Operator Guide
For

Eagle Raptor 6
Software

Contents

Section One

Introduction

1.0   Introduction
This manual is intended for equipment operators with a basic knowledge of Microsoft Windows operating system. Some basic experience with the Raptor software setup is assumed.
This manual includes information about the physical printer and how the user can set up print jobs. This manual will also cover the basics of printer maintenance both software and hardware.

1.1   Convention
This manual uses specific terms at times. You may sometimes see directions written out like this: File>Save. When you see this, it means to go to the "File" menu in the toolbar by hovering your mouse over the name in the toolbar and then select the second item in the list (such as "Save").

1.2   Inks
Replacement ink is available from Think Ink Inc. Getting your ink from Think Ink entitles you to free technical support and great ink prices.

1.3   Technical Support
If you need assistance, you can use the MCS On-Line Connection through the Raptor software at any point. Just click the MCS logo in the right side of the Raptor software window.
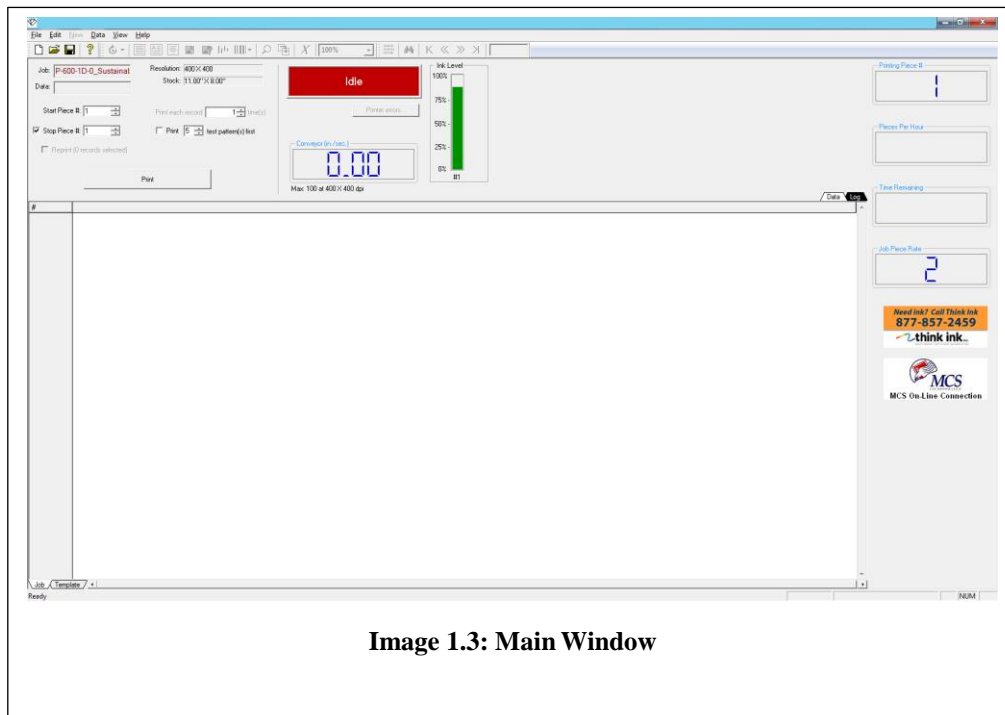
Image 1.3: Main Window

If further assistance is needed, contact MCS at support@mcspro.com or call MCS toll free at 1.800.768.0154 Monday through Friday 8:30AM to 6:30PM EST.
If you do call, you may be asked for a software version number. This can be seen on the Title Bar of the main menu and can also be found in the "Help" tab, go to Help>About, to view the software version.

1.4   Eagle Raptor Software

The Eagle Raptor software is designed to work with the following Eagle print systems, Eagle and Eagle AMS Printers. This manual will detail how to use the software. The software runs on Windows 7 later versions only. This manual will explain each of the following steps: loading templates, print data sets, and even help with maintenance the print system.

Section Two

Software Installation

2.0   Installing Raptor 6 Software

The service technician should have set up the computer for you. If, for whatever reason, the software needs to be reinstalled, then the necessary files are in the "Raptor 6" files you were given. Should you need to reinstall your software, install the provided version of the Raptor software, update to the current version, and install the dongle software.

Should you just need to update your software, simply follow the instructions for updating in section 2.1.

2.1   Installing Software

The original installation program should be included in the "Raptor 6" files you were provided with upon installation.

Steps for installing software:
1.   Disable antivirus software.
2.   Run "Raptor 6 Install.exe.
3.   Follow setup steps.
4.   Run Raptor 6.0.0.0 program version you'd like to install the 6.0.0.0 will be the actual version contained in the installation that will be installed. Note you will receive an error from the setup program if Raptor 6 install has not been completed properly.
5.   Follow setup steps.
6.   Open program.
       Note: When Raptor 6 program is run, you will be prompted to "Run as administrator" when necessary. This is a one-time requirement. From the start up menu, right click the program and select "Run as administrator."
7.   Verify software version displayed in the program's Title bar
8.   Re-enable antivirus.
9.   Updating Software

Software updates are up to the user. They are provided as Raptor 6.0.0.0 Install with 6.0.0.0 being the actual version of the program. Go to [url] to find the updates.

2.2   Dongle Installation

(Note: If the current dongle is lit there should be no need to perform this step)

The USB dongle is the software key. The system will not print properly without the dongle. A "Printer Setup Error" will occur if there is no dongle detected. A dongle is only required once the PRINT button is used. If it is necessary to install the dongle software, open the file "HASPUserSetup.exe from the C:/Program Files (MCS) Raptor 6/Extras folder.

Image 2.3

Section Three

Getting Started

3.0   Getting Started

The Raptor 6 Software is an application for Windows 7 and later that will allow you to lay out fixed or variable data that includes text, numbers, barcodes, and graphics.

Before you begin, you must make sure the printer is up and running.

3.1   System Power Up

The system needs to be powered up in the correct order.

The proper power up order is:
1.   Power up the PC and log into Windows.
2.   Power up the Raptor controller and Raptor Printer IO Controller.
3.   Run Eagle Raptor Software.
4.   Wait until LED on Controller turns solid green.
5.   The font screen should show IDLE when everything is connected and ready
6.   Ink supply level will automatically be displayed on the programs front screen.

3.2   Printing

The Eagle Raptor 6 Software is a powerful tool that will help you print. The printing process contains three main sections: the print job, the optional template, and data.

The basic steps for most print jobs are:
1.   Import Data.
2.   Perform Print Setup.
3.   Create a Template.
4.   Create a Print Job.
5.   Print the Job.

Section Four

Understanding The Software Interface

4.0   Understanding the Software Interface

To open the application, simply double click the Raptor 6 icon on your desktop.

Please note: You may be prompted to open the application as an administrator. If this is the case right-click the icon and select "Run as administrator."

The MCS Logo will appear on the screen and the main window will open.

4.1   The Main Window

The main window consists of eight main sections. Each section is described below.

1.   Display Window
2.   Toolbar
3.   Menu Bar
4.   Display Area shows Data, Job and Template information
5.   Date and Log Window Tabs
6.   Job and Template Window Tabs
7.   Print Status
8.   Order Ink
9.   Technical Support Link
10.   Ink Volume Level
11.   Status Bar

(Note: The tool bar can be configured to provide more run information simply by dragging and dropping to display all functions on one line)
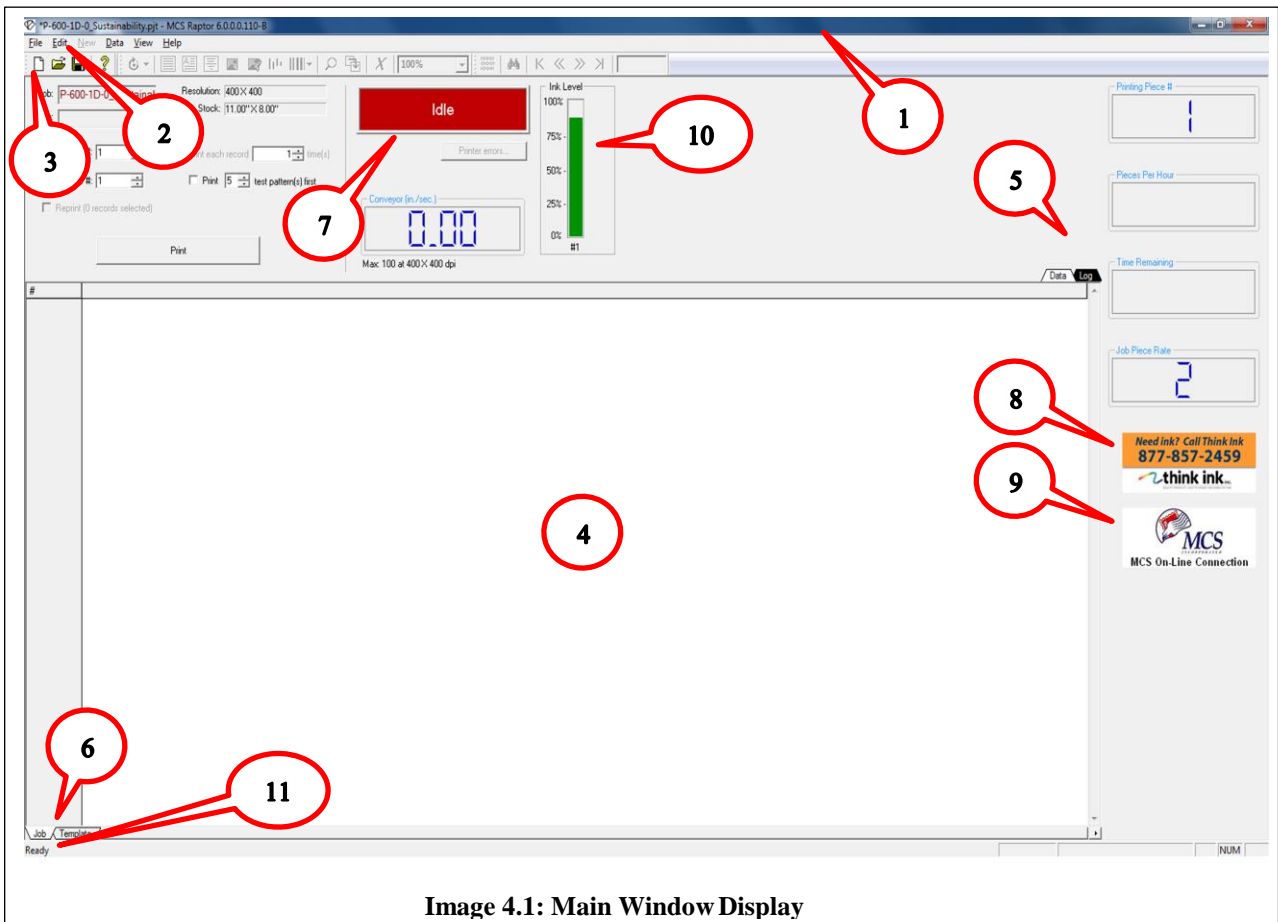

Image 4.1: Main Window Display

4.1.1 Title Bar
The title bar simply displays the name of the program and project. Like other Windows programs you can use the buttons on the upper left to close, hide, and resize the window.

4.1.1a Tool Bar
The toolbar looks like the toolbar from many other programs. It consists of "File," "Edit," "New," "Data," "View," and "Help."

4.1.1b Menu Bar
The menu bar consists of a "Job Tab", a "Template Tab" and a "Data Tab" as well as a "Log Tab" shown in the screen shoot (refer to page Image 4.1).

4.1.2 Display Area
This display area (refer to item 4 in Image 4.1) will display the data if on the "Data" tab and the template if on the "Template" tab.

4.1.3 Tab Selection Area
The "Job" and "Template" tabs are located on the bottom and left of the display window. The "Log" and "Data" tabs are located in the upper right of the title bar display window. These tabs allow you to change the data of the specific job (refer to item 5 & 6 in Image 4.1). The "Template" tab is a full-screen view and when selected the "Log" and "Data" tabs are not available.

4.1.4 Status Bar
The status bar is located at the bottom of the window and lets you know if the system is ready to print. Please refer to item 11 in Image 4.1 to see where the status bar is located.

4.2 Other Helpful Windows

4.2.1 Data Entry Font
This window is found under View Tab drag down> this will allow you to adjust the font type style and size (refer to Image 4.2.1 below).

4.2.2 Customize Menu Bar
The customize menu bar is located under the "View" menu. Go to View>Customize Menu. This option allows you to customize which options you might like to add or remove from your menu bar.
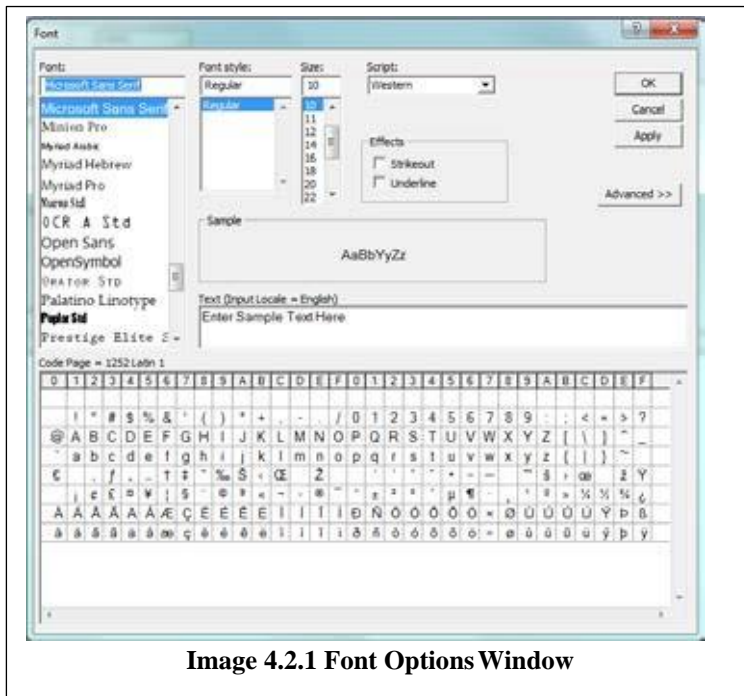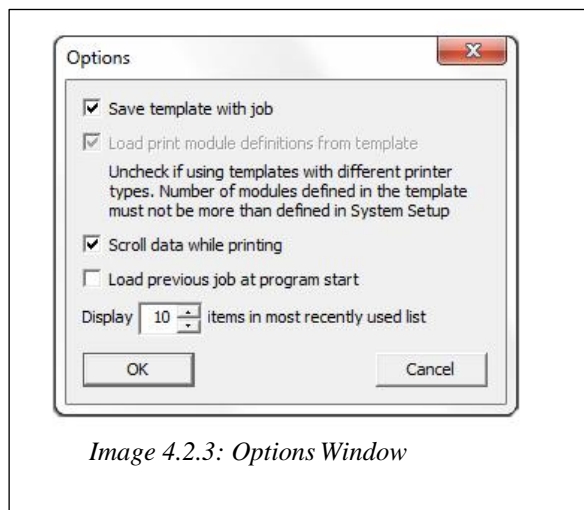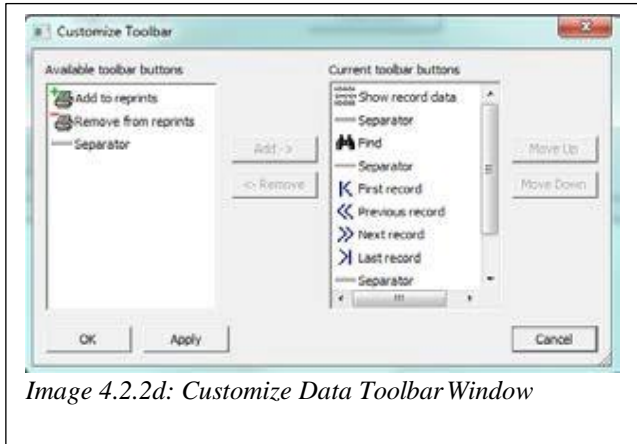
Image 4.2.1 Font Options Window

4.2.3 Options
The options menu is available under the "View" menu. Go to View>Options. This window allows you to specify some general preferences like:

- Save template with job. Checking this causes the job and template to be combined into one file. Unchecking this causes the job to be separate and loaded when the template is loaded. The reason for this is it allows the job to be created for example by the IT department and installed on the printing PC without knowledge about the template (the printer details)

- Load print module definitions from the template. This is normally checked and only relevant when "Save template with job" is unchecked. This allows jobs for different printer types to be created. As long as there is at least the number of modules in one system as the other job (an underlying template can be loaded)

- Scroll data while printing, causes the data display to update and scroll up when the highlighted bar reaches the bottom of the view.

- Load previous job at program start will load the last used job every time the software is run.

- Display 10 items in the most recent used list will configure how many previously loaded jobs to be shown in the File menu. Note that if the files in this list are no longer present they will be deleted from this list

Image 4.2.2a: Customize Menus

Image 4.2.2b: Customize Toolbar Window

Image 4.2.2c: Customize Template Toolbar Window

Image 4.2.2d: Customize Data Toolbar Window

Image 4.2.3: Options Window
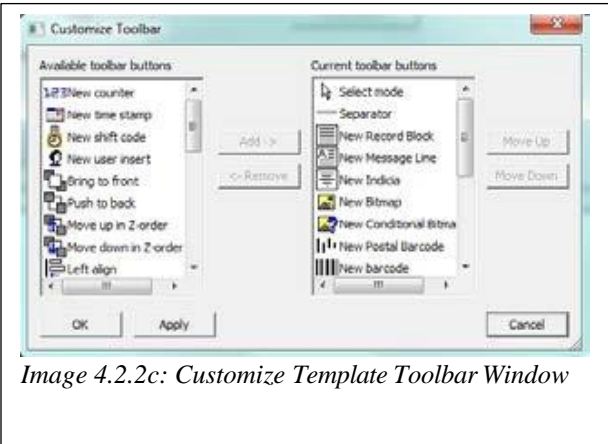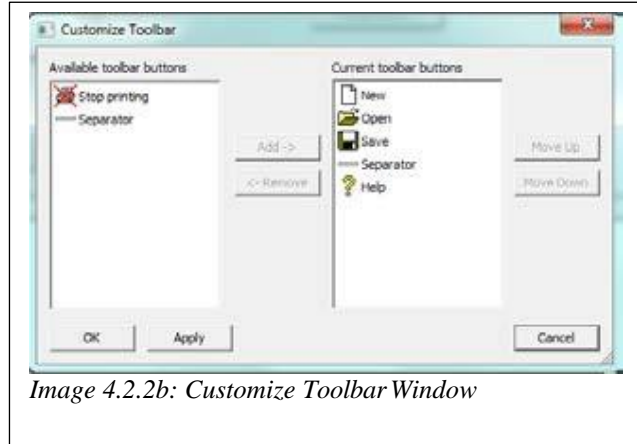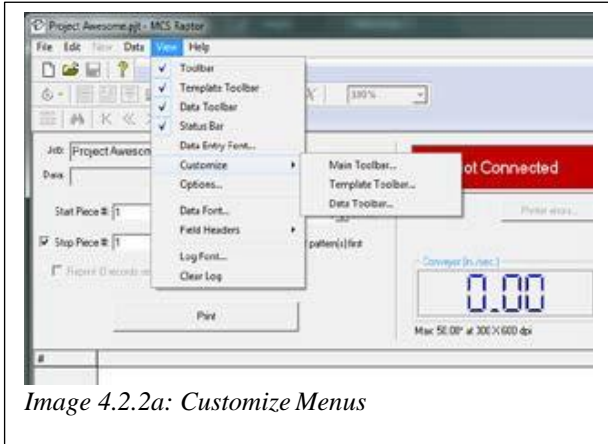
Section Five

Importing data

5.0   Importing Data
To load your data set, you will need to first set the data file options. Then you can import the file.

5.1   Data File Options
Data file options allow you to specify how data should be imported. It also allows you to specify the file type. Supported file types are listed in the table below.

To enter data file options, go to **File>Data File Options**. The following window (refer to Image 5.1) will appear.
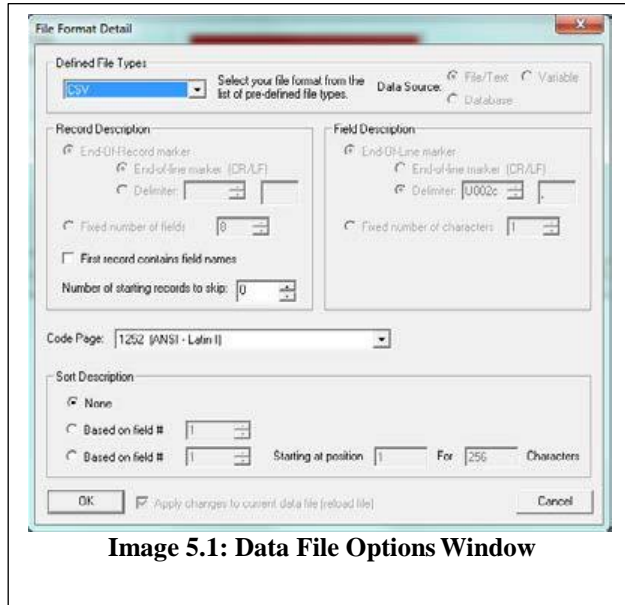
Image 5.1: Data File Options Window

Select the desired file format presets from the "Defined File Types." The supported file types and their descriptions are below.

File Type	Description
Custom	Allows you to specify custom file format definitions for fields and records
1 Up Format	Postal Barcode and Code Page fields are available.
Text I	Postal Barcode and Code Page fields are available. You can also enter a fixed number of fields in the record description.
Text II	Postal Barcode and Code Page fields are available.
CSV	Comma delimited fields, one record per line. Optional Field headers are supported for record #1.
SCITEX	Supports the Scitex image format
Database	Supports database files as configured in the system configuration.
Variable	Supports fixed length fields. The number of fields and their lengths must be configured in this dialog.

5.2　Custom Data Files

Custom data files require the most configuration because the program can make no assumptions about file type.

To enter custom data file options:

1.　Open the "Data File Options" window by going to File>Data File Options.
2.　Select "Custom" from the "Defined File Types" pull down section. (Refer to image 5.1 above)
3.　Click the radio button for the data source type (i.e. File/Text, Variable, or Database).
　　Please note: Only select Variable of Database if you know the file is of those types.
　　For Database files, enter the Database Parameters selection statement only if your database has multiple tables
4.　Enter the Record Description.
　　For File/Text source type, select the end-of-record marker, end-of-line marker, or end-of-record delimiter. The end-of-line marker can be a carriage return (CR) or line feed (LF). A record delimiter is the hexadecimal value for a specific character, like a comma (, = U002C) or pipe (| = U007C).
　　For Variable source type, use the "Add/Modify" field definition button to add field level definitions. Enter "field number," "starting" and "ending" positions, and "field length" for each field.
5.　Enter the Postal Barcode Description
　　Please note: Postal barcodes are 12 digits long and include the zip code plus four, deliver point, and a check digit.
　　If you select "None," then the software will not look for this value.
　　If you choose "Select from Data," then the software looks at all fields for this data. You may also specify a field number along with a specific amount of characters to look at.
6.　Select the Code Page from the pull down.
　　These options select the standard used to display text.
　　 Note: ANSI-Latin is most often used for the American alphabet.
7.　Click "OK" to save your settings.

5.3　Opening Data Files

Data files cannot be created in Raptor 6 Software and must be created in other software programs or utilities. The data file settings need to be updated if you have not already done so (see Custom Data Files section 5.2). Data files must then be opened and reviewed before they can be attached to jobs.

To open the file:

1.　Make sure "Tab" is selected in the tab selection area.
2.　Go to File>Open Data Files or click the open file icon on the menu bar.
3.　Navigate to the file's location and click open.
4.　The file will be displayed in the display area under the "Data" tab.

5.4　Viewing Records

Navigating through large groups of data is made easy with data menu options. Use the navigation icons on the toolbar to go to the "First Record," "Previous Record," "Next Record," "Last Record," "Go to Record...," and "Find..." (The find function is described in more detail in the Finding Records section 5.5). (See image 5.5 on page 9).

5.5   Finding Records

To find a record:

1.   Under the "Job" tab and "Data," you can find the "Find..." icon.
2.   Select "Find..." from the Data menu.
3.   Enter the desired criteria.
4.   Enter a value to find (such as a name, number, etc.).
5.   Select current location or whole file.
6.   Click "Find." » You can navigate through multiple occurrences with the "Find next" button.
7.   If you use the find feature while printing, you can click the "*Add to Reprints*" button to reprint the highlighted data (for more information see *Reprints section 8.4*).
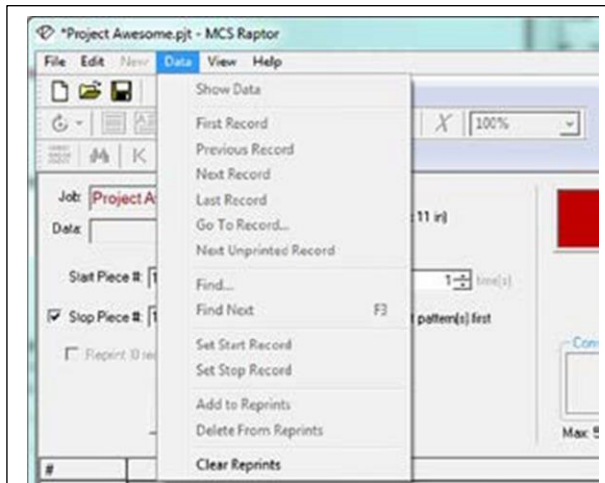

Image 5.5: Data Menu for Finding Records and Reprints

Image 5.6: Edit Menu for Postal Barcode Validation

5.6   Validating Postal Barcodes

If the data file contains barcodes and you have placed barcodes in the template, you can check to see if those barcodes are valid. If the barcode does not validate, the error will be listed in the "Log" tab under "Job" in the Tab selection area.

To validate postal barcodes:

1.   Make sure the data file contains postal barcodes.
2.   Specify the field containing the barcode in the "Data File Options" window.
3.   Select the "Job" tab and then "data" in the Tab selection area.
4.   Go to Edit>Validate. Please refer to image 5.6 above.

