

ANILAM

6000 CNC CONTROL DXF Converter



DXF file can be converted into 5000 machine programs using the Offline software.

The DXF files are stored in the Program Page.

When going to Program Page only .G and/or .M file will be

displayed,press shift **F8** **Display** twice, this will display all files on **Program** page.

If DXF is on disk it needs to be copied into **C:\User** directory.

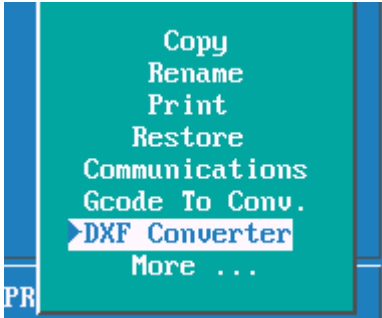
press shift **F7** **Log** select **A:**

High light required DXF program press **F9** **Utility** Copy to **C:**

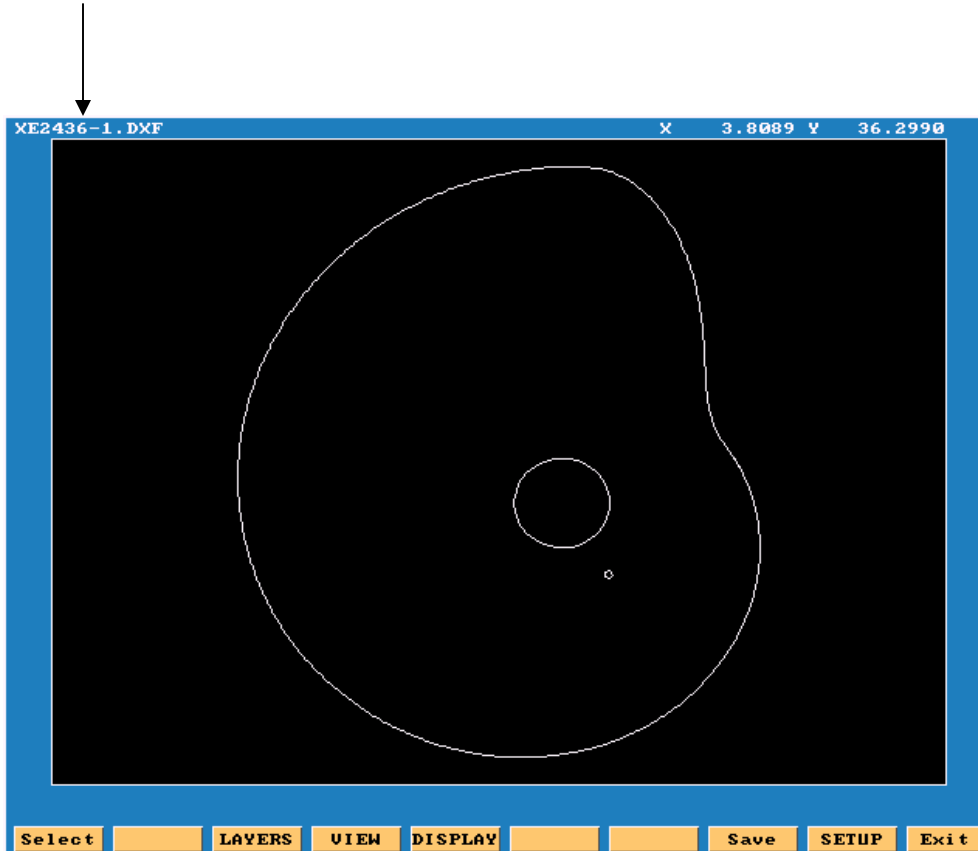
Log back to **C:\User**.

