KNK Force Dual Head Applications Using Sure Cuts a Lot

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If You're New to SCAL

If you've not yet set up your Force to cut from Sure Cuts a Lot, please watch the following video by Darrel Farris:

https://www.youtube.com/watch?v=ZcJj5l7TY34

Preparing the File for Dual Head Use

(1) Arrange shapes so that those to be executed on the left side are on a different layer from those to be executed on the right side.You can have more than two layers, if needed. You just cannot mix left side shapes with right side shapes on the same layer:
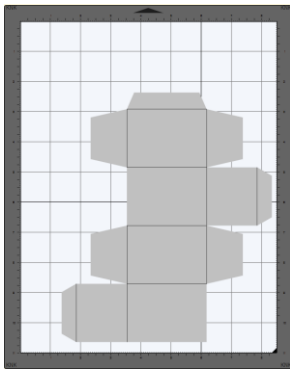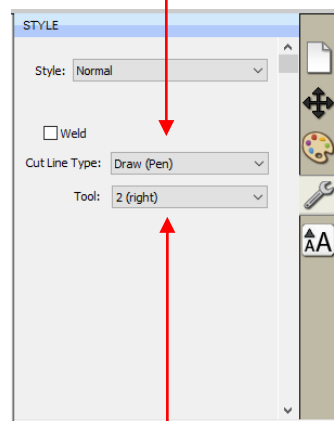
Click on triangle to toggle the sublayer menu
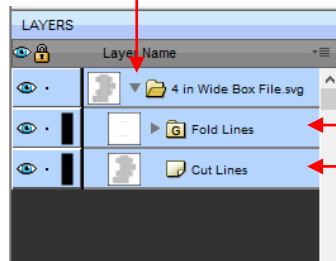
Fold lines and cut lines are on two different layers.

(2) Drag the layers, as needed, so that an upper layer will be executed before a lower layer. In this example, the **Fold Lines** layer is already above the **Cut Lines** layer and will occur first.

(3) To assign a layer to either the left side or the right side and, at the same time, indicate if the layer will be cut (using a blade) or will be using an accessory tool (such as a pen or embosser), select the layer and then click on the

Style icon. Follow the four steps below:

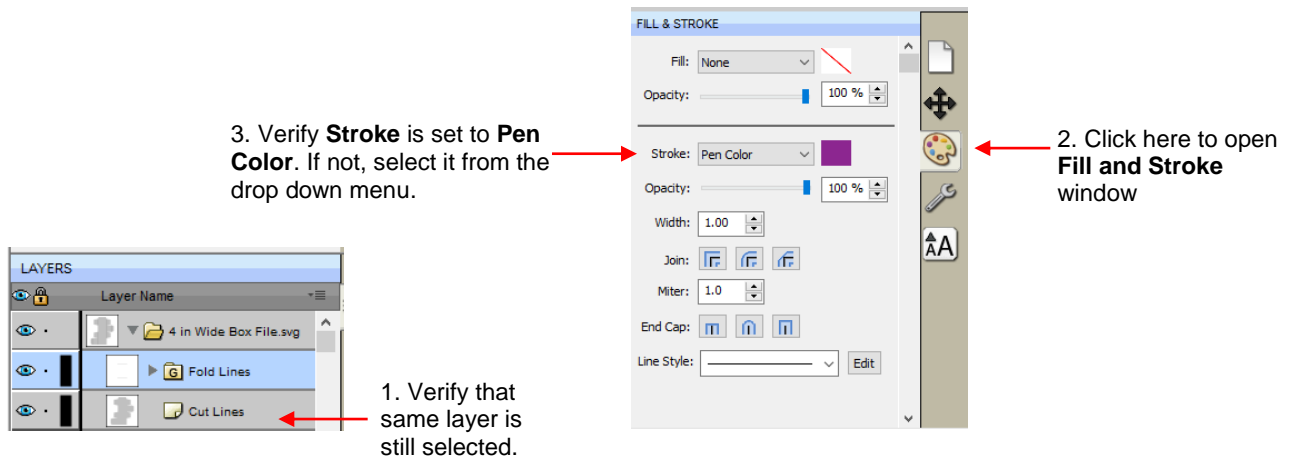3. Select **Draw (Pen)** which is the option when using accessory tools, such as a pen, engraver or embosser.

