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Purging the Eagle Print Head

The following is information specifically about the Eagle and Eagle AMS Print Head Pin Maintenance and Purging the Eagle and Eagle AMS Print Head.

With the system is powered up, it will be necessary to purge the Eagle Print Head by perform the following:

Step 1

Raise the Print Head and remove the cover in the following manner:

- A. Raise the Eagle Print head to its highest setting by pulling out the lock knob, manually lifting the Eagle Print Head and pushing the lock knob to its original position.
- B. Remove the cover on the bottom in the following manner:
 - B-a. Pull both retaining lock knobs out from the head at the same time
 - B-b. Once the locks are out of the head pull the cover down and away from the head and set the cover aside see image 1-1.
- C. Place a Purge Tray under the Eagle Print Head.

Special Note: If the Purge duration is set equal to or less than 3 seconds (refer to Step 2-E, setting the purge duration), use of a purge tray may not be necessary. Simply hold a Kimwipe under the pens (**Not Touching the Pens**) and press the yellow purge button on the print head.



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

- A. Bring the Raptor 6 Software on line. (Purge time duration can be set for best performance in the "Eagle Pin Maintenance Menu")
- B. In the Main Menu press File > System >> Setup, to open the System Setup Menu see image
- C. In the "Maintenance" section of the System Setup Menu, Select "Eagle" see image 2-1
- D. Press "Pen Maintenance" to open the menu shown in image 2-2.

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E. Once inside the Pin Maintenance menu, press the scroll down arrow to select the purge duration time in seconds, see image 2-2. Once a selection has been made press the "Done" button to exit the menu and save the new setting. Now when the Yellow Purge button on the Eagle Print Head is pressed, the purge will last no longer the time set. (Note: Once this setting is made, it will become the default setting every time the Raptor Software runs)

Step 3

Purge the Print head by performing the following:

- A. Put an ink tray beneath the Eagle Print head before pressing the yellow purge button or if the purge duration is equal to or less than 3 seconds hold a Kimwipe under the pens (**Not Touching the Pens**) and press the yellow purge button on the print head.
- B. Press and hold the Yellow Purge Button down, for approximately one second, on the Eagle Print Head, a blue Dialog box will open on the monitor, see image 3-1. (Note: This will only appear on the screen for a brief moment while the system is actively purging)



C. Once the system has completed the purge a second dialog box will appear indicating to "gently wipe the pen's nozzles using a new, clean Kimwipe", see image 3-2. To close this dialog box you can either press the "Done" button located at the bottom of the box or simply start printing and the box will close automatically.

	Purge complete.
Using on	e pass over the pen, gently wipe the pen's nozzles using a new, clean Kimwipe.
Click t	he yellow button or DONE when finished wiping.

There are two other features found in the Pen Maintenance menu, "Prime" and "Empty"

- 1. When the Prime button is pressed, holding the Yellow Purge button on the Eagle Print Head will release fluid from the pen which will be filled from the supply (This continues through 5 cycles or until the yellow purge button is released) see image 4-1. (For details to Prime the Head see page 9)
- 2. When the Empty button is pressed, holding the Yellow Purge button on the Eagle Print Head will empty the Print Head but the fluid will not be refilled. This feature will run for 60 seconds or until the yellow purge button is released, see image 4-1. (For details to Empty the Head for Storage see page 16)

To prepare the head for long-term periods of un-use:			
1. Remove the current ink from the head using the "Em 2. Disconnect the ink supply tube from the head and plu supply tube. 3. Fill the pen with the Flush fluid using the "Prime" pro	pty" procedure. g in the Flush cedure.		
To prepare for printing use the same procedure to replac with ink.	e the flush		
Purging using a quick press of the printhead yellow button purges for 1 second. Holding the button down purges up to but not more than the time set here.	5 Secs 💌	Р	rime Button
When "PRIME" is pressed, holding the Printhead Yellow button will brime the printhead. Fluid will be released from the pen and will be filled from the supply. This continues through 5 cycles or until the button is released.	PRIME		
When "EMPTY" is pressed, holding the Printhead Yellow button will empty the printhead. Fluid will not flow into the printhead. This will un for 60 seconds or until the button is released.	EMPTY		
Done		E	Empty Button



Priming the Eagle Print Head

In the event air gets into the ink lines or ink foams from the pens during a purge, using the Prime feature will move greater volumes of ink through the system and clear the lines more efficiently than performing multiple purges.

