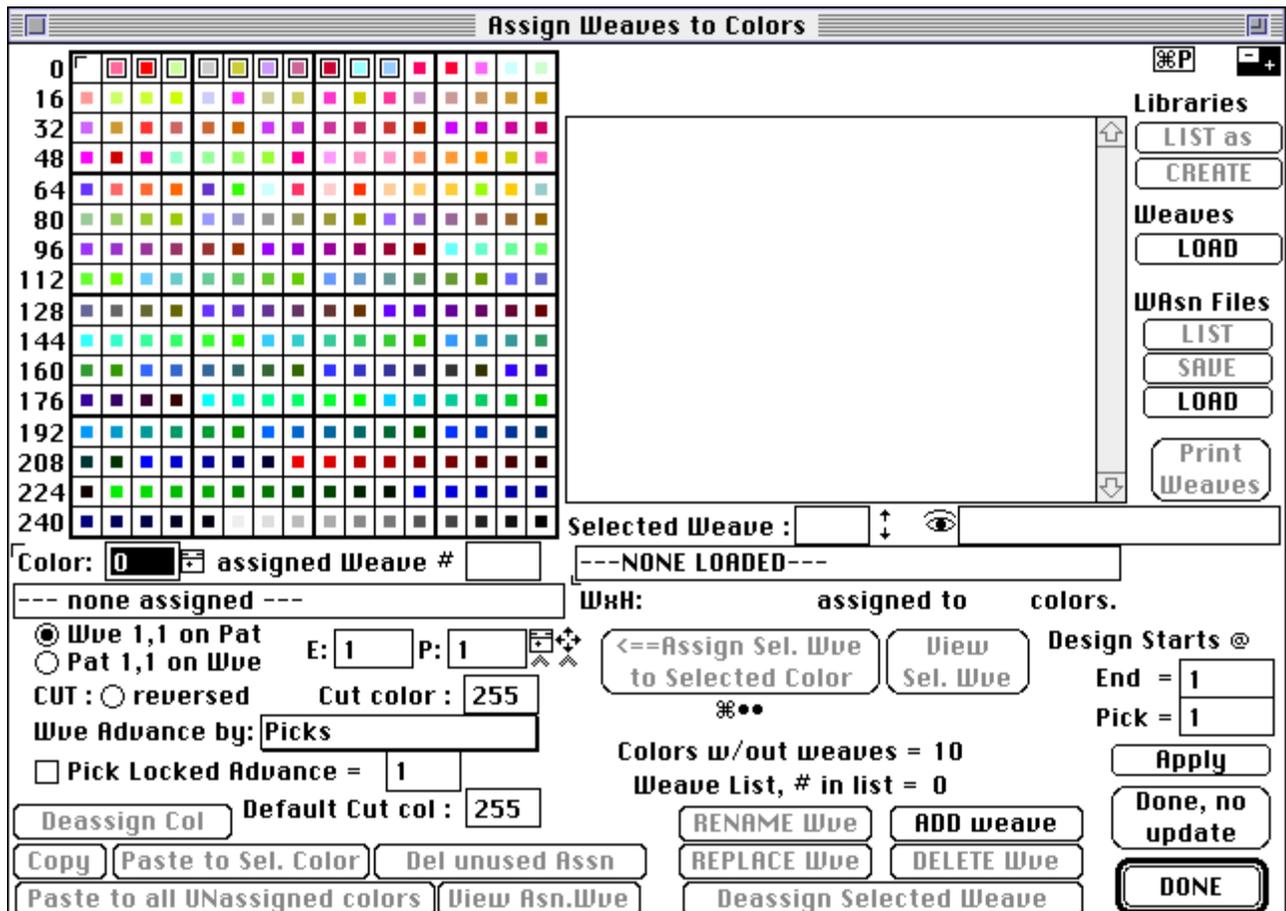


## Assign Weaves

When you have expanded your finished .

file into an expanded format, you are ready to assign weaves. (Weaves can also be assigned to an image file if desired.) To assign weaves go to the Weave menu, pull down to Assign Weaves... or use command K. The Assign Weaves dialogue will appear.

