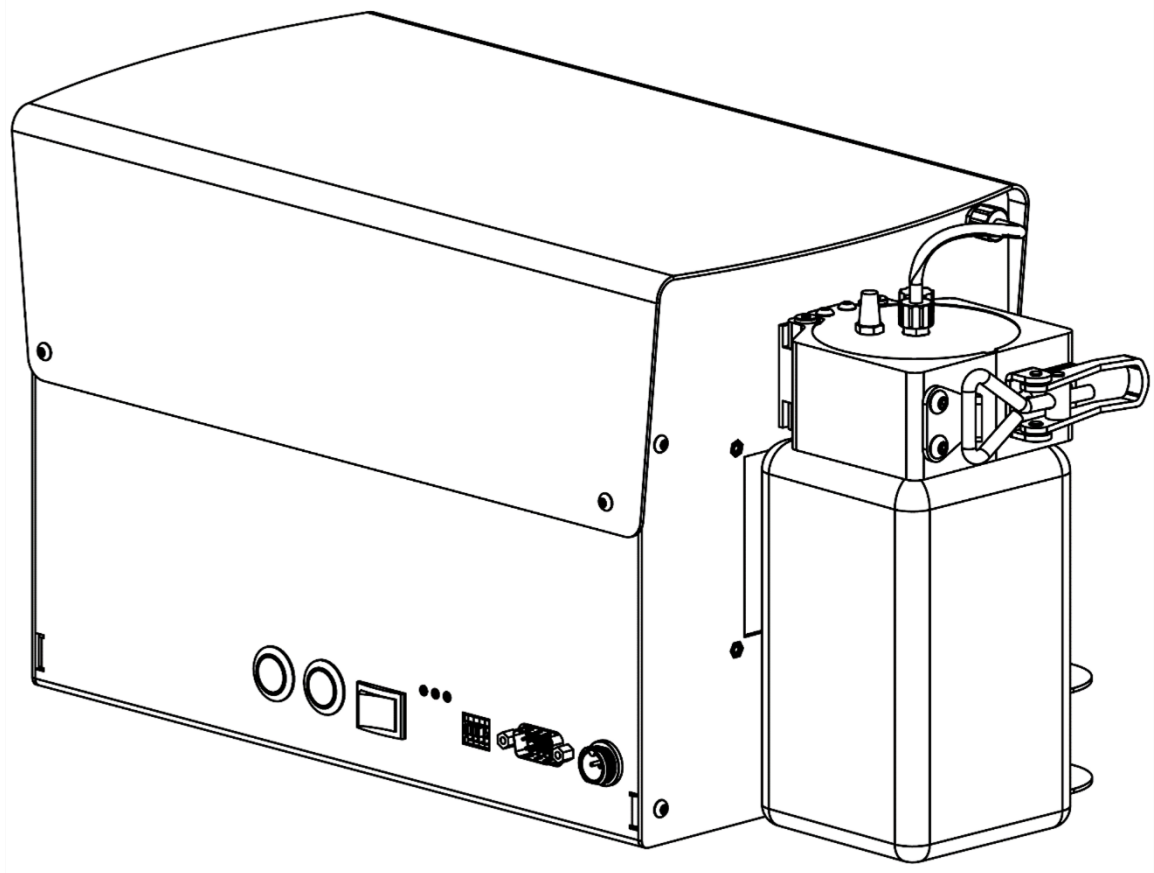


# RNJet Motorized Bulk Ink System

Setup & Installation Manual



# **RNJet Motorized Bulk Ink System**

## **Industrial Hi-Resolution Inkjet Printing System**

### **Installation Manual**

Revision **14**            2026/06/18

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# Notices & Cautions

## Legal Disclaimer

Accessories could be different to this document without notification due to part shortage or design improvement.

## Safety

- During handling, installation, maintenance, and operating procedures for the printing system, always follow safety regulations by wearing safety glasses, gloves, and protective clothing.
- Keep all print system components and fluids away from open flames and excessive heat.
- In case of fluid eye contact, flush immediately with large amount of water and receive appropriate medical attention.
- The power source used for the print system should comply with all safety regulations and codes required for safe plugging.
- Power, data, and sensor input cables must be inserted appropriately in their respective locations. Where possible, route cables away from moving objects and secure via tie-wraps.

## Handling and Care

The motorized bulk ink system consists of mechanical, electrical, and electromechanical components. Extra precautions should be taken when handling the ink system during installation, operation, and maintenance. Never tilt the bulk ink system as there is a chance of ink leakage and electrical shock in electronic components.

## **Ink**

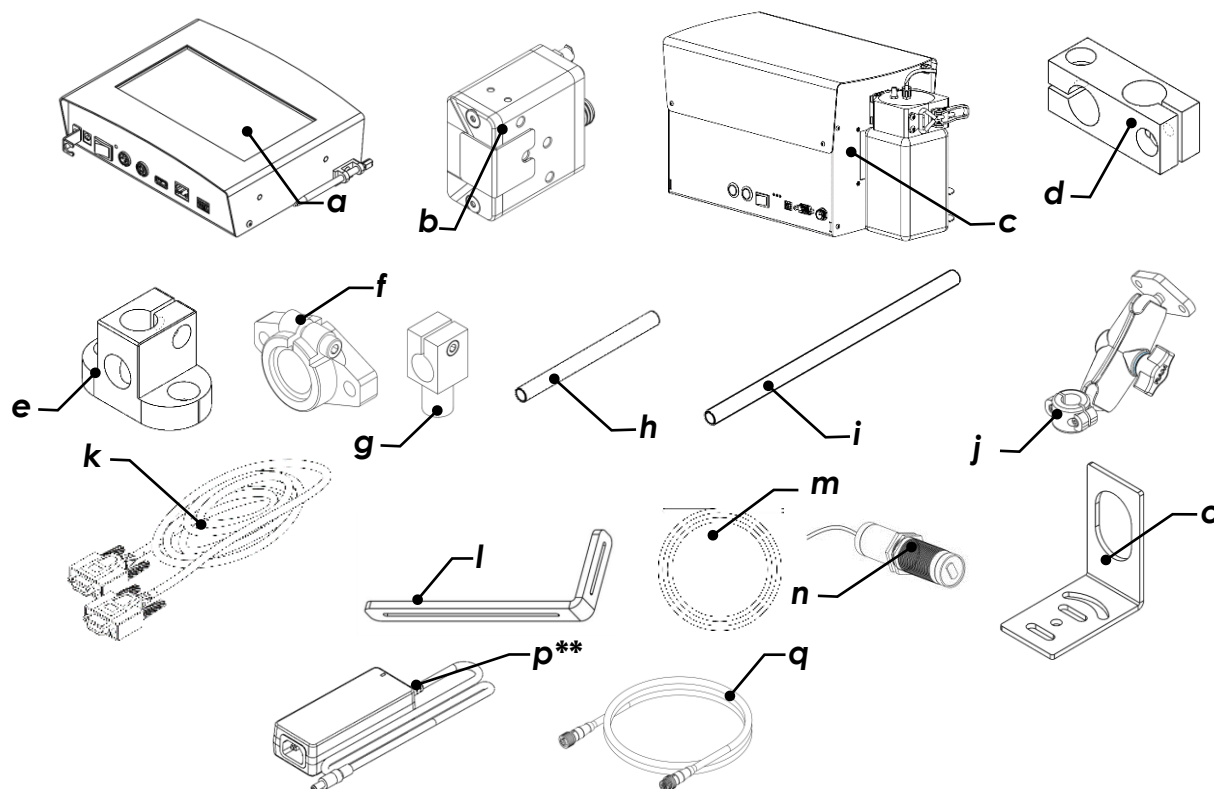
Inks come in different solutions, varieties, and codes, make sure to use identical ink for each printer system and avoid exchange of ink with other varieties. Consult our sales team for more information (see last page of this manual).

*For the best printing results, always use RNJet PREMIUM INKS.*

For more information, please visit <http://www.rnjet.com>.

# Introduction

## What's in the box: RNJet100+ and RNJet200+



- a:** Controller x 1pc
- b:** Print Head x 1pc [2pcs]
- c:** Ink System x 1pc [2pcs]
- d:** Cross Mount x 2pc [4pcs]
- e:** Base Mount x 1pc [2pcs] #
- f:** Strut Mount x 1pc [2pcs]
- g:** Strut Arm x 1pc [2pcs]
- h:** Ø16 x 200mm x 1pc [2pcs]
- i:** Ø16 x 380mm x 2pcs [4pcs]

- j:** Controller Pivot Mount x 1pc
- k:** Ink Data Cable x 1pc [2pcs]
- l:** L-shape Bracket x 1pc [2pcs]
- m:** Ink Tube x 1pc [2pcs]
- n:** Photocell (Sensor) x 1pc
- o:** Photocell Mount x 1pc
- p:** Power Adaptor x 1pc\*\*
- q:** Data Cable x 1pc [2pcs]

