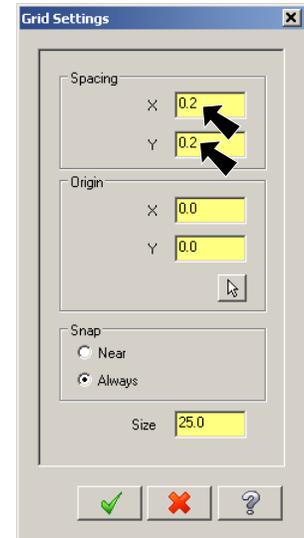
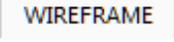
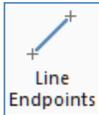


Fig. 2

B. Sketch Lines For Battery Symbol.

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



Step 2. Sketch **6 lines** for **battery symbol** in **Fig. 3**. Use grid to determine location of lines.

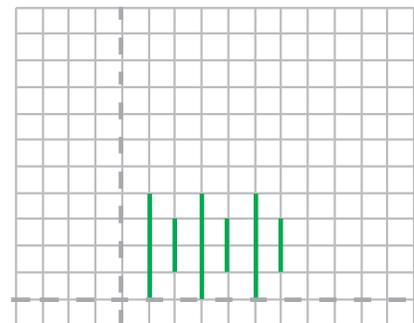


Fig. 3

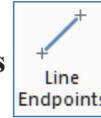
C. Save As "CIRCUIT".

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

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

D. Sketch Lines For Wire And Switch Symbol.

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



Step 2. Sketch lines for **wire and switch** in **Fig. 3**. Use grid to determine location of lines.

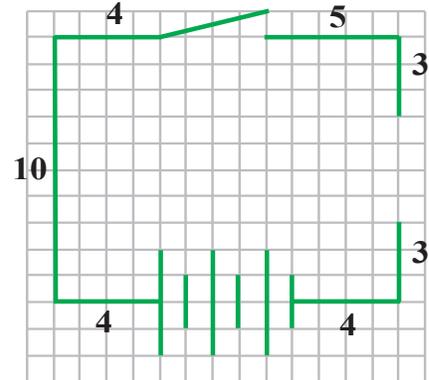


Fig. 4

Step 3. Save (Ctrl-S).

E. Motor Symbol.

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



Step 2. In the Circle Center Point function panel:

under Size, **Fig. 5**

Diameter .8

Click the center point in graphic window, **Fig. 6**.

Click OK .

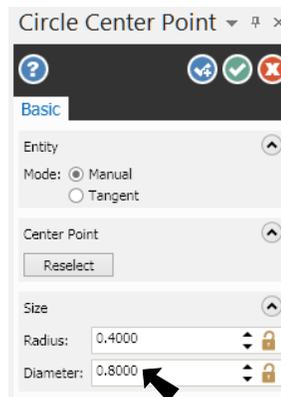


Fig. 5

Step 3. Save (Ctrl-S).

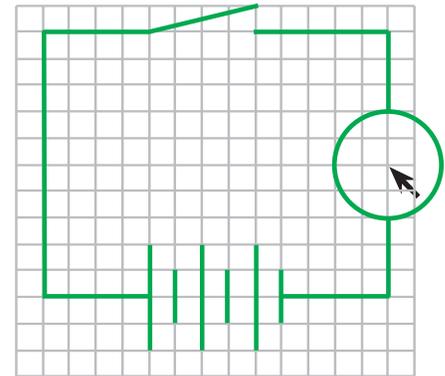


Fig. 6

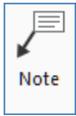
F. Turn Off Snap.

Step 1. On the View tab **VIEW** click

Snap to Grid to unselect.

G. Name Electric Symbols.

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



Step 2. In the Note Dialog box, **Fig. 7**
Lock Caps on keyboard and key-in
SWITCH

select **Multiple Notes**
click OK

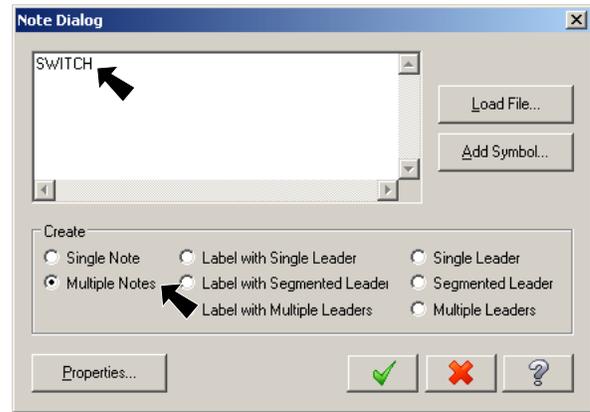


Fig. 7

Step 3. Use **Page Down** key to zoom out.

Step 4. Center text above **switch symbol** and click, **Fig. 8**.

Step 5. In the Drafting function panel, click **OK and Create New Operation** , **Fig. 9**.

Step 6. Add notes for:
MOTOR
1.5 VOLT BATTERY
M in the center of the motor symbol
click **OK and Create New Operation** to enter new text, **Fig. 10**.

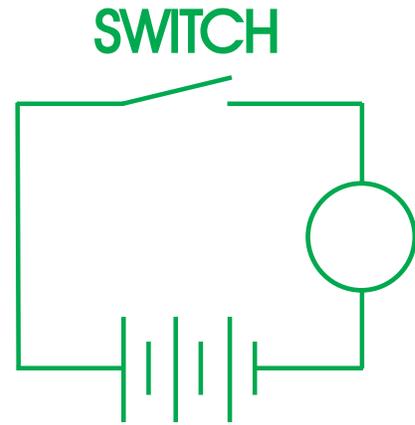


Fig. 8

Step 7. Save (Ctrl-S).

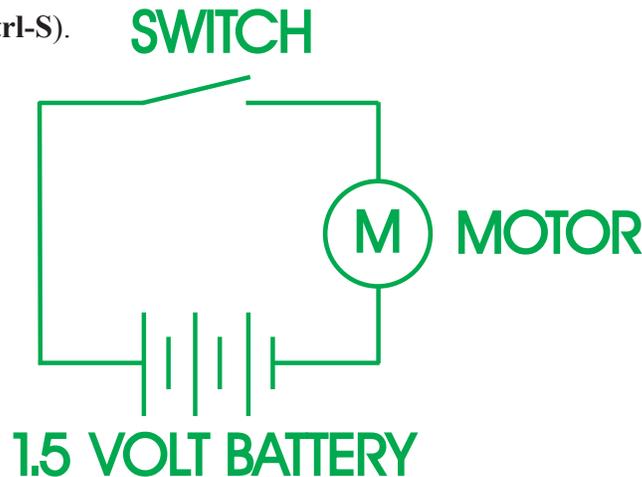


Fig. 10

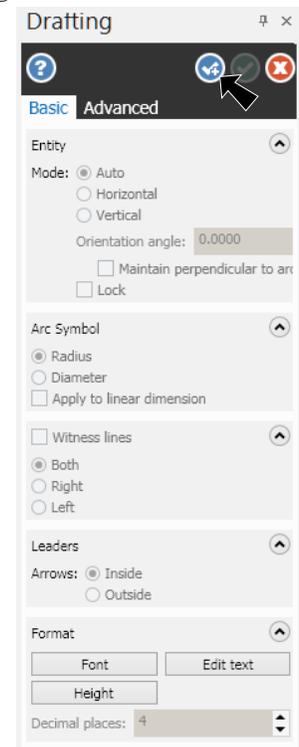


Fig. 9