5.7   Setting Start and Stop Records

You can choose where to start and stop a print job within your data file.

To choose where to start and stop printing:

1.   Make sure you are under the "Job" and "Data" tabs to view your data.
2.   Select the desired row you want to start at by clicking on it.
3.   Right-click the row and select "Set start Record."
4.   Select the desired row you want to stop printing at by clicking on the row.
5.   Right-click the row and select "Set stop Record."
     [*Image 9: Right-click Options and Image 9b: Data Options Menu*]
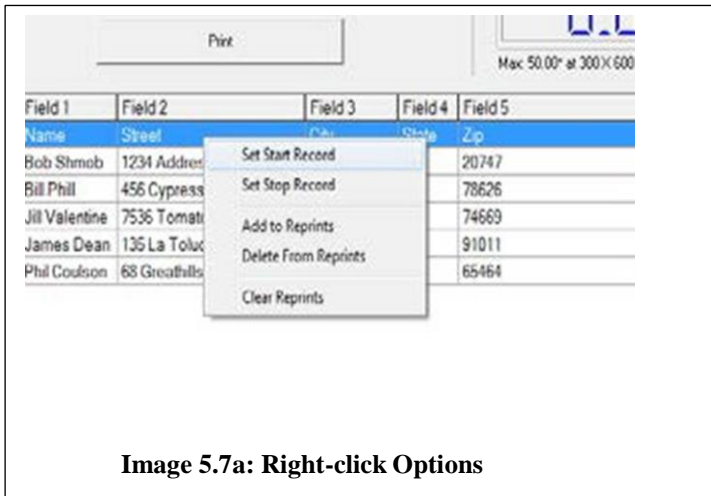
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Image 5.7a: Right-click Options

Image 5.7b: Data Options Menu

5.8   Changing the Data Font

You can change the font style, size, etc. easily. The font change is reflected in your data table.
Note: Only Open Type fonts with True type outlines are recognized by the Raptor 6 software. Please keep this in mind when you install your own fonts.

To change the data font:
1.   Press the "Data" Tab in the
2.   Go to View>Data Font
      The font window will open (refer to Image 5.8).
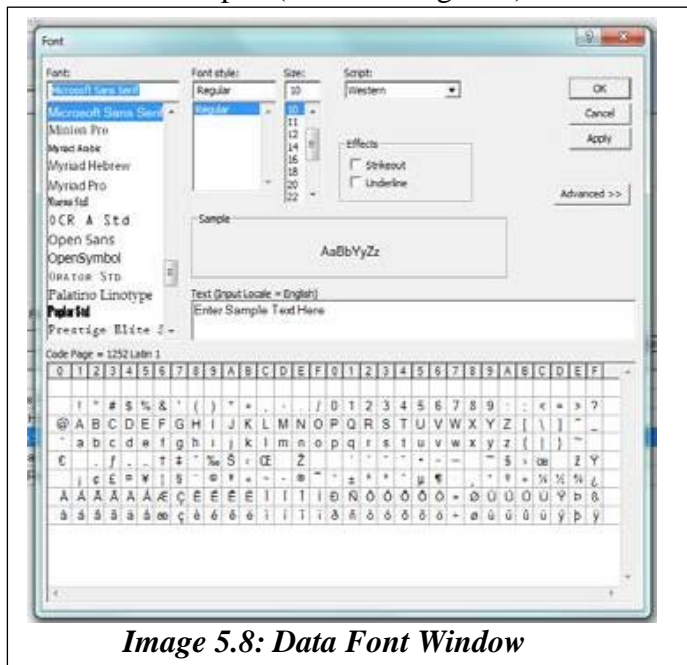

Image 5.8: Data Font Window

3.   Select the desired font type, size, weight, etc.
      A sample of the font will be displayed in the sample box.
4.   Click "OK."

Section Six

Templates

6.0   Open Existing Templates

If you want to print from a pre-existing template or make modifications to a pre-existing template, you will first need to open the template.

The template contains all of the layout information for your piece. Templates are useful in that they allow you to arrange the data from similar files.

You can create a new template, open an existing template, and save a template. Template file names are displayed in the job window, but cannot be edited there.

To open a template:
1. Click the "Template" tab in the tab selection window.
2. Go to File>Open template.
   The file location should have been stored previously and will open from the previously saved location unless the file has been moved or renamed. Templates have a .ptl extension.
3. Locate your template and click on it.
4. Click "Open."
   The template will open in the display area. The template name, data file, and template file will be listed here.

6.2   Creating New Templates

A new template provides a blank sheet for you to lay out direct mail items.

Make sure that the clocks, time stamps, shift definitions, and user inserts are set before you enter items in templates. See print setup.

To create a new template:
1. Click the "Template" tab in the tab selection bar.
2. Go to File>New Template.
   If an existing template is open, you will be prompted to save that template or not before the new template is opened.
   The new template's title will be "Untitled" until you save the template.
3. Import data (refer to section 5) and print settings (refer to section 7).
4. Save the template by going to File>Save template.
5. Enter in the template name and click "Save."

6.3   Saving Templates

You can save a template at any point by going to File>Save template and clicking "Save."
You can also use the "Save As" option to save the template under a new name.

6.4   Understanding the Template Display Area

When setting up a print job, it is important to see how the print will look before you start printing. The template display area displays the print area of the number of print heads activated. Please note that each print head is 4.25" wide.

The white area on the screen (in screenshots of Image 6.4a and Image 6.4b) is the printable area of the print head. This process will provide the framework for laying out data.
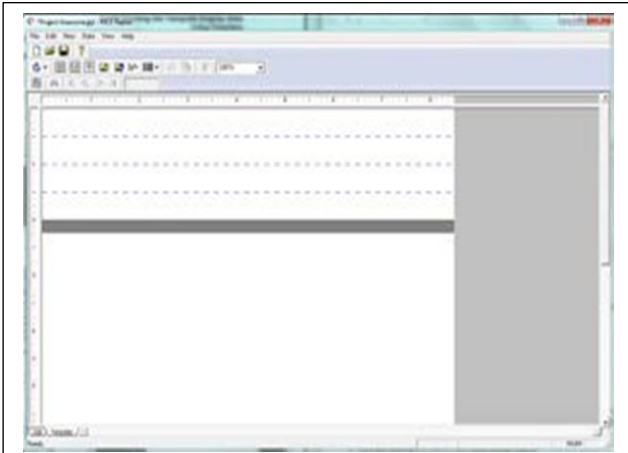

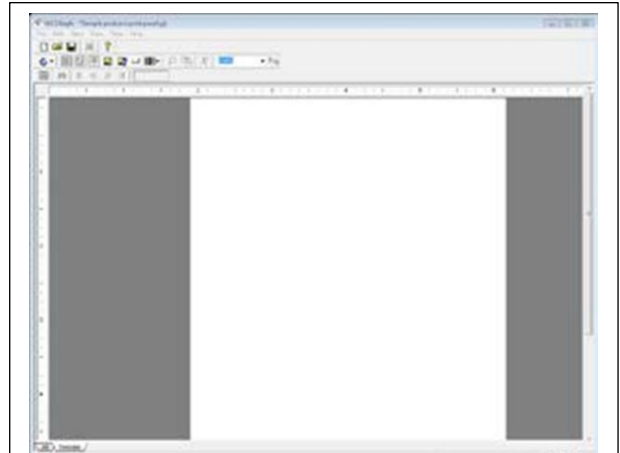*Image 6.4a: Template Window in Portrait*
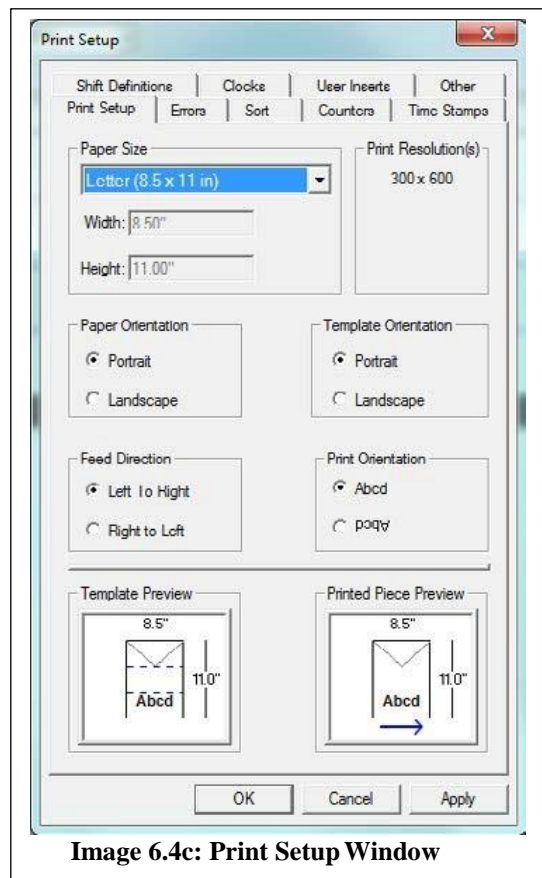

Image 6.4b: Template Window in Landscape

Image 6.4c: Print Setup Window

The settings for this are located in Print Setup under File>Print Setup (refer to section 7)

6.5   Placing New Items

 You can place a variety of items in your template. For the best results, data should be imported before placing blocks.

6.5.1   Record Blocks

Record blocks are groups of text generated from your data. Each field of data is treated as a separate line in the block. Field numbers are shown when the record block is placed.

If you wish to see the actual data, click the "Show Record Data" icon in the menu bar.

To place a record block:
1.   Select the "Template tab" on the Tab selection bar.
2.   Go to New>New record Block.
        The default tab is the "Text" tab (refer to image 6.5.1a).
Here you can add or delete fields, add counters, timestamps, shifts, and user inserts by scrolling to the bottom of the field lists, apply text effects such as bold, italic, strikethrough, size, font, and word wrap, add or remove line spacing, and adjust font width.
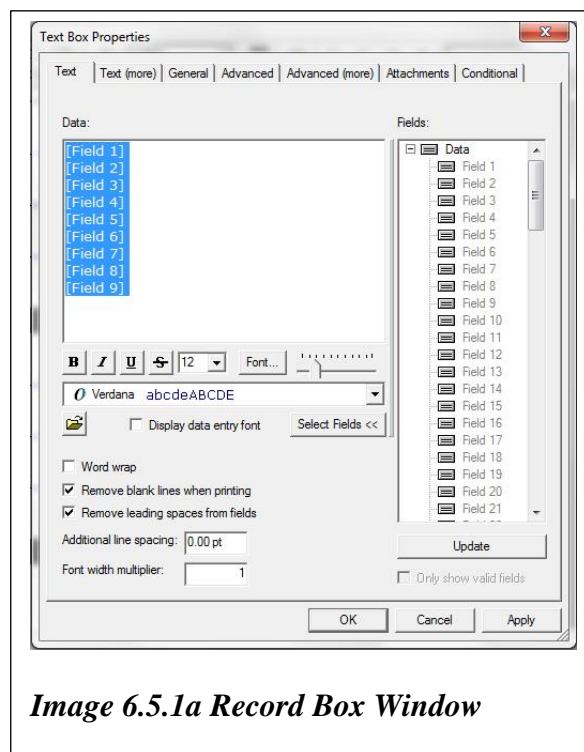

Image 6.5.1a Record Box Window

3.   Click the "Text (more)" tab to enter more specific criteria.
     Refer to Image 6.5.1b.
     In this tab, you can tell the software when to add new lines, adjust upper case, remove characters
     between fields, and extend height fonts.
4.   Click the "General" tab to enter more specific criteria.
     Refer to Image 6.5.1c.
     Under this tab, you can adjust the placement for printing.
5.   Enter position and size values, decide if you want to allow resizing, keep data natural size, or
     force square. Most resizing keeps the image constrained to its original proportions.
     Forced square will force the image to fit in a perfect square.
6.   Click the "Advance" tab to enter more specific criteria.
     This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an
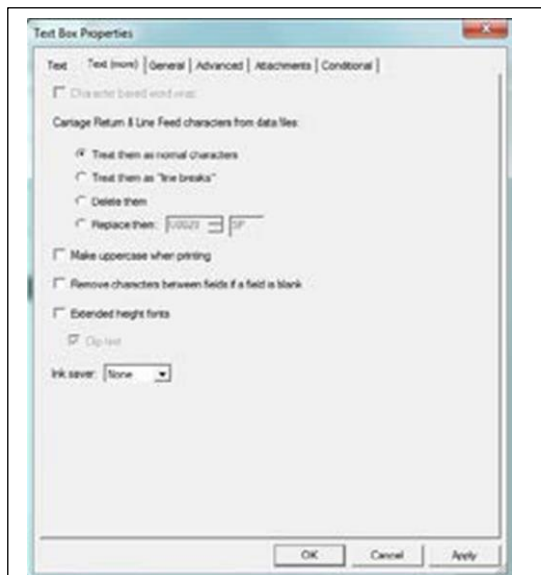   option for making text transparent.

Image 6.5.1b: Record Box Text (more) Tab
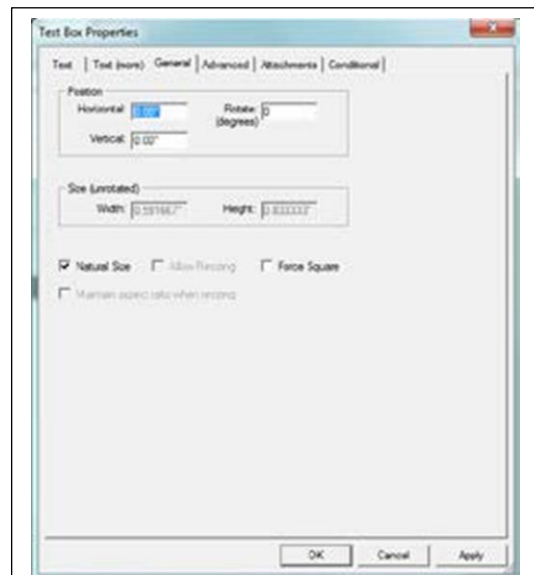

Image 6.5.1c: Record Box General Tab

7.   Click *"OK"* to save
     Move the item to where you want to place it on the template.
     Refer to Editing Options (section 6.6) for more information on editing placement.

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6.5.2   Message Lines
Message lines are typically used for fixed text and can be created in a similar manner as "record blocks."
To use message lines:
1.   Go to New > [Message Line].
2.   Highlight "Fixed Text" in the Data box and write out your personalized message.
      This window is almost identical to that of the "record blocks" window.
      Here you can also choose to add a word wrap and remove unnecessary spacing.
   Refer to *Image 6.5.2* on next page.

6.5.3   Conditional Message Lines
Conditional message lines are just like message lines, but you can better choose when that specific message should be printed. Individual messages can be printed based on the conditions you set.
      Please note: The key to proper conditional message line operation is to have identical location placement for both the trigger and the location of the individual message.
To create conditional messages:
1.   Open the Message lines text box by going to New>Message Line.
2.   Enter the desired text for the message.
3.   Click the "General" tab.
4.   Enter the position of the text.
      This will ensure you have consistent placement of message text.
5.   Select the "Conditional Box."
      This section operates much like a programming language. It will ask if a certain field is or is not equal to a specified value. It will create your trigger. Refer to *Image 6.5.3* on next page.
6.   Enter the source for the condition in the drop down menu.
7.   Select the condition either "equal" or "not equal."

Image 6.5.2: Message Block

Image 6.5.3: Record Box Conditional
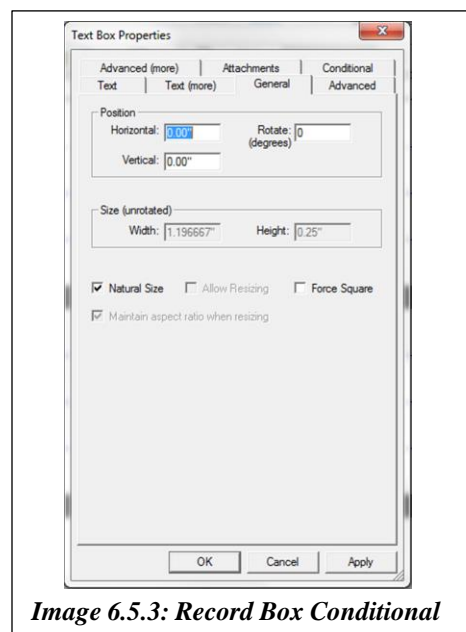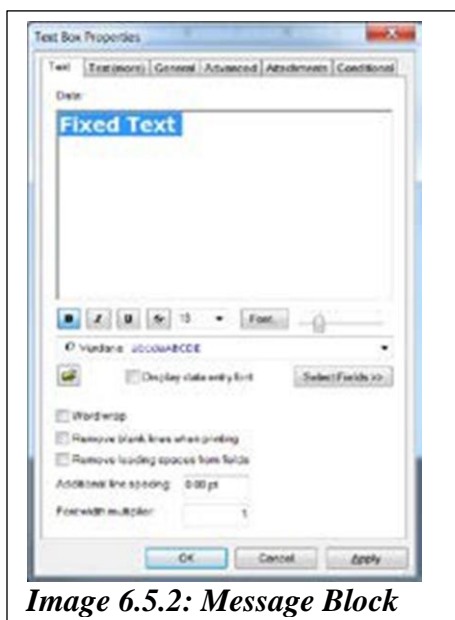
8.   Enter the trigger (the value the field must or must not be equal to).
      For example, if you wish to send a message of "Friend" to a person named "Joe" you would enter the "first name" list as the source and "Joe" as the value with the condition of "equal".
      Then on each instance of "Joe" the message will print.
9.   Click "OK" to save and close the window.

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6.5.4 Indicia

The Indicia feature allows you to print your postage. The input settings for Indicia is similar to the input settings of "Record blocks."

To use indicia:

    1.   Go to New > Indicia.
    2.   Select the "Advanced" tab.
    3.   Check the "Transparent" checkbox.
    4.   Select the "Data" tab.
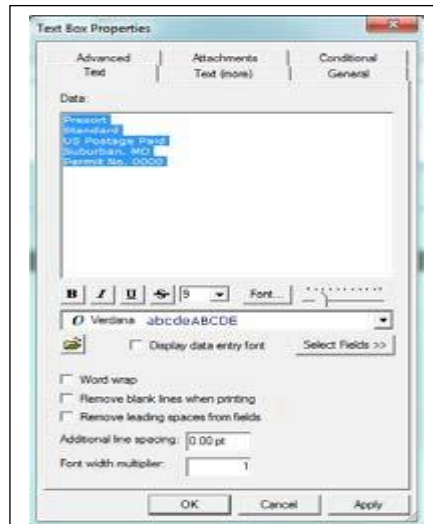   5.   Highlight the text in the "Data" field and replace it with your desired text.

Image 6.5.4: Indicia Window

You can add record fields to this text to personalize the message.

Bitmaps (BMP) are graphics files. Imported bitmaps can be either conditional or unconditional and can be placed or resized (refer to Editing Options in section 6.6).

Please note: The Raptor 6 software will import monochrome (single color) bitmaps. This is the preferred image format. If a color BMP is imported one of the configured dithering algorithms will be applied at print time to generate a monochrome image.

Importing Unconditional Bitmaps
1.   Under the Template tab, go to New>Bitmap.
2.   A dialog box will open.
3.   Navigate to where the BMP file is located.
4.   Click "Open" once you have selected the BMP file.
     The Program will import the image at 600 DPI

A "Bitmap Properties" window will appear. Changes can be made by entering information in the tabs of this window (refer to Image 6.5.5b below).

Image 6.5.5b: Bitmap Properties Window

5.   Click the "General" tab and enter the desired position and size information (refer to Image 6.5.5c below) The image can also be moved in the Template view.

Image 6.5.5c: Bitmap General Tab

Image 6.5.5d: Bitmap Advanced Tab

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6.   Click the "Advanced" tab and enter the desired border and alignment information.
      (Refer to image 6.5.5d above)
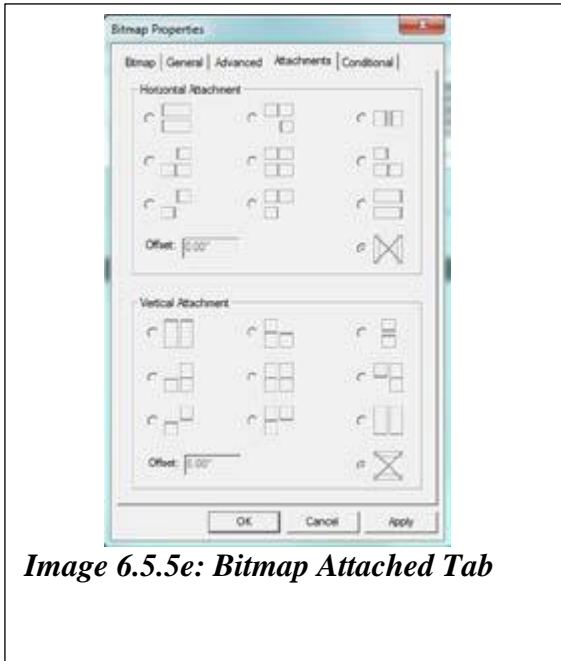   This step is also where you can designate the BMP as transparent *(refer to Image 6.5.5e below)*

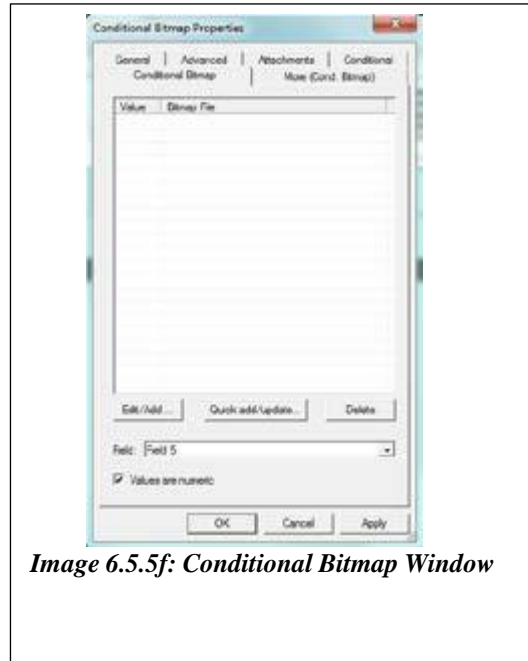**Image 6.5.5e: Bitmap Attached Tab**

Image 6.5.5f: Conditional Bitmap Window

7.   Click the "Attachments" tab if you wish to modify the attachment options
      (refer to Image 6.5.5f above).
8.   Click "OK". Importing Conditional Bitmaps
      Much like conditional message lines, you can upload bitmaps to print only under certain
      circumstances. Please note: The data file must have a field containing conditional bitmap values
      to use this feature.
      Please note: If you have a large amount conditions (e.g. 2500 or more), it is recommended that
      you have additional RAM (about 2 - 4GB extra).

To import a conditional bitmap:

1.   Under the "Template" tab, go to New>Conditional Bitmap.
   The Program will ask for the Bitmap resolution *(refer to Image 6.5.5a)*.
   The conditional Bitmap Properties dialog box will appear *(refer to Image 6.5.5f)*.
2.   Click "Edit/Add" or "Quick Add/Update".
   "Edit/Add" should be used when you have bitmaps with alphanumeric names or numeric names that are not in ascending numerical sequence.
   A new window will appear to allow you to enter each bitmap individually *(refer to Image 6.5.5g)*.
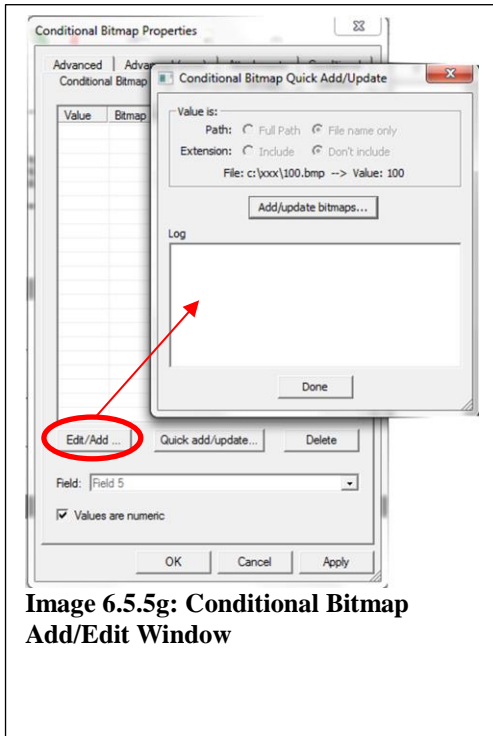

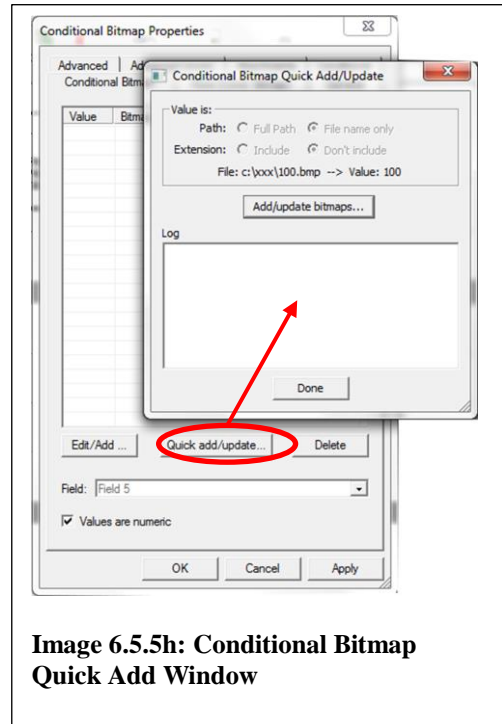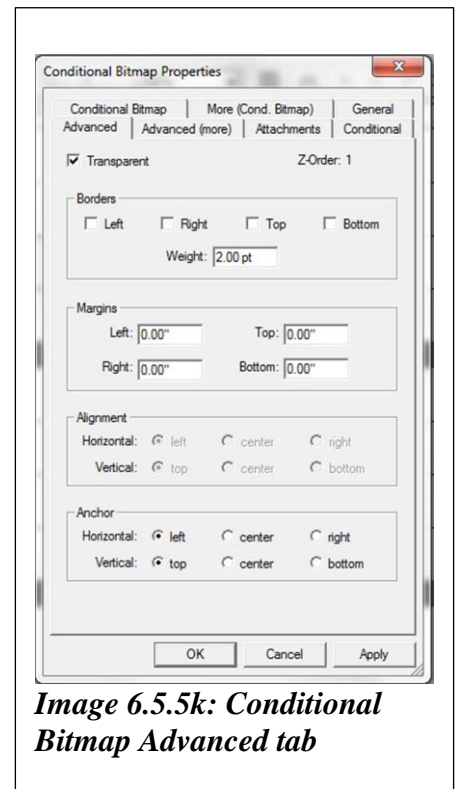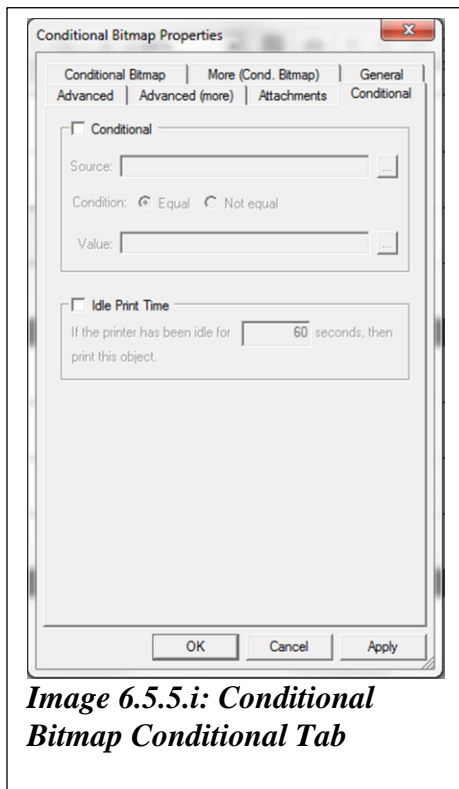**Image 6.5.5g: Conditional Bitmap Add/Edit Window**

Image 6.5.5h: Conditional Bitmap Quick Add Window

3.   Enter the bitmap numeric value or browse to select the filename.
   "Add/Update" is used when all bitmap files have a numerical value in ascending order (i.e. if you have a number for each state).
   A new window will appear *(refer to Image 6.5.5h on the last page)*.
4.   Click "Add/Update" and navigate to select all the numbered files.
5.   Click "Open."
   The values that appear will be shortcuts specified for the path to the files.
6.   Click "OK" or "Done" to close the window.
7.   Click "Conditional Bitmap" tab.
   Please refer to *Image 6.5.5i below*
   Check the "Conditional" box if values are numerical and select the field in the data file that contains the bitmap number.