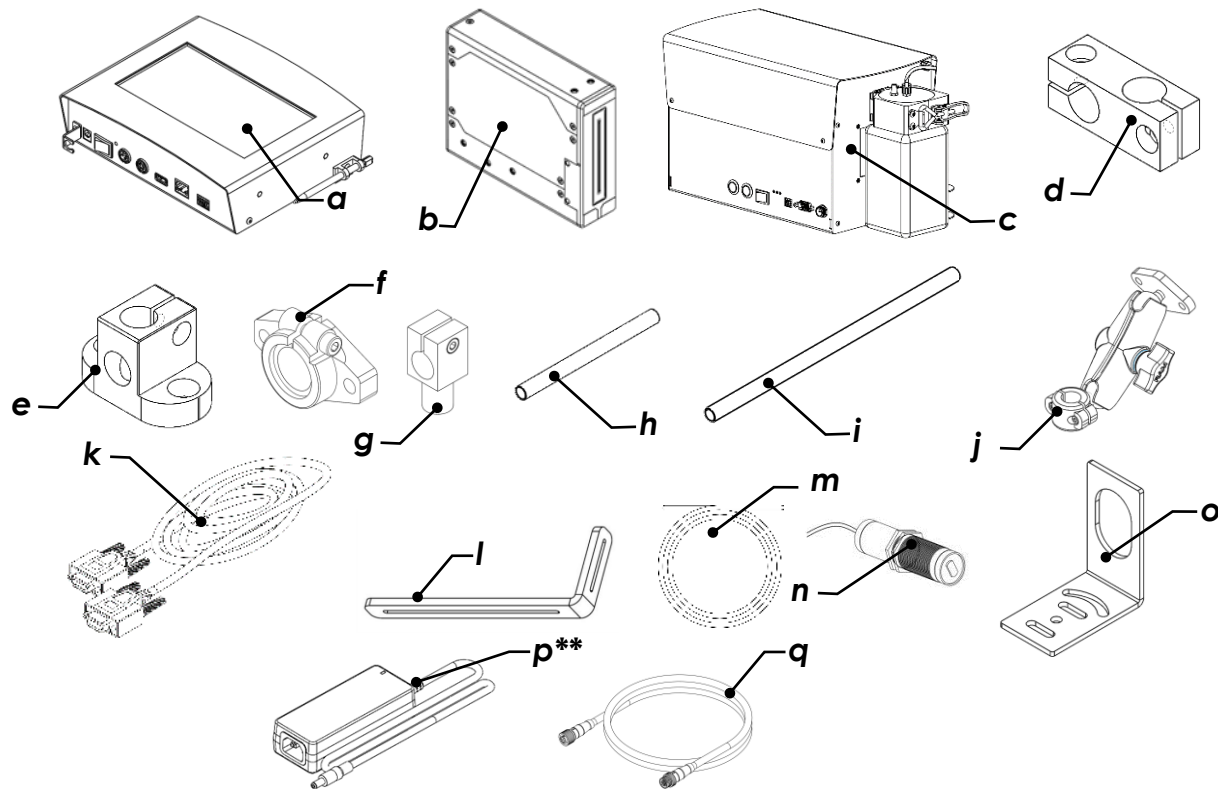
[ ] Only for RNJet 200.

\*\* Due to different power plug standards worldwide, we do not supply the power cord.

**# Screws for Base Mount to the Production Line are not provided since the thickness, depth, material, tapped or not for customers differ**

Figure 1

## What's in the box: RNJet E1-72+ and RNJet E1-140+



- a:** Controller x 1pc
- b:** Print Head x 1pc [2pcs]
- c:** Ink System x 1pc [2pcs]
- d:** Cross Mount x 2pc [4pcs]
- e:** Base Mount x 1pc [2pcs] #
- f:** Strut Mount x 1pc [2pcs]
- g:** Strut Arm x 1pc [2pcs]
- h:** Ø16 x 200mm x 1pc [2pcs]
- i:** Ø16 x 380mm x 2pcs [4pcs]

- j:** Controller Pivot Mount x 1pc
- k:** Ink Data Cable x 1pc [2pcs]
- l:** L-shape Bracket x 1pc [2pcs]
- m:** Ink Tube x 1pc [2pcs]
- n:** Photocell (Sensor) x 1pc
- o:** Photocell Mount x 1pc
- p:** Power Adaptor x 1pc\*\*
- q:** Data Cable x 1pc [2pcs]

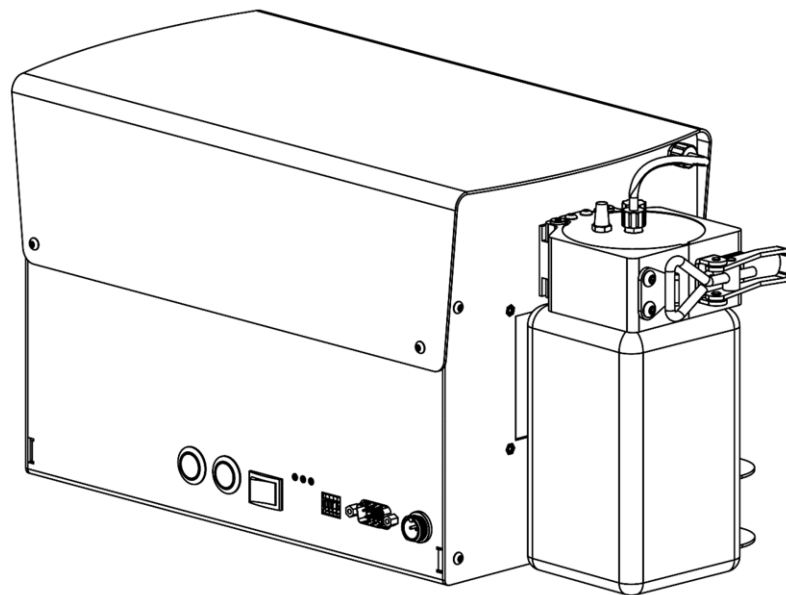
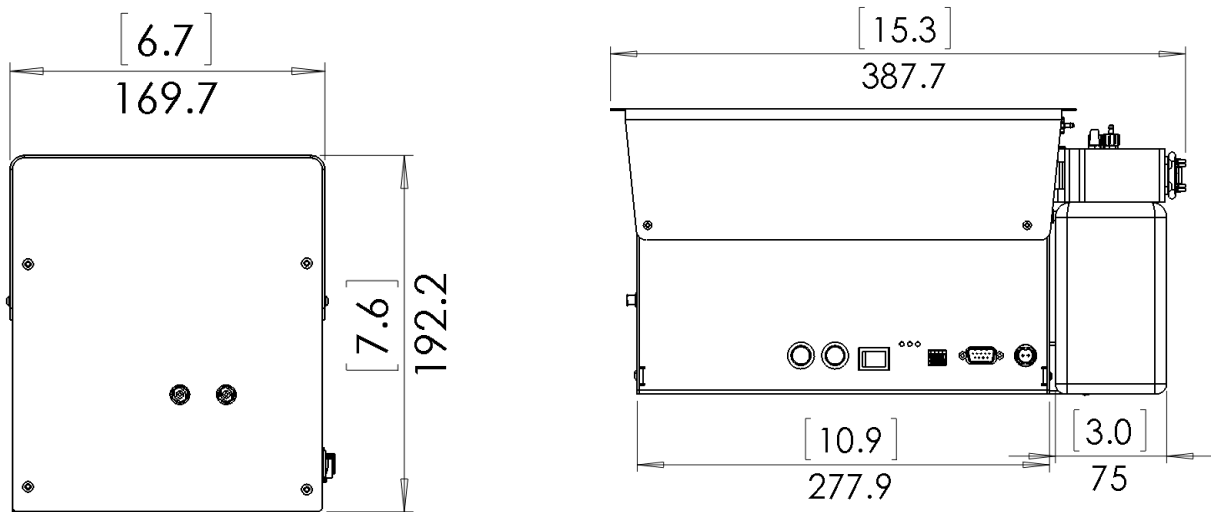
[ ] Only for RNJet 140.

\*\* Due to different power plug standards worldwide, we do not supply the power cord.

**# Screws for Base Mount to the Production Line are not provided since the thickness, depth, material, tapped or not for customers differ**

Figure 2

## Dimensions:



*Dimensions are in mm [inch]*

*Figure 3*

# System Specifications

## Accessories and Consumables

Below are optional and essential items your device should have in order to function or keep up with the maintenance schedule. (See Figure 4)

You could find more information about the accessories and consumables on our website at <http://www.rnjet.com>.

