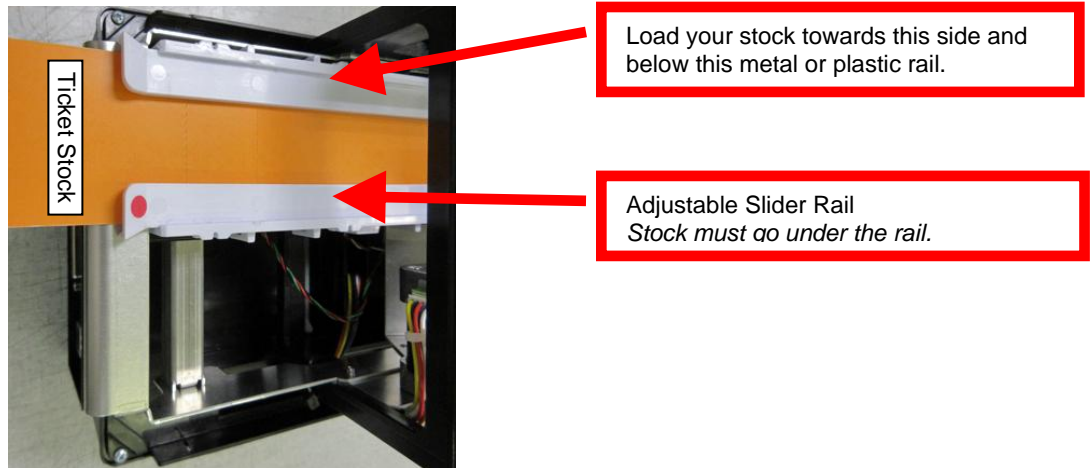


Routine Cleaning Procedures Lemur

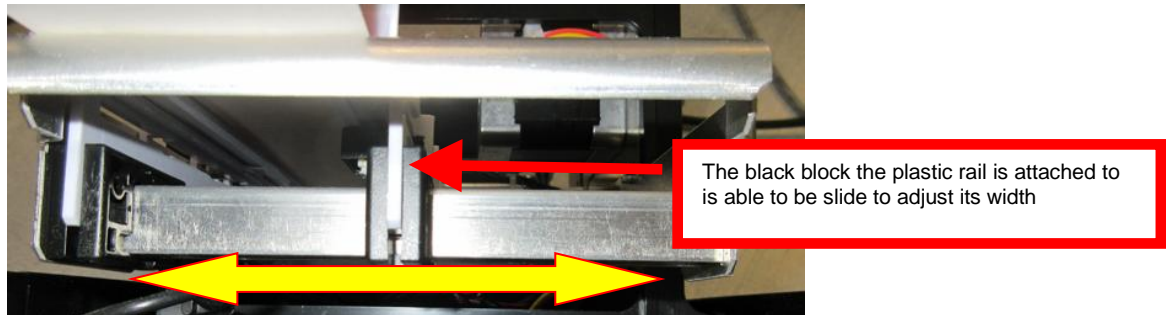
UNIVERSAL PAPER GUIDE (UPG)

- **PLASTIC RAIL PAPER PATH** (from January 2021 to present)



Above photo is of RADJW UPG with plastic rails paper path set for 2" wide stock

Adjust the slider bar down to the proper ticket width, making sure the bar is not too tight against the ticket. The ticket should move freely in the paper guide path



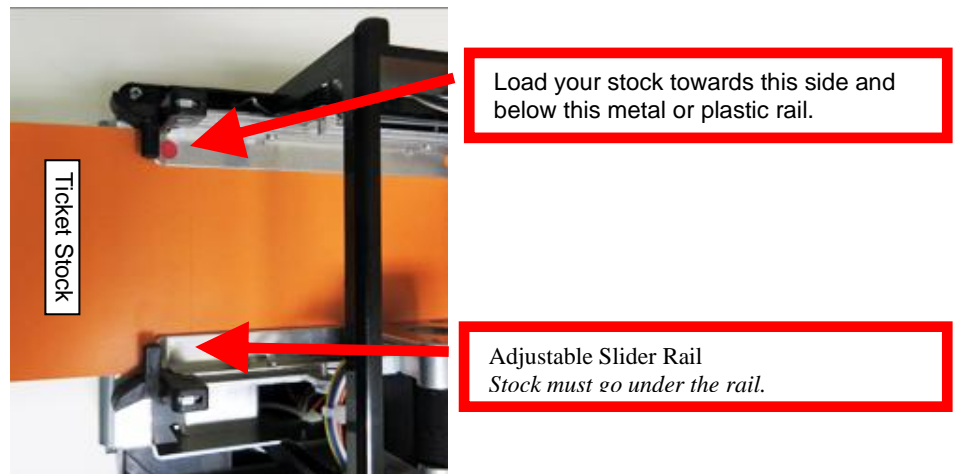
- Open up the adjustable rail so it is a little wider than the width of the stock you intend to us.
- Insert your ticket stock into the paper guide.
- Adjust the rail down to the proper ticket width, making sure the rail is not too tight against the ticket. The ticket should move freely in the paper path.

CAUTION:

If the slider bar is adjusted too tightly against the ticket stock, then it will cause the stock to buckle (see photos below). This will lead to feed or ticket jam issues. Ensure the adjustable rail is properly adjusted.