High light DXF program 

Press **F9** **Utility** high light DXF Converter

 **ENTER**

File name



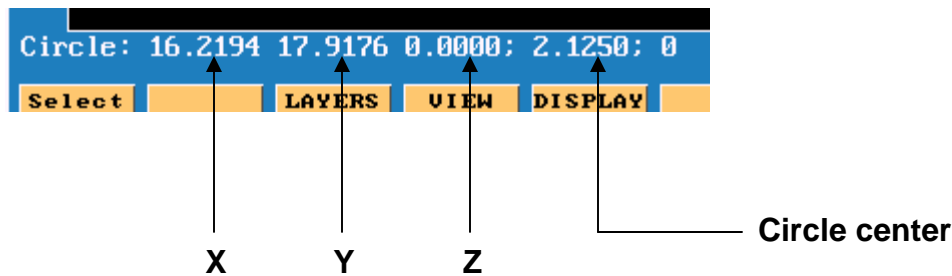
- Select:** Used when selecting elements on drawing.
Layers: Allows layer on drawing to be turned Off or On.
View: XY,XZ,YZ or isometric.
Display:Fit, window, redraw, half or double.
Save: Saves program with .G once converted.
Setup: Allows setup of inputs and outputs.
Exit : Goes back to **Program** page

Zero on most drawings is usually not at a point that is convenient for programming, so there is a way it can be changed.

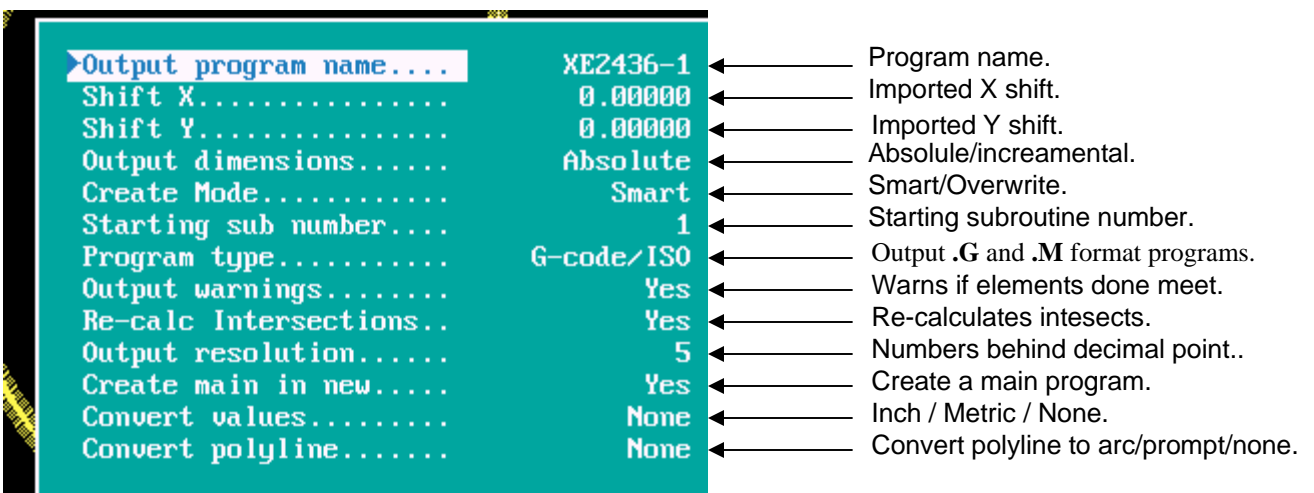
In the case of current drawing, the center of the hole in center of part is the best point X0 Y0.

To do this Press the Ctrl key and hold it down put mouse point on to circle and press left mouse key, it will change to yellow, release keys.

At the bottom of screen X, Y, and Z coordinate will appear and also circle diameter.



Now press **ALT** key and letter **T** at the same time. This will in put these coordinates in to the **SETUP** and change **X0 Y0** to the center of hole.