The 256 color palette used for this file is displayed on the left . The color used in the file have a frame around them. These are the colors that require a weave assignment. To open the weaves you want to use you can load individual weaves or weave libraries or you can open a previously defined



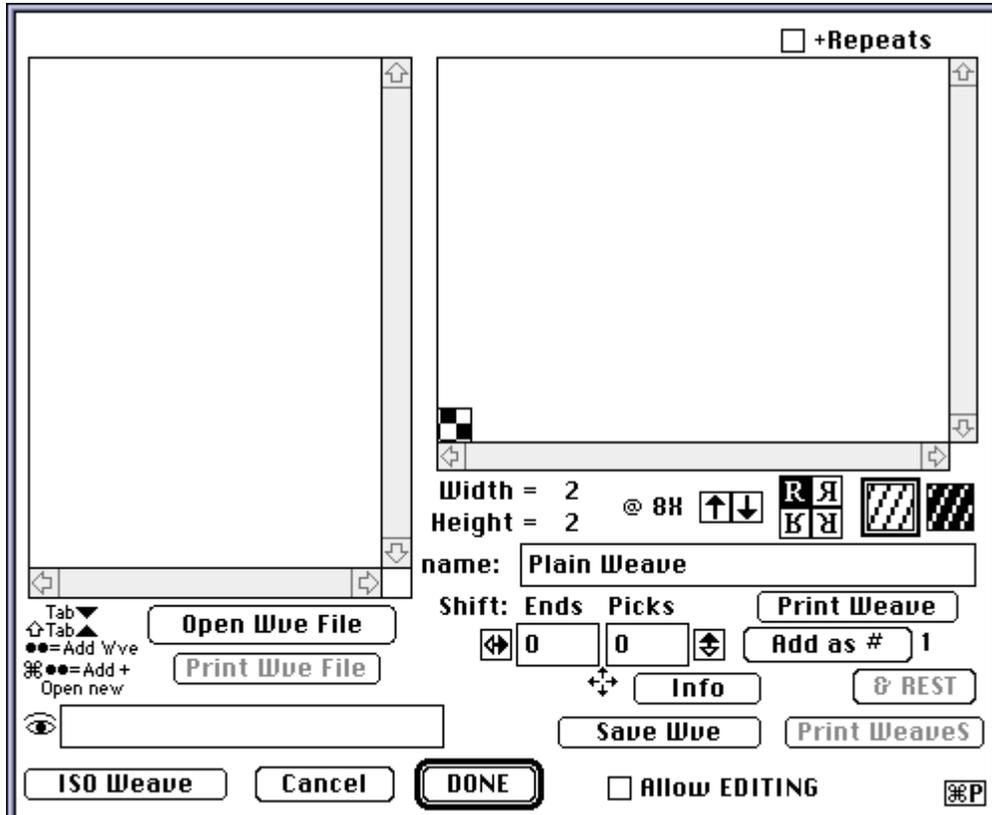
Wasn (Weave Assignment file).

### Weaves: LOAD

Weaves

LOAD

To load an individual weave or a weave library click on LOAD located beneath the word Weaves, located in the upper right of the dialogue.

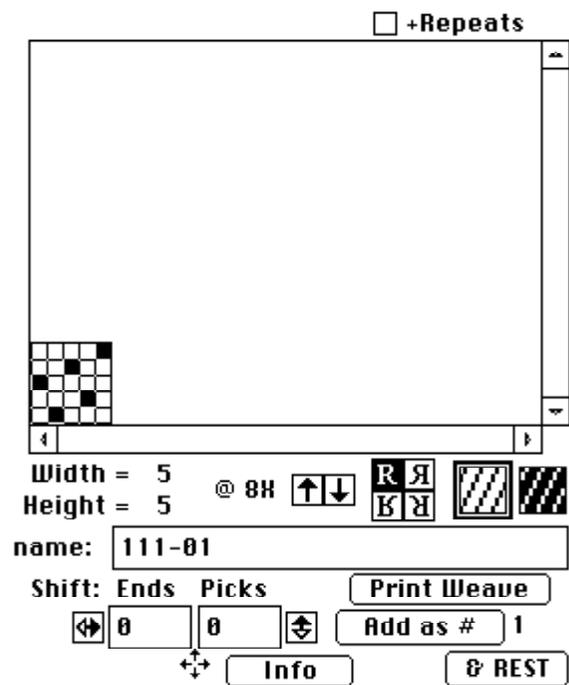


Clicking on the LOAD button will bring up this dialogue: To open an existing weave click on Open Weave File, located beneath the window on the left. Locate the folder that contains the weave or weave library you want to load. Click on open. To add the highlighted weave to the Assign Weaves dialogue, click on the button labeled Add as # . To add the highlighted weave and the remaining weaves in the

weave library click on the button labeled & REST, located beneath the Add as button.