**Notice:** Items below are not included in this package and should be ordered separately.

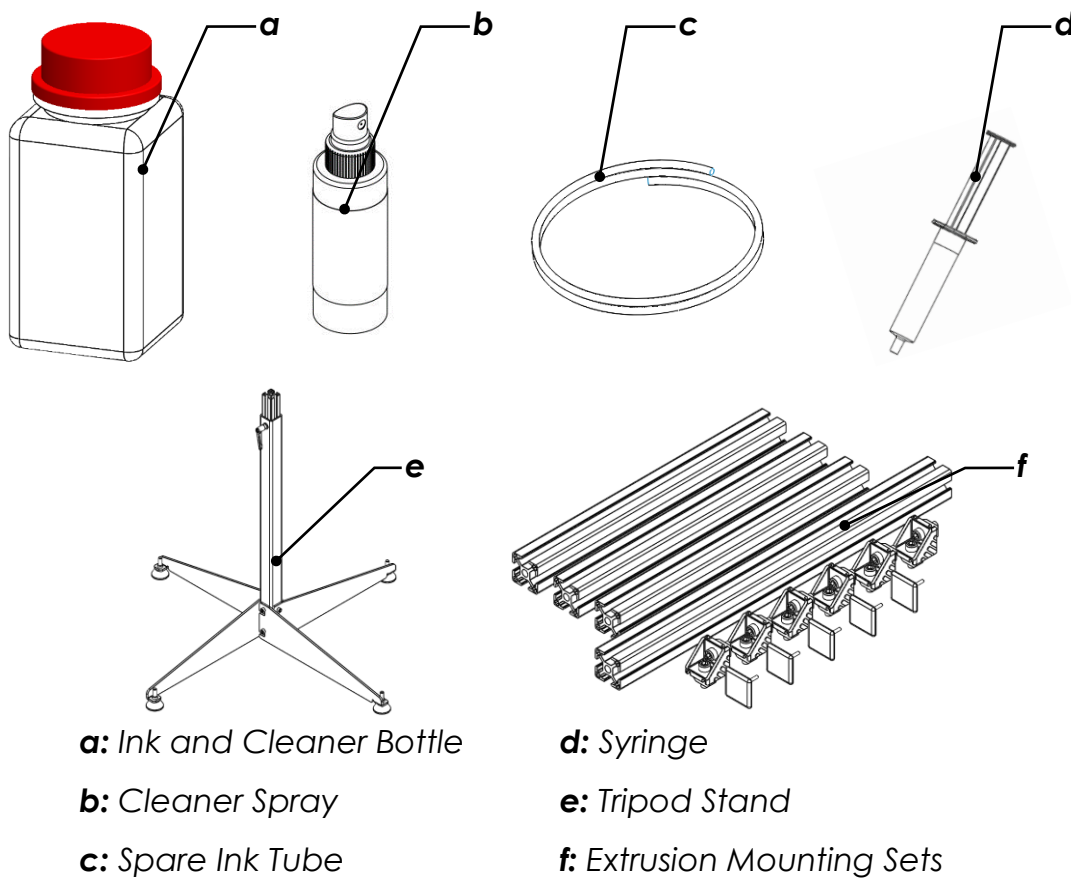


Figure 4

# Installation

## Pipes & Cross Mounts

Assemble one pipe vertically to the Base Mount which is fixed to the production line. Add another pipe horizontally with a Cross mount.

2 long and 2 short pipes are included in the standard packaging. You may decide which length of pipes to use for your application.

- a:** Print Head
- b:** Vertical Pipe
- c:** Horizontal Pipe
- d:** Cross Mount

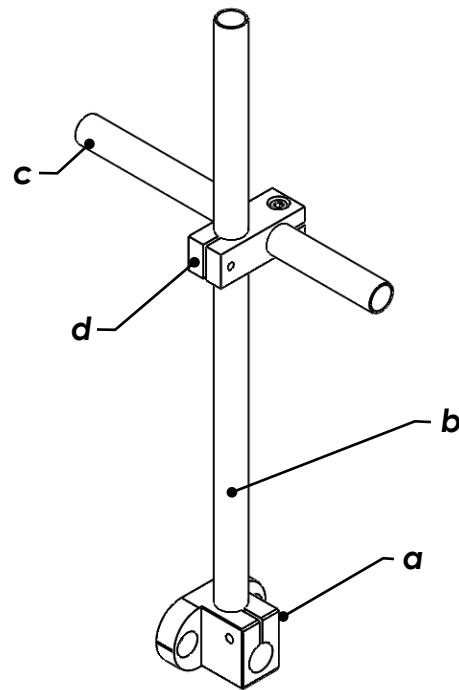


Figure 5

# Print Head

## Small Character Print head (17mm)

Unseal the print head and remove the nozzle guard.

**Notice:** the print-head has been tested before product delivery and may contain a certain amount of cleaner or test ink. Unpack carefully as ink spillage may occur.

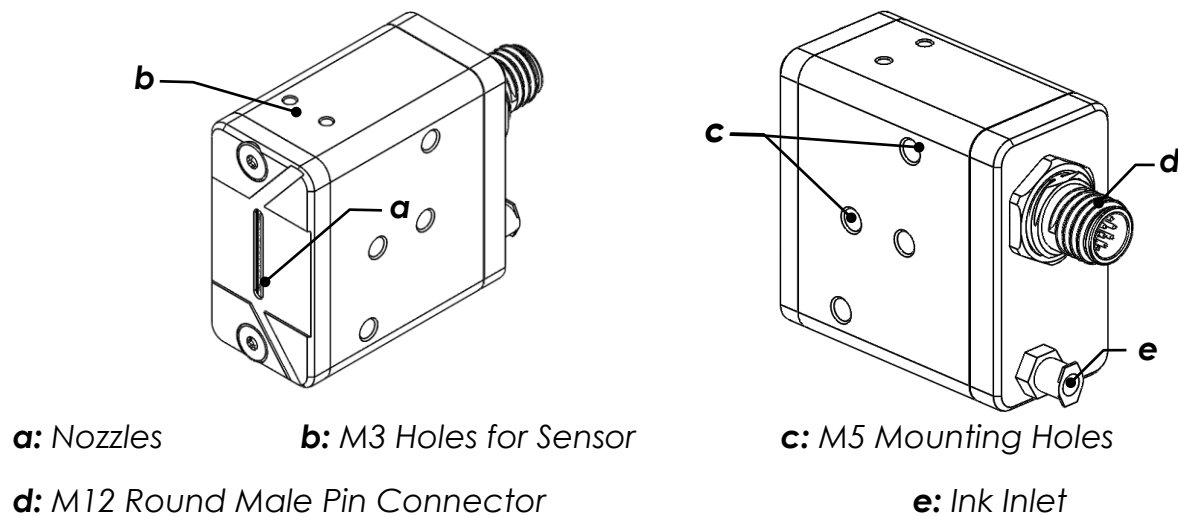


Figure 6

Assemble the Strut Mount and Strut Arm to the Printhead. Then, assemble to the end of the horizontal pipe.

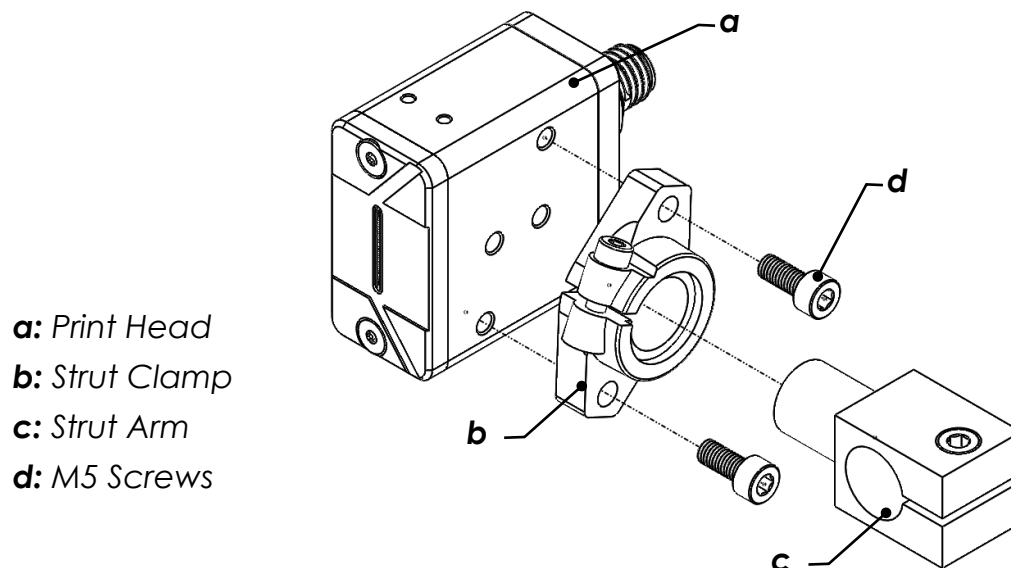
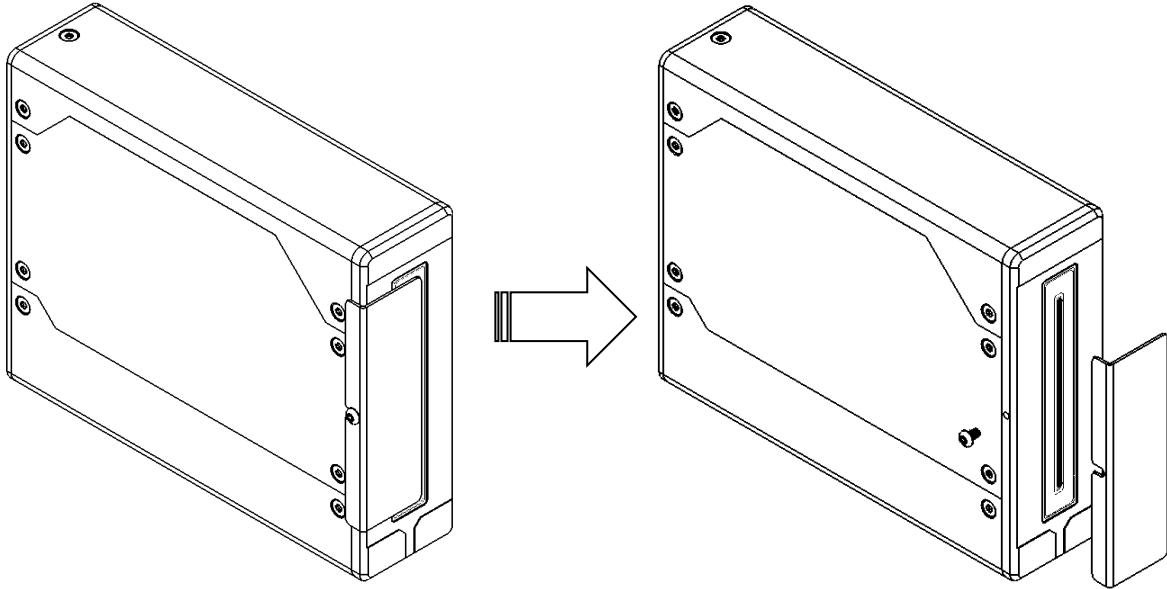