2. Click here to open **Style** window.
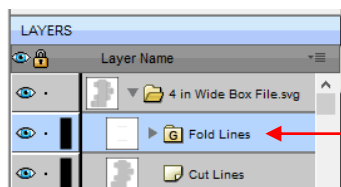
1. Click here to select the layer

4. Select **2 (right)** to use the right head for that layer

(4) <u>With the same layer still selected</u>, click on the **Fill and Stroke** icon and verify that a color is assigned to the **Stroke** and the **Line Style** is set as a solid line (unless you want a different style from the drop down menu).

3. Verify **Stroke** is set to **Pen Color**. If not, select it from the drop down menu.

2. Click here to open **Fill and Stroke** window
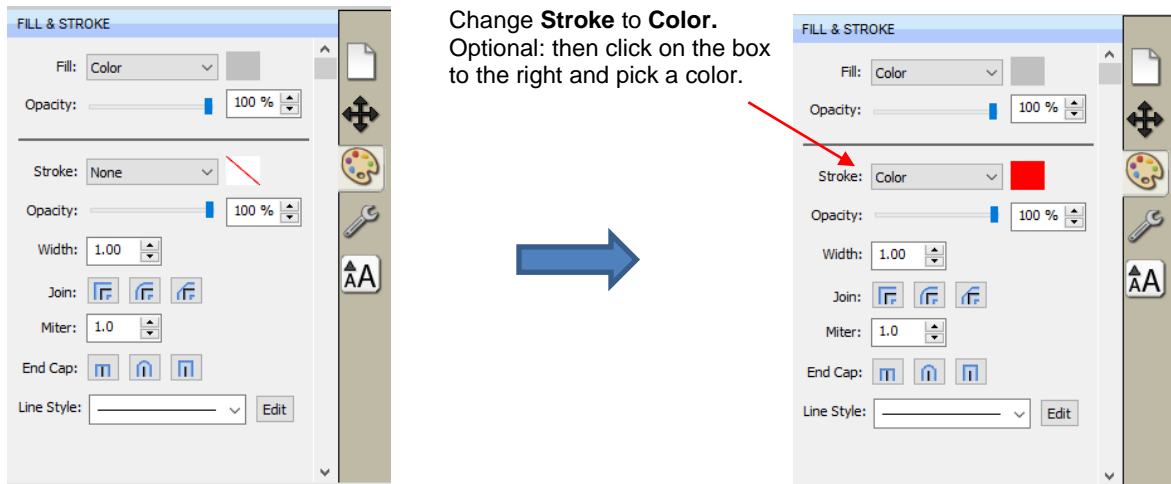
1. Verify that same layer is still selected.

(5) Repeat steps (3) and (4) for other layers. In this example, the **Cut Lines** layer needs the following change:

Change **Stroke** to **Color.** Optional: then click on the box to the right and pick a color.

Entering Settings

(6) Click on the **Cutter** icon to open the cut window:

Click here to open **Cut Settings** window:

(7) Click on **Settings** to open **Cutter Settings** window:

Click on **Settings** to open the **Cutter Settings** window

(8) Change the **Tool X Offset** and **Tool Y Offset** values, if needed. Note that if you have them calibrated in C3, then reverse the signs and enter the same values in SCAL. For example:

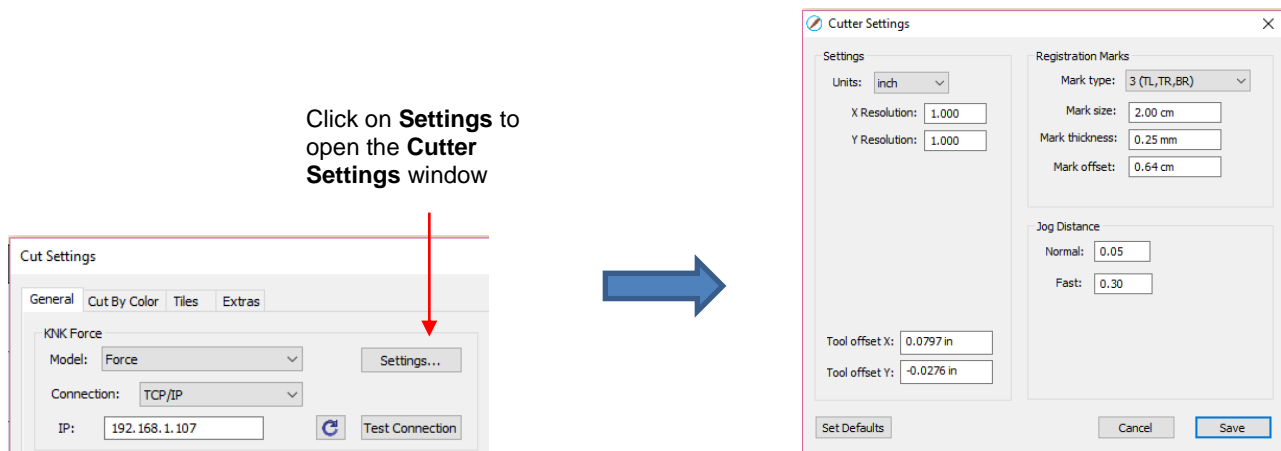In C3, the blade holder (left side) and embosser (right side) were calibrated to have the following offsets, entered under **Settings>Machine Settings**:

X offset for second tool	Y offset for second tool
-0.07	0.08

These same values would be entered this way in SCAL, but with a change in the signs. A negative number is changed to a positive and a positive number is changed to a negative:

Enter the same values but with a change in the signs.

Tool offset X:	0.07
Tool offset Y:	-0.08

Set Defaults   Cancel   Save

Click on **Save.**

(9) Note that if you have performed the **Sizing Calibration** in C3, those same values can be entered into the **Cutter Settings** window in SCAL. For example:

In C3, the Force was calibrated to have the following sizing resolutions, entered under **Settings>Basic Settings**:

Wheel resolution	Belt resolution
0.997	1.0127

These same values would be entered this way in SCAL:

Enter the **Belt resolution** here.

Settings
Units: inch
X Resolution: 1.127
Y Resolution: 0.997

Enter the **Wheel resolution** here.

(10) After making changes, click on **Save**. You will then be back in the **Cut Settings** window.

(11) Change the **Cut Mode** to **WYSIWYG** so that the layers are aligned as shown on the screen.

Cut Settings
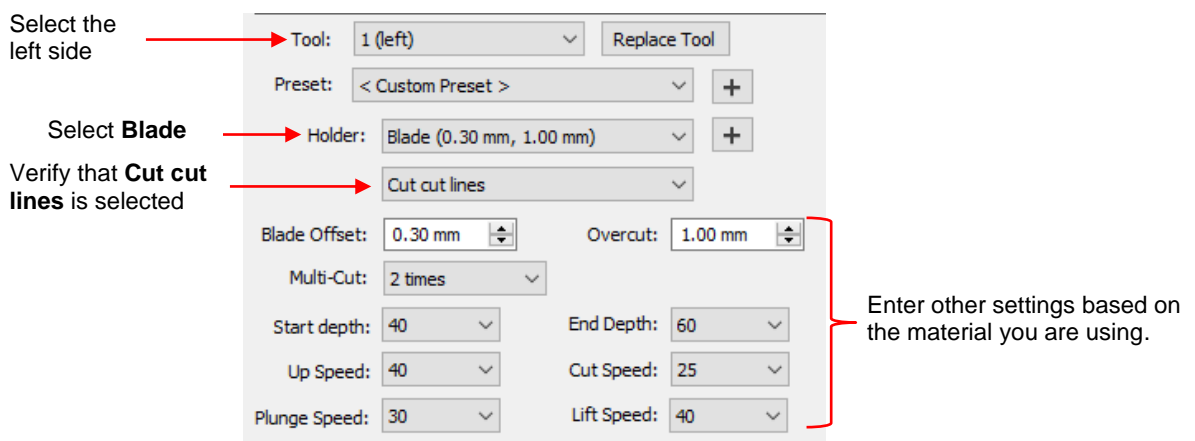Cut Mode: Origin Point → Cut Mode: WYSIWYG