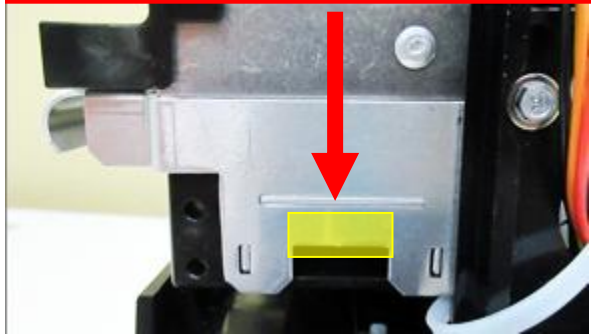
- **METAL RAIL PAPER PATH** (from October 2019 to December 2021)



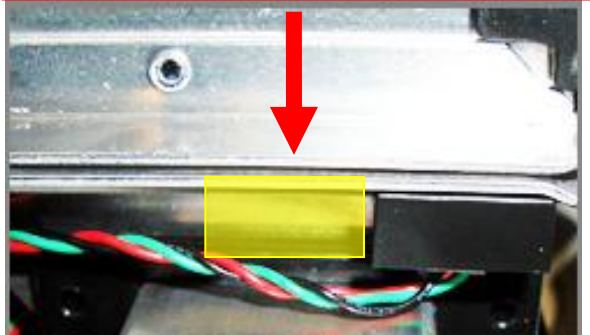
Above photo is of RADJW UPG with metal rails paper path set for 3.25" wide stock

Adjust the slider bar down to the proper ticket width, making sure the bar is not too tight against the ticket. The ticket should move freely in the paper guide path

The adjustable rail may be closed by gently pushing on the black plastic block shown in the area below (highlighted in yellow). This may be done with a screw driver or pen.



The adjustable rail may be opened by gently pushing on the paper guide rail (highlighted in yellow) with your thumb.



- Open up the adjustable rail so it is a little wider than the width of the stock you intend to us.
- Insert your ticket stock into the paper guide.
- Adjust the rail down to the proper ticket width, making sure the rail is not too tight against the ticket. The ticket should move freely in the paper path.

CAUTION:

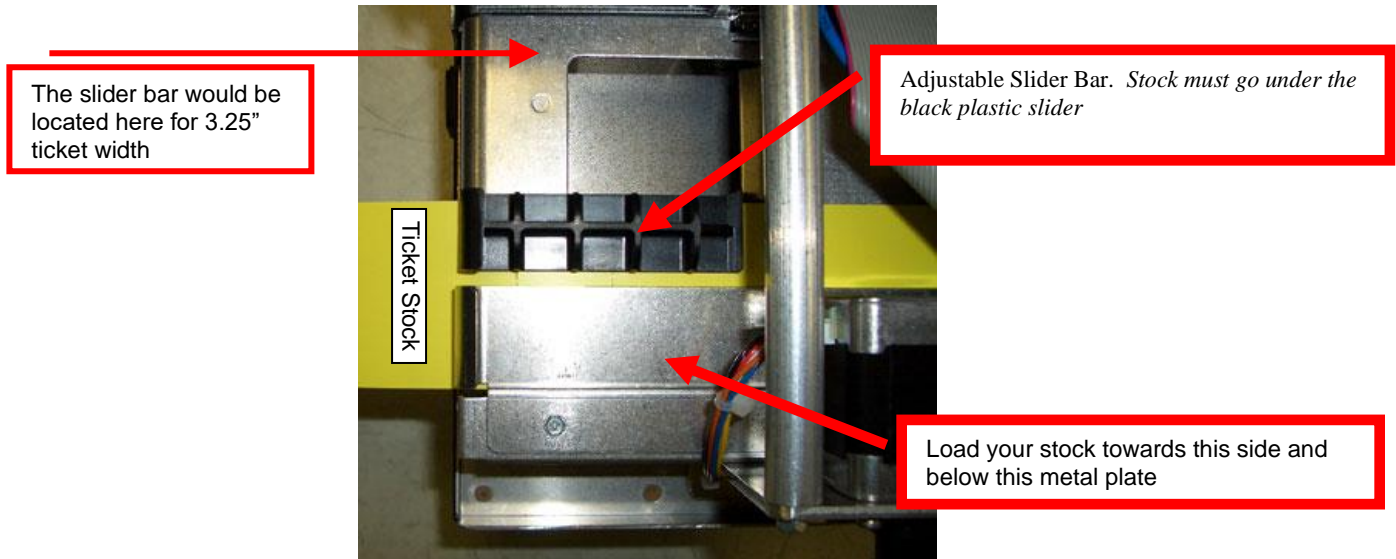
If the slider bar is adjusted too tightly against the ticket stock, then it will cause the stock to buckle (see photos below). This will lead to feed or ticket jam issues. Ensure the adjustable rail is properly adjusted.