Figure 7

## Large Character Print head (72mm)

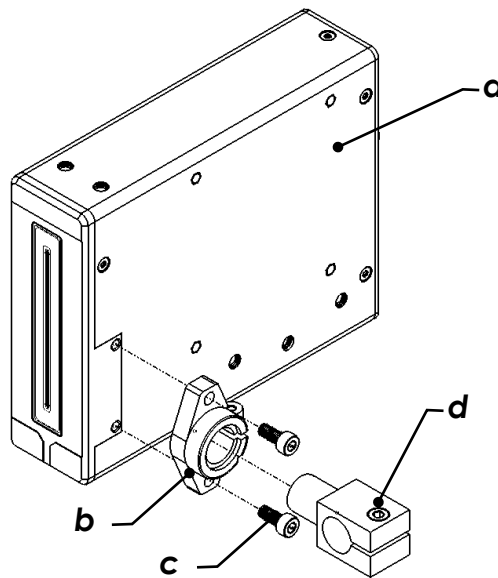
Unseal protection wrap from print head.

**Notice:** the print-head has been tested before product delivery and may contain certain amount of test ink. Unpack carefully as ink spillage may occur.



Assemble the Strut Mount and Strut Arm to the Print Head. Then, assemble to the end of the horizontal pipe.

- a:** Print Head
- b:** Strut Clamp
- c:** Strut Arm
- d:** M5 Screws



# Bulk Ink System

## L-Shape Mount

The bulk system can be installed at any desired location (including conveyor) within the ink level limits and we suggest keeping it **AS CLOSE AS POSSIBLE TO THE PRINT HEAD**.

As shown in Figure 8, there are two M5 mounting holes under the bulk ink system. Split washers can be used to fix the screws in place.

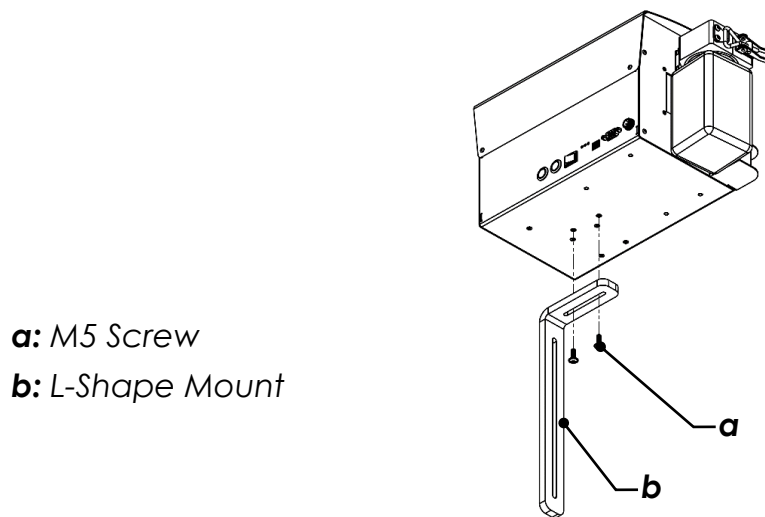


Figure 8

To avoid ink leakages from the print head or ink starvation, the height of the ink system must be adjusted with the print head accordingly. Ink level markings are engraved on the front cover plate as shown below.

For side printing direction (Figure 9), use the screw holes of the print head as reference and keep the print head level 20~30mm higher than the ink level.

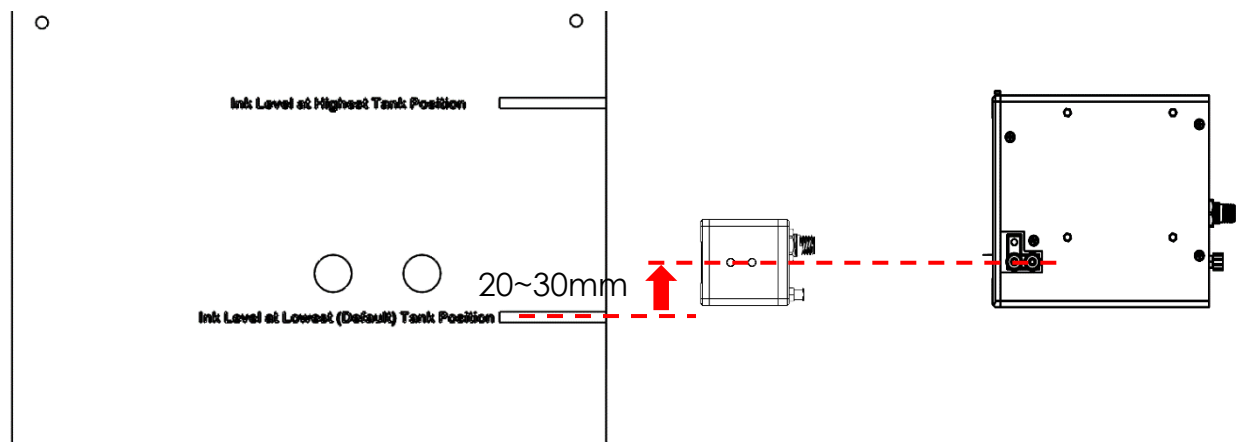


Figure 9

For downward printing direction (Figure 10), use the nozzle surface of the print head as reference and keep the print head level 20~30mm higher than the ink level.

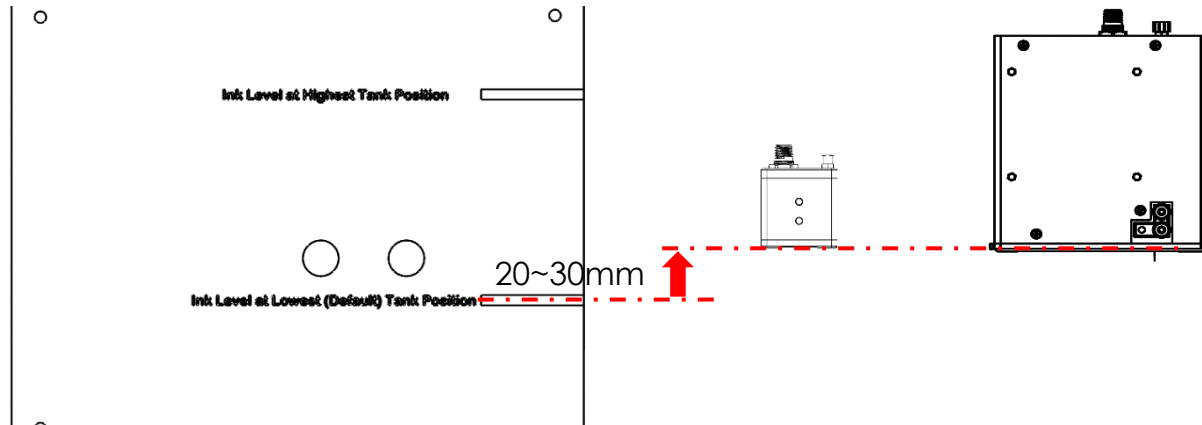


Figure 10

To adjust the print head level, refer to Figure 11, simply loosen the screws on the L-shape mount for the print head, and bring the print head assembly up/down, then tighten the screws back.

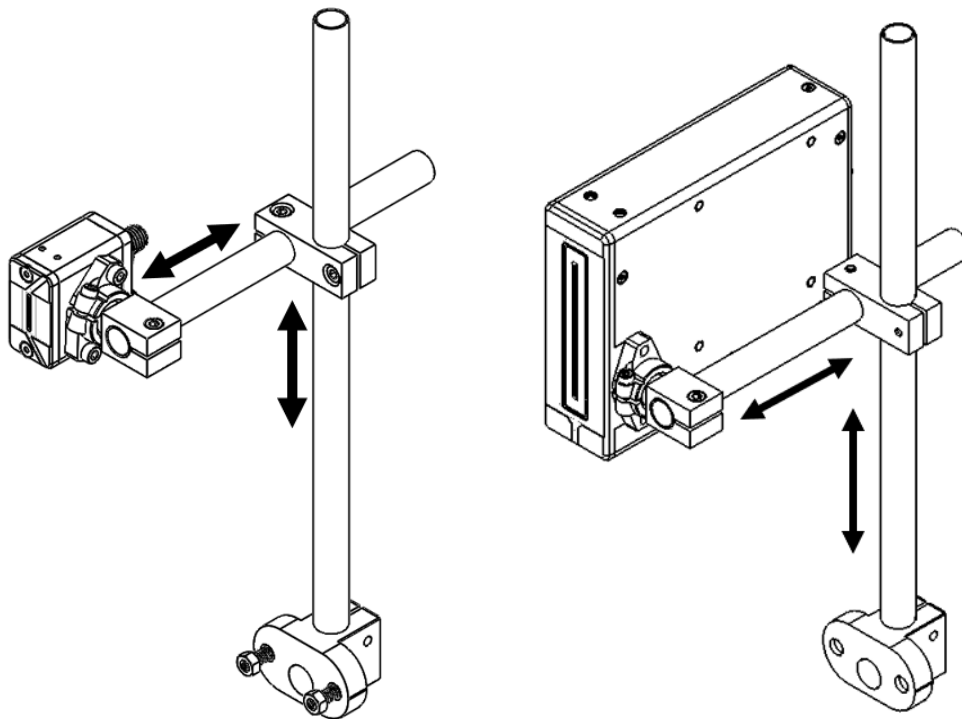


Figure 11

Ink systems can leak during transportation and therefore an internal stopcock valve is devised to prevent possible leakages. This valve **MUST BE OPENED** before operation.