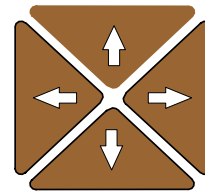


Press **F10** **Exit**

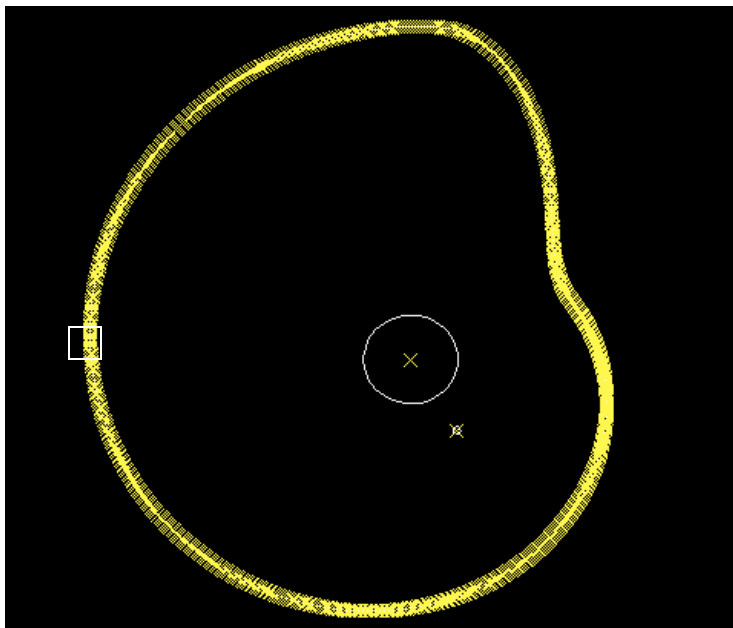
Press **ALT**key and letter **F**key at the same time, this will mark the end of each element.

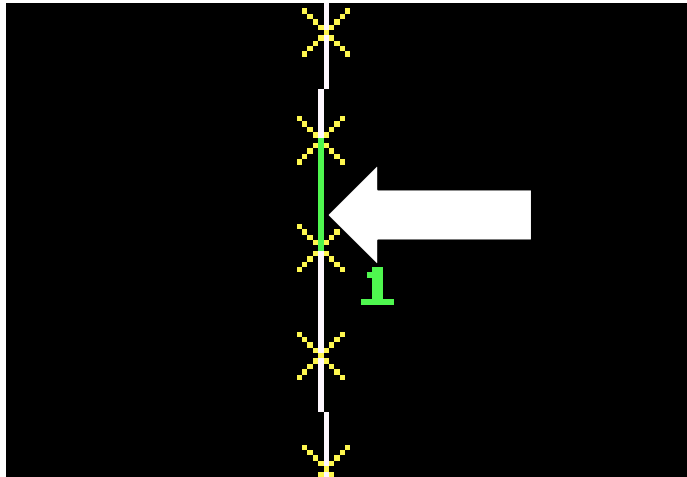
Press **F5** **DISPLAY** high light **Window** press **ENTER** **Fit Window Redraw Half Double**

A box will appear on screen move around screen using



press **F6** **Compress** position box as shown below press **ENTER**





Press **F1** **Select** point mouse arrow to lower end of a line as shown and press left mouse key. Line will turn green as above and put a number at low end of line, the position of the number is the start point. Now point to the line below it and press left mouse key, all off the line will be come green.

Press **ALT** key and letter **F**key at the same time the end of line markers will disappear.

Press **F5** **DISPLAY** press **ENTER** Part will appear at full size on screen

Press **F8** **Save**



Press **F10** **Exit**



Press **F1** or Press **Y** **ENTER** it will now return to **Program page**.

High light **.G** or **.M** file press

F4 **Edit**

High light **.M** file press

F8

Edit

in coversational will appear as below

```

1 Call 1
2 EndMain
3
4 Sub 1
5 Dim Abs
6 Rapid      X -14.44357 Y 1.05070
7 Line       X -14.44446 Y 1.17741
8 Line       X -14.44421 Y 1.30422
9 Line       X -14.44282 Y 1.43111
    
```

Start of program



```

719 Line     X -14.40565 Y 0.16721
720 Line     X -14.41445 Y 0.29298
721 Line     X -14.42213 Y 0.41891
722 Line     X -14.42868 Y 0.54500
723 Line     X -14.43410 Y 0.67123
724 Line     X -14.43839 Y 0.79760
725 Line     X -14.44155 Y 0.92409
726 Line     X -14.44357 Y 1.05070
727 EndSub
    
```

End of program

Program has to be **Edited** , to put in tool changes or cutter comp and **Z** moves.