(12) Load the tools into both sides of the Force. Select one of the sides and then click on **Replace Tool.** Follow the instructions that appear. Then repeat for the other side.
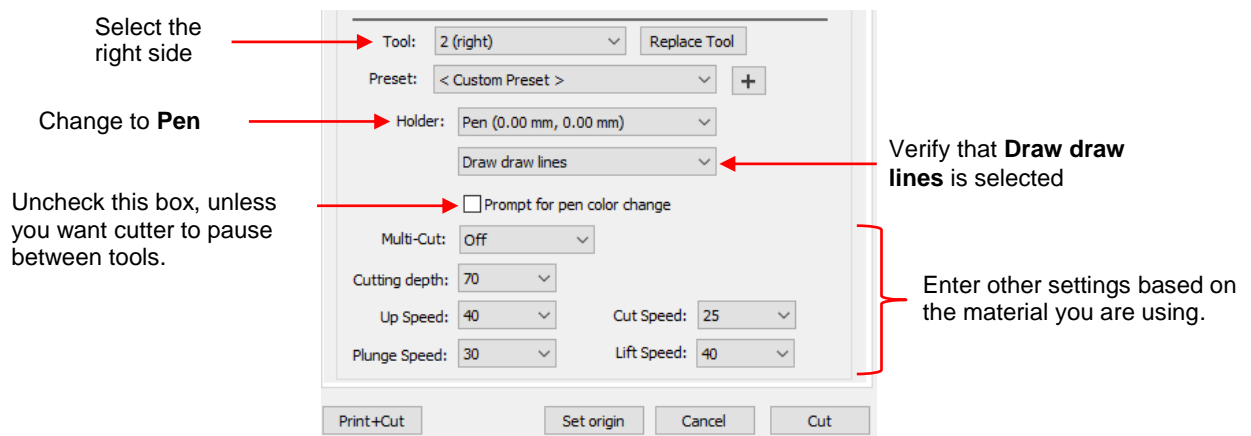
Select one of the sides: ———→ Tool: 1 (left)   Replace Tool ←——— Click on **Replace Tool.**

(13) Click on **Set Origin** [Set origin] and set the origin based on the tip of the left side tool.
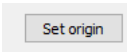
(14) Under **Tool**, select **1 (left)** and then enter the settings you wish to use for the left side:

Select the left side ———→ Tool: 1 (left)   Replace Tool

Preset: < Custom Preset > +

Select **Blade** ———→ Holder: Blade (0.30 mm, 1.00 mm) +

Verify that **Cut cut lines** is selected ———→ Cut cut lines

Blade Offset: 0.30 mm   Overcut: 1.00 mm

Multi-Cut: 2 times

Start depth: 40   End Depth: 60

Up Speed: 40   Cut Speed: 25

Plunge Speed: 30   Lift Speed: 40

Enter other settings based on the material you are using.

(15) Under **Tool**, select **2 (right)** and then enter the settings you wish to use for the right side:

Select the right side ———→ Tool: 2 (right)   Replace Tool

Preset: < Custom Preset > +

Change to **Pen** ———→ Holder: Pen (0.00 mm, 0.00 mm)

Draw draw lines ←——— Verify that **Draw draw lines** is selected

Uncheck this box, unless you want cutter to pause between tools. ———→ ☐ Prompt for pen color change

Multi-Cut: Off

Cutting depth: 70

Up Speed: 40   Cut Speed: 25

Plunge Speed: 30   Lift Speed: 40

Enter other settings based on the material you are using.

Print+Cut   Set origin   Cancel   Cut

Executing the Dual Head Procedure and More

(16) Click on **Cut** and the Force will perform the dual head procedure. If you wish to do another dual head application, be sure to verify the settings for both sides before executing another cut.

(17) If you need to tweak the X and/or Y offset, then use the following guidelines (note that it is the opposite to the adjustments in C3 due to the reverse signage):

◊   If right tool is drawing too far left, increase **X**   OR   If right tool is drawing too far right, decrease **X**

◊   If right tool is drawing too high, increase **Y**   OR   If right tool is drawing too low, decrease **Y**

Also remember that:

◊ Increasing a negative number makes it less negative (e.g. from -1.5 to -1.4)

◊ Decreasing a negative number makes it more negative (e.g. from -0.8 to -0.9)