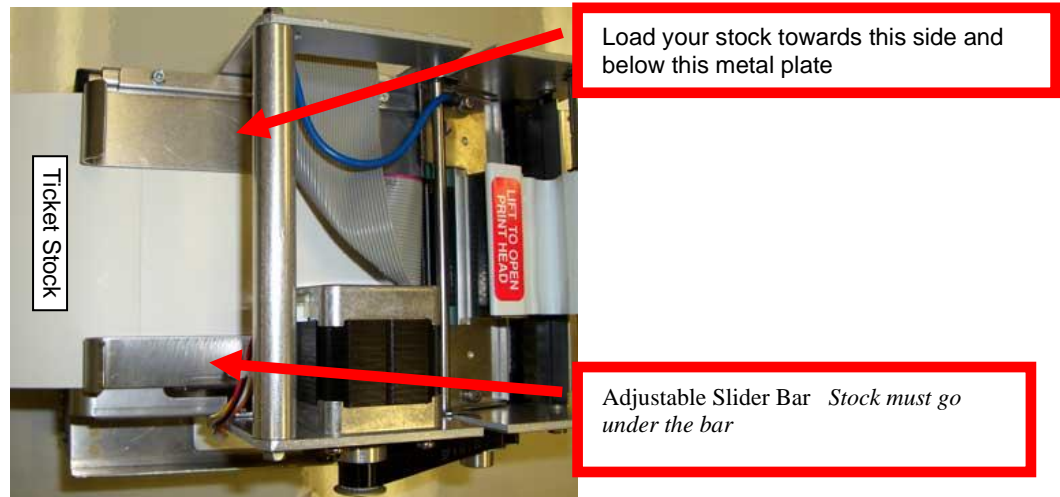
PAPER GUIDE SLIDER BAR (NON-UPG) (Printers prior to October 2019)

Confirm that the slider bar on the paper path is properly adjusted for the width stock being used. If the slider bar or rail is adjusted too far away from the ticket it may cause crooked printout or the printer to skip tickets.

To adjust the paper path for use with a different ticket width, adjust the slider bar to the fully open position. Insert your ticket stock into the paper guide. Adjust the slider bar down to the proper ticket width, making sure the bar is not too tight against the ticket. The ticket should move freely in the paper guide.



Above photo is of a RDJW paper path with plastic slider bar set for 2" wide stock



Above photo is of ADJ paper path with metal slider bar set for 4" wide stock

THERMAL PRINT HEAD CLEANING PROCEDURE

The print head should be cleaned periodically to prevent debris from building up on the print element. The required cleaning interval varies greatly depending on the quality of the ticket stock and the amount of dust entering the print area. Excessive dirt builds up on the print head will result in reduced quality. Continuing to run the print head in a dirty condition will reduce its life expectancy, as it is unable to diffuse its heat properly.

The following is done with the printer powered off and unplugged from the AC source.

In June of 2025 printers started to use a Head Spring Assembly. If your printer has this type of assembly then continue on. If not then go to [page 6](#).



Cam Lock Assembly



Head Spring Assembly

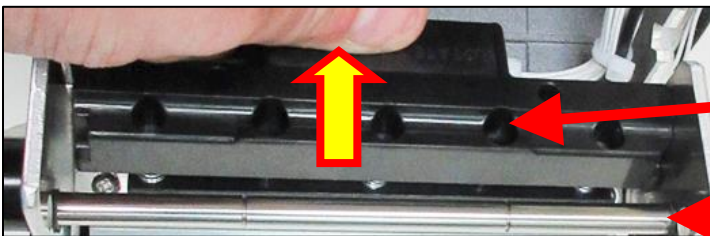
HEAD SPRING ASSEMBLY

The thermal print head can be removed for cleaning or replacement, as follows:

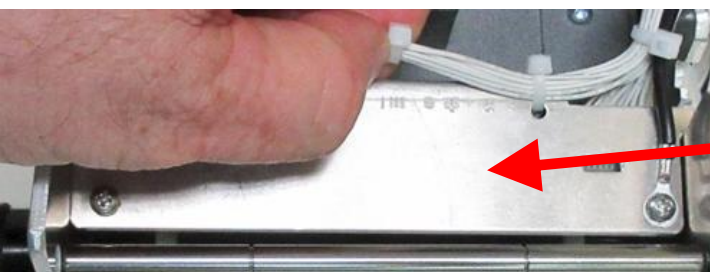
1. Make sure power is off and the AC cord is disconnected from the printer.
2. **DO NOT UNPLUG CABLE FROM PRINT HEAD.**
3. Push down on the Head Spring Assembly tab to disengage it from the cam shaft.



4. Once the assembly is below the shaft move it backwards and remove from print module.



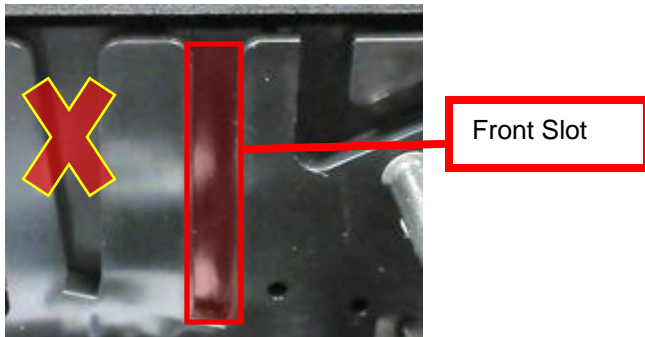
5. Lift the print head mounting plate out from the print module.