The name of the current weave or weave library is displayed on the top left of the dialogue.

When any weave is highlighted, the weave is displayed in the window on the right. Its' width and height is displayed below the view window. The name of the currently highlighted weave is shown below the display of the width and height. To the right of the width and height are arrows that can be used to zoom in or out on the displayed weave. To the right of the arrows, are four R buttons. These can be used to flip the currently displayed weave. To the right of the four Rs are two buttons that can be used to invert the currently displayed weave. When you click on one of these buttons, the black pixels become white and the white pixels become black. The current weave can be viewed in repeat by clicking on the

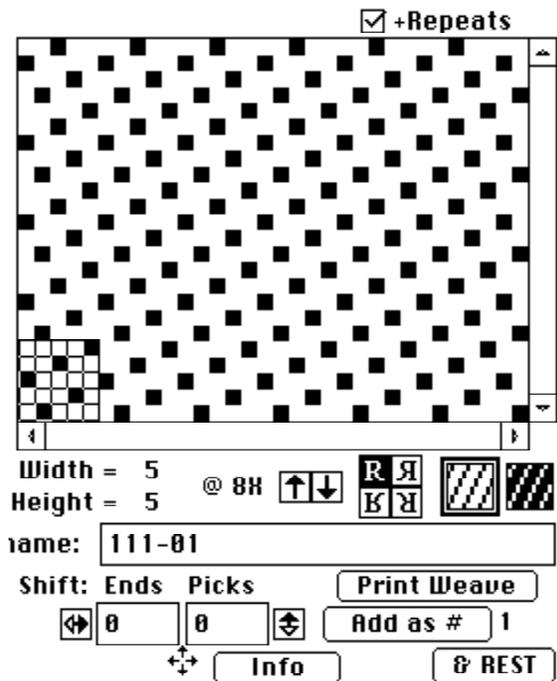


box next to the word + Repeats at the top right of the dialogue.

The current weave can be shifted in ends and/or picks. To shift in ends or picks enter the number you want to shift in the text box beneath the words Shift: Ends Picks. You can also click on the arrow keys located beside the text boxes. This will scroll in the ends or picks.

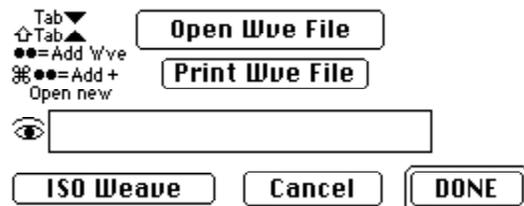
Another way to alter the current weave is to click on the box labeled Allow EDITING, located at the bottom right of the dialogue. This allows you to click in the weave itself. A

white pixel becomes black and a black pixel becomes white when it is clicked on.



When a change is made in the weave the name of the weave changes. When the change is made by flipping in ends or picks (by clicking on one of the Rs) or by inverting the weave, a letter or bullet will be added to the beginning of the weave name to identify it with the change that was made to it. When a change is made by shifting in ends or picks, the name of the weave will change to NEW. This keeps the new weave from mistakenly replacing the original weave. To rename the weave highlight the word NEW and type the new name. To save the new weave for future use-beyond the current file-click on the button labeled Save Wve. The current weave can be printed by clicking on the button labeled Print Weave, located under the text box for the weave name.

To get info on the currently highlighted weave click on the button labeled Info, located beneath the shift text boxes. To print the highlighted weave, click on the button labeled Print Wve File, located beneath the Open Weave File button on the left side of the dialogue box.