- 1) Disassemble the controller and print head if required.
- 2) Unscrew the 4x M3 screws as shown in Figure 12 and take the top cover off.

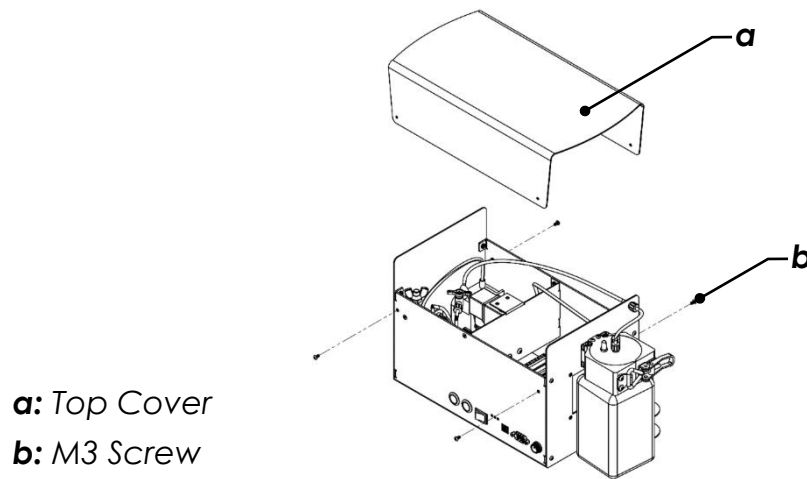


Figure 12

- 3) Open the stop cock valve. The valve must be OPEN (see Figure 13) when the printer is in function, otherwise the secondary tank can burst or leak.
- 4) After opening the valve, put the top cover back.

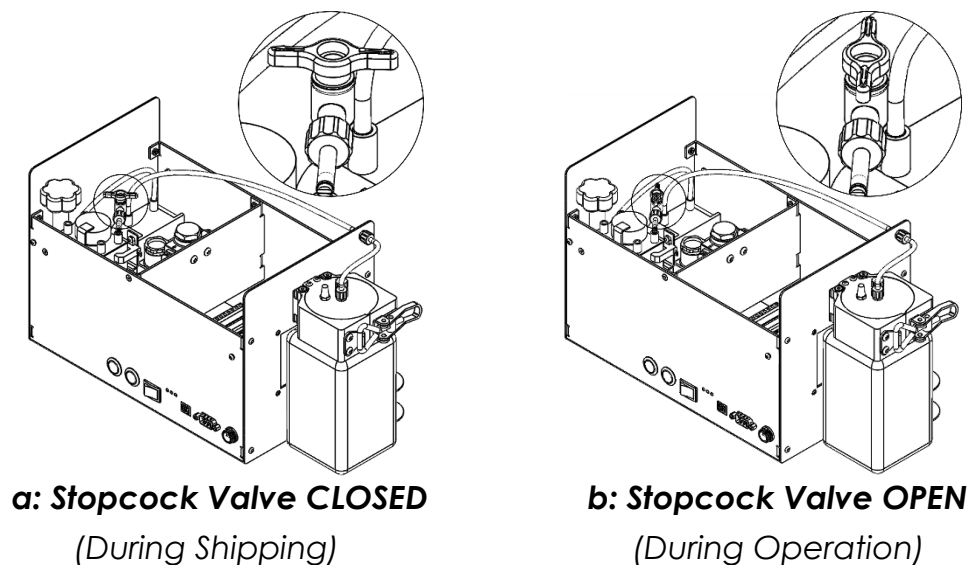
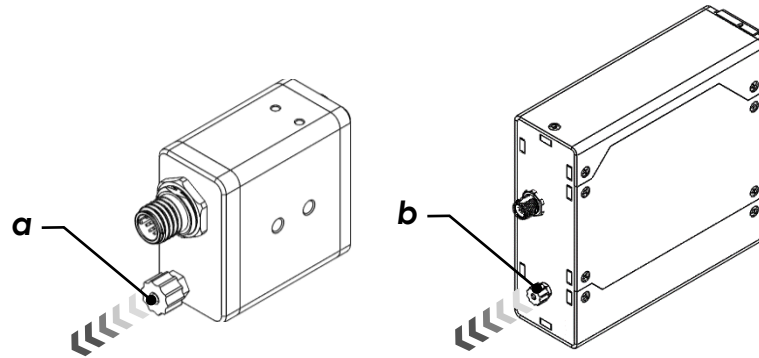


Figure 13

## Ink Tube

**Note:** The print head is pre-loaded with residual amount of ink which will be expelled during installation. Holding or placing an absorbent material between the print head assembly and the conveyor is recommended during setup. Do not forget to remove it before testing and operating.

- Unscrew the plastic tube cap located on the back of the print head (see Figure 14).



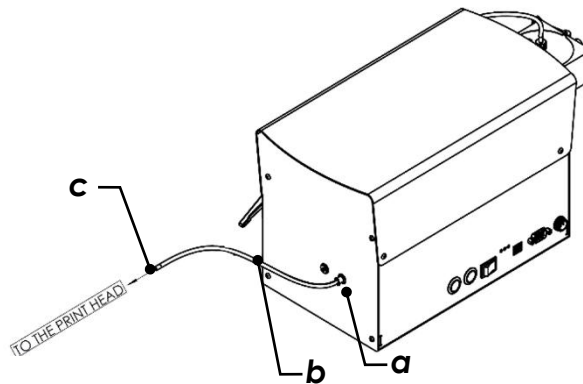
**a:** Tube cap on Small Character print head

**b:** Tube cap on Large Character print head

Figure 14

- Plug one end of the ink supply tube to the print head and connect another end to the ink system and press firmly into place (see Figure 15).

**Notice:** Retain the caps for potential re-use during disassembly for storage or transport.



**a:** Ink outlet to ink system

**b:** Ink Tube **c:** Ink inlet to Print head

Figure 15

## Waste Ink Container

If there is any air leak during purge, secondary ink tank will overflow. Waste ink container shown in Figure 16 is devised to collect excess ink through a hose in case of overflow.

**Notice:** Make sure not to clog the waste ink hose as it is vital for pressure regulation during print. If waste ink is detected, contact RNJet Technical support immediately.

- a:** Waste container
- b:** Waste ink hose

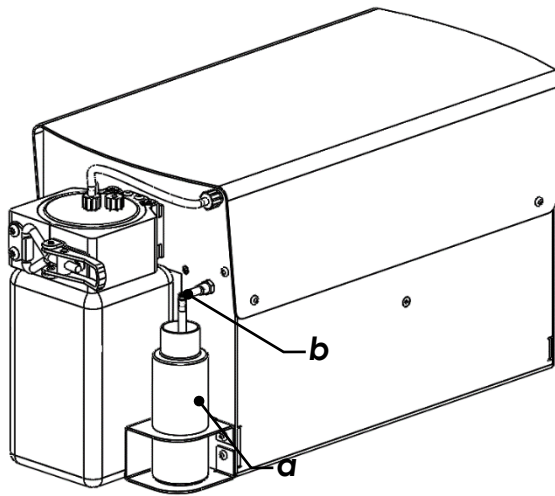


Figure 16

## Power (Ink System)

- Please note that there are two power adaptors provided with the Printer. Power adaptor with two male pin plug is for Bulk ink system.

- a:** 24V-90W Power Adaptor
- b:** 2P Female Connector

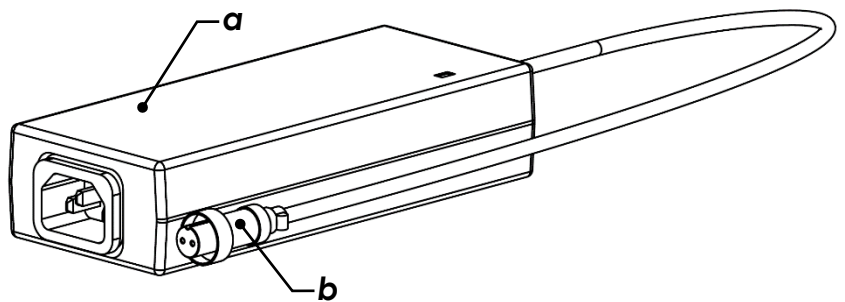


Figure 17

- Insert the male end of the power adapter cable supplied at the back of printer (refer to Figure 18).
- Connect an applicable length power cord to the power adapter and plug into power source supply (single phase/120/240V AC 15 amp circuit). Avoid where possible the use of extension cords.