High light **.G** file press

F8

Edit

in G code format will appear as below

```

M98 P1
M2

O1
G90 G0 X -14.44446 Y 1.17741
G1 X -14.44421 Y 1.30422
G1 X -14.44282 Y 1.43111
G1 X -14.44030 Y 1.55807
G1 X -14.43662 Y 1.68510
G1 X -14.43181 Y 1.81218
    
```

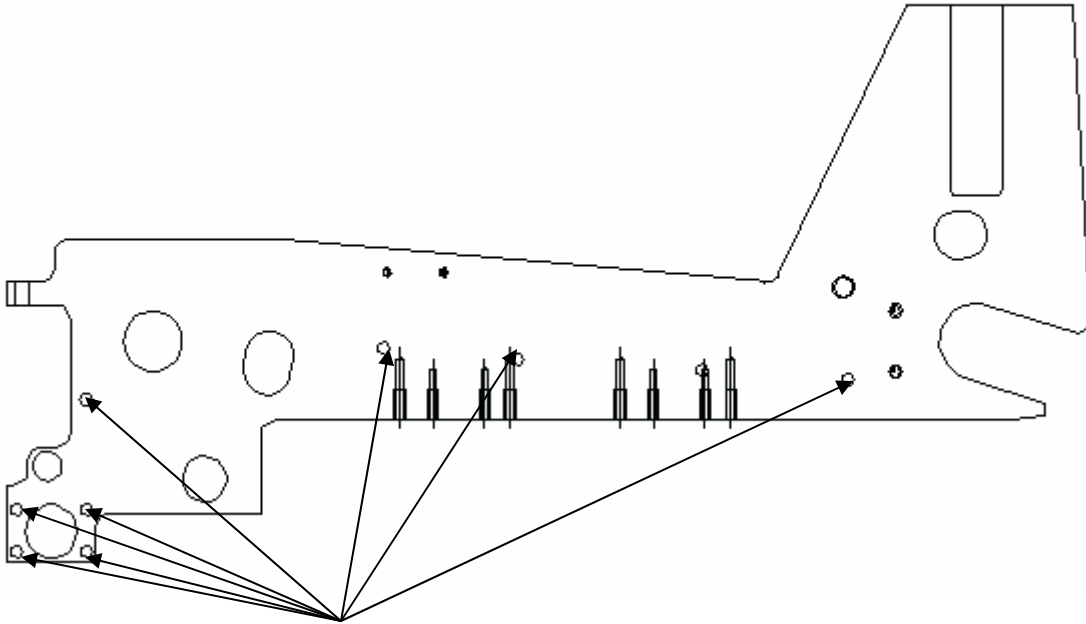


```

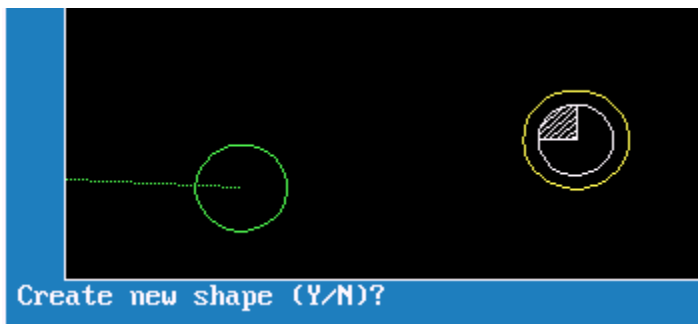
G1 X -14.41445 Y 0.29298
G1 X -14.42213 Y 0.41891
G1 X -14.42868 Y 0.54500
G1 X -14.43410 Y 0.67123
G1 X -14.43839 Y 0.79760
G1 X -14.44155 Y 0.92409
G1 X -14.44357 Y 1.05070
G1 X -14.44446 Y 1.17741
M99_
    
```

Program has to be **Edited** , to put in tool changes or cutter comp and **Z** moves.