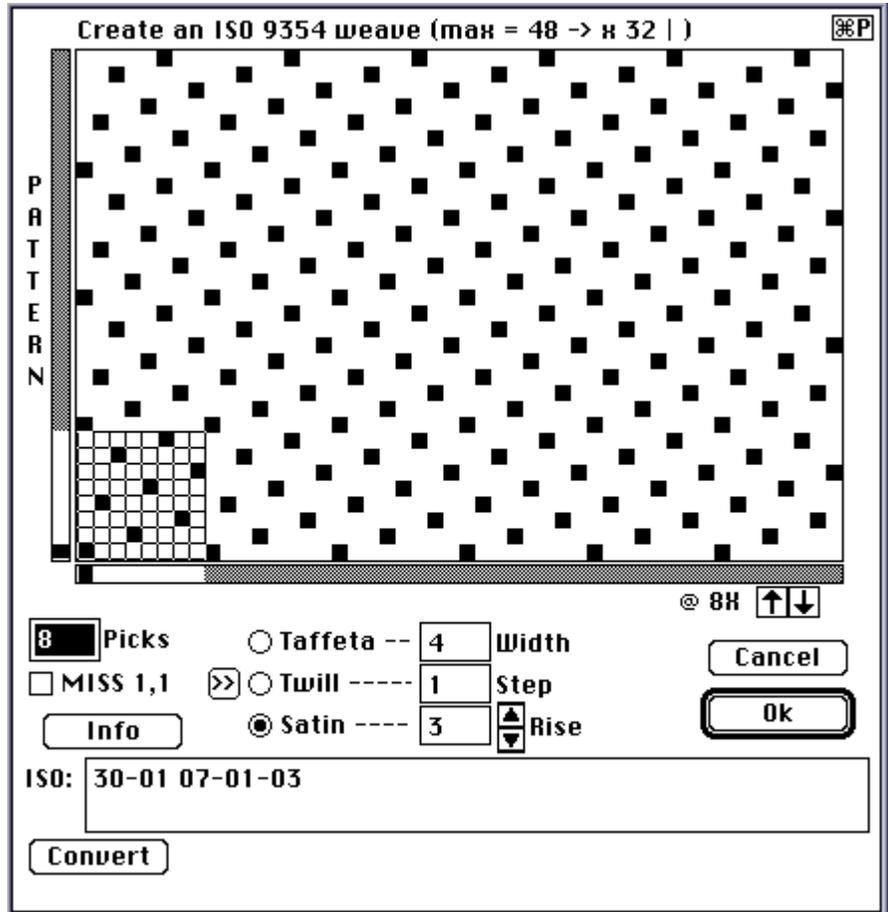
To ask JacqCAD to search a library for a specific weave, type the name of the weave in the text box next to the eye icon. (This is especially useful when you want to find a single weave that is in a library of 256 weaves.)

Sometimes the weave you need is a standard weave or a slight variation of a standard weave. Rather than draft the weave from scratch, it can be very useful to be able to start with the standard weave,

make the alterations necessary, add the weave and save the new weave for future use. To create a weave this way click on the button labeled ISO at the bottom left of the dialogue. Clicking on the button labeled ISO brings up a dialogue.

This is the International Standard Organization's weave definitions. You can choose the category of weave: Taffeta (a.k.a. plain weave or tabby), Twill, or Satin. you can choose the number of picks or height of the weave at the left in the text box next to the word Picks. Click on the small >> double arrow button to let JacqCAD know you are done entering digits and to load the current number into the weave configuration. You can choose the width, step or rise of the weave by entering the desired value to the right of the category in which you are working.

To zoom in and out on the current weave in the ISO dialogue, click on the arrow buttons at the right, located beneath the weave view. To invert the current weave (black pixels go to white and white pixels go to black), click on the button labeled MISS 1,1, located beneath the Picks text box. To get information on the current weave



click on the button labeled Info, located beneath the MISS 1, 1 button. Info includes width, height, % of warp cover, % of warp activity, % of weft (fill) activity, the longest floats on face and back in warp and weft. You can print this information using command P.

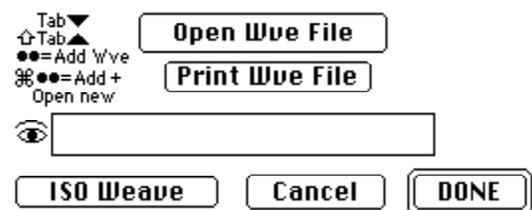
Next to the word ISO is the numeric equivalent of the current weave. The first number includes the category and whether the weave begins with a cut or a miss. (A cut is a black pixel-this a cut signifies a warp end that will be raised, a miss signifies a weft on top -so the warp the end is down.)