8.   Click the "General" tab to enter more specific criteria.
   Under this tab you can adjust the placement for printing *(refer to Image 6.5.5j below)*.

9. Enter position and size values, decide if you want to allow resizing, keep data natural size, or force square. Most resizing keeps the image constrained to its original proportions. Forced square will force the image to fit in a perfect square.
10. Click the "Advance" tab to enter more specific criteria. This tab will allow you to adjust boarders, margins, alignment and anchor position. There is also an option for making text transparent.
11. Click "OK" to save.
12. Edit the size and position of the bitmap. Move the bitmap by dragging and dropping it. Resize the bitmap by moving your cursor over a corner of the object, clicking and dragging. Delete bitmap by right clicking bitmap and selecting "Delete" or select the item and hit the "Delete" button on your keyboard. Refer to Editing Options (section 6.6).

Image 6.5.5.i: Conditional Bitmap Conditional Tab

Image 6.5.5j: Conditional Bitmap General Tab

Image 6.5.5k: Conditional Bitmap Advanced tab

6.5.6 Barcodes

Postal or standard barcodes may be placed in your template. Barcodes can be conditional and unconditional. Please note: All barcodes are limited to 90 degree rotations.

Postal Barcodes/Intelligent Mail Barcodes
The EAGLE Raptor software has tools built-in for creating USPS barcodes.

To add a postal barcode:

1. Under the "template" tab go to New>Postal Barcode or New>Barcode>Intelligent Mail. The barcode window will appear *(refer to Image 6.5.6a below)*.
2. Load field data or counter by clicking the "..." box in the "Data" box.
3. Click the "General" tab to enter more specific criteria *(refer to Image 6.5.6a2 below)*.
   Under this tab you can adjust the placement for printing.
   Enter position and size values, decide if you want to allow resizing, keep data natural size, or force square.
   Most resizing keeps the image constrained to its original proportions.
   Forced square will force the image to fit into a perfect square.
4. Click the "Advance" tab to enter more specific criteria *(refer to Image 6.5.6a3 below)*.
   This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent.
5. Click the "Attachments" tab to enter more specific criteria *(refer to Image 6.5.6a4 below)*.
   This tab includes options for the layout of the barcode.
   Please note: This will only be available if you have data from a specific field.
6. If you want to make the barcode conditional, click the "Conditional" tab
   (refer to Image 6.5.6a5 below).
   Check the "Conditional" box and enter the source of the trigger, choose "Equal" or "Not Equal" and then enter a value for the trigger.
7. Click "OK" to save and close the window or click "Apply" to just save your settings, but keep the window open.
   Move the barcode around by simply dragging it to where you want to place it.
   Delete the barcode by selecting it and hitting the "Delete" key or right-click and select "Delete."

Other Barcodes

There are a variety of other barcodes you can add to your template.
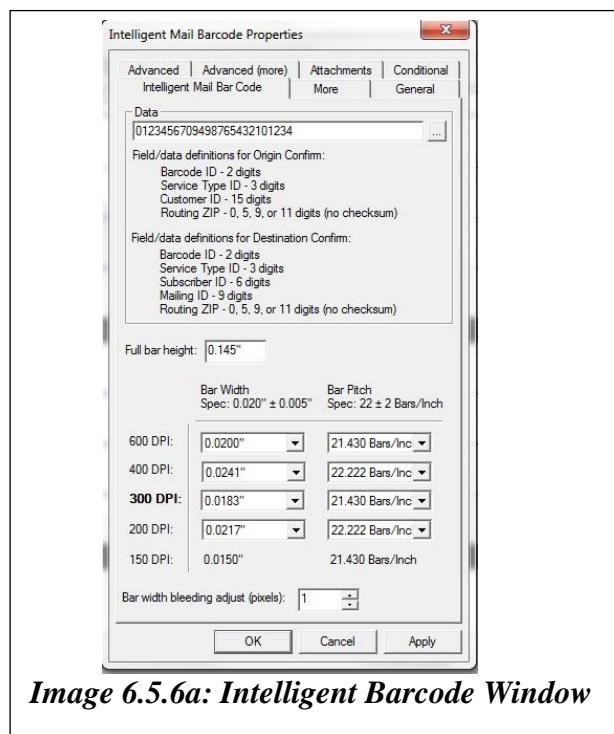

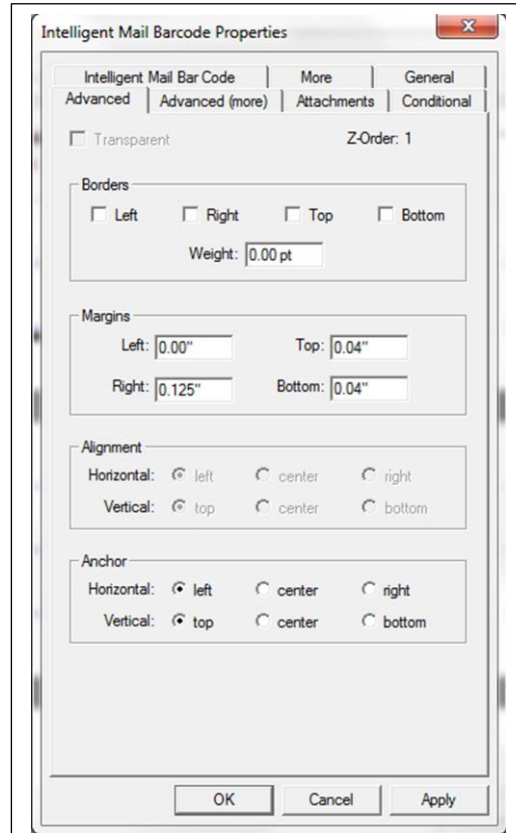*Image 6.5.6a: Intelligent Barcode Window*
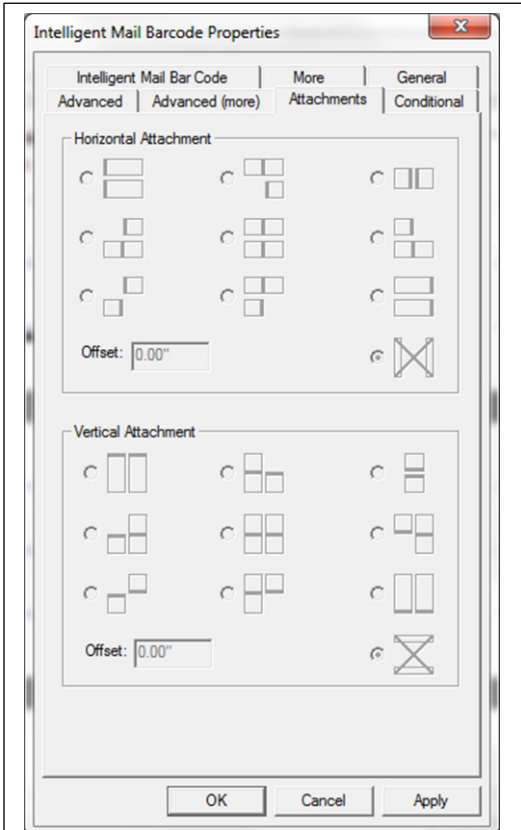
Image 6.5.6a2 General Tab

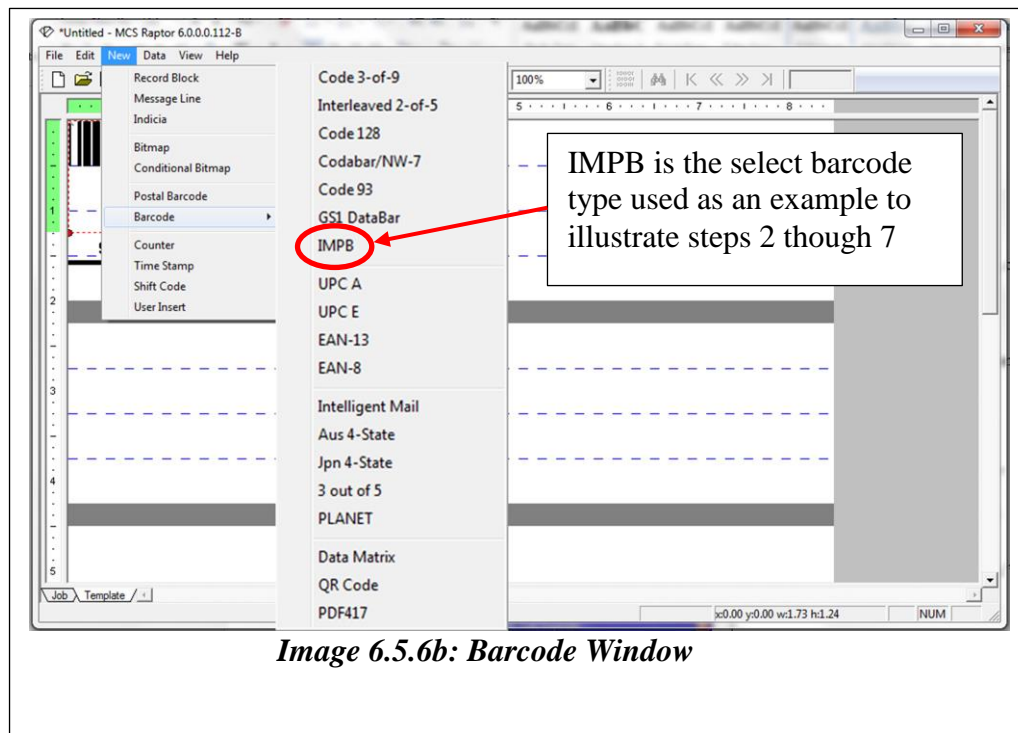*Image 6.5.6a3 Advanced Tab*

*Image 6.5.6a4 Attachments Tab*

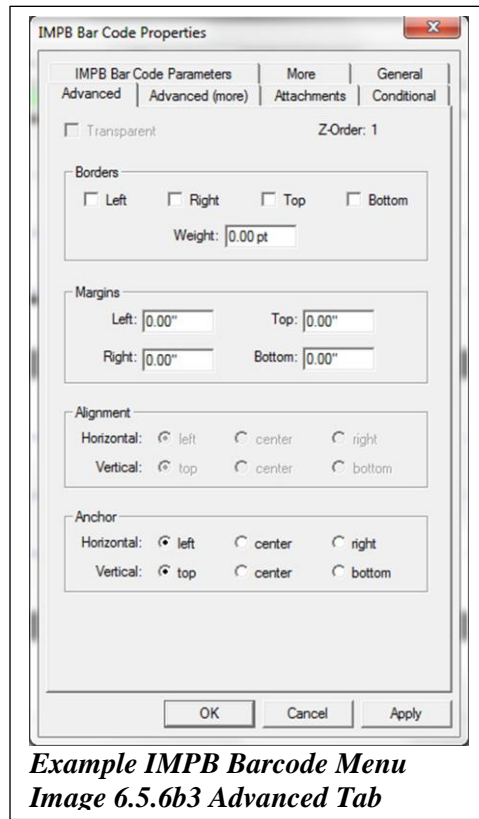

Image 6.5.6a5 Conditional Tab

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To add a standard barcode:

1.   Under the "template" tab go to New>Barcode> [showing all barcode types].
   Select the barcode you need from the barcode window *(refer to Image 6.5.6b below)*.
2.   Load field data or counter by clicking the "..." box in the "Data" box.
3.   Click the "General" tab to enter more specific criteria *(refer to Image 6.5.6b2 below)*..
   Under this tab you can adjust the placement for printing.
   Enter position and size values. Decide if you want to allow resizing, keep data the natural size, or force square.
   Most resizing keeps the image constrained to its original proportions.
   Forced square will force the image to fit in a perfect square.
4.   Click the "Advance" tab to enter more specific criteria *(refer to Image 6.5.6b3 below)*..
   This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent.
5.   Click the "Attachments" tab to enter more specific criteria *(refer to Image 6.5.6b4 below)*..
   This tab includes options for the layout of the barcode.
   This option will only be available if you have data from a specific field.
6.   If you want to make the barcode conditional, click the "Conditional" tab
   (refer to Image 6.5.6b5 below)..
   Check the "Conditional" box and enter the source of the trigger, choose "equal" or "Not equal" and then enter a value for the trigger.
7.   Click "OK" to save and close the window or click "Apply" to just save your settings, but keep the window open.
   Move the barcode around by simply dragging it to where you want to place it.
   Delete the barcode by selecting it and hitting the "Delete" key or right-click and select "Delete."
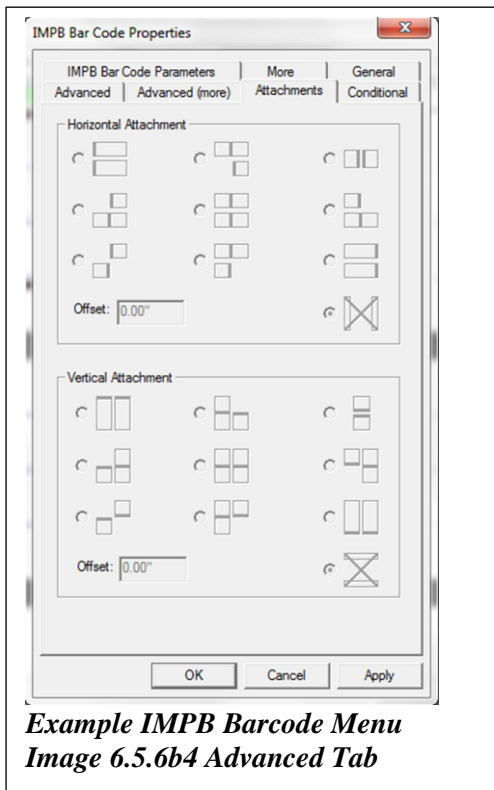

Image 6.5.6b: Barcode Window
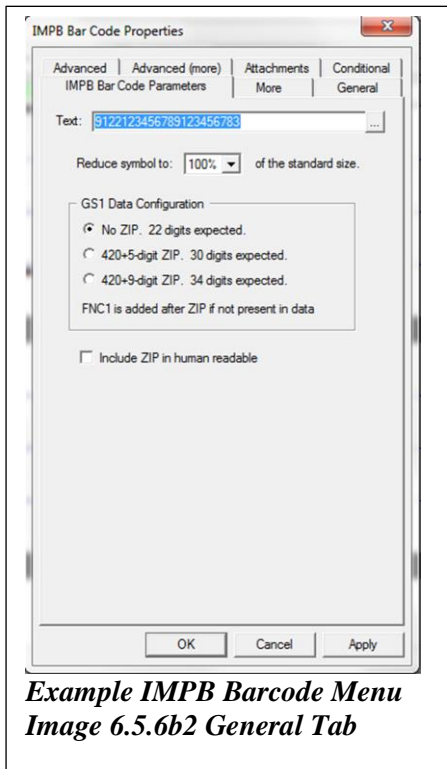
*Example IMPB Barcode Menu
Image 6.5.6b2 General Tab*

*Example IMPB Barcode Menu
Image 6.5.6b3 Advanced Tab*

*Example IMPB Barcode Menu
Image 6.5.6b4 Advanced Tab*

*Example IMPB Barcode Menu
Image 6.5.6b5 Conditional Tab*

You can add counters to your template. Please note that a clock and counter need to be created in print setup first (sections 7.4 and 7.5).

To add a counter:
1. Under the "Template" tab go to New>Counter.
    A window will open *(refer to Image 6.5.7 below)*.
2. Choose the desired counter field by double-clicking the desired counter field in the "Fields" list.
3. Click the "General" tab to enter more specific criteria *(refer to Image 6.5.7a below)*.
    Under this tab, you can adjust the placement for printing.
    Enter position and size values, decide if you want to allow resizing, keep data natural size, or force square.
    Most resizing keeps the image constrained to its original proportions.
    Forced square will force the image to fit into a perfect square.
4. Click the "Advance" tab to enter more specific criteria *(refer to Image 6.5.7b below)*.
    This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent.
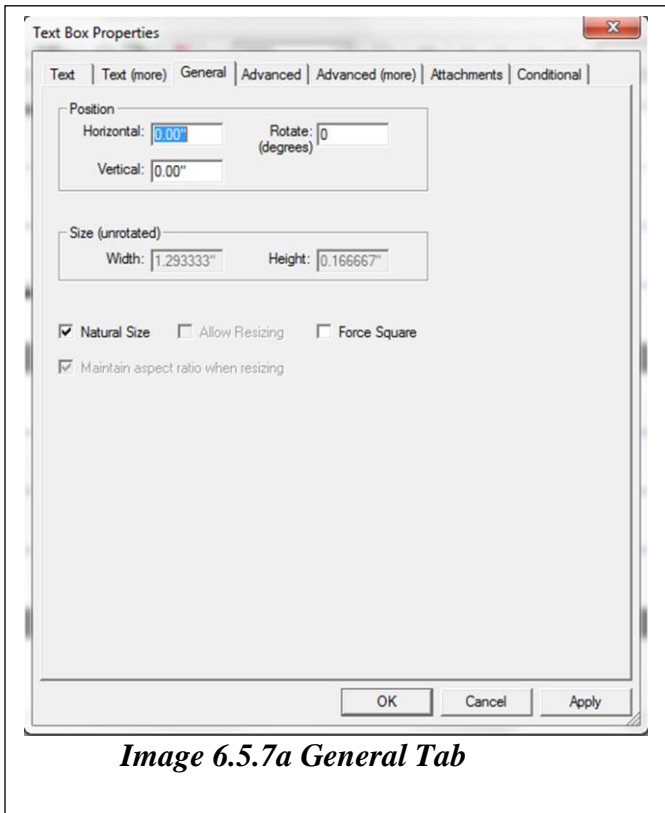5. Click "OK" to save.

Image 6.5.7: Counter Window
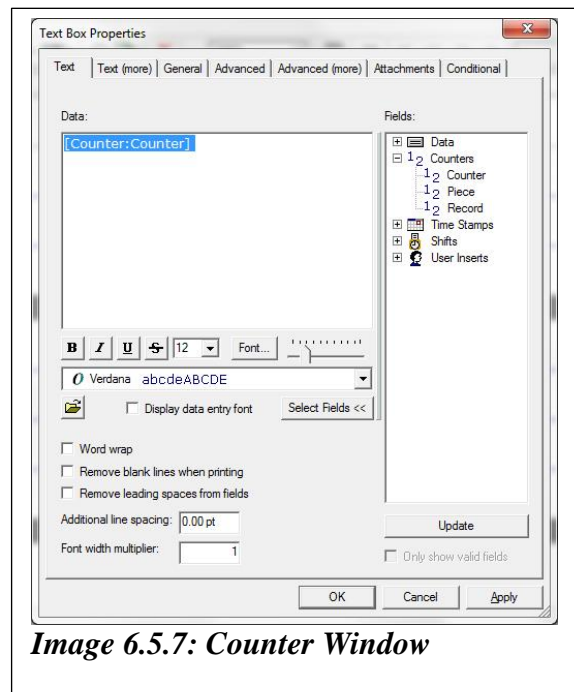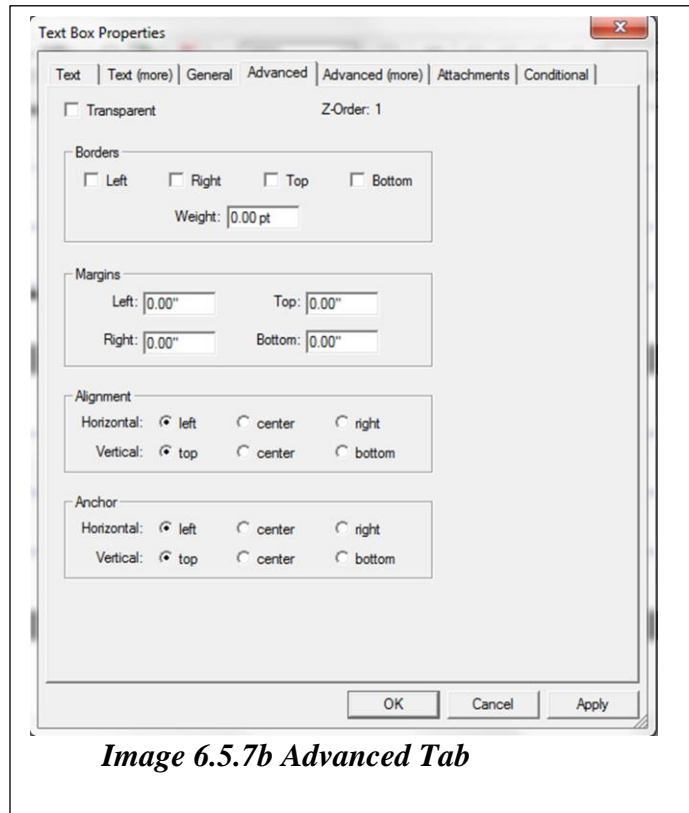
Image 6.5.7a General Tab

Image 6.5.7b Advanced Tab

6.5.8   Timestamps

Timestamps can also be placed in your template. Please note that a clock and timestamp need to be created in print setup first *(sections 7.4 and 7.6)*.