- Toggle the two-position power switch to the “ON” position when printer operation is required (Refer to Figure 18).

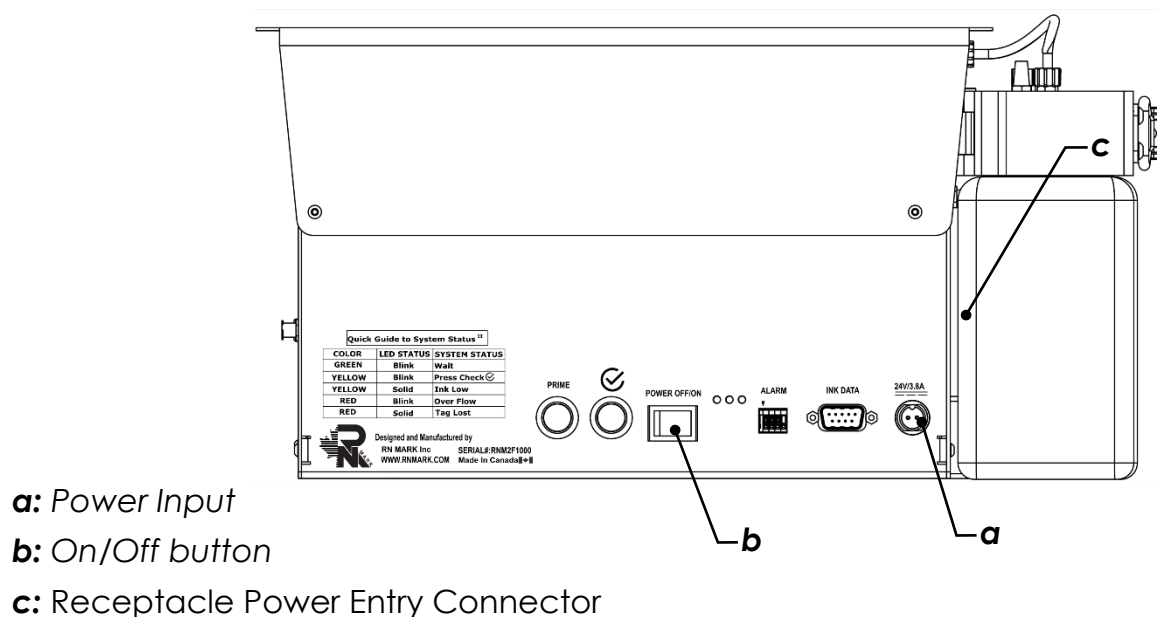


Figure 18

## Ink Data

As shown in Figure 19 the Ink system communicates with controller for ink data delivery/reception/calculation. Please plug the Serial DB9 cable provided.

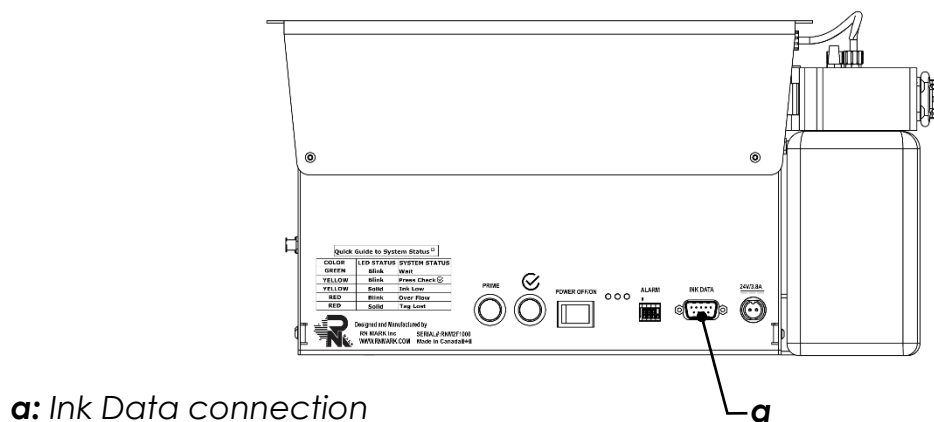


Figure 19

## Alarm

3 color LED alarm shown in Figure 20 indicates the status of the ink system.

**a:** External Alarm Port  
**b:** 3-Color LED Alarm

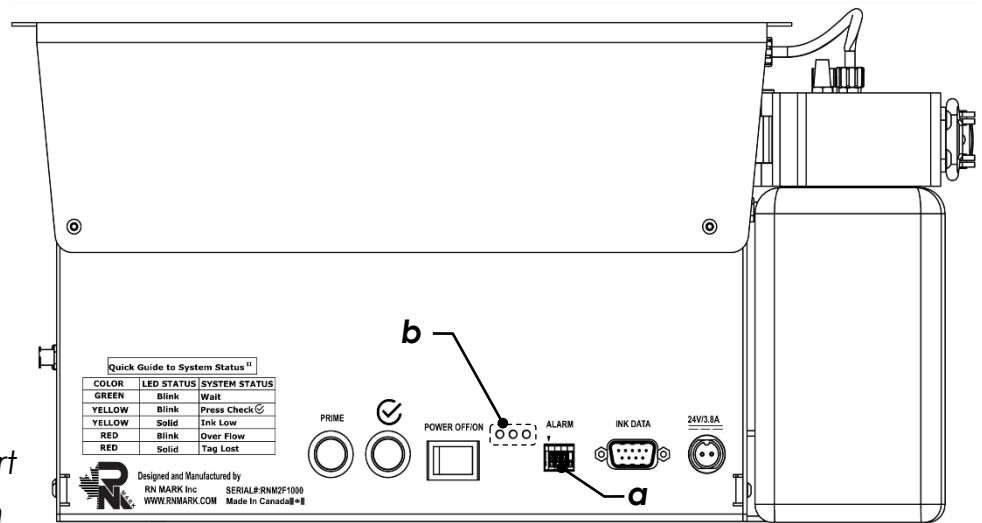


Figure 20

Each color has a definition described in Table 1.

| Color  | LED Status | System Status |
|--------|------------|---------------|
| GREEN  | Blink      | Wait          |
| YELLOW | Blink      | Press Check   |
| YELLOW | Solid      | Ink Low       |
| RED    | Blink      | Overflow      |
| RED    | Solid      | Tag Lost      |

Table 1

External 24V Alarm tower can be connected to “4-Position Wire to Board Terminal Block” if required. Pinout for terminal port is shown in Figure 21 and Pin1 is indicated by ▼ on the left.