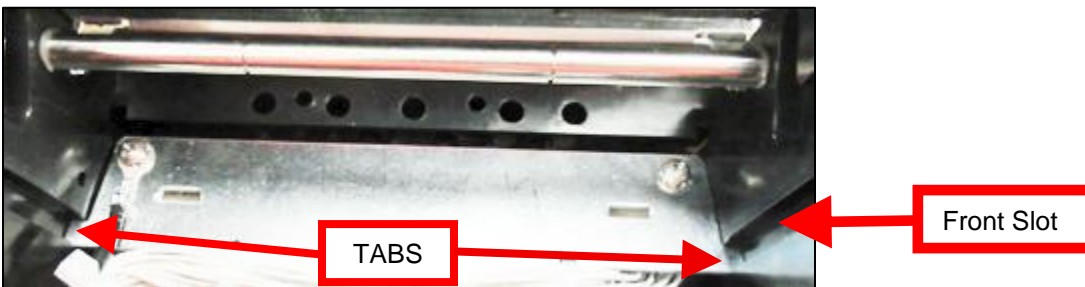
6. Clean the thermal print head surface (the side that makes contact with the paper) with isopropyl alcohol & paper towel. See yellow highlighted area with red border.



7. Install the print head mounting plate back into the print module by reversing the above procedures. Make sure the print head mounting plate tabs are in the front print cage slots.



8. Install the print head mounting plate back into the print module in a downward angle. Ensuring tabs are in their correct corresponding slots.

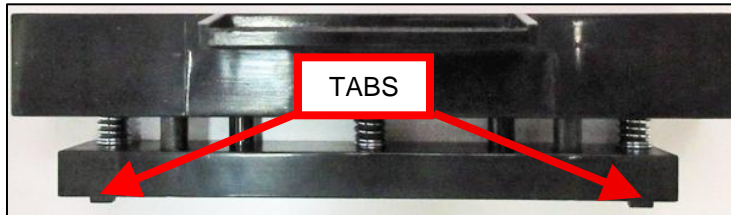


9. Install the Head Spring Assembly back in place.

- a. Position the top recessed radius part of the assembly so it makes contact against the cam shaft. Red highlighted area in the below image.



10. Rotate the lower part of the assembly forward so the tabs on the lower part of the assembly engage the slots in the print head mounting plate.



11. The below image shows the Head Spring Assembly tabs locked in place. See red arrows below.

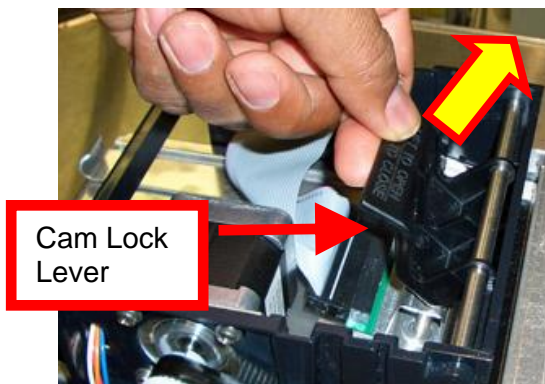


12. The printer is now ready for operation.

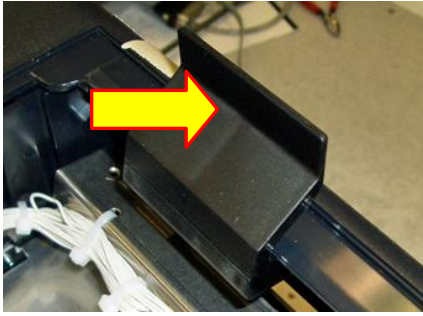
CAM LOCK ASSEMBLY

The thermal print head can be removed for cleaning or replacement, as follows:

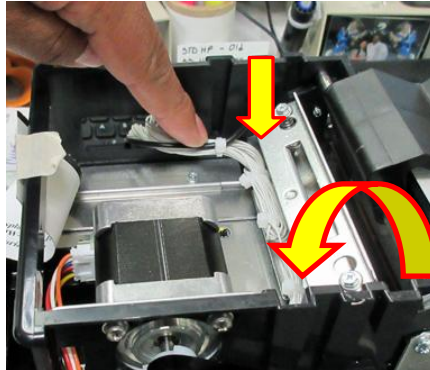
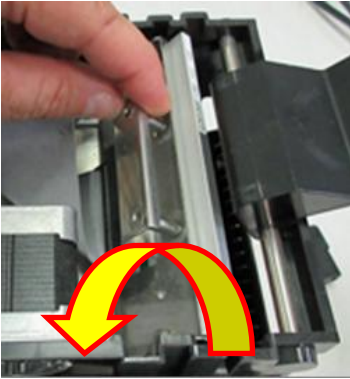
1. Make sure power is off and the AC cord is disconnected from the printer.
2. **DO NOT UNPLUG CABLE FROM PRINT HEAD.**
3. Lift up on the cam lock assembly (located above the head mounting plate) to remove pressure from the thermal head.