To add a timestamp:

1. Under the "Template" tab, go to **New>Time Stamp**.
   A window will open *(refer to Image 6.5.8 below)*.
2. Choose the desired counter field by double-clicking the desired counter field in the *"Fields"* list.
3. Click the *"General"* tab to enter more specific criteria *(refer to Image 6.5.8a below)*.
   Under this tab, you can adjust the placement for printing.
   Enter position and size values, decide if you want to allow resizing, keep data natural size, or force square
   Most resizing keeps the image constrained to its original proportions.
   Forced square will force the image to fit in a perfect square.
4. Click the *"Advance"* tab to enter more specific criteria *(refer to Image 6.5.8b below)*.
   This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent.
5. *Click* "OK" *to save.*
   Move the counter around by simply dragging it to where you want to place it.
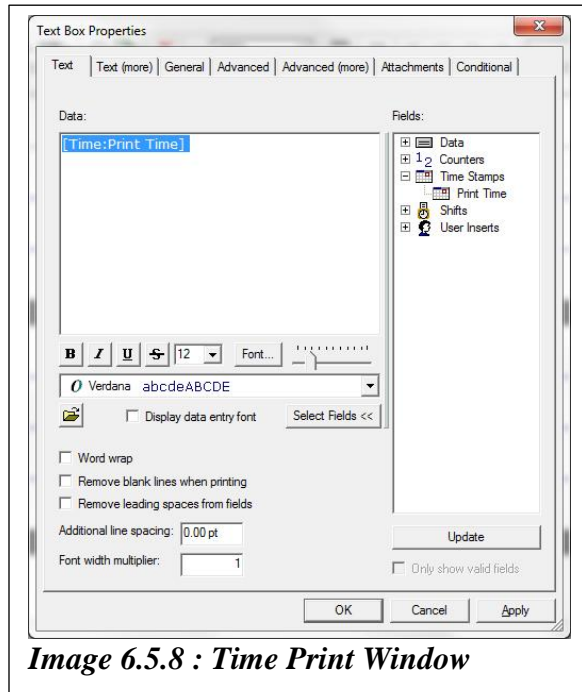   Delete the barcode by selecting it and hitting the *"Delete"* key or right-click and select *"Delete."*
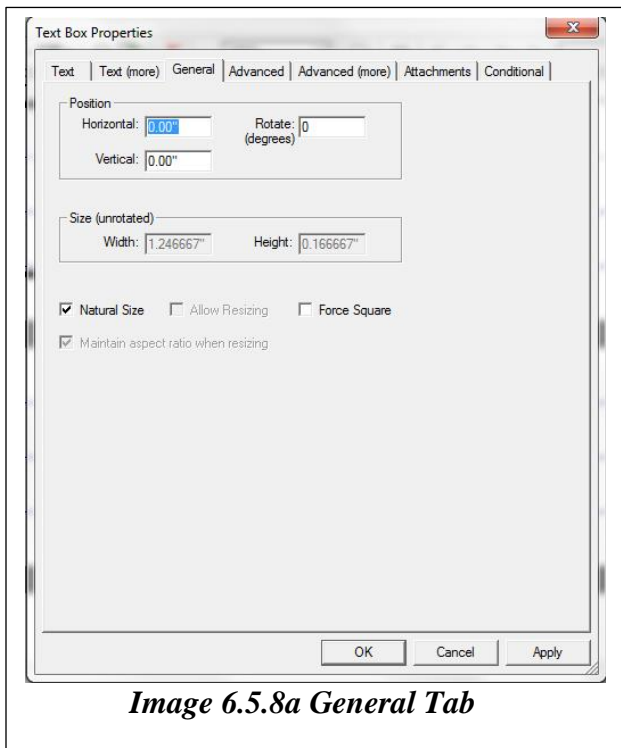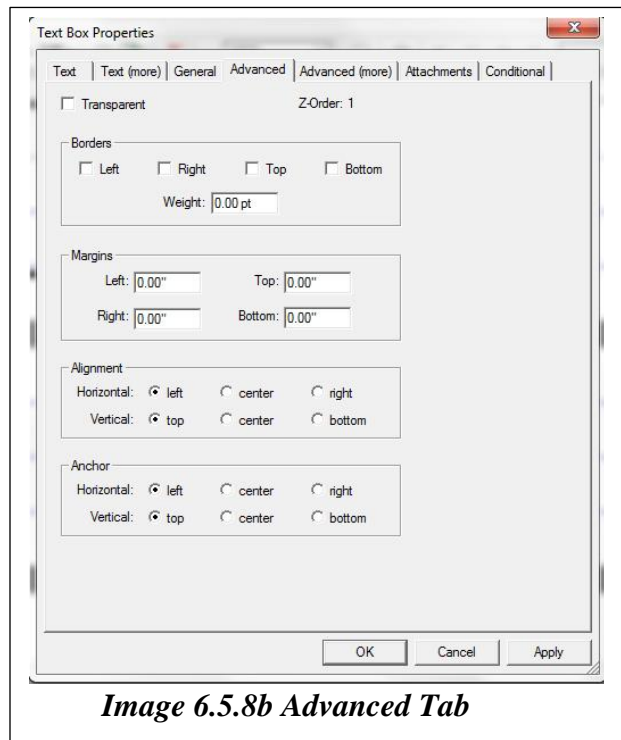
Image 6.5.8 : Time Print Window

Image 6.5.8a General Tab

Image 6.5.8b Advanced Tab

Please note that a clock and shift code need to be created in print setup first (refer to sections 7.4 and 7.7).

To add a shift code:
1. Under the "Template" tab go to **New>Shift Code**.
   A window will open *(refer to Image 6.5.9 below)*.
2. Choose the desired counter field by double-clicking the desired counter field in the *"Fields"* list.
3. Click the *"General"* tab to enter more specific criteria *(refer to Image 6.5.9a below)*.
   Under this tab, you can adjust the placement for printing.
   Enter position and size values, decide if you want to allow resizing, keep data the natural size, or force square
   Most resizing keeps the image constrained to its original proportions.
   Forced square will force the image to fit into a perfect square.
4. Click the *"Advance"* tab to enter more specific criteria *(refer to Image 6.5.9b below)*.
   This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent. Click *"OK"* to save.
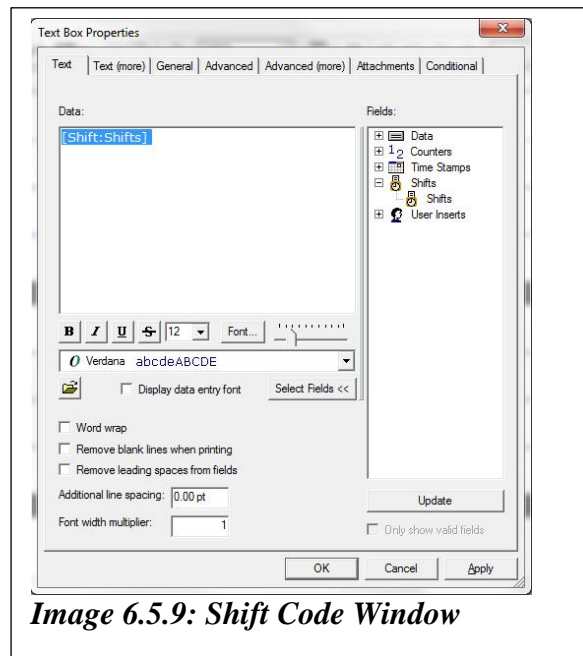
Image 6.5.9: Shift Code Window
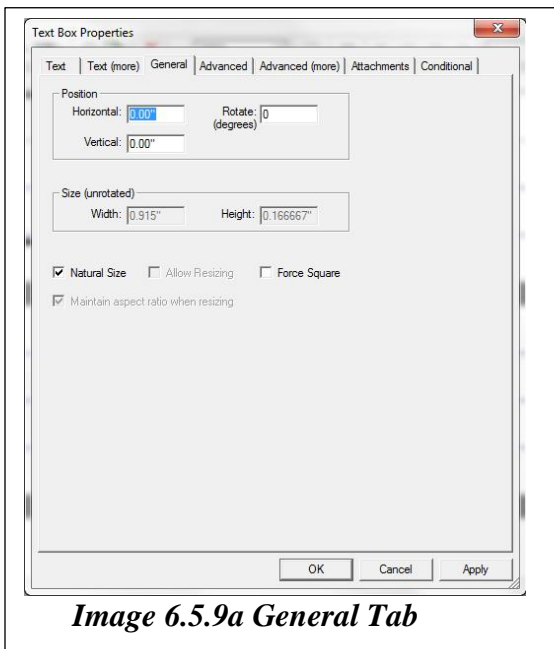
Image 6.5.9a General Tab
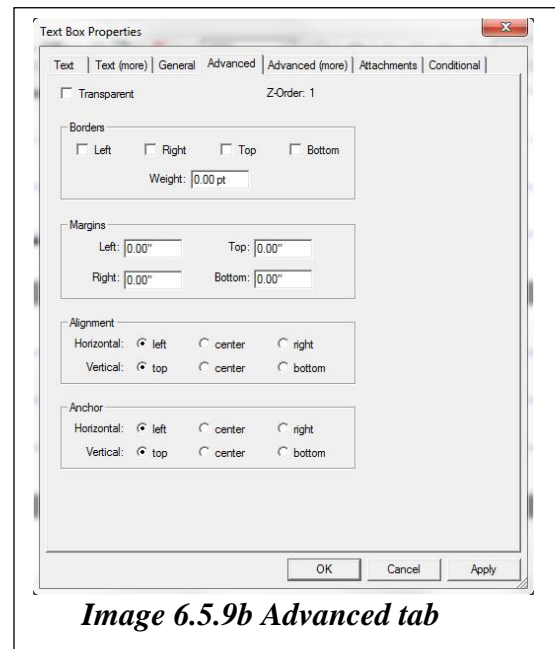
Image 6.5.9b Advanced tab

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6.5.10 User Insert

To add a user insert
1. Under the *"Template"* tab go to **New>User Insert**.
    A window will open **(refer to Image 6.5.10 below)**.
2. Choose the desired counter field by double-clicking the desired counter field in the *"Fields"* list.
3. Click the "General" tab to enter more specific criteria **(refer to Image 6.5.10a below)**.
    Under this tab you can adjust the placement for printing.
    Enter position and size values, decide if you want to allow resizing, keep data the natural size, or force square
    Most resizing keeps the image constrained to its original proportions.
    Forced square will force the image to fit into a perfect square.
4. Click the *"Advance"* tab to enter more specific criteria **(refer to Image 6.5.10b below)**.
    This tab allows you to adjust borders, margins, alignment, and anchor positions. There is also an option for making text transparent.
5. Click *"OK"* to save.

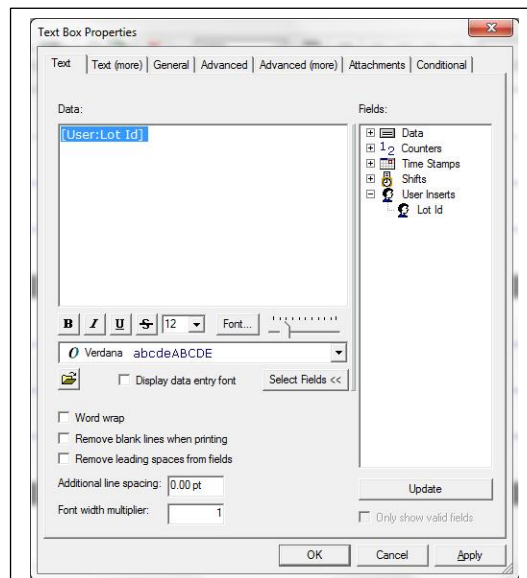Move the counter around by simply dragging it to where you want to place it.
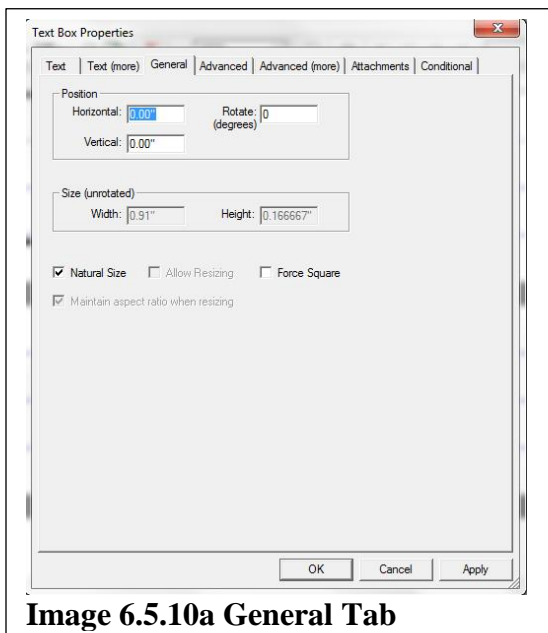

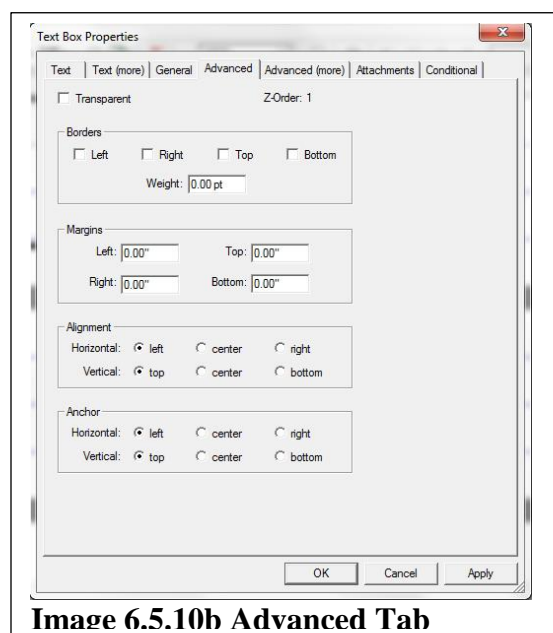*Image 6.5.10: User Input Window*

Image 6.5.10a General Tab

Image 6.5.10b Advanced Tab

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6.6   Editing Options

Editing items in a template is simple and similar to most layout programs. This section will detail in what ways you can edit items in the Raptor software.

6.6.1   Selecting Objects

You can select a single object by simply clicking on the object. If you want to select multiple objects, you can hold down Ctrl while clicking the desired objects. If you want to select all objects, then hit Ctrl+A or going to **Edit>Select All**.

6.6.2   Moving or Rotating Objects

Once you have selected an object or objects, you can move or rotate them.

To move a single object, you can simply hover your mouse over the object and click on it. While you are still holding down the mouse button, drag the object to where you want to place it.

To move several objects, you select, you select multiple objects holding the Ctrl and thern left click while still holding the Ctrl and drag the objects. Please note that the objects will keep their orientation and distance from each other. They will move as a unit.

To rotate an object, hover the mouse over one of the three corners with a red dot. The mouse icon will change to a circle with arrows. Click and move the mouse clockwise to rotate the object clockwise. Click and move the mouse counterclockwise to rotate the object counterclockwise.

6.6.3   Undoing and Redoing Changes

At any point, if you want to go undo what you have just done, hit Ctrl+Z or go to **Edit>Undo.** To redo what you have done, hit Ctrl+Y or go to **Edit>Redo.**

6.6.4   Duplicating Objects

You can duplicate objects to make an exact copy. Simply select the object or objects you want a duplicate of and go to **Edit>Duplicate**. Alternatively, you can right-click the object and select *"Duplicate."*

6.6.5   Deleting Objects

Deleting an object is simple. Select the object and hit *"Delete"* on your keyboard. You can also right-click and select *"Delete"* or go to **Edit>Delete**.

If you deleted an object you did not mean to, undo the delete with **Edit>Undo**.

6.6.6   Object Properties

You can also edit an object's properties easily in the Raptor software. This feature will allow you to edit the object's displayed information, field information, text sizing and weight, word wrap, attachments, conditionality, etc.

You can edit an object's properties by double-clicking the object, right-clicking the selected object and selecting *"Properties..."* or selecting the object and go to **Edit>Properties**.

6.6.7   Aligning Objects

You can have the Raptor software align objects for you to make sure they are on the same line or edge.

There are many types of alignment the program can do for you. You can choose to align items on the left, right, top, bottom, horizontal center, vertical center, and side by side.

To align objects:
1.   Select the objects you wish to align.
2.   Use Ctrl+Left-Click to select multiple objects.
3.   Go to Edit>Align>[desired alignment type].

Remember, you can undo unwanted changes with Ctrl+Z or go to **Edit>Undo**.

6.6.8   Move to Print Area

You can move selected objects to different print areas. Print areas are separated by the gray areas. Each print area represents a board or group of boards and are numbered from the top of the template to the bottom.

To move objects to a different print area:
1.   Select the desired object or objects.
2.   Go to **Edit>Move** to Print Area or right-click and select *"Move to Print Area."*
        A window will pop up (refer to Image 6.6.8 below).
3.   Select the print area from the drop down menu.
4.   Click *"OK."*

Image 6.6.8: Move to Print Area Window
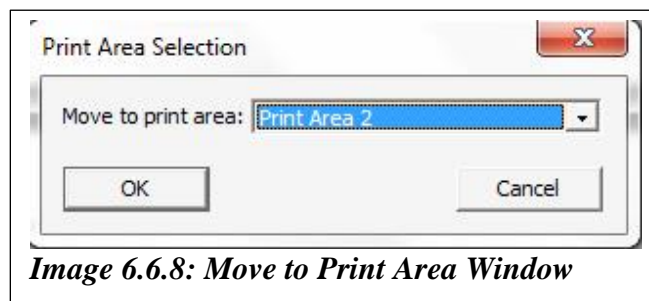
6.6.9 Layering Objects

Objects can be laid on top of each other. Please note that this will only work for transparent objects. Please make sure the transparent box is checked under the object's *"Advanced"* tab.

You can create a stack by simply moving objects on top of each other. This action will create a Z-order or a layer of order for objects. Please refer to ***Image 6.6.9 below*** for an example of selecting multiple objects.
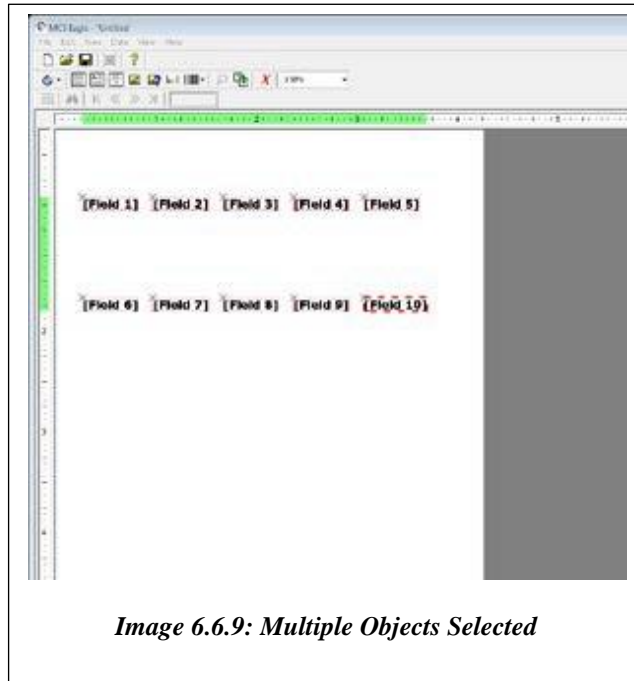

Image 6.6.9: Multiple Objects Selected

You can change the layer of objects by moving objects to the front or to the back. You can also move objects up or down in the stack with *"Move up"* and *"Move down"* commands.

To move an object: 6
   5.   Select the object.
   6.   Make sure you have selected the correct one.
   7.   Go to **Edit>**[Select move option: Bring to Front, Push to Back, Move up, or Move Down].
You can also find these features when you right-click the object.

6.6.10 Set Background

The Raptor Software allows you to put an image in the background. When you set a background, the original printed piece is placed at the back of the stack of objects and will not be editable or moveable.
   Please note: Background files can only be bitmap, JPG, or GIF images.

To load a background image:
   1.   Go to **Edit>Set Background**.
   2.   Navigate to the image you want.
           BMP, JPG, or GIF only!
   3.   Click *"Open."*
           The file will be placed in the background, but it will not be visible yet.
   4.   Go to **View>Show Background Image** to display the image while you are editing the template

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6.6.11 Scanning Data

While laying out your template, it may be necessary to space items according to your longest or largest entry. The Raptor Software has a tool for this process.

To scan data:
1.   Click the desired object for spacing.
2.   Go to **Edit>Scan Data**.
       The longest record will be displayed in the record block.
       If you do not see the longest record, make sure the "show record data" button is selected on the toolbar.

6.7 Viewing Options

A variety of options are available under the "View" menu. This manual has already mentioned you can show record data and show background images. Under the view menu, you can also opt to see guidelines, show colors, show zoom level, show anchor points, show Z-order (layered order of objects), show attachments and dock markers, and show pen colors (spot color editing).

6.8 N Up Option

Objects can be selected for a N Up repeat feature which allows labels to be created quickly. Please note that this feature does not increment counters.

To use the N Up feature:
1.   Select the object you want to make a label on.
2.   Right-click and select *"Make N Up Label"* or go to **Edit>Make N Up Label**.
       Refer to (***Image 6.8 for N up Label Generator menu***).
3.   Enter the desired number of labels left to right.
4.   Enter the desired number of labels top to bottom.
5.   Enter the distance from the anchor left to right.
6.   Enter the distance from the anchor right to left.
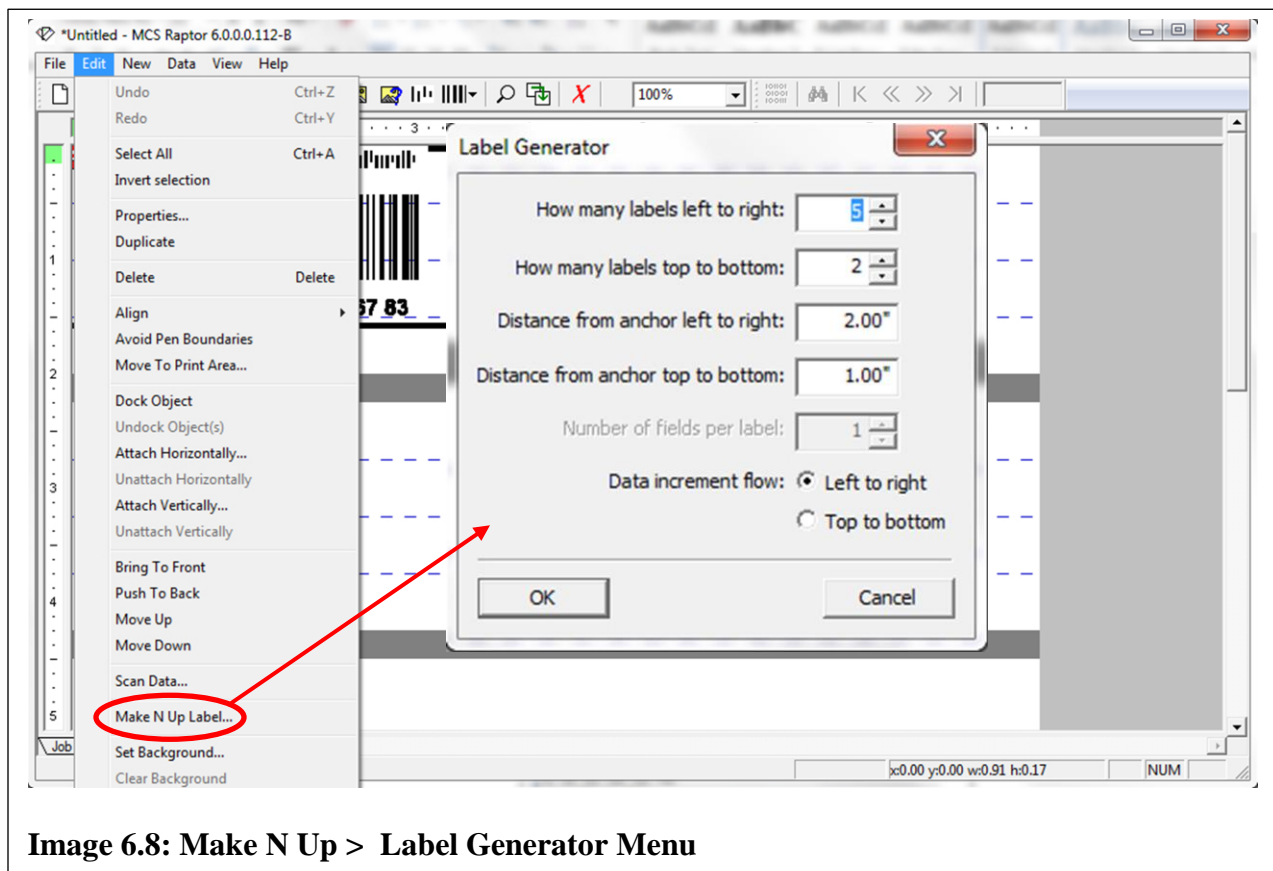7.   Click *"OK."*

Image 6.8: Make N Up > Label Generator Menu

6.9   Print Proof
You can choose to print to a regular office printer to review the template layout. This type of printing will not reflect any job settings, just the layout.

To print a print proof:
1.   Go to **Edit>Print Proof**.
        A window will pop up that will allow you to select specific records or scale the proof.
2.   Edit printing options.
3.   Click *"Print."*
4.   Select desired printer.
5.   Click *"OK."*

Section Seven

Print Setup

7.   Print Setup

Each print job has specific needs of the printer. The print setup window has many tabs of varying settings.

To open the print setup window:
1. Go to **File>Print Setup**.
    A window will pop up **(refer to Image 7.1 below)**.
    Please note: At any point, you can click *"Apply"* to save your settings. Click *"OK"* to save and close the window

7.1   Print Setup Tab

The "Print Setup" tab is where you can input the paper orientation and setup *(refer to Image 7.1 below)*.

While you are on this tab you can:
1. Select the paper size and paper orientation.
2. Height information is needed only if you use landscape orientation.
3. Select the print resolution.
    600 x 600 pixels is the highest quality available.
4. Enter the template orientation.
    This dimension should be the same as paper orientation.
5. Verify your changes in the *"Template"* and "Printed Piece Preview" boxes.

Please Note: If the feed direction is asterisked and in red print, feed direction has been overridden in either System Setup or in the System configuration and the Print Setup setting has no effect (Even though it can be change

Image 7.1 Print Setup Window

Image 7.2 Print Setup Error Tab
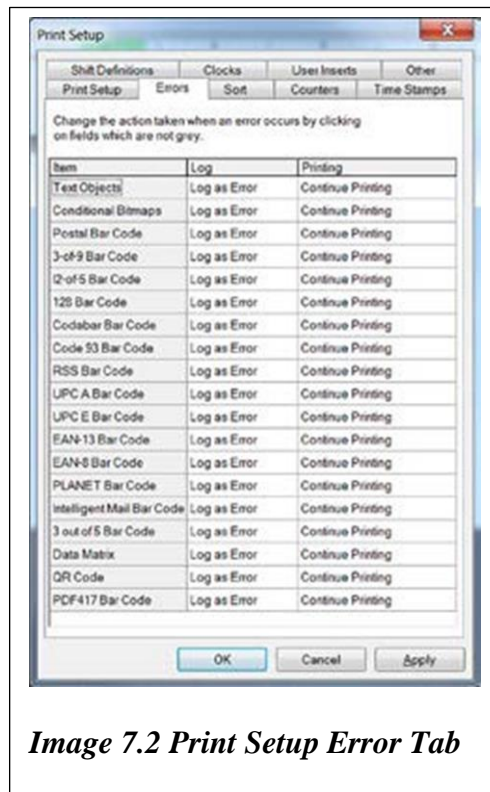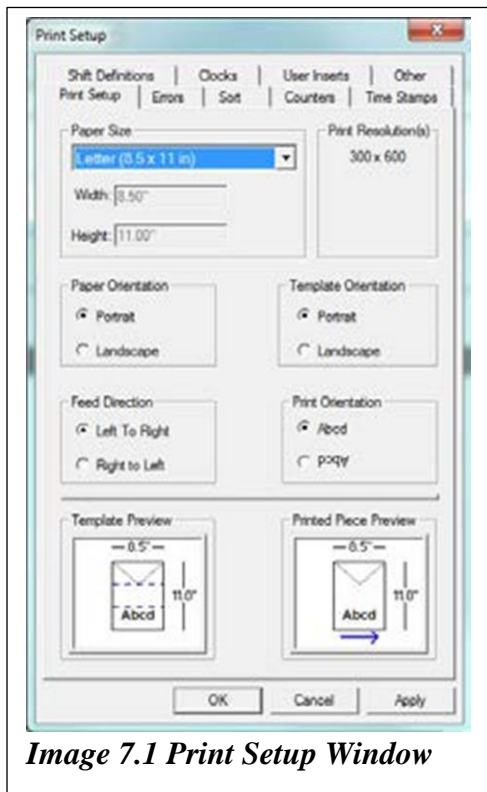
7.2   Errors Tab

This section allows you to decide before printing what you want the job to do if/when it encounters an error. You can choose how errors are reported and logged *(refer to Image 7.2 above)*.