To Prime the Print Head perform the following steps:

Step 1

Raise the Print Head and remove the cover in the following manner:

- A. Raise the Eagle Print head to its highest setting by pulling out the lock knob, manually lifting the Eagle Print Head and pushing the lock knob to its original position.
- B. Remove the cover on the bottom in the following manner:
 - B-a. Pull both retaining lock knobs out from the head at the same time
 - B-b. Once the locks are out of the head pull the cover down and away from the head and set the cover aside see image 1-1.
- C. Place a Purge Tray under the Eagle Print Head you intend to select as a precaution to guard against ink dripping onto the belts during this procedure.



Remove the "Ink Out" Fitting plug by:

- A. Press and hold the lock clip as shown in image 2-1
- B. While the lock clip is depressed, lift out the fitting plug and set it aside, see image Note: Once the plug has been removed, the lock clip will remain open.



Insert the Purge Bottle line fitting into the Eagle Print Head by pushing down firmly until the lock clip automatically closes, see image 3-1 and 3-2.





Run the Raptor 6 Software and prime the head by performing the following:

- A. Bring the Raptor 6 Software on line.
- B. In the Main Menu press File > System >> Setup, to open the System Setup Menu see image 4-1
- C. In the "Maintenance" section of the System Setup Menu and high light the "Eagle" Print Head you are priming, see image (A Warning: Make sure the purge tray is under the print head selected)

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ave Job	4-D ich are	not grey and enter ner	w values. Click on	"More" for n	odule details.			Eagle heads · Enabled Eagle AMS heads · Enabled
	Module	From Sensor	Top Of Piece	Printer Type	Module Size	Resolution	Setup	Falcon heads - Enabled Osprey heads - Enabled
Save Job As	1	6.00"	0.00''	Eagle	4.25"	150 x 600	5	PDF - Enabled
Data File Ontions	2	10.00"	4.50"	Osprey	2.56"	600 x 400	7	TCP/IP interface - Enabled
	3	10.00"	7.25"	Falcon	2.00"	600 x 600	1	PPMC · Enabled
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- D. Once in the Set Up Menu, press the "Pen Maintenance" button to open the Maintenance Menu, see image 4-2
- E. Press the Prime button, see image 4-2. (🕂 Warning: Make sure the purge tray is under the selected print

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head)
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- F. Press the Yellow Purge button to initiate the Prime function.
- G. Remove the Purge Bottle by pressing the locking clip of the "Ink Out" fitting, then lifting the purge bottle barb out of the fitting
- H. Insert the plug (removed in Step 2) back into the "Ink Out" fitting.

It should be noted that the appearance of the buttons in Maintenance Menu will change during the performance of Steps 4-E through 4-G, see image 4-3

EAGLE-1A - Pen Maintenance	EAGLE-1A - Pen Maintenance	EAGLE-1A - Pen Maintenance
To prepare the head for long-term periods of un-use: 1. Remove the current ink from the head using the "Empty" procedure. 2. Disconnect the ink supply tube from the head and plug in the Flush supply tube. 3. Fill the pen with the Flush fluid using the "Prime" procedure. To prepare for printing use the same procedure to replace the flush with ink. The flush second, rabiding the printhead yellow button to more than the time set here. When BENTY" is pressed, holding the Printhead Yellow button will prime the porthead. Fluid will be released from the pen and will be fluid for in the port and the port of the printhead. Fluid will be released from the pen and will be fluid for in the port and the port of the printhead. Fluid will be released. When BENTY is pressed, holding the Printhead Yellow button will prime the porthead. Fluid will be released. When BENTY is pressed, holding the Printhead Yellow button will prime the porthead. Fluid will be button for released. When BENTY is pressed, holding the Printhead Yellow button will prime the porthead. Fluid will be button for released. More the prime and the button of the released. Apppearance of the menu when first opeened, bottom button button shows: "Donne"	To prepare the head for long-term periods of un-use: 1. Remove the current ink from the head using the "Empty" procedure. 2. Disconnect the ink supply tube from the head and plug in the Flush supply tube. 3. Fill the pen with the Flush fluid using the "Prime" procedure. To prepare for printing use the same procedure to replace the flush with ink. Paring using a dark press of the printhead yellow button parges for 1 accord. Holding the button down parges up to but not more from the sether. When "PRIME" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released from the pen and will be field from the supply. This continues through 5 cycles or until the button is released. When "EMPTY" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will not flow into the printhead. This will run for 60 seconds or until the button is released. Appearance of the menu when Prime buttton is pressed, bottom hutton shows: "Cancel"	To prepare the head for long-term periods of un-use: 1. Remove the current ink from the head using the "Empty" procedure. 2. Disconnect the ink supply tube from the head and plug in the Flush supply tube. 3. Fill the pen with the Flush fluid using the "Prime" procedure. To prepare for printing use the same procedure to replace the flush with ink. Profing using a dark press of the printhead yellow button purges for 1 accord. Holding the button down purges up to but not more than the time set here. When "PRIME" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released from the pen and will be flield from the supply. This continues through 5 cycles or until the putton is released. When "EMPTY" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released. When "EMPTY" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released. When "EMPTY" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released. When "EMPTY" is pressed, holding the Printhead Yellow button will prime the printhead. Fluid will be released. BUSY Once the Yellow Purge Button has been pressed the Prime
mage 4-3	Pressing this button in this condition will deselect "Prime" The bottom button would again show "Done"	the maintenance menu bottom button shows "BUSY" and will remain in this state until the Prime function is completed