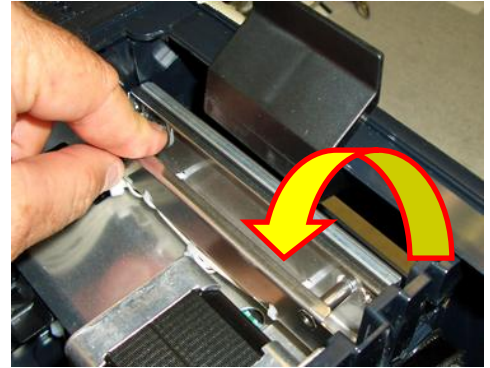
4. Position the cam lock level as far forward as possible.



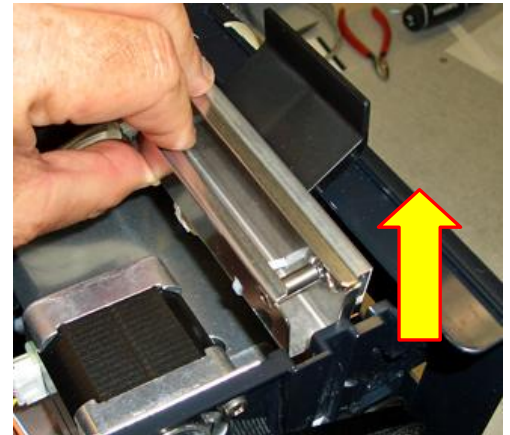
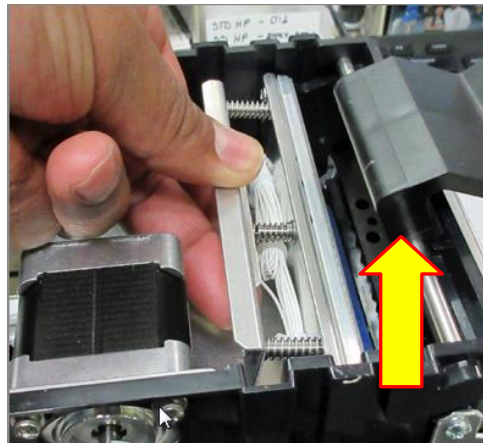
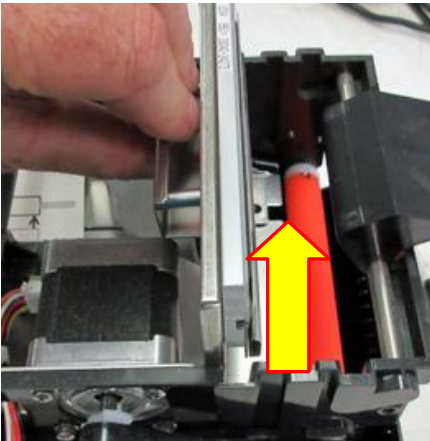
5. Flip the head back toward the rear of the printer. Denote what slot the print head was taken out of. Below photos show the different type of head mounting plates used through the production history of the Lemur series printers.



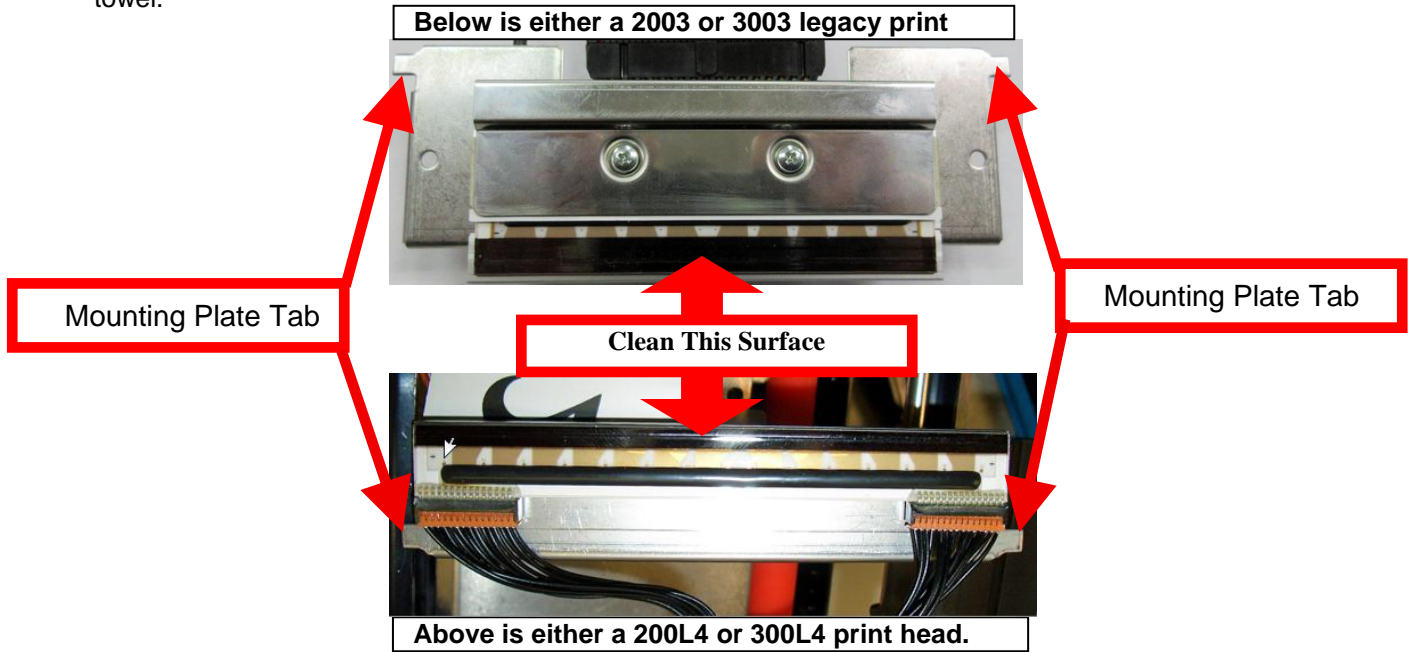
Pushing down on the head cable will aid in flipping the head plate.