While you are on this tab you can:
1.   Enter the desired setting for each type of error by clicking each error.
2.   You can choose to either stop printing or continue printing.

7.3   Sort Tab

This tab allows you to set settings for a delay, pulse width and piece offset.

7.4   Counters Tab

This tab allows you to create the counters that are applied in the text properties in templates. Once you have created the counter here, you can use them in templates (refer to section 6.5.7 on counters in templates).

While you are on this tab you can:
1.   Click "Add" to add a new counter.
      A window will pop up *(refer to Image 7.4a and Image 7.4b below).*
2.   Enter the counter name.
3.   Select the Counter type.
4.   Enter start value, increment value, minimum value, maximum value, repeat value (if desired), and start repeat value (if desired).
5.   Click *"Apply"* to save and continue, click *"OK"* to save and close

Image 7.4a Counters in Print Setup Window

Image 7.4b Counter Definition Window
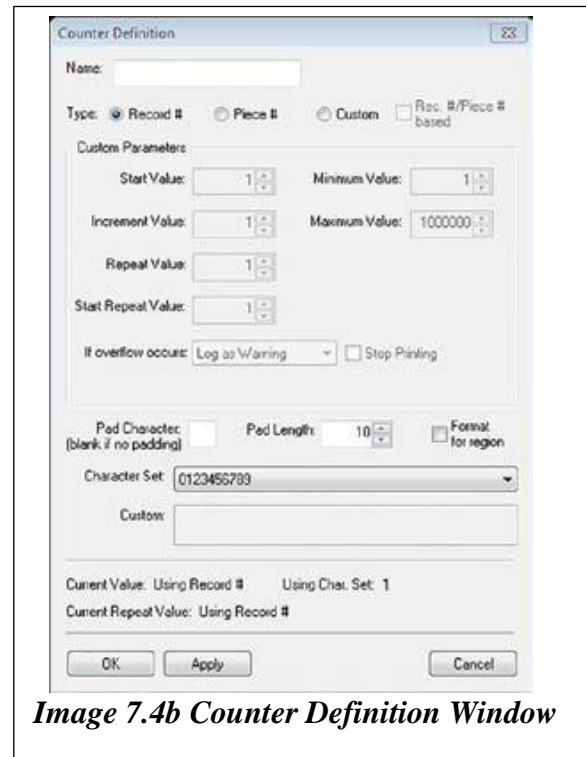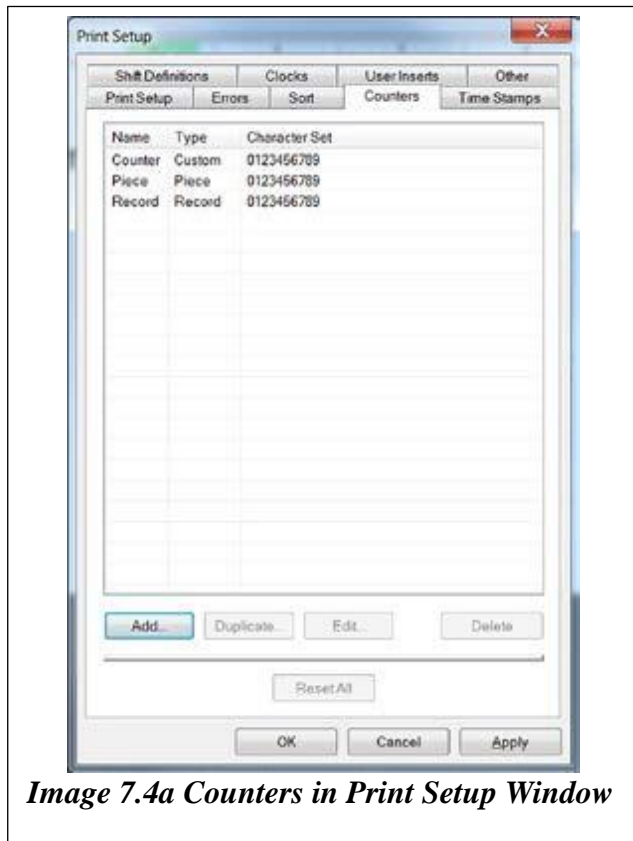
7.5   Clocks Tab

The clocks tab allows you to create a clock for the print job. It can be applied to clocks in the template and is necessary for timestamps and shift definitions.
    Please note: A clock must be created before you can create timestamps and shift definitions.

While you are on this tab you can:
1.   Click *"Add"* to add a new clock.
      A window will pop up *(refer to Image 7.5)*
2.   Enter the timestamp name and description.
3.   Select Type.
      You can print date/time or specify your own.
4.   Select Offset.
5.   Click "*OK*" to return to the "*Print Setup Window.*

Image 7.5: Clock

7.6   Time Stamps Tab

This tab allows you to create the timestamps that are applied in the text properties in templates. Once you have created the timestamp here, you can use them in templates (refer to section 6.5.8 on timestamps in templates)
        Please note: Clocks must be created in the "clocks" tab (Section 7.5) before you can create a timestamp.

While you are on this tab you can:
1.   Click *"Add"* to add a new timestamp.
            A window will pop up *(refer to Image 7.6a and Image 7.6b)*.
2.   Enter the timestamp name and description.
3.   Select the clock.
4.   Select the type of timestamp to enter and click *"Insert."*
            The definition field will be populated, but you may change the definition if you desire.
5.   Click *"Apply"* to save and continue or click *"OK"* to save and close.
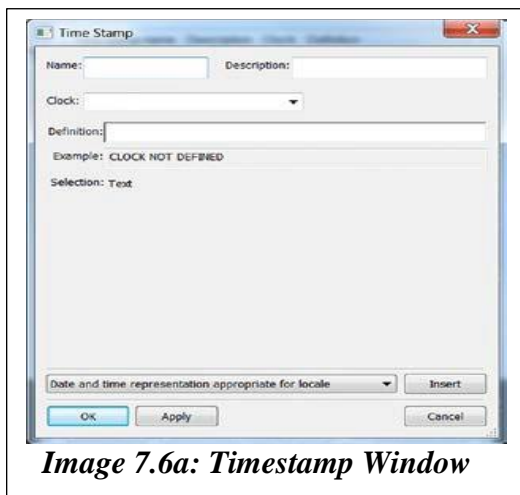

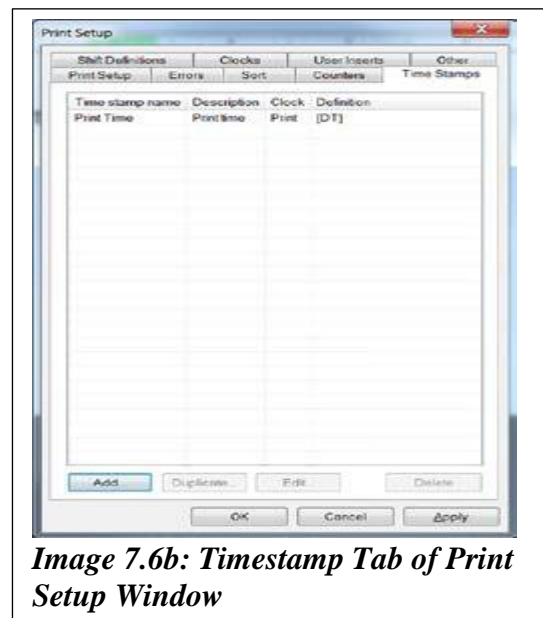*Image 7.6a: Timestamp Window*

Image 7.6b: Timestamp Tab of Print Setup Window

7.7   Shift Definitions Tab

This tab allows you to create the shift definitions that are applied in the text properties in templates. Once you have created the shift definition here, you can use them in templates (refer to section 6.5.9 on shift definition in templates).
Please note: Clocks must be created in the *"clocks"* tab *(section 7.5)* before you can create a shift definition
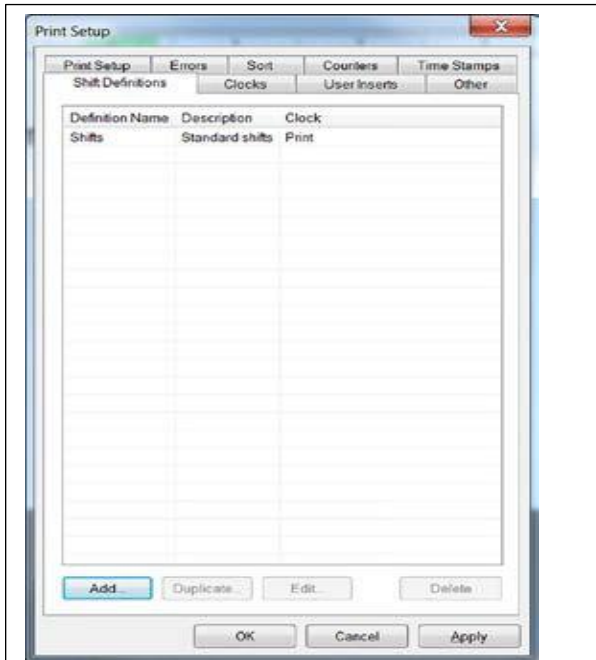

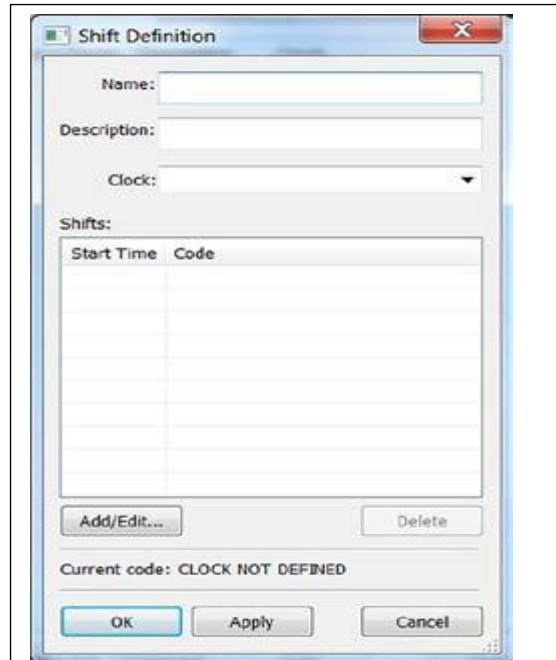***Image 7.7a: Time Shift Tab of Print Setup Window***

Image 7.7b Time Shift Window

While you are on this tab you can:

1. Click "Add" to add a new shift definition.
   A window will pop up **(refer to Image 7.7a and Image 7.7b above)**.
2. Enter the shift definition name and description.
3. Select the clock.
4. Click *"Add/Edit."*
   A window will pop up *(refer to Image 7.7c below)*.
5. Select start time and code.
6. Click *"OK"* and return to *"Shift Definition"* window.
7. Click *"Ok"* to return to the *"Print Setup"* window.
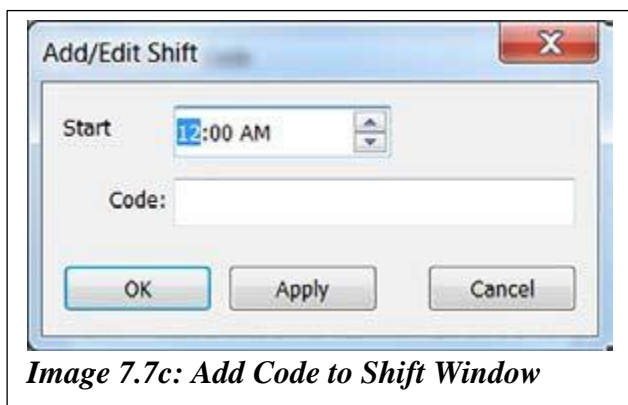

Image 7.7c: Add Code to Shift Window

7.8   User Inputs Tab

This tab allows you to create text inserts that can be applied to text properties in templates.

While you are on this tab you can:
1.   Click *"Add"* to add a new shift definition.
         A window will pop up *(refer to Image 7.8a and Image 7.8b below).*
2.   Fill in the *"Insert name"* and "Description" fields.
3.   Fill in the "prompt" users will see when they enter this insert.
4.   Enter the default value.
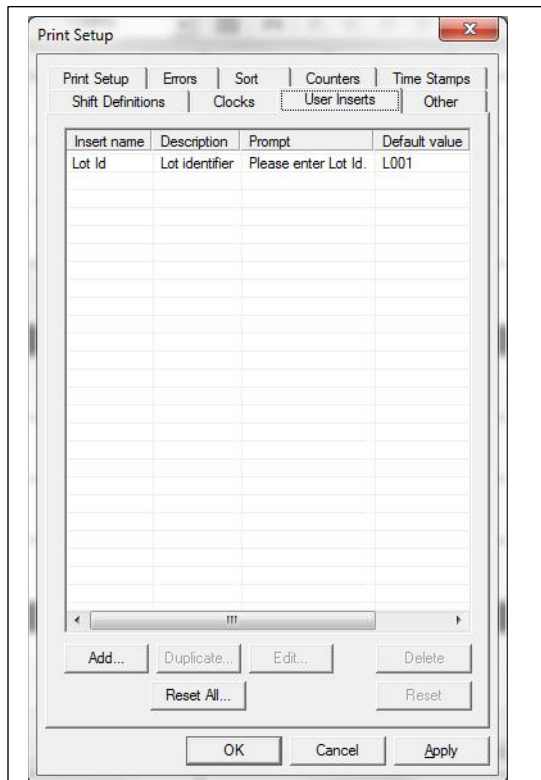5.   Click *"OK"* to return to the *"Print Setup"* window

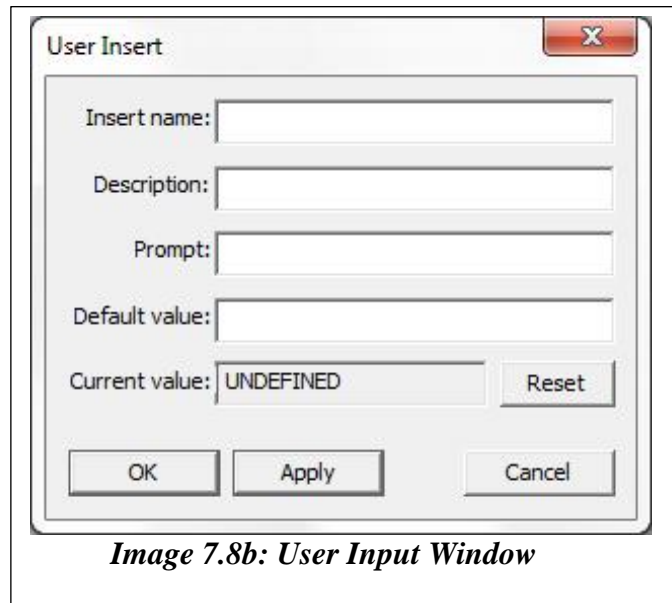*Image 7.8a: User Inputs Tab of Print Setup Window*

Image 7.8b: User Input Window

7.9   Other Tab

The other tab is used for troubleshooting (please refer to Image 7.9 below). It can simulate the encoder or sensor to help identify encoder or sensor problems.
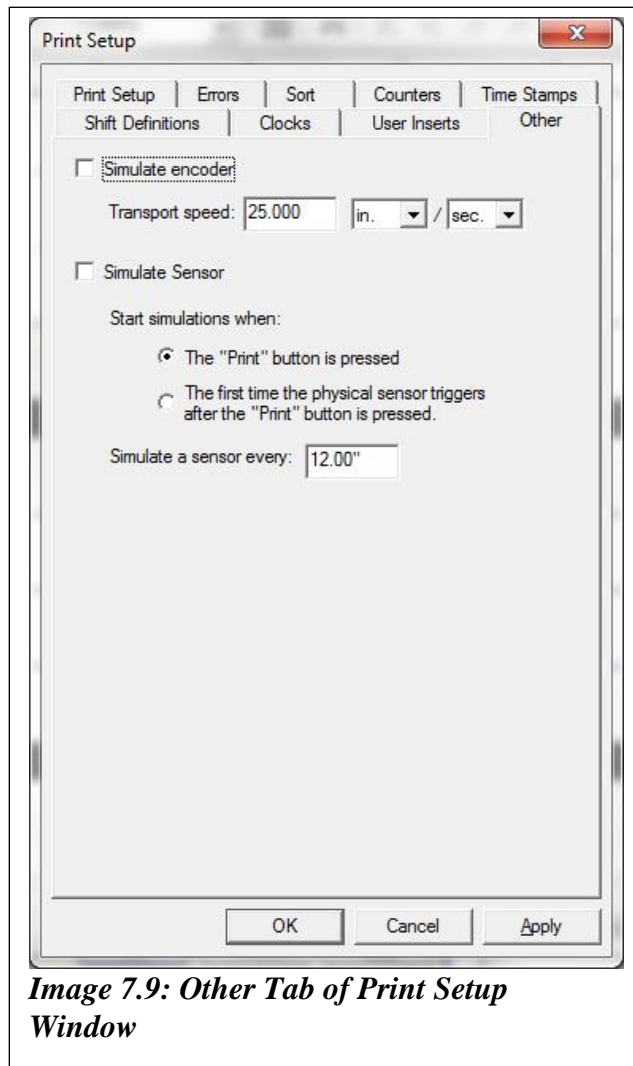

Image 7.9: Other Tab of Print Setup Window

To simulate the encoder or sensor:
1. Check either the *"Simulate encoder"* or *"Simulate Sensor"* check boxes.
2. Enter the desired simulation parameters.
3. Click *"Apply"* to save and continue or click *"OK"* to save and close the *"print setup"* window.

Section Eight

Printing

8.0   Printing

In the Raptor Software, jobs are the control center for printing. The job window shows a variety of status information and allows you to print the print job.

A job consists of data, a template, and all print and system settings. Creating a job is described in this section. Please refer to Section 7 on Templates and Section 8 on Print Setup.

8.1   Creating, Opening, and Saving Jobs
With the Raptor software, you can create a new job, open an existing job, and save a job. Job file names appear in red if they have not been saved and an asterisk (*) will appear in the title bar if there are any unsaved changes.

8.1.1   Creating Jobs
To open a new job:
1.   Make sure you are on the *"Job"* tab in the tab selection window.
2.   Go to **File>New Job**.
3.   If an existing job is open, you will be asked if you want to save the previous job, open a new job without saving, or cancel.

8.1.2   Opening Existing Jobs
To open an existing job:
1.   Make sure you are on the *"Job"* tab in the tab selection window.
2.   Go to **File>Open** or select the *"Open"* icon in the toolbar.
     If an existing job is open you will be asked if you want to save the previous job, open a new job without saving, or cancel.

8.1.3   Saving Jobs
To save a job:
1.   Go to **File>Save** Job or click the *"Save"* icon in the toolbar.
2.   Provide a name for the job and click *"Save."*
     Please note: You can also use the *"Save As"* feature to save the job under a new name. All the current changes will be made to the new save as opposed to the previous save.

8.2   Printing Jobs
The entire process for using jobs is as follows:
1.   Make sure you are on the *"Job"* tab in the tab selection window.
2.   Go to File>New Job or load a previous job by going to **File>Open.**
     If an existing job is open, you will be asked if you want to save the previous job, open a new job without saving, or cancel.
3.   Import Data **(Refer to Section 5 on Importing Data).**
4.   Create a template **(Refer to Section 6 on Templates).**
5.   Specify printer settings **(Refer to Section 7 on Printer Settings).**
6.   Go to **File>Save Job** or click the *"Save"* icon in the toolbar.
7.   Provide a name for the job and click *"Save."*
     You can now print the job by going to **File>Print.**
Please note: When you are printing a job, all menu items will become unavailable except for "Stop Printing."

8.3   Checking Print Status

The window displays current printing status in a large status box. The status box will display red when there is a problem or when connected but idle. The status box will display yellow if printing and green if printing was completed successfully.
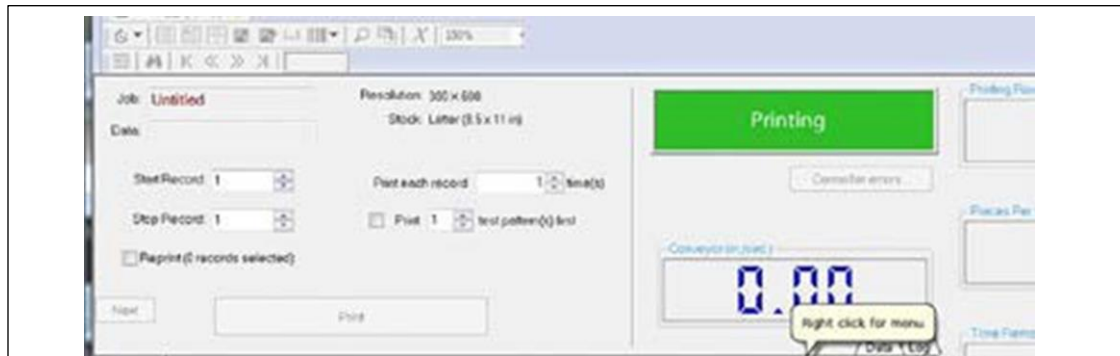

Image 8.3a: Printing Display Shows Printer is in the Process of Printing

Image 8.3b: Printing Display Shows the Ink is Low and Print Speed is Bad

Image 8.3c: Printing Display Shows the Ink is Low and the Print Speed is Good

8.3.1   Viewing the Job Log

The job log displays a variety of information about the printer and the job. You can view the job log by selecting the *"Job"* tab and then the *"Log"* tab.
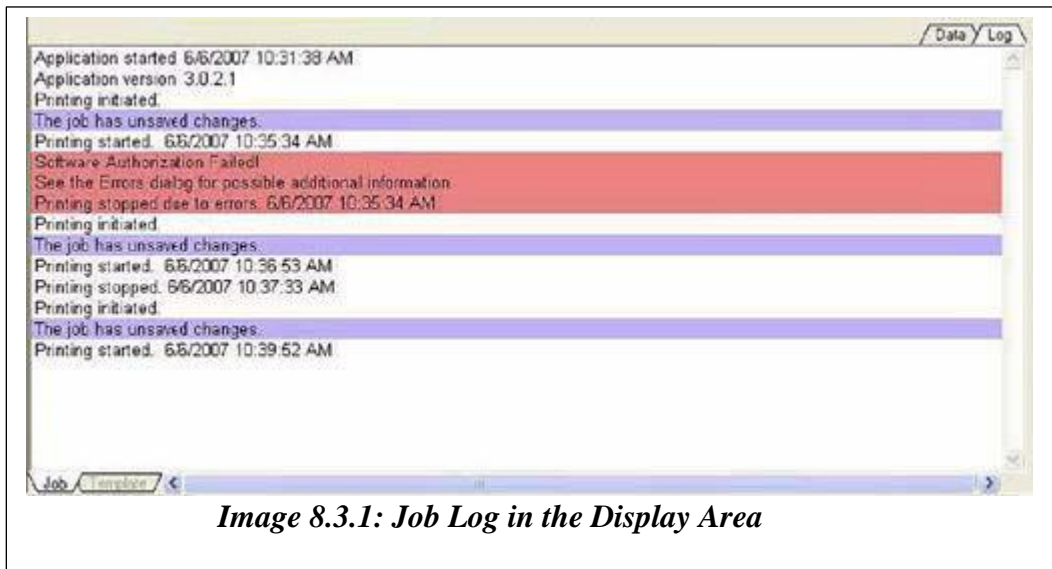

Image 8.3.1: Job Log in the Display Area

8.4   Reprints

This feature is handy for when you are printing and notice an error. When you notice errors, you can use the find options in the data fields to locate which records need to be reprinted

To locate and reprint records:

1.   Click the "Data" tab.
2.   Use the "Find" feature to locate the desired record(s).
       Refer to section 5.5 on finding records.
3.   Right-click the row and select *"Add to Reprints."*
       That data set will be highlighted green and be added to the re-print queue
       (refer to Image 8.4b below).
       You can select multiple entries first with Ctrl+click ***(refer to Image 8.4a below).***
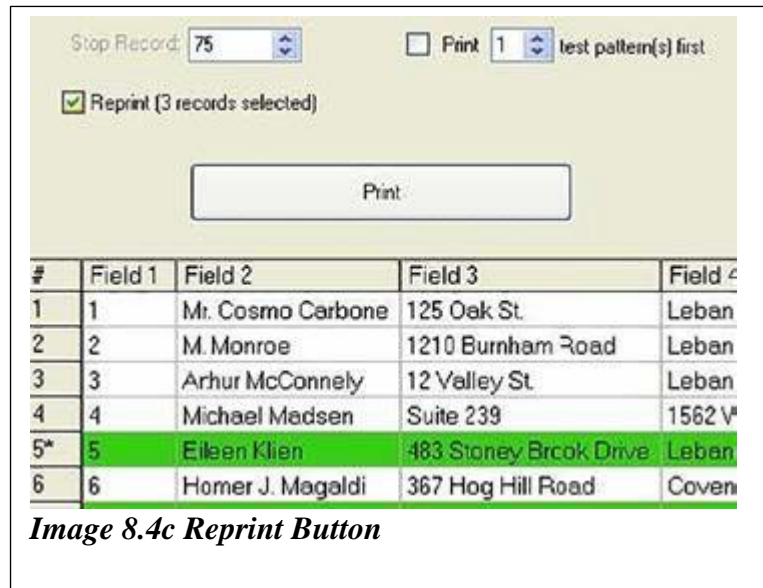

Image 8.4a: Right-click Menu Selection

Image 8.4b: Multiple Entries Selected (in Green)