Special Warning: If you have <u>not properly selected</u> the actual Print Head in Step 4-C you will effectively complete a simple Purge and never see the Pen Maintenance Menu go to the "BUSY" state. Instead you will see a Purge Complete appear over the Maintenance Menu as shown in image 4-4. This will be your only indicator that you have not performed the "Prim" Function.



Empty the Head For Storage

Prepare for Storage

In the event your machine will be disconnected from power for a 90 day time period or more or you plan to ship the machine to another location it should be prepared for storage.

To prepare the Eagle Print Head for storage, perform the following:

Step 1

Raise the Print Head and remove the cover in the following manner:

- A. Raise the Eagle Print head to its highest setting by pulling out the lock knob, manually lifting the Eagle Print Head and pushing the lock knob to its original position.
- B. If the print head is covered, remove the cover on the bottom in the following manner:
 - b-1. Pull both retaining lock knobs out from the head at the same time
 - b-2. Once the locks are out of the head pull the cover down and away from the head and set the cover aside see image 1-1.
- C. Place a Purge Tray under the Eagle Print Head you intend to select as a precaution to guard against ink dripping onto the belts during this procedure.



Remove the "Ink Out" Fitting plug by:

- A. Press and hold the lock clip as shown in image 2-1
- B. While the lock clip is depressed, lift out the fitting plug and set it aside, see image 2-1 Note: Once the plug has been removed, the lock clip will remain open.



Insert the Purge Bottle line fitting into the Eagle Print Head by pushing down firmly until the lock clip automatically closes, see image 3-1 and 3-2.





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

- A. Bring the Raptor 6 Software on line.
- B. In the Main Menu press File > System >> Setup, to open the System Setup Menu see image 4-1
- C. Go to the "Maintenance" section of the System Setup Menu and high light the "Eagle" Print Head you are emptying, see image 4-1. Note: This step will have to be repeated for each individual print head you wish to empty. There is no command to empty all the print heads at one time. (A Warning: Make sure the purge tray is under the print head selected)

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- D. Once in the Set Up Menu, press the "Pen Maintenance" button to open the Maintenance Menu, see image 4-2
- E. Press the Prime button, see image 4-2. (A Warning: Make sure the purge tray is under the selected print head)



- F. Press the Yellow Purge button to initiate the "Empty" function.
- G. Remove the Purge Bottle by pressing the locking clip of the "Ink Out" fitting, then lifting the purge bottle barb out of the fitting.

Remove the Ink Bottle from the Ink Supply in the following manner:

- A. Press and hold the retaining clip on the ink supply box, see image 5-1.
- B. Lift the line off and away from the ink bottle.
- C. Remove the ink supply box from the Ink Supply Controller, see image 5-1. (Note: Cap the Ink Box once it has been removed)



Step 6

Install a box of "Flush" solution into the Ink Supply Controller

- A. Place the Flush box into the ink Supply Controller with the view window face out
- B. Remove the cap from the barb at the top of the box
- C. Press the supply line fitting on the box barb firmly until the retaining clip locks.

Repeat the "Prime" procedure as stated in Step 4 on pages 12 through 13 to flush the Eagle Print Head.

(Note: It may be necessary to empty the Purge Bottle before priming the head with Flush)

The flush box can be left in the Ink Supply Controller for storage. When putting the system back on line after it has been inactive, prime the system with Flush, then install a New Box of Ink and prime the system.