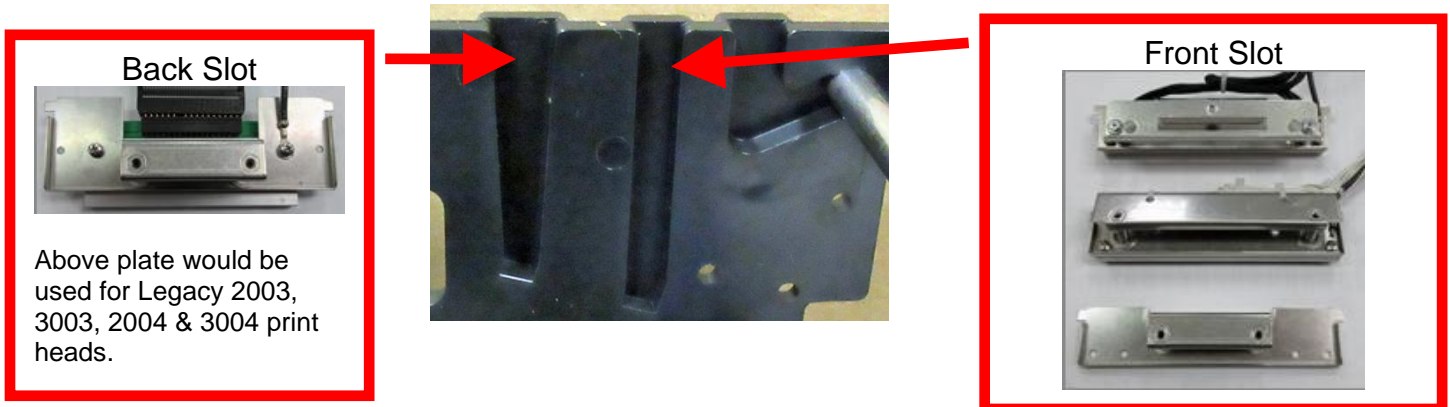
6. Lift the print head mounting plate straight out.



- Clean the thermal print head surface (the side that makes contact with the paper) with isopropyl alcohol & paper towel.



- Install the head mounting plate by reversing the above procedures. Make sure the print head mounting plate tabs are in the correct print cage slots.