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4.   Repeat steps 2-3 for all the records you need reprinted.
5.   Click the *"Job" tab*.
6.   Confirm the *"Reprints"* number is equal to the number of entries you selected for reprinting.
7.   Check the *"Reprint"* box and click "Print" (refer to Image 8.4c below).
8.   Once the records have been reprinted, go to the *"Data"* tab.
9.   Right-click anywhere and select *"Clear Reprints"*.
10   Go back to the *"Job"* tab and unselect *"Reprint."*

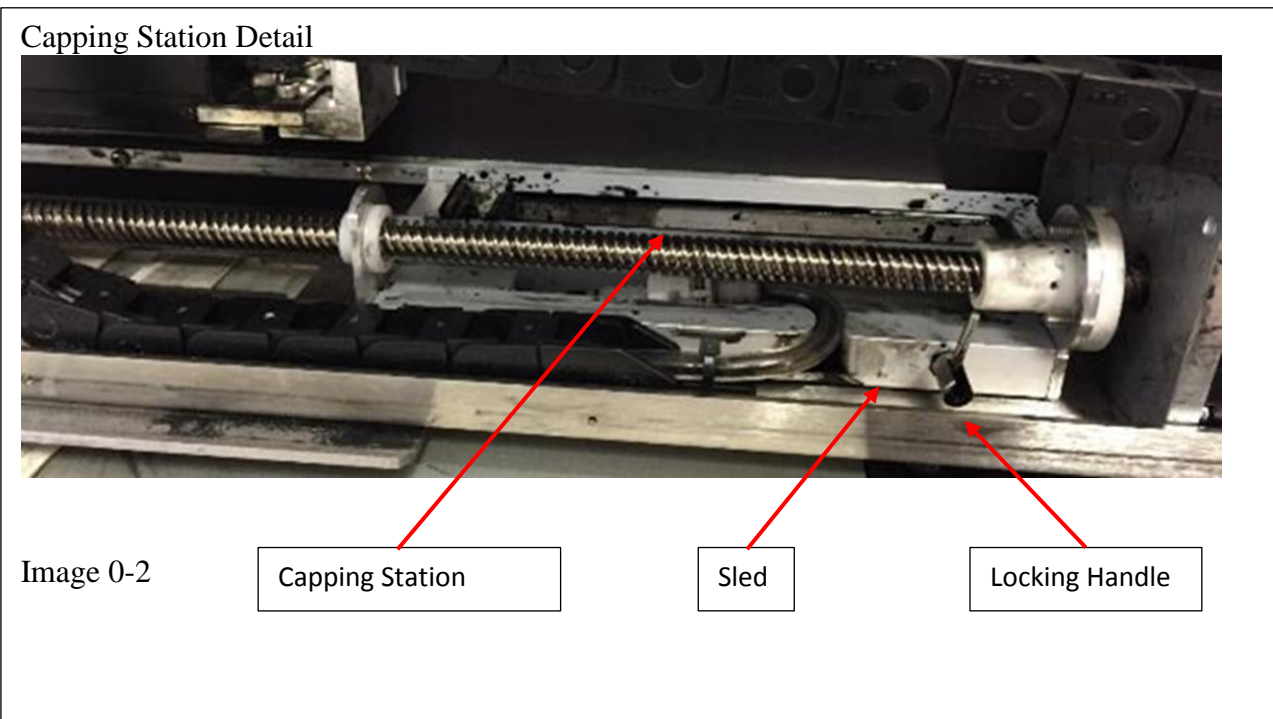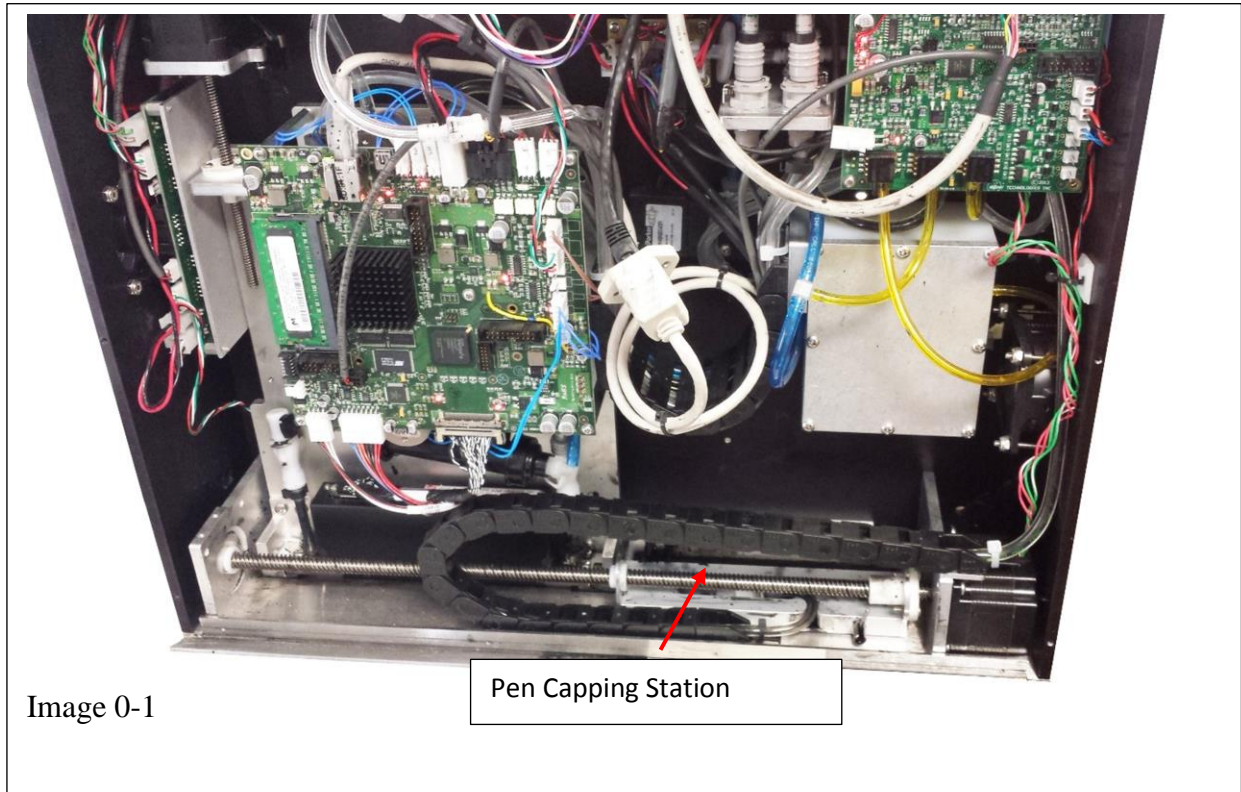| #	Field 1	Field 2	Field 3	Field 4
1	1	Mr. Cosmo Carbone	125 Oak St.	Leban
2	2	M. Monroe	1210 Burnham Road	Leban
3	3	Arhur McConnely	12 Valley St.	Leban
4	4	Michael Madsen	Suite 239	1562 V
5*	5	Eileen Klien	483 Stoney Brook Drive	Leban
6	6	Homer J. Magaldi	367 Hog Hill Road	Coven

Image 8.4c Reprint Button

Section Nine

Pen Maintenance

9.0   Eagle AMS Maintenance

The Eagle AMS Print Head was designed with a completely automated cleaning feature that can be setup to perform at times that have been predetermined by the operator. This system has a Purge Bottle built in the main cabinet as well as Flush and Ink bottles. There is also an automatic wiper and capping station built into the Eagle AMS Print Head. Operator, or Service interaction will be required to change out the Ink and Flush solution when empty and also to empty the Purge bottle when full. All of these containers have automated detectors on them so the system will alert the Operator when needed.

Image 0-1

Pen Capping Station

Capping Station Detail

Image 0-2

Capping Station   Sled   Locking Handle

Ink Bottle   Flush Bottle   Purge Bottle
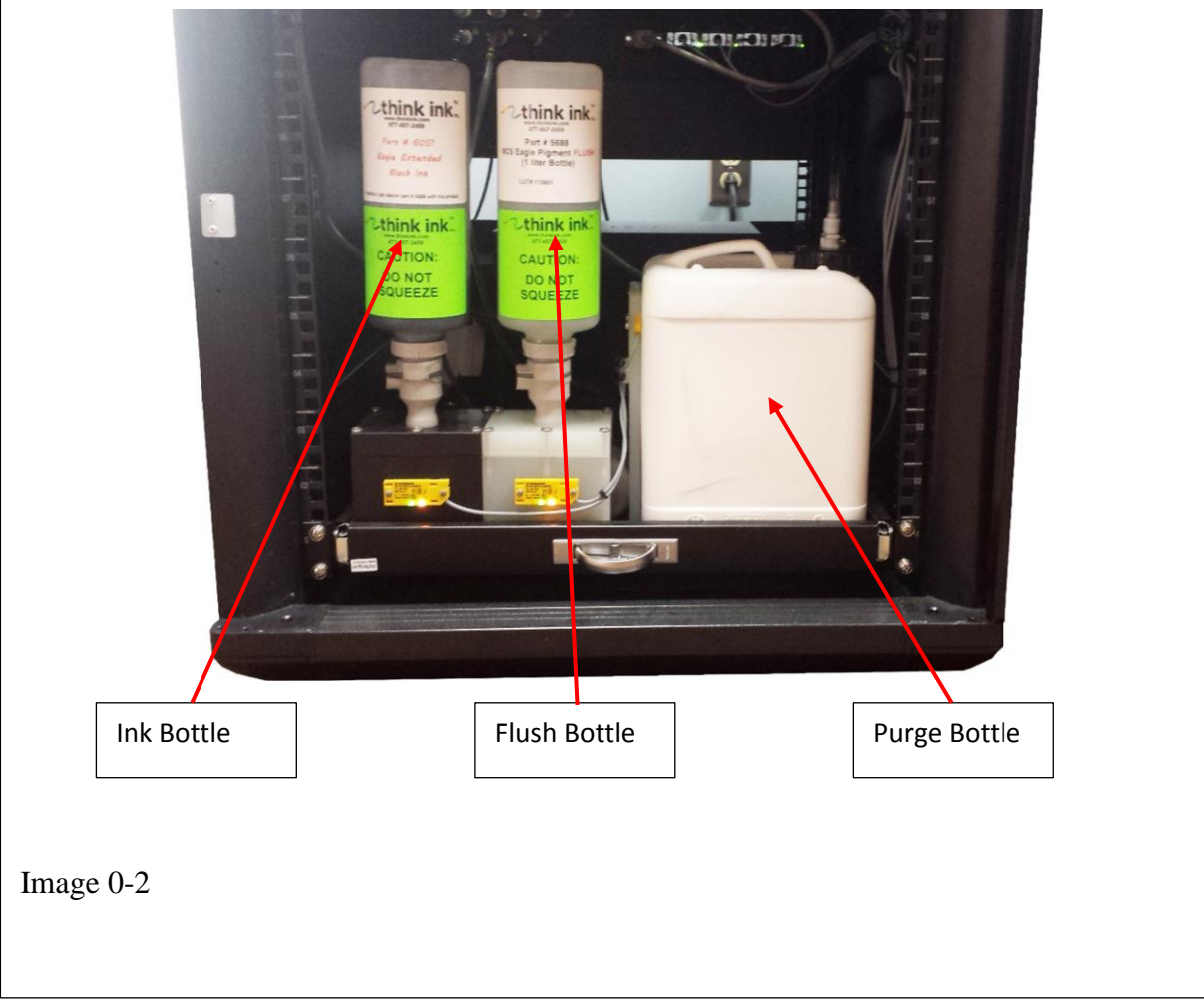
Image 0-2

9.1   Setting Time Defaults

The Raptor AMS or "**A**utomated **M**aintenance **S**ystem" is by design a self-cleaning and self-maintaining system as the name implies. The Ink bottle, Flush bottle and Purge bottle are all in line and active inside the system control cabinet. The Print Head Purging or "Cleaning" as it is referred to on this system will occur automatically at timed intervals you set and save to the system default. From that point on the system will automatically clean the Pens at the predetermined times. This system also allows you to manually interact and initiate a clean cycle at any time then automatically return to the beginning of the default time cycle.

To set the defaults you want your system to have, perform the following:

Step 1

Run the Raptor 6 Software and set the purge time by performing the following:

- A. Bring the Raptor 6 Software on line. (Auto Clean Time can be set in the "Eagle AMS Pen Maintenance Menu")
- B. In the Main Menu press File > System Setup, to open the System Setup Menu see image 1-1
- C. In the "Maintenance" section of the System Setup Menu, Select "Eagle AMS" see image 1-1
- D. Press "Pen Maintenance" to open the maintenance menu shown in image 1-2

Image 1-1

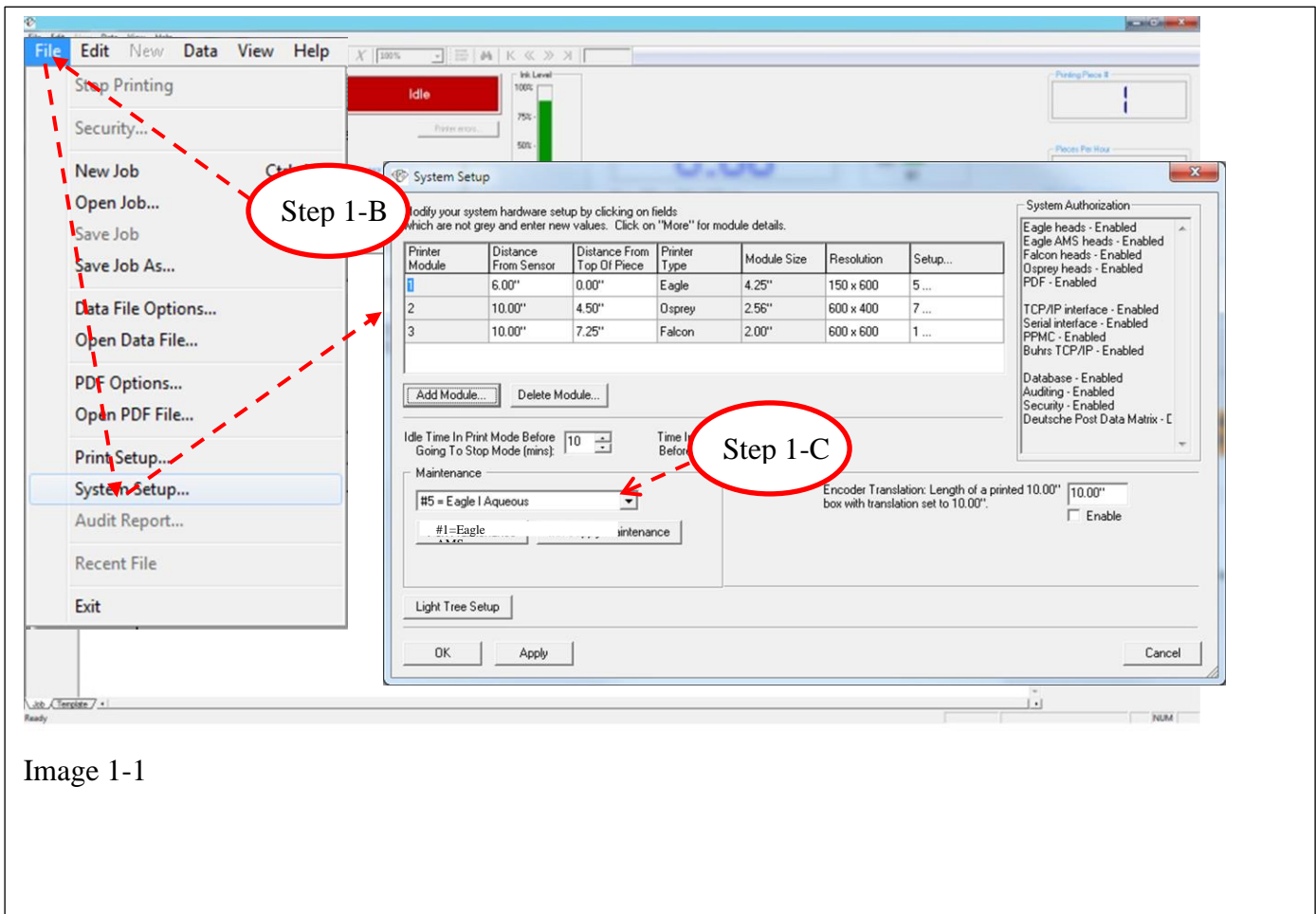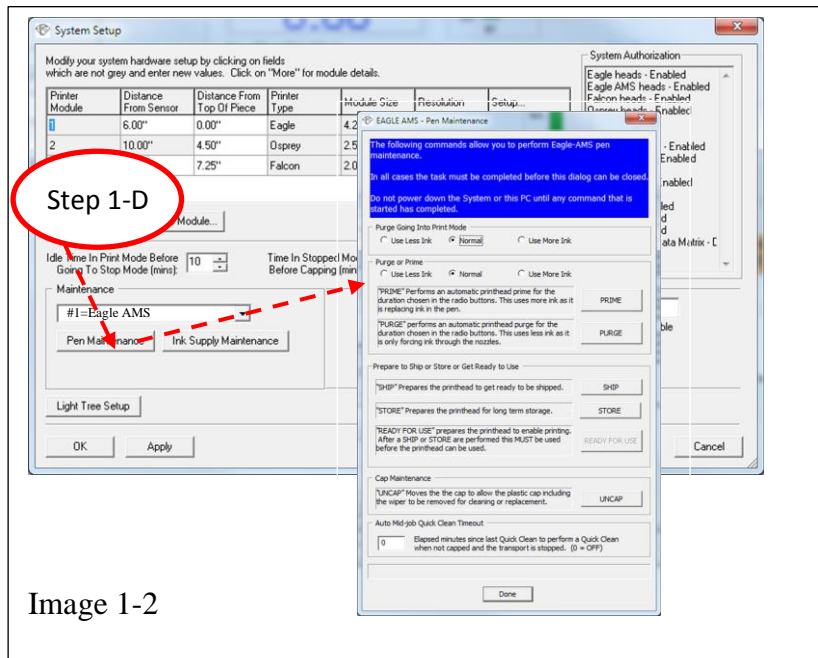Step 1-D

Image 1-2

A. Set Quick Clean time in Minutes, the Default range is 10 to 600 minutes. In most cases a setting of 60 to 120 minutes is optimal. To set the time simply click on the "Auto Mid-job Quick Clean Timeout" box and type in the number of minutes you what the Clean cycle set, then press "enter" on the key board or the "Done" button on the Eagle AMS Pen Maintenance menu, see image 1-3. The system will not initiate a Quick Clean while printing, however once the time cycle has been met or exceeded the first time the systems stops printing a "Quick Clean" cycle will automatically begin.

Using the mouse, click here to set the Time value with the key board for the Quick Clean timeout, then press the "Done" button in the menu or the "enter" key on your key board
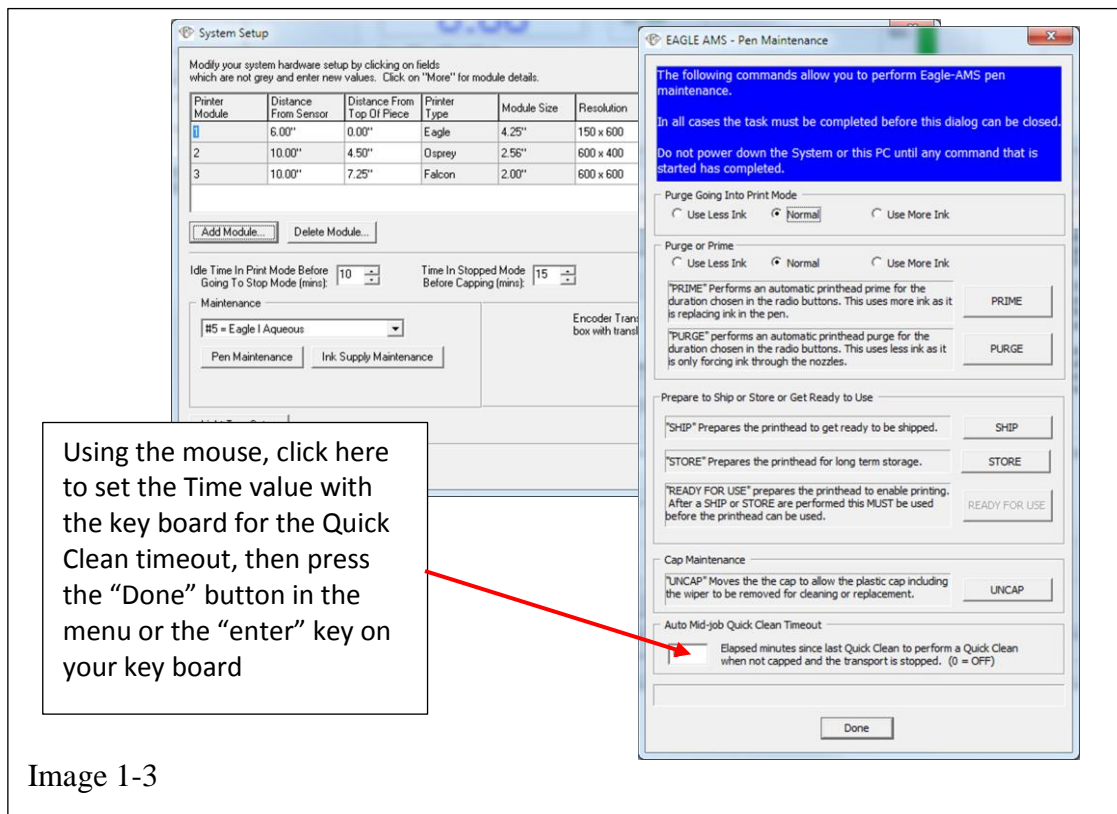
Image 1-3

9.2   Setting Ink Volume

The amount of ink used in each Quick Clean Cycle can be selected from three (3) preset defaults found in the Eagle AMS Pen Maintenance menu. The climate and altitude your system is operating in should be considered when making this selection. To choose between the three (3) presets found in the Eagle Pen Maintenance Menu for the automated quick clean cycle go to the "Purge Going into Print Mode" section, place the cursor over the selected default you wish to choose and left click on it. To set the ink amount used for manual Purges and Primes go to the "Purge / Prime" section , place the cursor over the selected default you wish to choose and left click on it, see image 2-1

Image 2-1
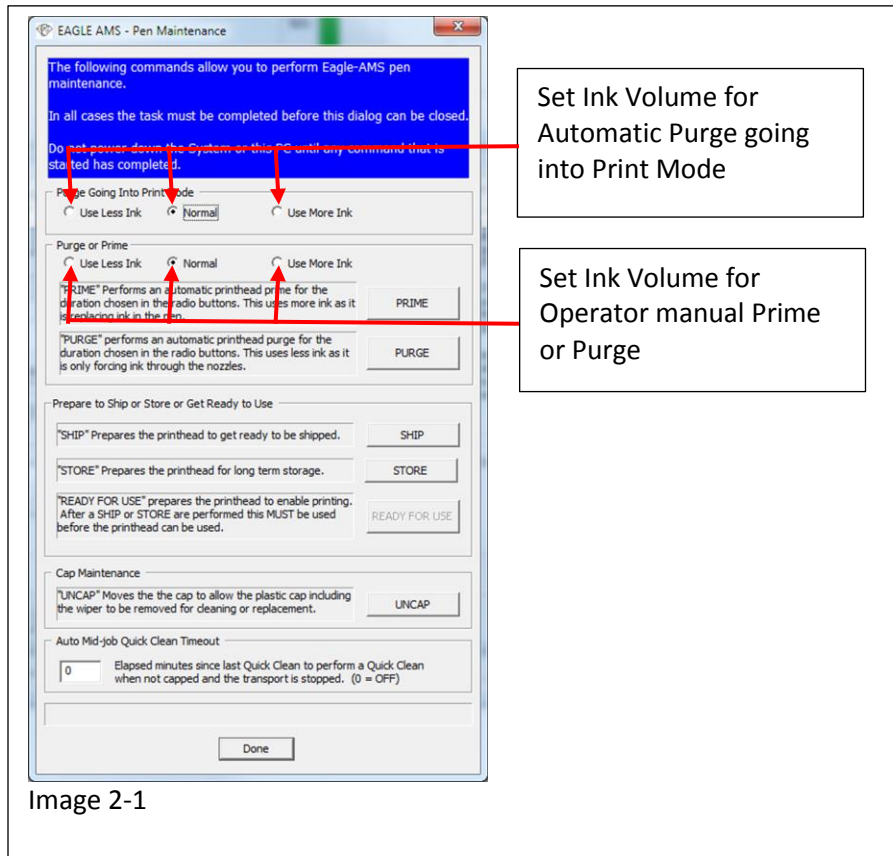
9.3   Cap Setting &Maintenance

The Pen Cap of the Eagle AMS operates automatically for wiping the pens after purging or priming as well as capping the pens when printing has stopped. The actual time delay for when the pens are automatically capped depends on the default setting you enter.
First a time setting to automatically recognize "Idle" time in Print Mode must be established before the system will go into "Stop Mode". Then an elapse time for the duration of Stop Mode must be entered before the automatic quick clean cycle will begin.
To enter these times perform the following:

Step 1
Run the Raptor 6 Software and set the Cap time by:

A. Bring the Raptor 6 Software on line. (Idle Time and Cap Time can be set for best performance in the "Eagle AMS System Menu")
B. In the Main Menu press File > System Setup, to open the System Setup Menu see image 3-1
C. In the "Idle Time In Print Mode" section of the System Setup Menu, set the time in minutes by pressing the Up / Down arrow buttons, see image 3-1
D. In the "Time In Stopped Mode" section of the System Setup Menu, set the time in minutes by pressing the Up / Down arrow buttons, see image 3-1
(Note: The factory set default time of 15 minutes for "Idle" time and 15 minutes for "Stopped" time is ideal for normal operation in most climates.)

Image 3-1

When it becomes apparent, by diminished print quality, that the Capping Station needs to be replaced perform the following:

Step 1

A. Run the Raptor 6 Software and open the Eagle AMS Pen Maintenance menu as discussed in Section One, Step 1 B through D.