Taffeta is category 10 and 11. Category 10 is a taffeta that starts with a cut. Category 11 is a taffeta that starts with a miss. If the weave starts with a cut, the second number will be the number of cuts in a row, followed by the number of misses in a row. If the weave starts with a miss, the second number signifies the number of misses in a row, then the number of cuts in a row, then the number of misses, until the full sequence is defined. The fourth set of numbers in a taffeta is 00.

Twill is category 20 and 21. Category 20 is a twill that starts with a cut. Category 21 is a twill that starts with a miss. If the weave starts with a cut, the second number will be the number of cuts in a row, followed by the number of misses in a row, this series of numbers will repeat until the full sequence is defined. If the weave starts with a miss, the second number signifies the number of misses in a row, then the number of cuts in a row, then the number of misses, until the full sequence is defined. The fourth set of numbers in a twill is the step in the weave. The step is the number it steps in the adjacent column before the first cut if it started with a cut or the miss if it started with a miss. This will be a single number.

Satin is category 30 and 31. Category 30 is a satin that starts with a cut. Category 31 is a satin that starts with a miss. If the weave starts with a cut, the second number will be the number of cuts in a row, followed by the number of misses in a row. If the weave starts with a miss, the second number signifies the number of misses in a row, then the number of cuts in a row. The third number is the stitcher number. This is the number of cuts if it started on a cut or the number of misses if it started on a miss. Stitchers are characteristic of satin weaves. Satin weaves are used when the least amount of interlacing between warp and fill is desired. The stitcher signifies the points of interlacing. The fourth set of numbers in a satin is the rise in the weave. The rise is the number it steps in the adjacent column before the first cut if it started with a cut or the miss if it started with a miss. This will be a single number.

The weave can also be altered by changing the numeric values in the ISO text box and then click on the button labeled Convert. This will convert the numeric sequence into a weave and display it in the view box. This method of altering the weave can be a useful tool in understanding how the ISO system works. Try altering the numeric values and converting the numbers to the weave to make the ISO process clear.

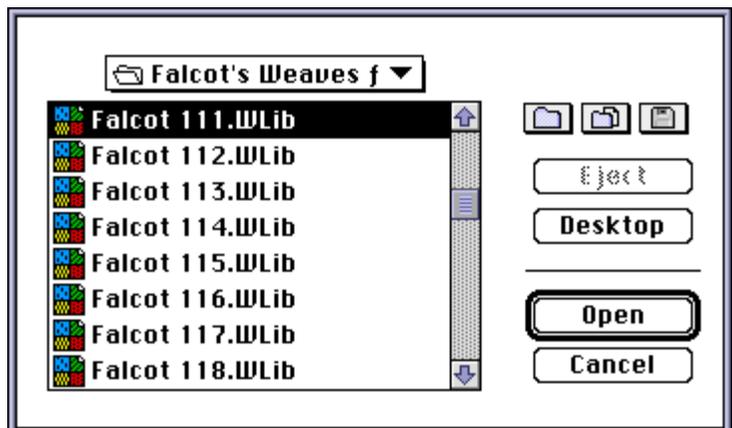


Shorthand commands for navigating through a library of weaves and adding weaves is located at the far left, below the list of weaves. Tab moves to the next weave down in the list. Shift tab moves to the next weave up in the list. A double click adds the selected weave. Using the command key with a double click adds the selected weave and prompts the open weave command to select another weave from the same or a different folder.