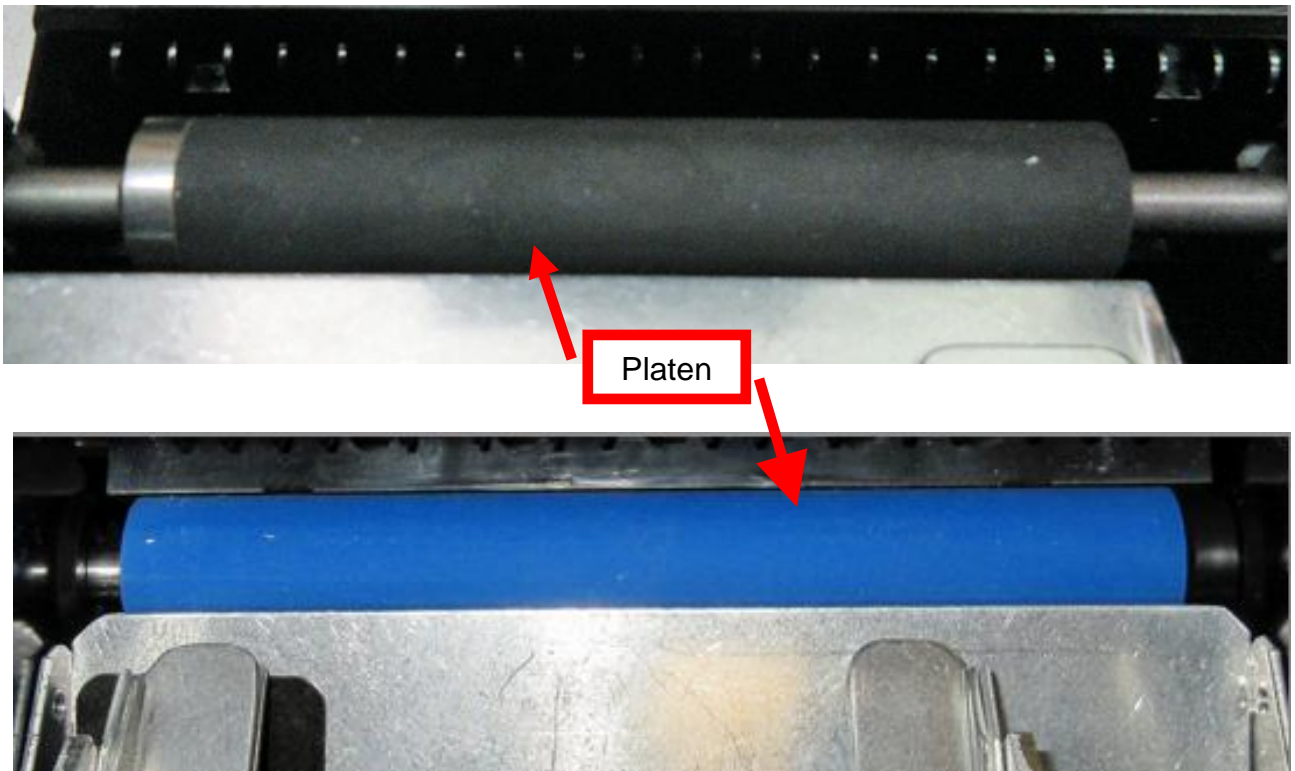


- Restore pressure to the head by pushing down on the cam lock assembly. The printer is now ready for operation.

PLATEN CLEANING PROCEDURE

The Platen (rubber drive roller) should be cleaned once a year to prevent paper dust from building up on the roller. (NOTE: The platen may require more frequent cleaning in dusty environments or high level of usage)

1. With the print head still removed, clean the platen.
2. Apply a small amount of Isopropyl alcohol onto a paper towel to clean the rubber roller.
3. Clean **only** the part of the rubber roller where the media makes contact with it. For example, if you are using a 2" wide ticket, only clean the part of the platen where the 2" wide ticket makes contact with it.
4. Rotate the rubber roller clockwise a little and repeat step 4; continue in the same manner for one full revolution of the rubber roller.
5. Move onto cleaning the SQ load opto if the printer has one.

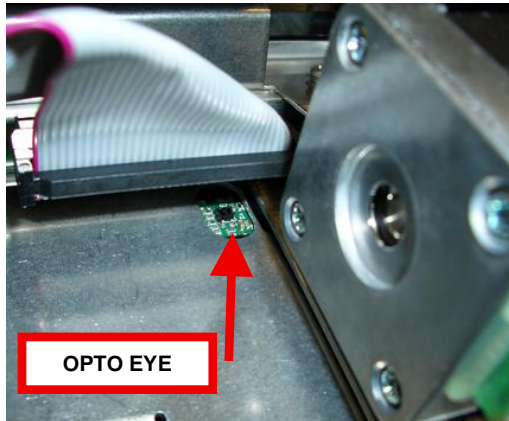


Platen size may vary from what is shown in the photo.

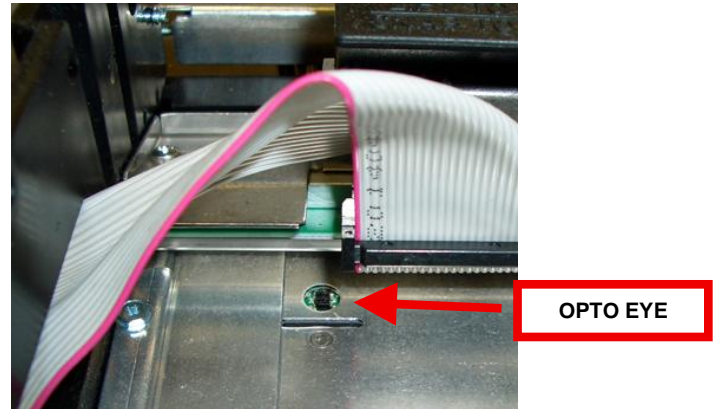
Clean Load Sensor (opto)

A printer built after August 2014 may have a load SQ opto that is responsible for letting the printer know when it has paper stock loaded in the printer. Printers with s/n 310327 or higher.

1. Using inert dusting gas (canned air) or equivalent blow air over the opto eyes (see photo below).
2. Once the opto eye is cleaned, install the head by reversing the steps that was done [The Thermal Head Cleaning Procedure Section](#).
3. Restore pressure to the head by pushing down on the cam lock lever.



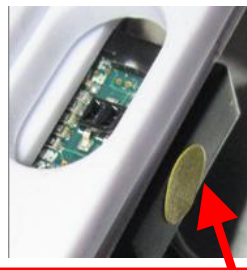
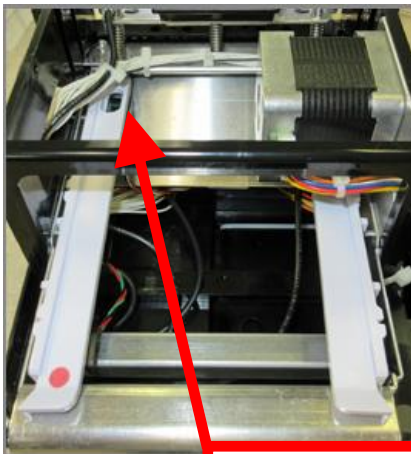
Above is a photo of a RADJW paper guide



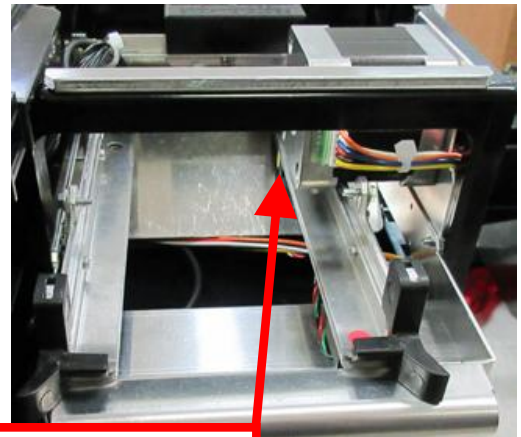
Above is a photo of an ADJ4 paper guide

In October 2019 the Universal Paper Guide (UPG) was introduced.