B. Press the "Uncap" button in the Pen Maintenance menu, see image 3-2. This will move the Capping Station to the far right.
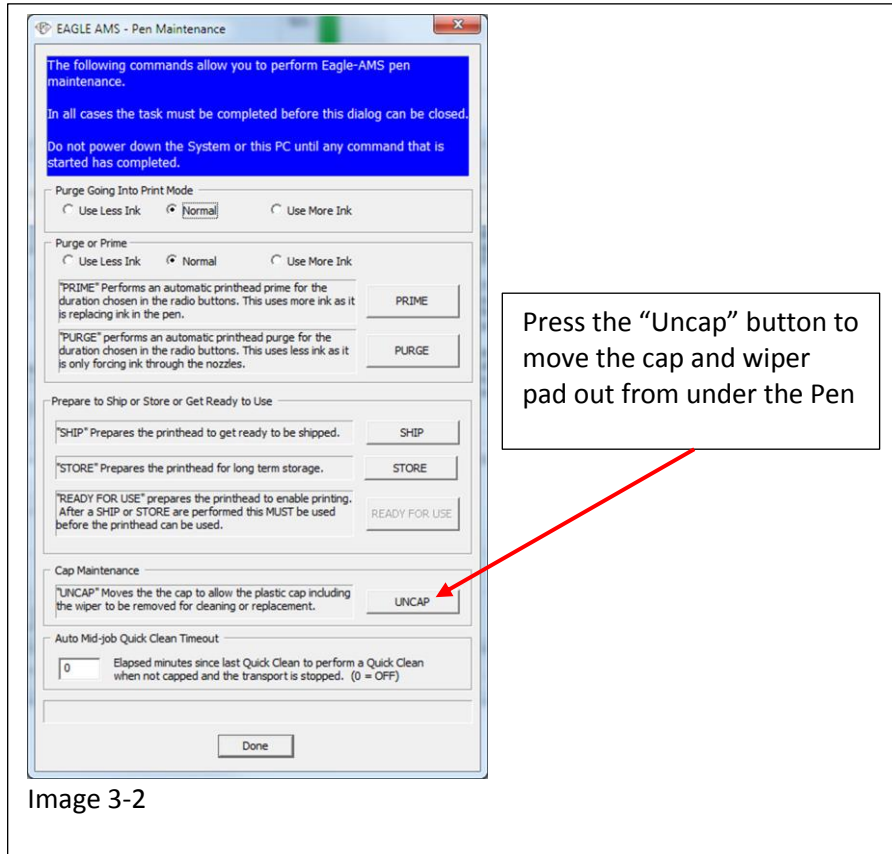

Press the "Uncap" button to move the cap and wiper pad out from under the Pen

Image 3-2

(⚠ Caution: As a safety precaution, ware latex gloves at this time)

C. Pull the lock out until it clears the collar and turn it counter clockwise to unlock the cap from the sled, see image 3-3.

D. Gently lift the capping station out of the sled just enough to gain access to the hose connection see image 3-4.

E. Disconnect the "Purge" hose by turning the fitting counter clockwise while supporting the elbow side of the connection on the cap, see image 3-5

F. Once the old capping station is removed the excess ink can be cleaned out of the sled using Isopropyl Alcohol or Denatured Alcohol, see image 3-6.
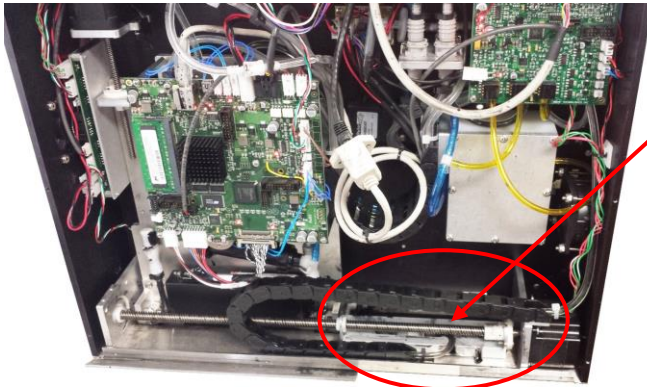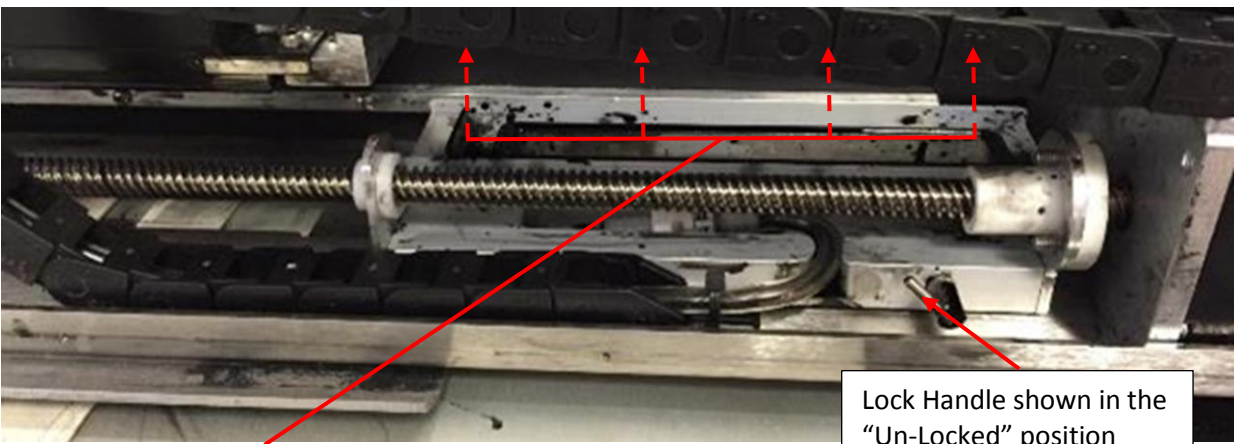
Pressing the "Uncap" Button as indicated in Step 1-B, will move the sled to the far right position
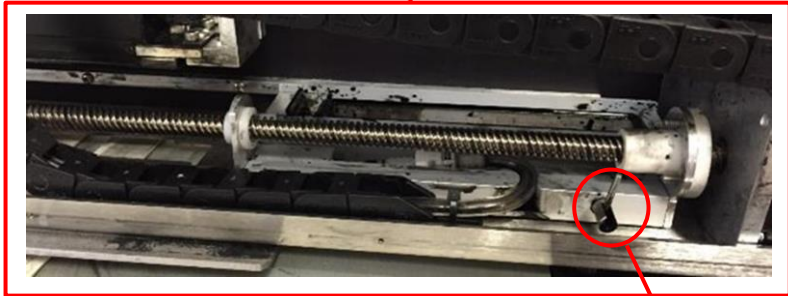
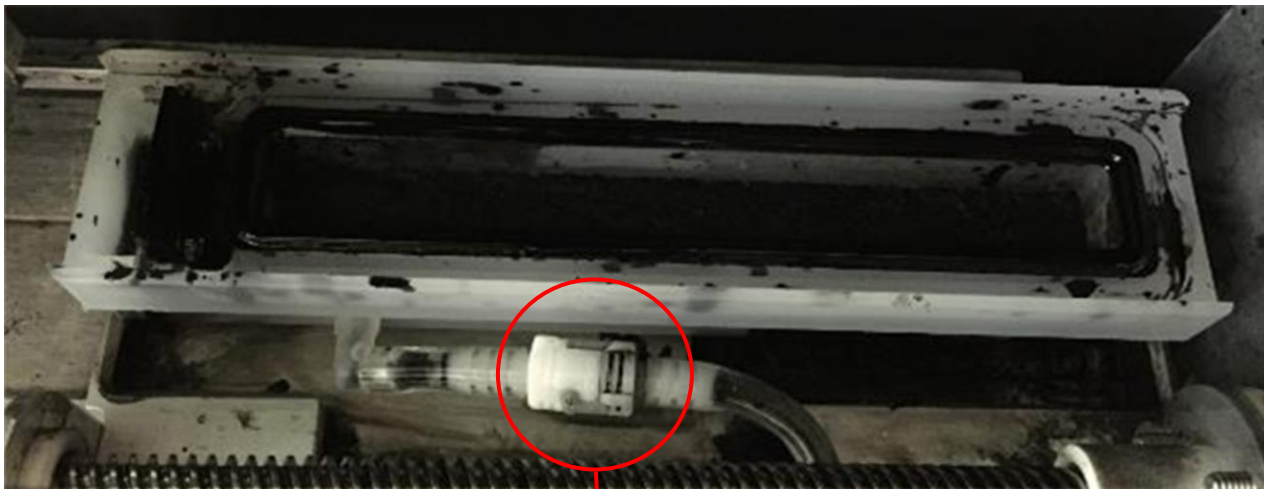Pull the Lock Handel out just past the collar and turn it counter clockwise to un-lock

Image 3-3

Lock Handle shown in the "Un-Locked" position

Gently lift the Capping Station out of the Sled just enough to gain access to the hose fitting

Image 3-4

Hold and support the fitting on the "Elbow" side of the connection

Turn the lock side of the Purge hose fitting counter clockwise and pull the connection gently to disconnect it.
(**Note**: Wipe any access ink off the Pure hose fitting in preparation for installing the new Capping Station)
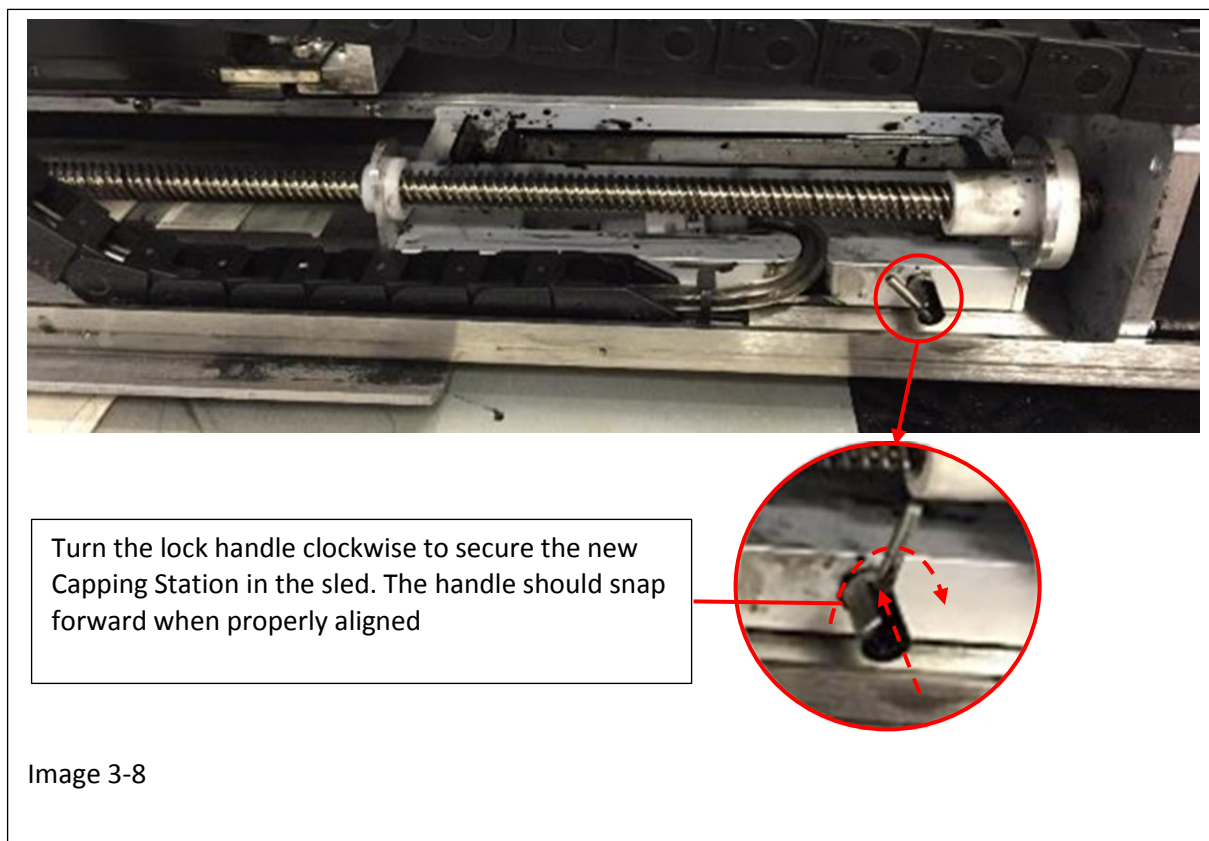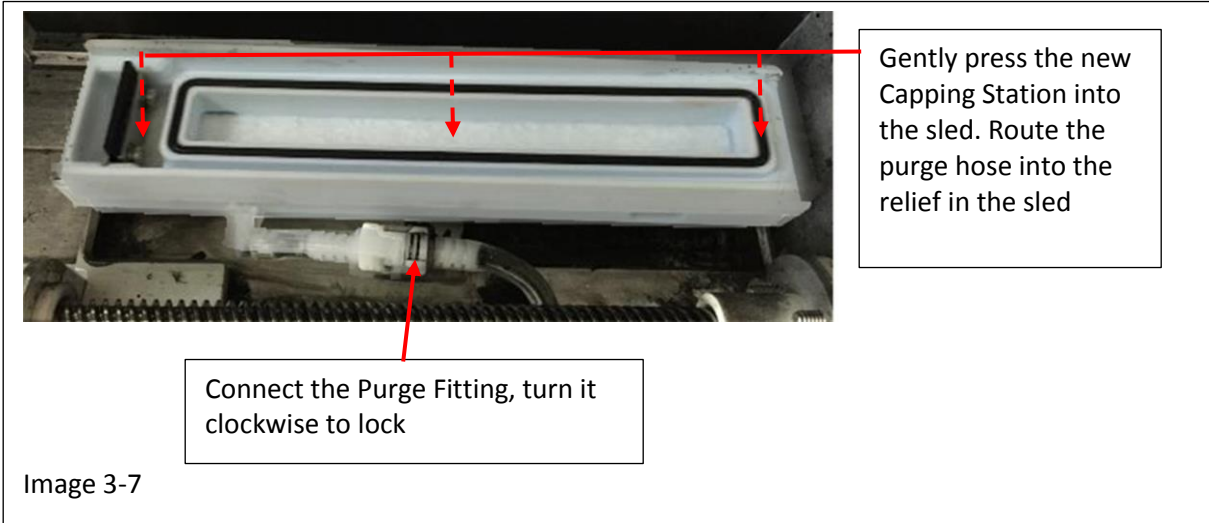
Image 3-5
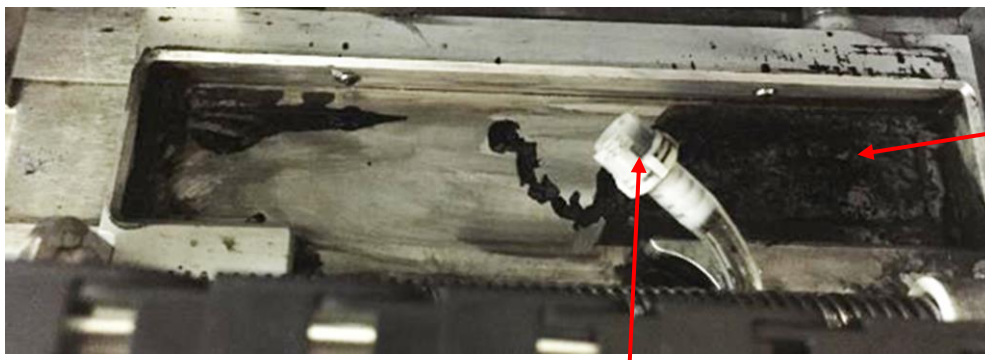
Clean out access ink before installing the new Capping Station

Image 3-6

Clean out old ink from the fitting to ensure a good seal to the new Capping Station

Install the new Capping Station in the reverse order the old one was removed.

    A. Connect the Capping Station Purge Fitting the Purge Hose Fitting. Make sure the hose is routed under the screw rod and pressed firmly into the relief in the sled, see image 3-7.

    B. Press the new Capping Station into the sled and turn the locking handle clockwise to secure it, see image 3-8.

Gently press the new Capping Station into the sled. Route the purge hose into the relief in the sled

Connect the Purge Fitting, turn it clockwise to lock

Image 3-7

Turn the lock handle clockwise to secure the new Capping Station in the sled. The handle should snap forward when properly aligned

Image 3-8

9.4   Eagle AMS Status Notification

The Eagle AMS Print System will present different notifications indicating the print head status while in Quick Clean Mode as well as warnings. These are as follows:
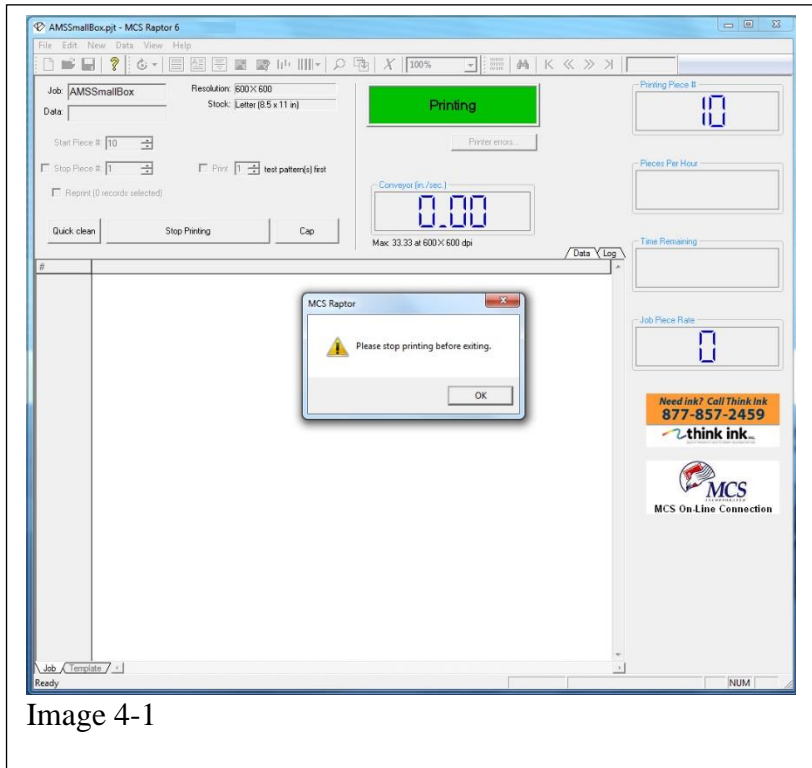Image 4-1 depicts an error warning box indicating to "Stop Printing" before Exiting Software

Image 4-1

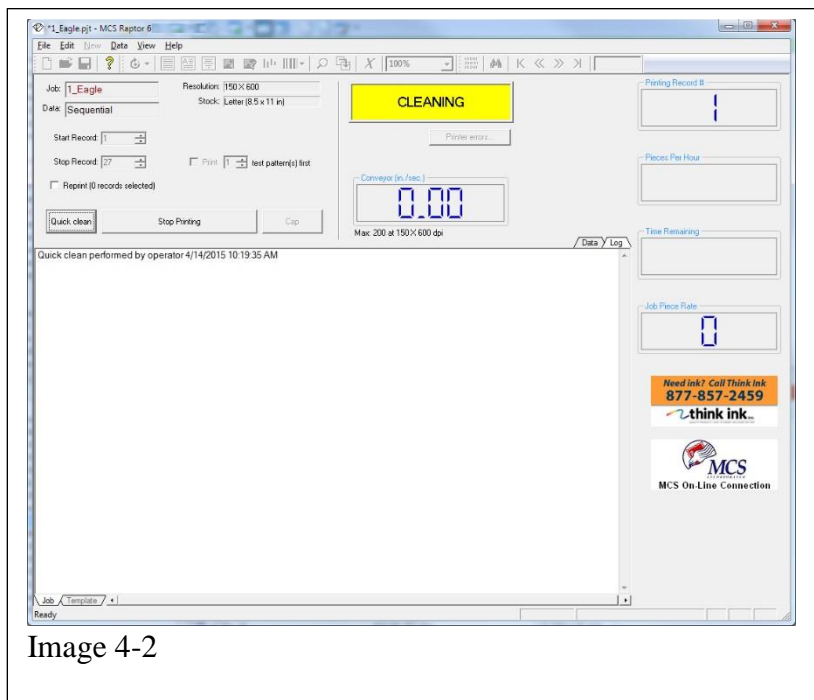Image 4-2 depicts Cleaning for an Operator Initiated Quick Clean command.

Image 4-2

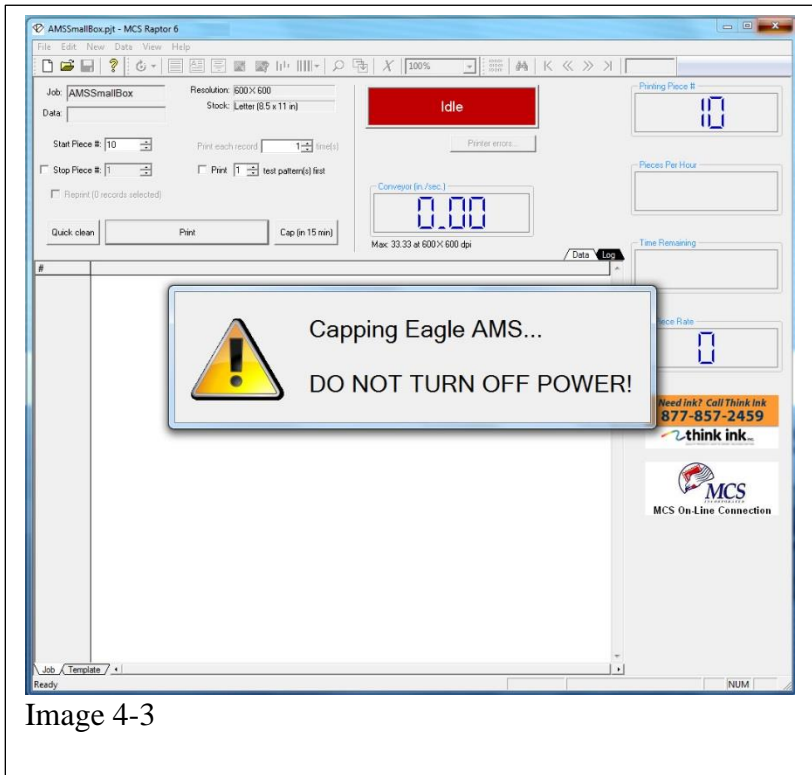Image 4-3 depicts the Eagle AMS is actively Capping the print head and warns "Do Not Turn Off Power"

Image 4-3

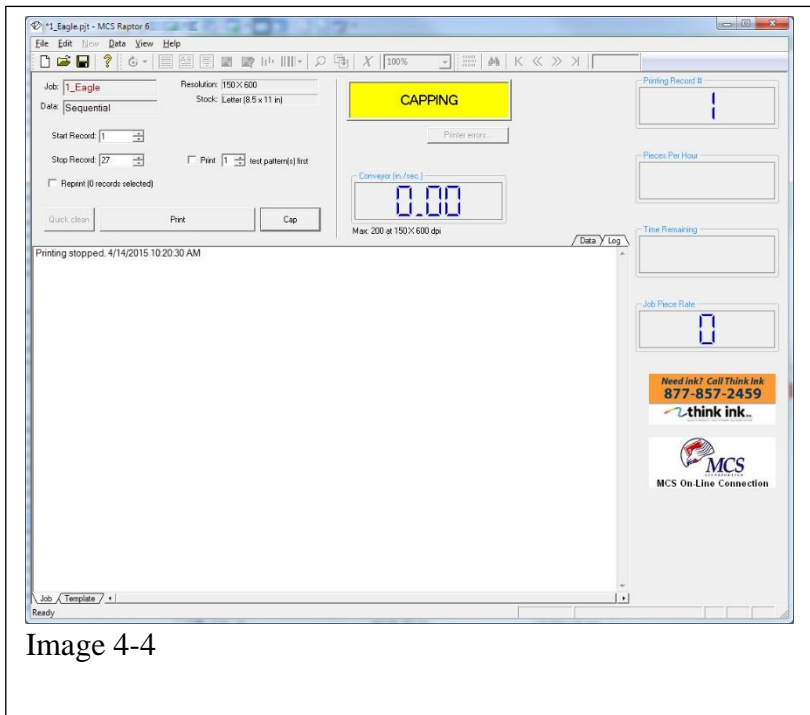Image 4-4 depicts the Eagle AMS print head is actively "Capping"