This example will show multiple subroutines.

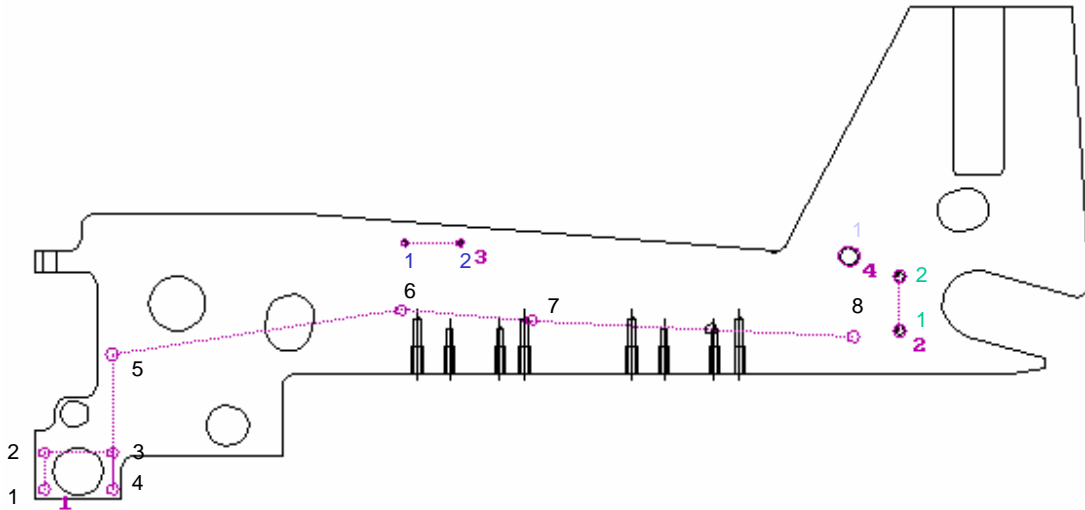


Press **F1** **Select** and pick all holes that are the same size , in this case 8. When going to second set of holes press right key on mouse.



The green circle is the last of previously selected holes. The yellow circle is the one selected with right mouse button and in the bottom left it is asking if this is a new shape, the answer is **Y** .It will put a number 2 next to this hole, meaning this is shape 2.

The print below shows the four shapes of the different size holes.



Press **F8** **Save**

Press **F10** **Exit**

Below is the output from the DXF converter.
Some editing is required to put in drilling cycles.

The image shows a screenshot of G-code output from a DXF converter. The code is displayed on a blue background with white text. Annotations with arrows point to specific lines of code, explaining their purpose:

- M98 P1** to **M2**: Subroutine calls.
- O1**: Subroutine for positions of the eight holes numbered in black.
- O2**: Subroutine for positions of the two holes numbered in green.
- O3**: Subroutine for positions of the two holes numbered in blue.
- O4**: Subroutine for positions of the one hole numbered in blue.

```

M98 P1
M98 P2
M98 P3
M98 P4
M2

O1
G90 G0 X 0.15625 Y 0.84375
G0 X 0.15625 Y 0.15625
G0 X 1.34375 Y 0.15625
G0 X 1.34375 Y 0.84375
G0 X 1.34327 Y 2.66153
G0 X 6.38400 Y 3.50000
G0 X 14.30400 Y 3.00000
M99

O2
G90 G0 X 15.10019 Y 3.12200
G0 X 15.10019 Y 4.12200
M99

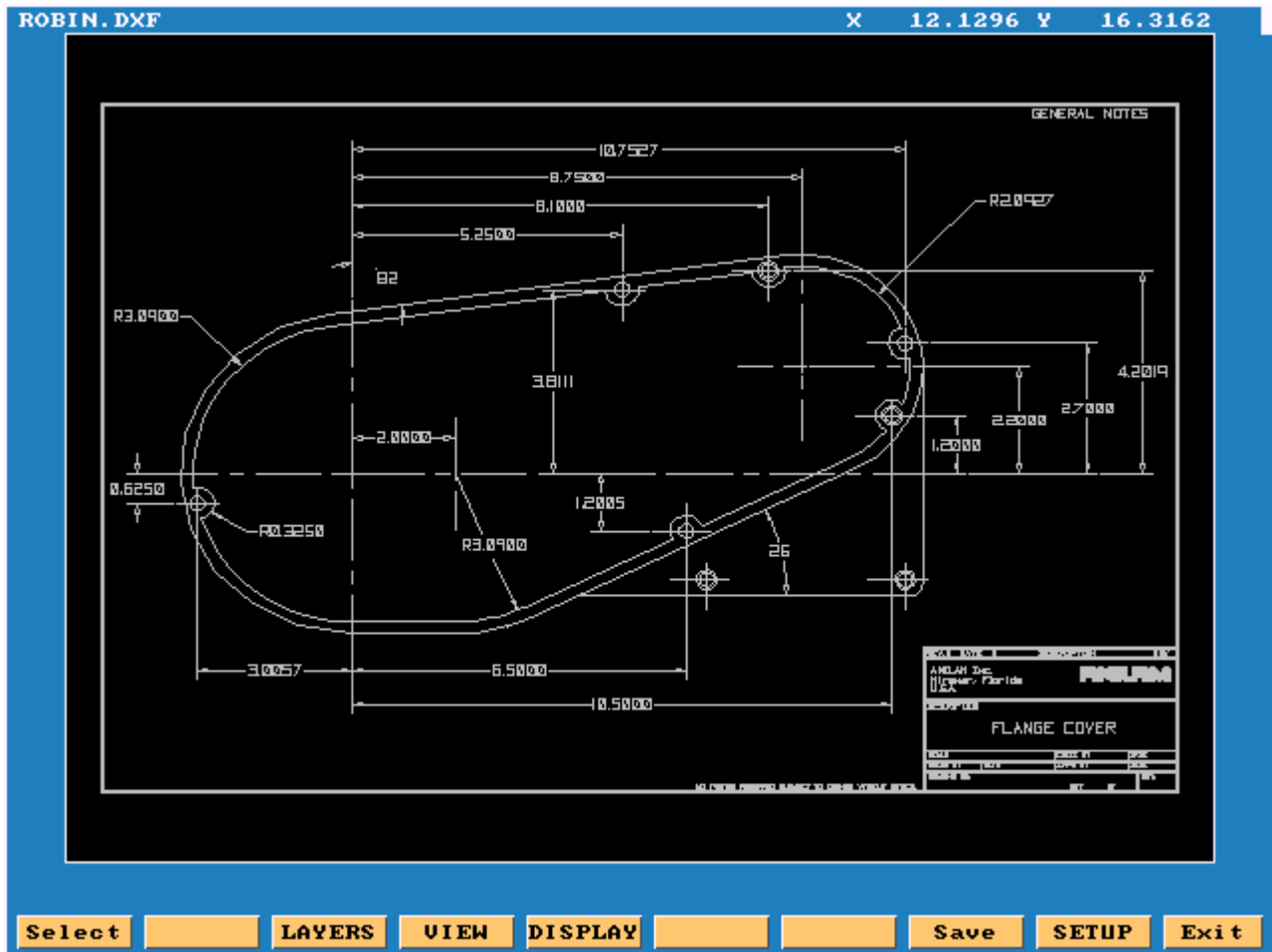
O3
G90 G0 X 7.42403 Y 4.75138
G0 X 6.45603 Y 4.75138
M99

O4
G90 G0 X 14.21138 Y 4.51231
M99
  