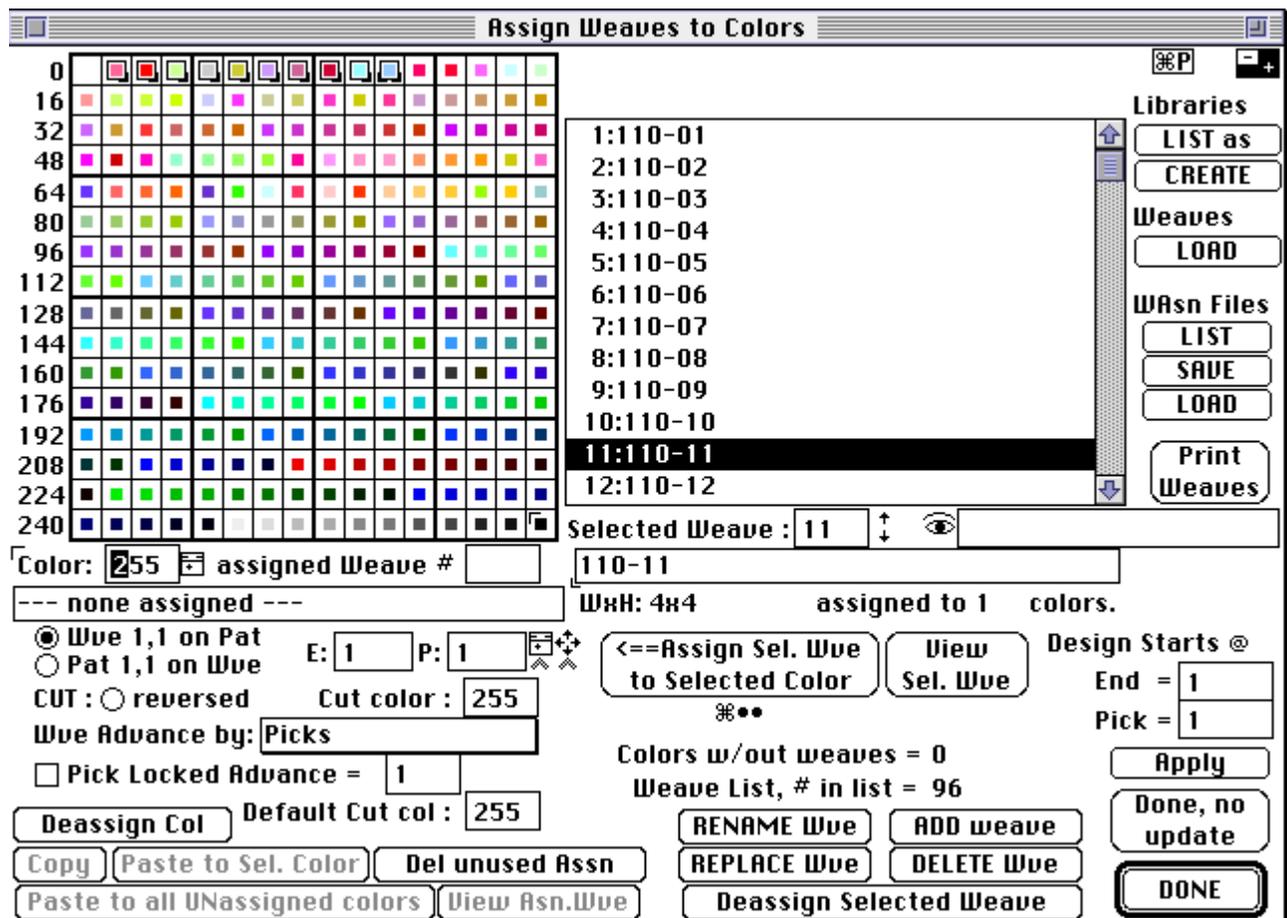
To exit the Load weaves dialogue and keep the selected weaves click on the button labeled DONE or use the return key on your keyboard. To exit the Open weave file without keeping the weaves click on the button labeled Cancel. Either action will return you to the Assign Weaves dialogue.

**Assign Weaves**  
**WAsn Files: LOAD**

If you want to choose your weaves from a previously defined weave assignment



file, click on the button labeled LOAD beneath the words WASn files located on the right side of the dialogue, beneath the Weaves LOAD button. You will see this dialogue where you locate the WASn



or Weave library you wish to open.

Once you have loaded the weaves you want to assign, using any of the above methods of opening weave files, you are ready to assign each color from your design to a weave structure.

To assign a color to a weave, click on the color (a bracket will appear on the upper left of the color patch, showing that color is selected) click on the weave you want to assign to the selected color. Now click on the button labeled Assign Sel Wve to Selected Color, located in the lower right of the dialogue. To view the selected weave click on the button to the right labeled View Sel. Wve

The current color to weave assignment is displayed just below the 256 color palette. The color number, the weave number and the name of the weave are shown.