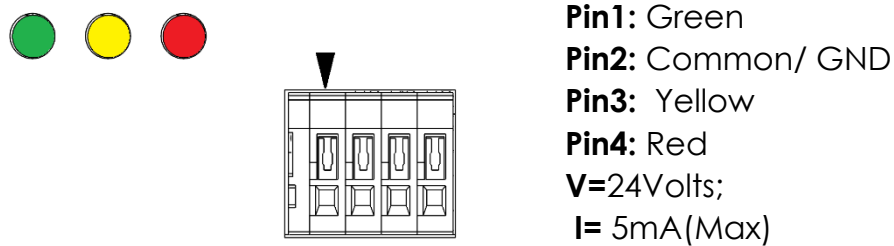


Figure 21

## Controller

- Use 2X M4 Flange Head screws to fix the Pivot Mount to the controller

- a:** Controller  
**b:** Pivot Mount  
**c:** 2X M4 Flange Head Screws

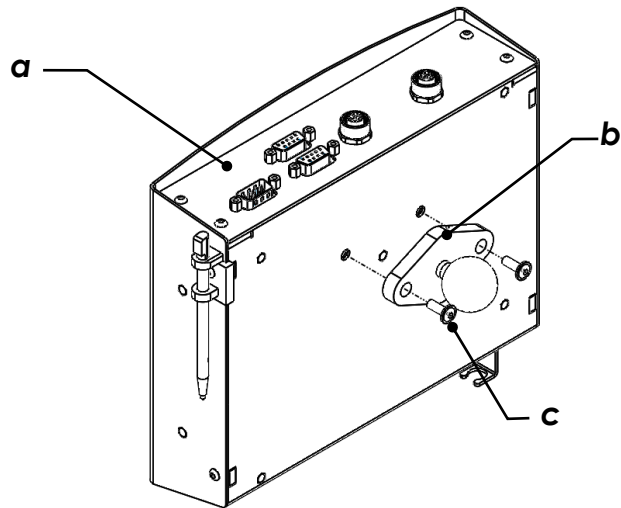


Figure 22

- Use 2X M4 Socket Head screws to fix the Pipe Mount

- a:** Pipe Mount Top  
**b:** Pipe Mount Base  
**c:** 2X M4 Socket Head Screws

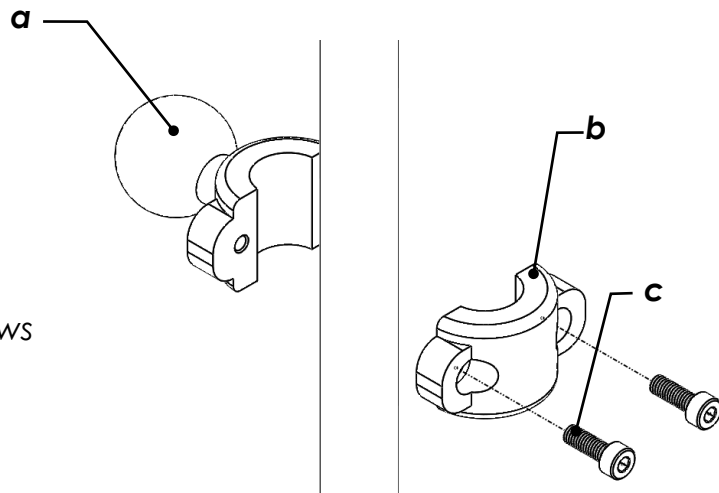


Figure 23

- Assemble the controller to the Pipe Mount

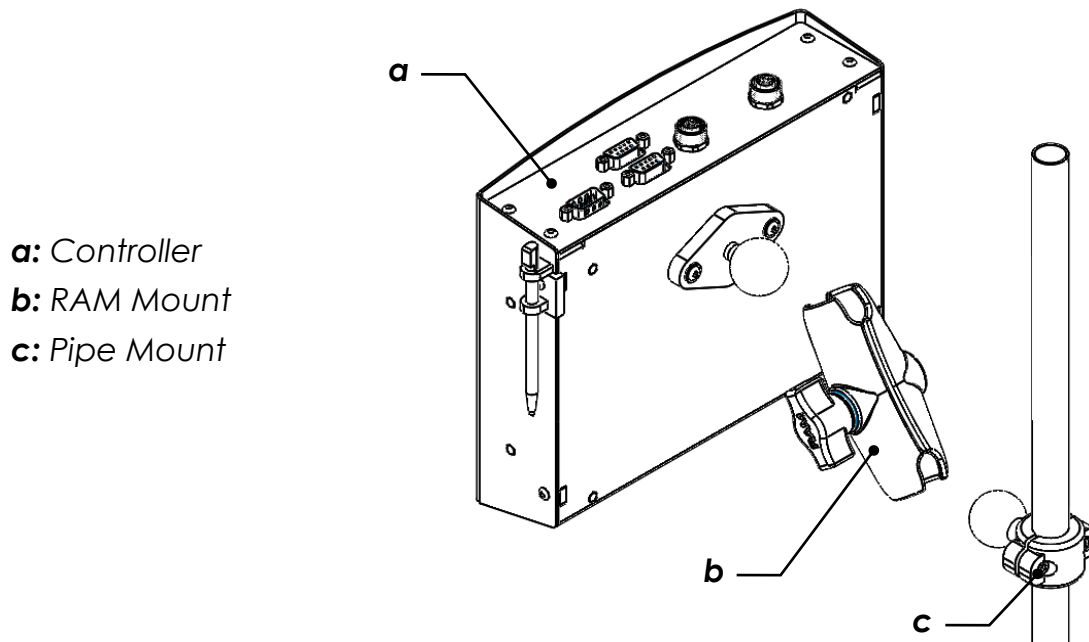


Figure 24

- Adjust the angle/ height as desired

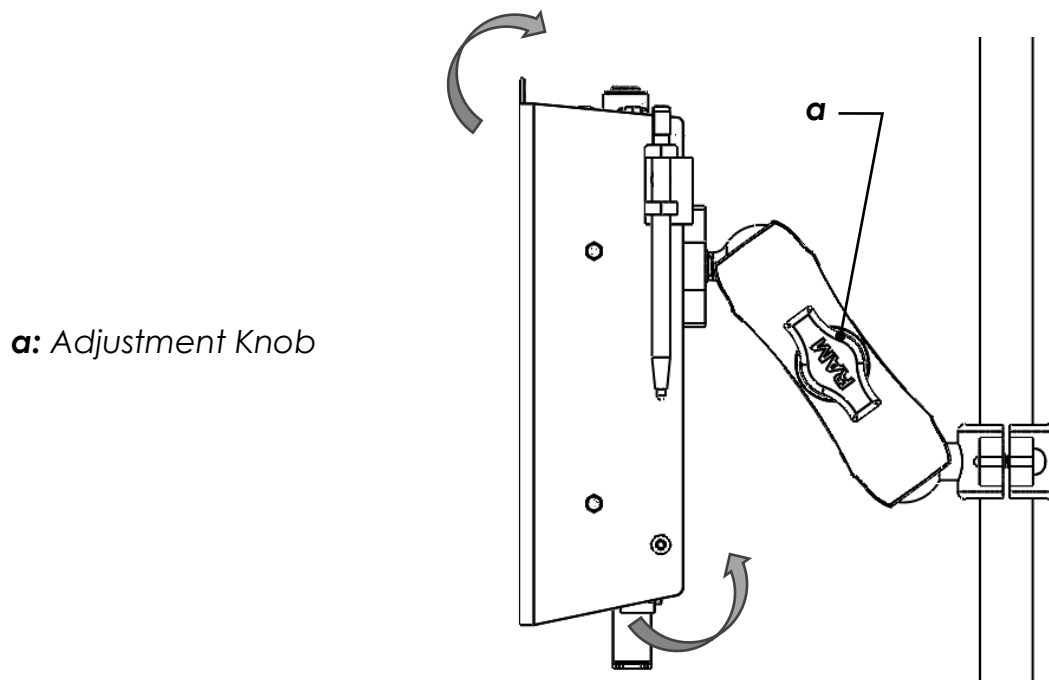


Figure 25

## Power Supply

- Insert the male end of the power adapter cable supplied at the back of printer (refer to Figure 18).
- Connect an applicable length power cord to the power adapter and plug into power source supply (single phase/120/240V AC 15 amp circuit). Avoid where possible the use of extension cords.

**Notice:** Due to different plug adaptors around the world and to avoid any misuse of connections, power cord is not provided and should be supplied locally.

- Toggle the two-position power switch to the “ON” position when printer operation is required.

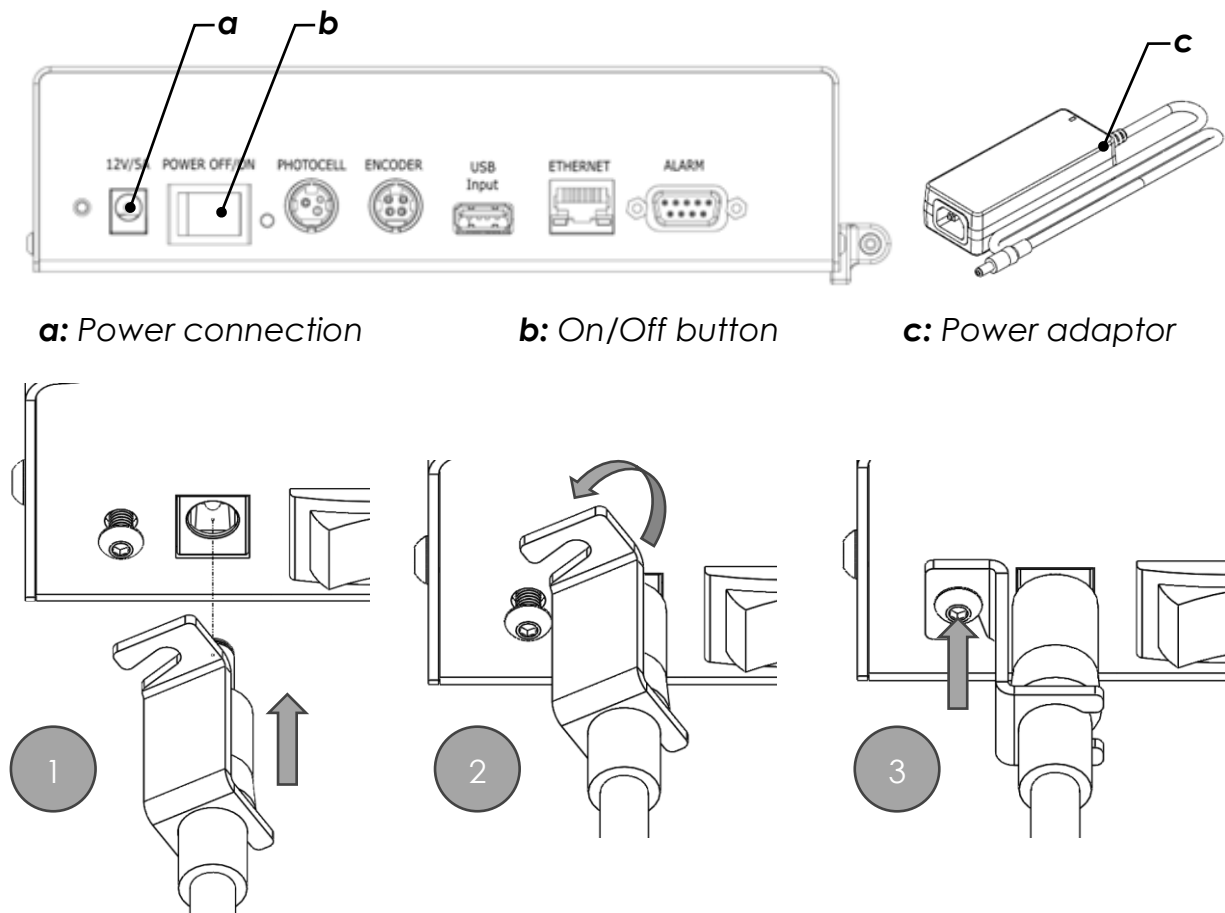


Figure 26

## Data Connections

**Notice:** DO NOT Connect/Disconnect the connectors when the power button is ON.

**Notice:** Power, data and sensor input cables must be inserted appropriately in their respective locations. Where possible, route cables away from moving objects and secure via tie-wraps.