Image 4-4

Image 4-5 depicts an operator initiated "Quick Clean" command while a piece was under the print head
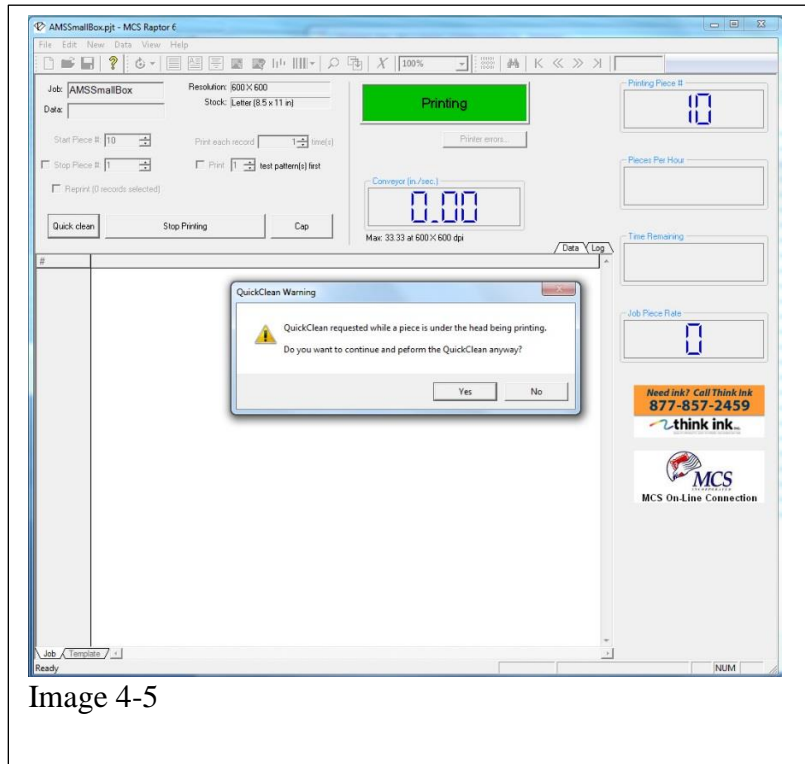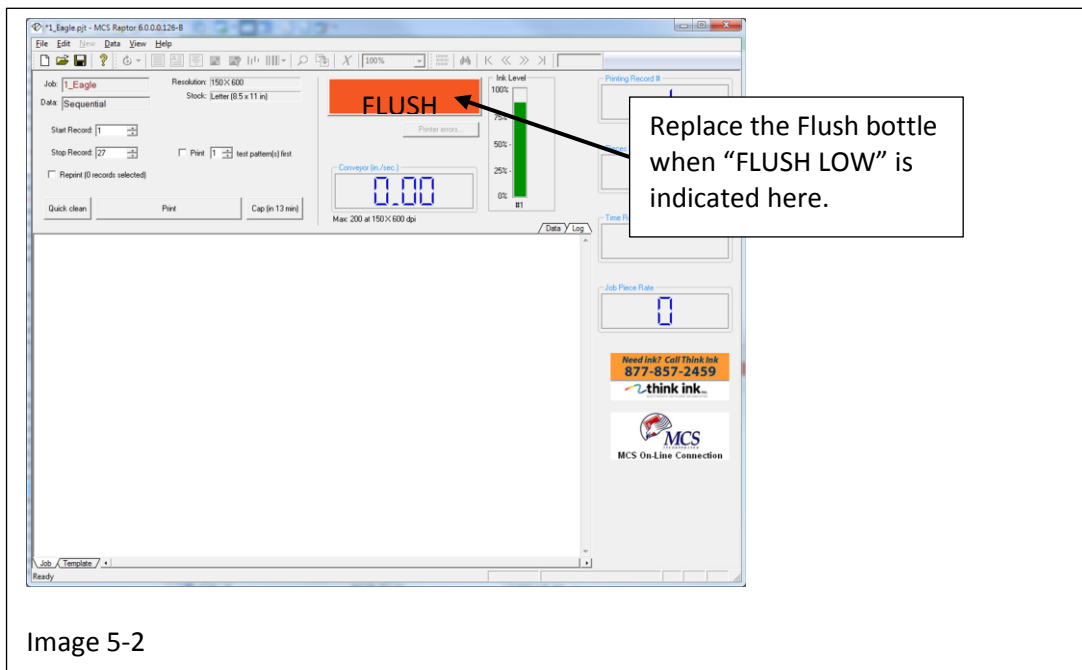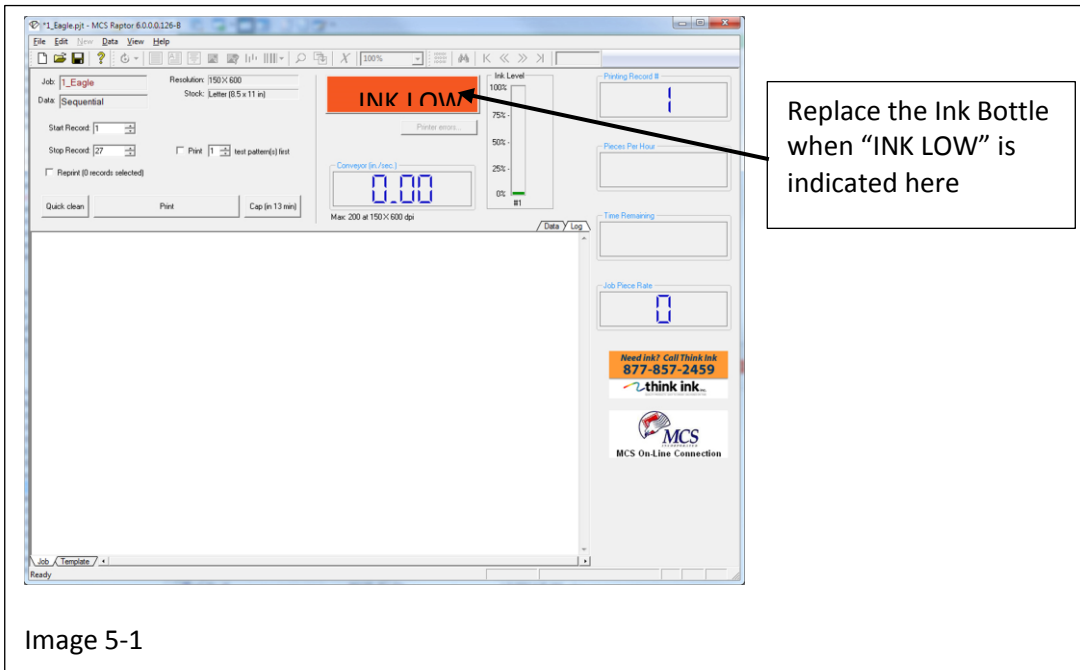

Image 4-5

9.4 Installing Ink & Flush Bottle

The system will indicate the level of ink in the main screen as shown in image 5-1. The system well also indicate when it's time to replace the Flush Bottle
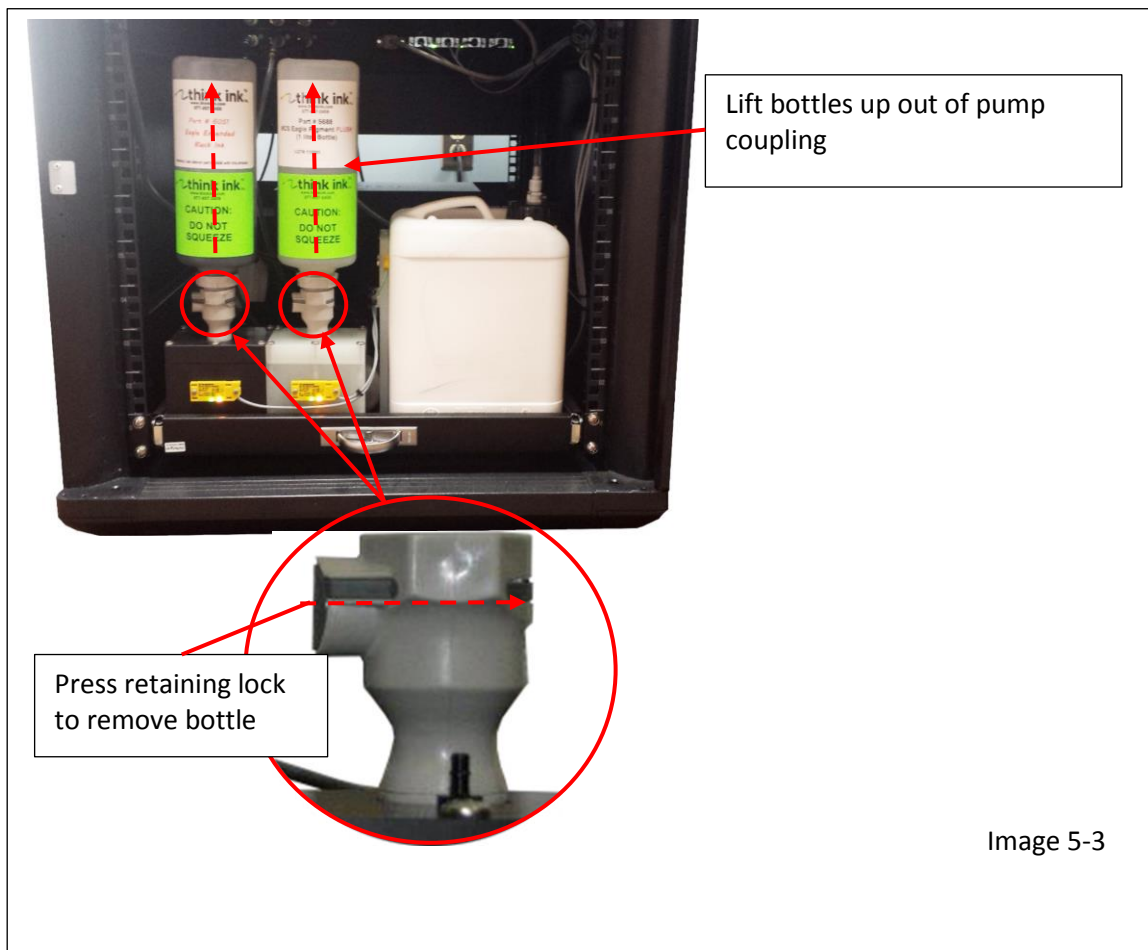

Replace the Ink Bottle when "INK LOW" is indicated here

Image 5-1

Replace the Flush bottle when "FLUSH LOW" is indicated here.

Image 5-2

To replace the ink bottle and / or Flush bottle when indicated by the system perform the following:
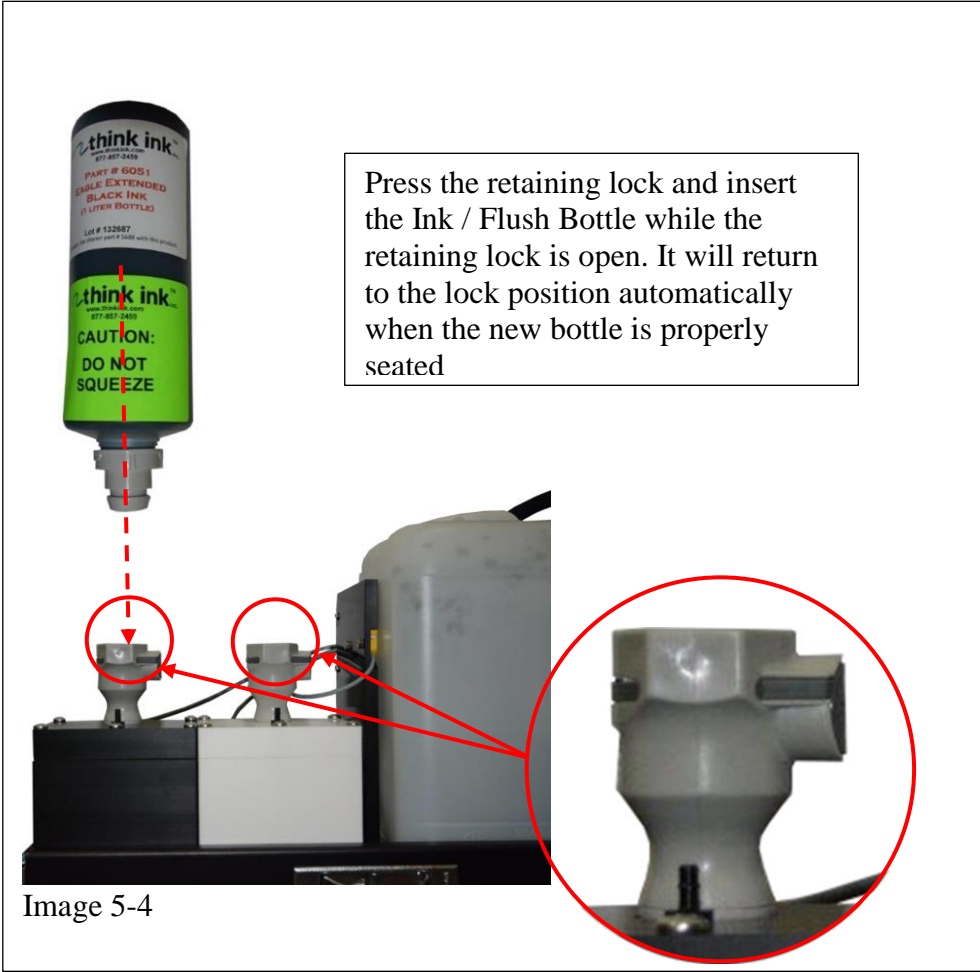Step 1
   A. With the system in "Idle" mode open the door to the Main Control cabinet.
   B. Press the retaining lock at the pump coupling, see image 5-3.
   C. While the retaining lock is pressed lift up the empty bottle and remove it from the cabinet.
(⚠ Caution: Do not squeeze the empty bottle while removing it. Small amounts of fluid may still be present at the nozzle that could drip out into the cabinet.)

Lift bottles up out of pump coupling

Press retaining lock to remove bottle

Image 5-3

Press the retaining lock and insert the Ink / Flush Bottle while the retaining lock is open. It will return to the lock position automatically when the new bottle is properly seated

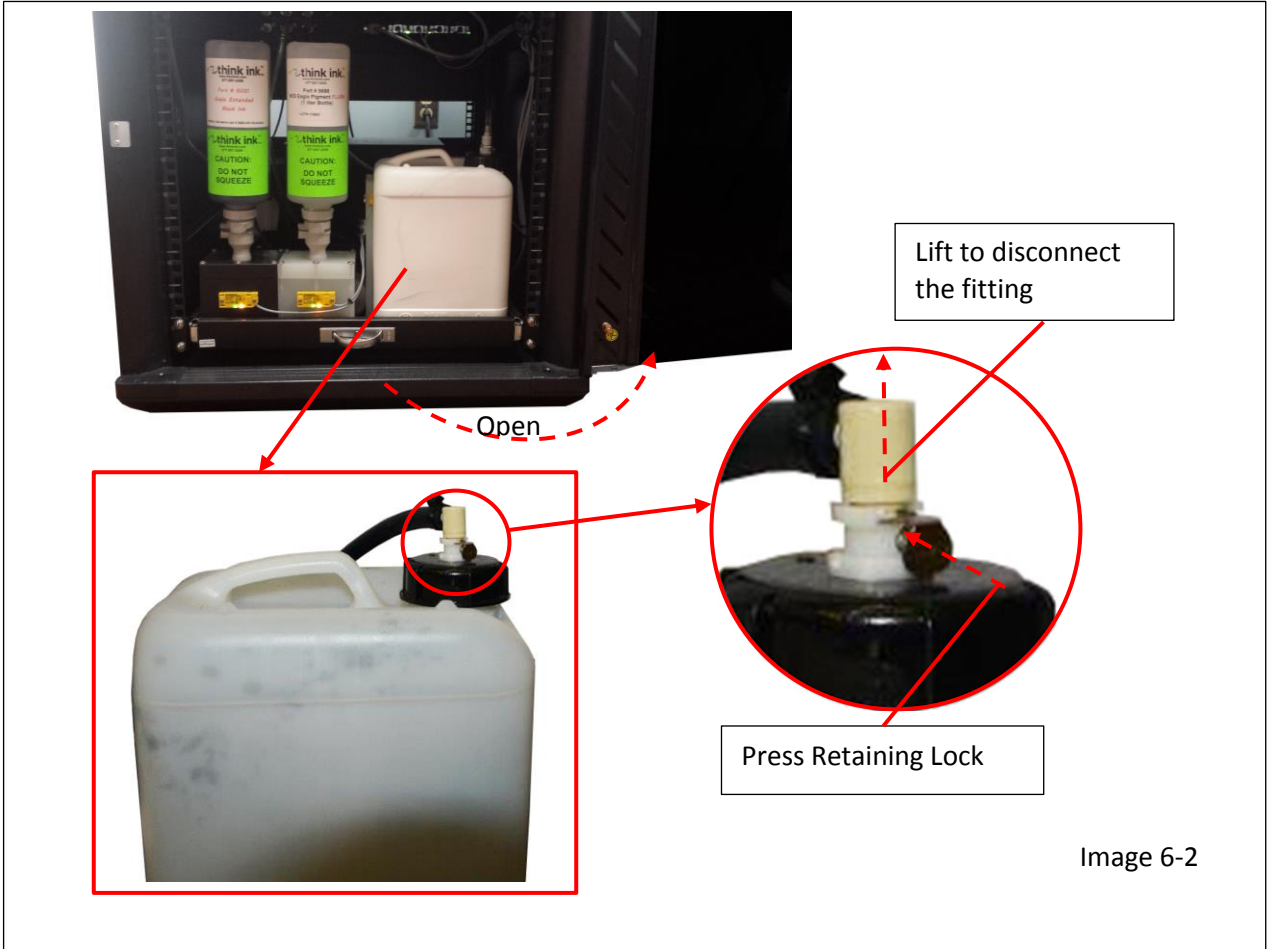Image 5-4

9.5   Emptying the Waste Bottle

The Waste Bottle is monitored by sensors. The Eagle AMS system will display an indication on the main screen when the container is full, see image 6-1
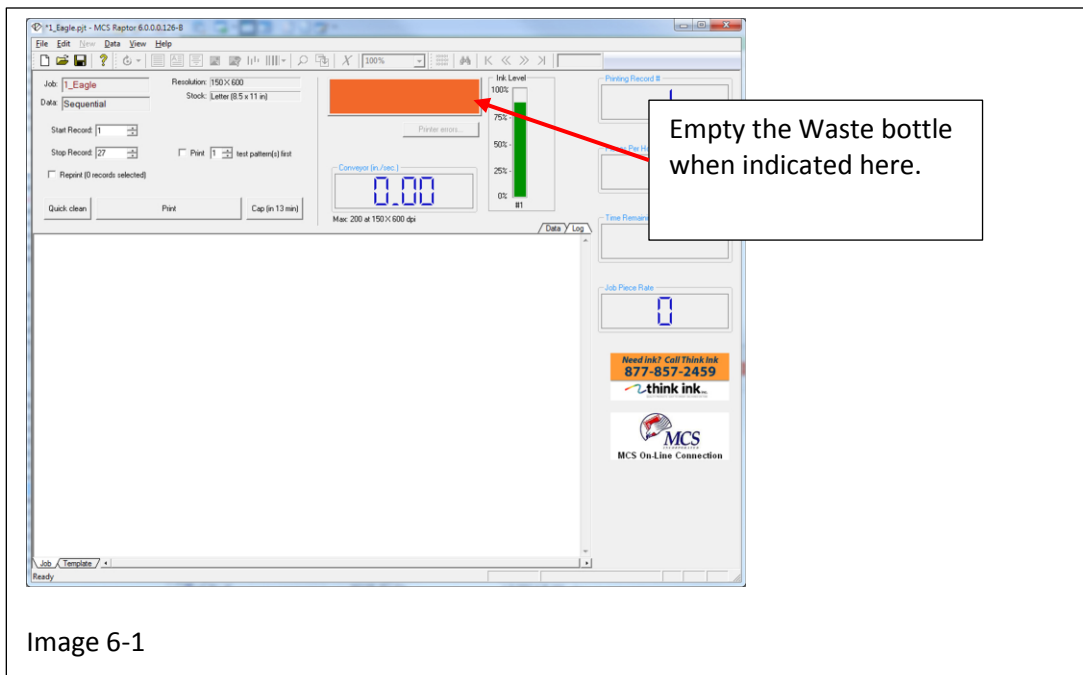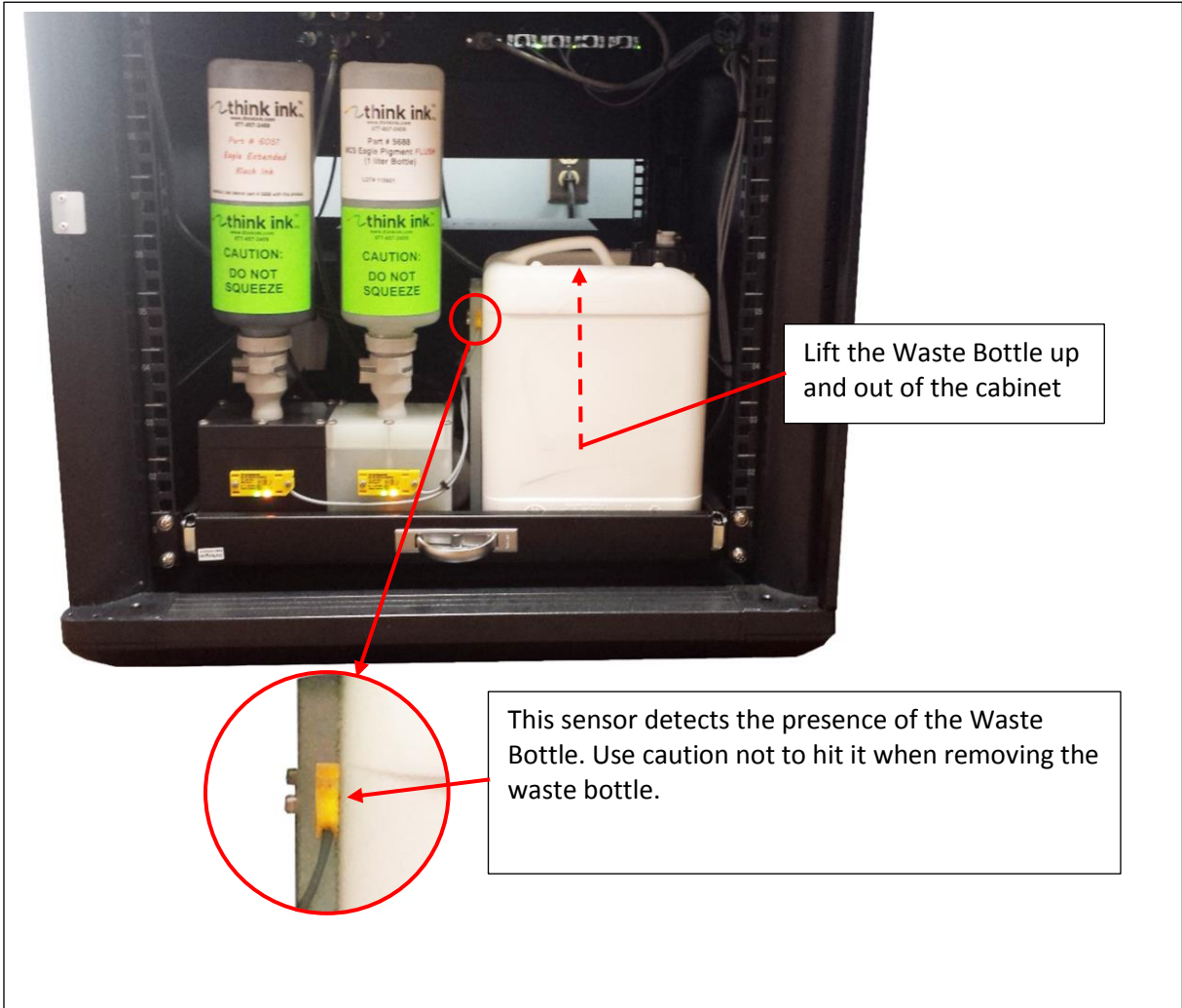

Image 6-1

To empty the Waste Bottle perform the following:
Step 1
    A. With the machine in "Idle" mode, open the door of the Control Cabinet.
    B. Disconnect the drain hose by pressing the retaining lock to release the hose fitting, see image 6-2. (Note: Fitting style may vary from straight to right angle. Both styles are shown in this publication)
    C. Position the drain hose out of the way. (Note: Place a Kimwipe around the fitting once removed to contain any drips that may occur)
    D. Lift the Waste Bottle out of the cabinet and empty it.

Lift to disconnect the fitting

Open

Press Retaining Lock

Image 6-2

Lift the Waste Bottle up and out of the cabinet

This sensor detects the presence of the Waste Bottle. Use caution not to hit it when removing the waste bottle.

Once the Waste bottle is out of the cabinet, the sensor, depicted in image 6-3 will no longer detect the waste bottle. The Missing Waste Bottle status will appear on the Main screen as shown in image 6-4.
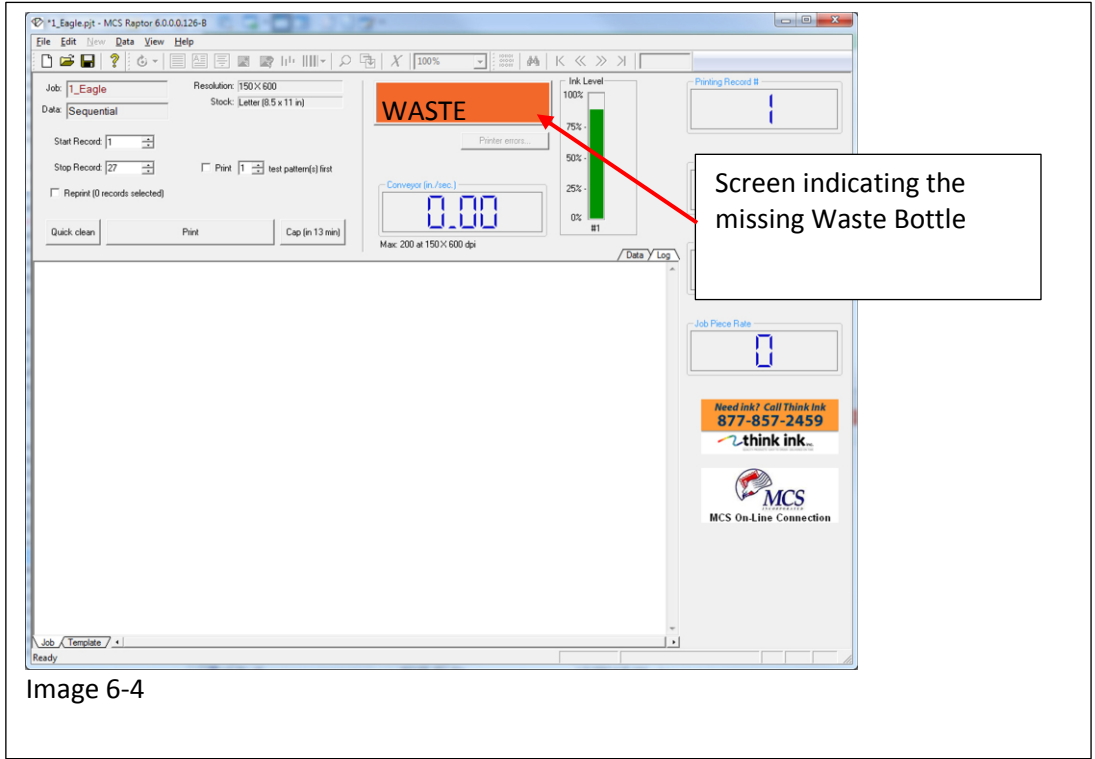

Image 6-4

Once the Waste Bottle has been emptied and returned to the carriage in the control cabinet, the sensor will once again detect the presence of the Waste Bottle and the status display will return to "Idle"

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AMS

End