The end and pick the selected weave starts on can be changed by entering the end and pick number in the text box next to Wve 1, 1. You can scroll through the end or pick start point by holding down the arrow key while using the arrow keys on your keyboard. The position of the start point in the image pattern can be changed by clicking on the radio button next to Pat 1,1 and then entering the correct end and pick position in the text boxes to the right. The position of the start point in the image pattern can also be loaded by clicking in the image while holding down the control key while

clicking in the image.

The weave can be cut in reverse (white pixels become black, black pixels become white) by clicking on the radio button located between the words CUT: and reversed. The cut color can be changed from the default of 255 by entering the color number in the text box next to the words Cut color. This can be used to preview color combinations. If you design in your fill colors and assign your weaves with the cut color being you warp color you can get a sense of the color mixing. (If you are working on multi-layer constructions or constructions with conditional shuttles, it is better to do this preview on a non-expanded file with weaves that are designed for single layer fabric).

The selected weave can be advanced by any of the following: picks, cards, color use, shuttle list or default list. You can set all the weaves to advance by the same method by choosing SET ALL by

following: picks, cards, color use, shuttle list or default list in the pull down menu. Click on the box next to Pick Locked Advance and enter the number you want to lock the weave to when you want the weave to control the advance of the weave to be more than the default of one. The pick lock uses the advance mode selected above. You can change the default cut color by entering the color number in the text box next to Default Cut col:

The number of colors without weave assignments and the number of weaves in the list are shown just below the button Assign Sel Wve to Selected Color.

You can define your design as starting on a position (lower left corner) other than end 1 pick 1 by entering the position in the text boxes below design Starts @ in the lower right of the dialogue box.

The buttons on the bottom left allow you to Deassign a color, copy a weave assignment and paste to other colors, delete unused assignments, paste a copied assignment to all unassigned colors and to view a weave assigned to a selected color. You can rename, replace, add, delete or deassign any weave by clicking on the corresponding button in the bottom right of the dialogue.

When you move your cursor over each color, its' status is shown in the top right of the dialogue. The color number, at what end and pick on the weave starts on, the weave number the name of the weave method by which the weave is advanced and the cut color used on the weave.



When you have made all the necessary weave assignments save the current weave assignment file by clicking on the Save button, located below the Wasn Files in the upper right of the dialogue box. You can apply the weave overlay without exiting the dialogue by clicking Apply in the lower right of the dialogue. Click on Done, no update to exit the dialogue without any weave overlay update. Click on Done to exit the dialogue, and apply the weave overlay, including recalculating.

When you exit the dialogue your design will have the weave overlay applied. You will see the pattern of the weaves you have assigned. You can look to see if there are any changes you want to make. If you want to change the weave assigned to a color reenter the Assign weaves dialogue, make the change, save and replace the previous Wasn file. Now click on DONE to exit with the change applied or click on Apply if you want to see the change but keep the dialogue box open.

If the change you want to make is in editing the color in the original image and have the weave that was assigned to that color elsewhere in the design



You can edit the color in the image . If the color is used already in the image then going to the Weave menu and pulling down to Update weave overlay will apply the weave overlay change to the area(s) you altered. If the color you use to edit is not already used in the design then you will need to reenter the Assign Weaves dialogue and assign a weave to that color.

Then you will need to save and replace the previous WASn file. Now click on DONE to exit with the change applied or click on Apply if you want to see the change but keep the dialogue box open.

#### Libraries



To create a weave library load the weaves you want included in the library and then click on CREATE under Libraries in the top right of the dialogue. You will need to define where you want to save the library and what you want to name the library. Creating a weave library allows you to organize weaves in any way you want and be able to load up to 256 weaves into the weave assignment dialogue with a single action. This is a time saving and organizational tool. You can list the weave library in text format by clicking on LIST as located beneath the word Libraries at the top right of the dialogue.

When the weave assignment is finished to your satisfaction, choose Cut weaves into design in the Weave pull down menu. This will make the weave cuts permanently part of your design file. The cuts will be made in the cut color you defined. (If you chose a color other than 255 to preview, these must be changed to 255 before the file is punched. 255 is the color used for the binary file that communicates with the loom controller in an electronic jacquard, 255 defines the hooks to be cut in a card controlled jacquard.)