Below is a UPG with plastic rails



Below is a UPG with metal rails



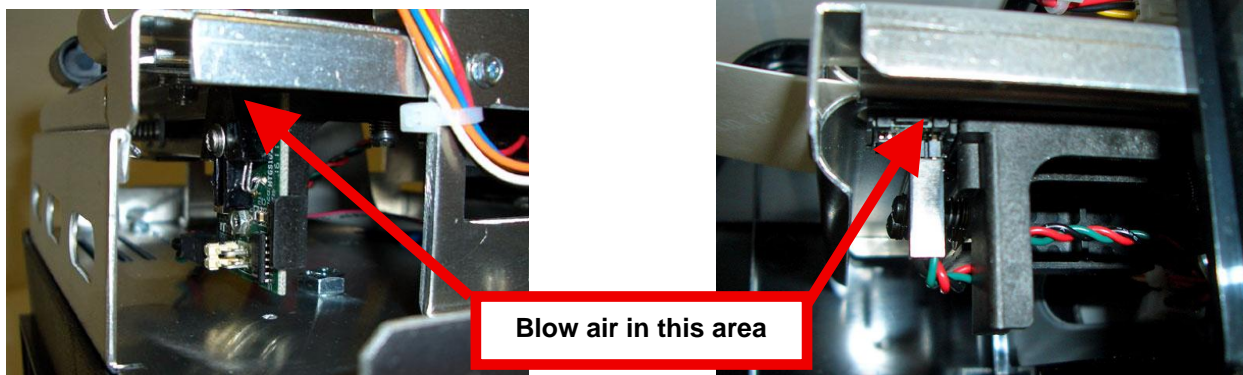
**OPTO EYE
has yellow DOT on side**

Clean Black Mark Sensor (opto)

There is one optical sensor (opto) that detects the black timing mark on the media for cut and tear alignment. Over a period of time there may be an accumulation of ticket dust on the opto eyes themselves. This paper dust could cause erratic operation of the printer.

Using inert dusting gas (canned air) or equivalent blow air over the opto eye (see below diagrams).

Below is for non- UPG path printer

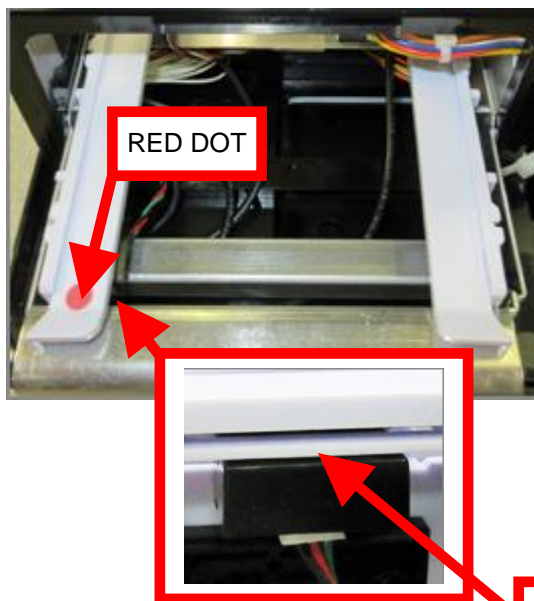


Above image is of a standard 422264 opto

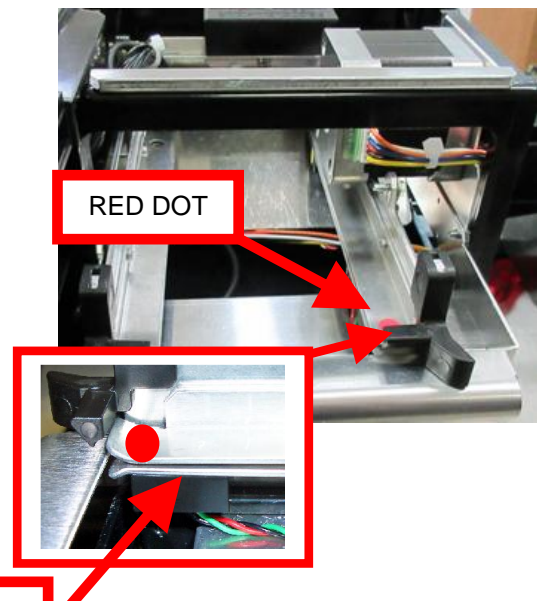
Above image is of a SQ opto

In October 2019 the Universal Paper Guide (UPG) was introduced. The sensor is located on the rail that has a RED dot.

Below is a UPG with plastic rails



Below is a UPG with metal rails



Below is a link to the complete Lemur user manual.

www.bocasystems.com/documents/lemur_manual.pdf

Please go to the link below if you require technical support with your BOCA printer. There is no fee for initial email support.

www.bocasystems.com/onlinesupportform.html