```

The program below is Edited with the drill cycles in the program.

```
N1 G90 G70 G0 T0 Z0
N2 T1
N3 G81 Z-0.1500 R0.1000 F10.0
N4 M98 P1
N5 M98 P2
N6 M98 P3
N7 M98 P4
N8 G80
N9 G0 Z5
N10 T2
N11 G83 Z-0.5000 R0.1000 F12.0 I0.2500
N12 M98 P1
N13 G80
N14 G0 Z5
N15 T3
N16 G87 Z-1.0000 R0.1000 F12.0 I0.2500 J0.0200 K0.1500 W0.0100 U0.5000
N17 M98 P2
N18 G80
N19 G0 Z5
N20 T4
N21 G81 Z-0.2500 R0.1000 F15.0
N22 M98 P3
N23 G80
N23 G80
N24 G0 Z5
N25 T5
N26 G83 Z-1.0000 R0.1000 F8.0 I0.2500
N27 M98 P4
N28 G80
N29 G0 Z5
N30 M2
N31 O1
N32 G90 G0 X 0.15625 Y 0.84375
N33 G0 X 0.15625 Y 0.15625
N34 G0 X 1.34375 Y 0.15625
N35 G0 X 1.34375 Y 0.84375
N36 G0 X 1.34327 Y 2.66153
N37 G0 X 6.38400 Y 3.50000
N38 G0 X 14.30400 Y 3.00000
N39 M99
N40 O2
N41 G90 G0 X 15.10019 Y 3.12200
N42 G0 X 15.10019 Y 4.12200
N43 M99
N44 O3
N45 G90 G0 X 7.42403 Y 4.75138
N46 G0 X 6.45603 Y 4.75138
N47 M99
N48 O4
N49 G90 G0 X 14.21138 Y 4.51231
N50 M99
```

In this example of a full drawing and how to turn off unnecessary information ,such as dimensions etc.



Press **F3** **Layers**

All Layers on
Invert Layers
Toggle Layers

High light **Toggle Layers** press

E
N
T
E
R

Put high light on layers not required and press

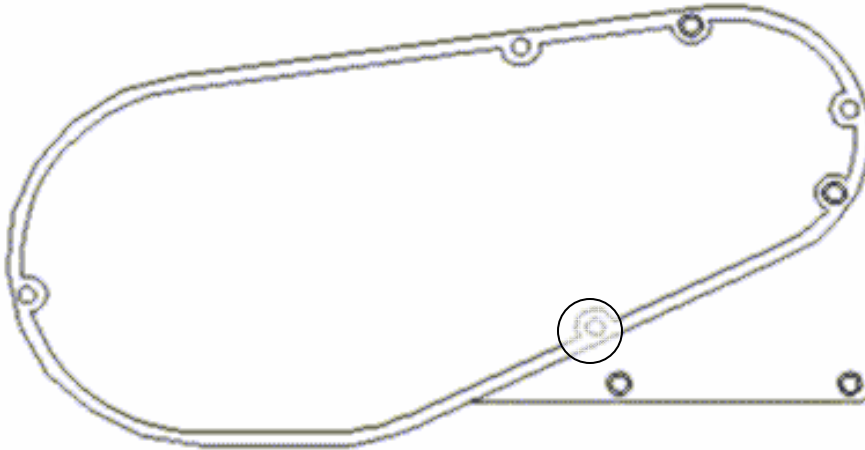
E
N
T
E
R

to turn OFF.

Layer Number	Layer Name	Status
1.	0.....	Off
2.	AM_TR.....	Off
3.	AM_BM.....	Off
4.	AM_BL.....	Off
5.	AM_VIEWS...	Off
6.	AM_PARDIM..	Off
7.	AM_REFDIM..	Off
8.	AM_VIS.....	Off
9.	AM_HID.....	Off
10.	AM_SUPPR...	Off
11.	CONT.....	On
12.	CEN.....	Off
13.	HID.....	Off

In the drawing shown the only layer required to be left on is #11

Only the part profiles and holes are left.



The circled area is blown up below. It shows an error in the drawing, where two lines are not connected. It will stop, select next element and the following message will appear.

Entity not connected. Connect anyway (Y/N)?

Press **Y** to continue.

It will then continue around part.