### Photocell Sensor

For print trigger, a photocell sensor is included. Photocell sensor works as Light ON trigger. Please see Figure 27.

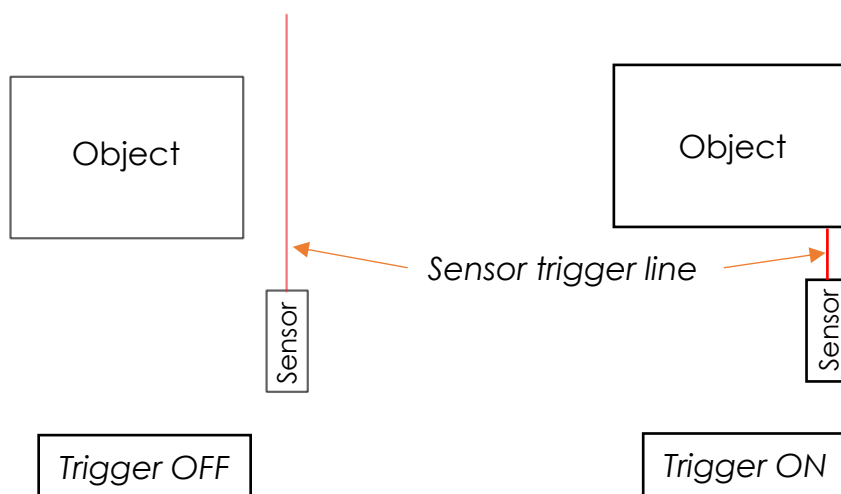


Figure 27

As shown in Figure 28, the printer system provides an NPN sensor signal input which triggers print command. It could be used with any 12 VDC NPN sensor.

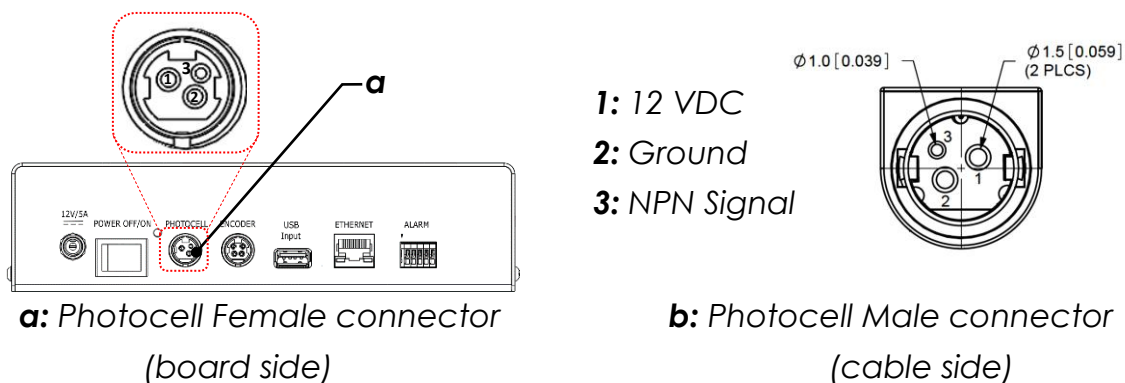
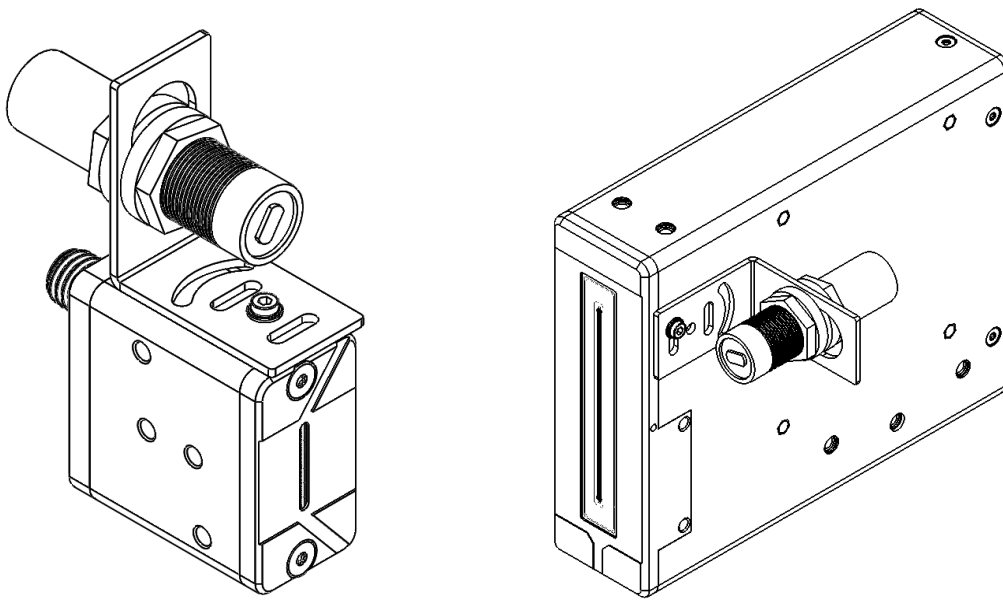


Figure 28

A Photocell sensor with proper 3-Ppin connector as well as a photocell mount bracket is included for versatile mounting on conveyor system. Photocell bracket can be mounted on either side of the head if possible (See Figure 19).



Slide the sensor through the sensor mount and re-secure by installing one locking nut from the top and the other from the bottom as shown on Figure 29. Finger tighten both locking nuts until there is no movement between the sensor and mount.

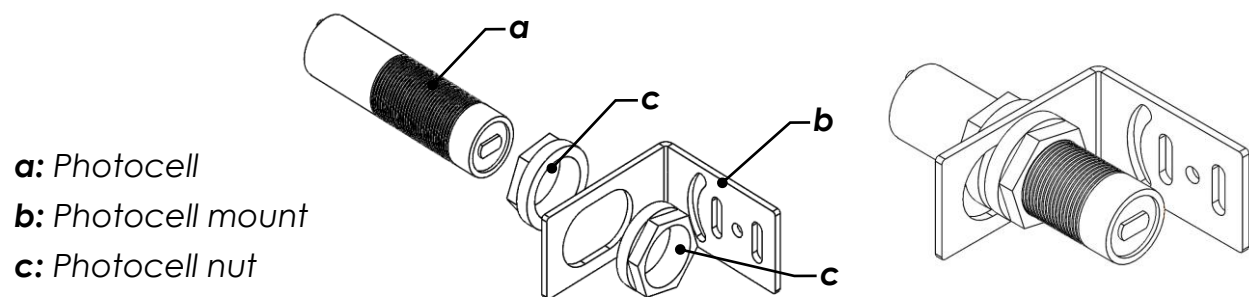


Figure 29

As shown in Figure 30, There are two settings on the photocell sensor body for adjusting sensing range (270° Potentiometer) and operating mode (2 positions).

Sensor is more sensitive to lighter colors (Highest: White) and less sensitive to darker colors (Lowest: Black). It also must be in Normally Open mode to trigger the print every time the printing substrate passes by.

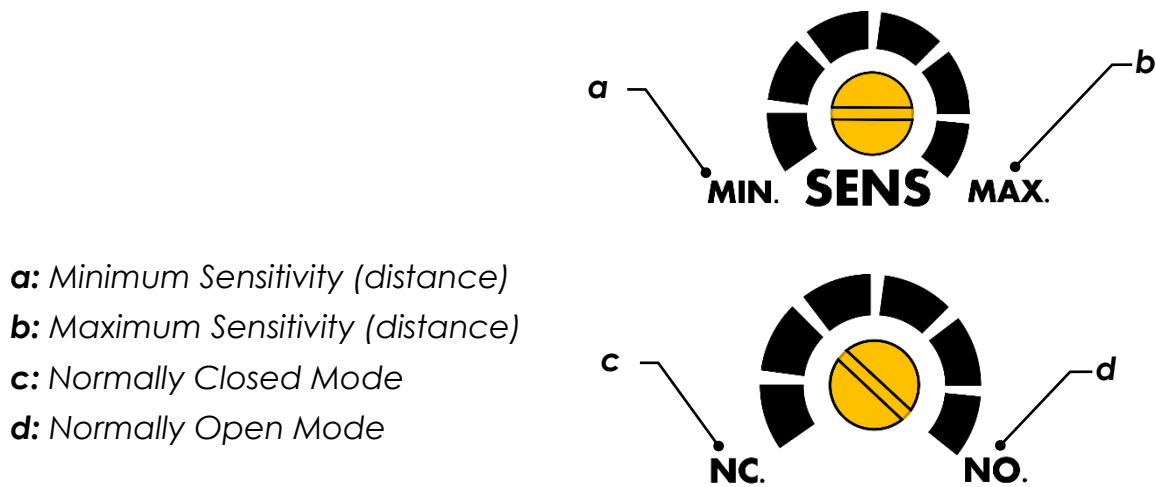


Figure 30

**Notice:** Sensor is preadjusted to Max sensitivity and Normally Open mode. Please do not touch the settings unless required otherwise.

## Shaft Encoder

Printer system is shaft encoder ready and provides a 12 VDC signal input (NPN configuration) on board which triggers print command (Figure 31). This function is available on demand. Consult your distributor for more details.

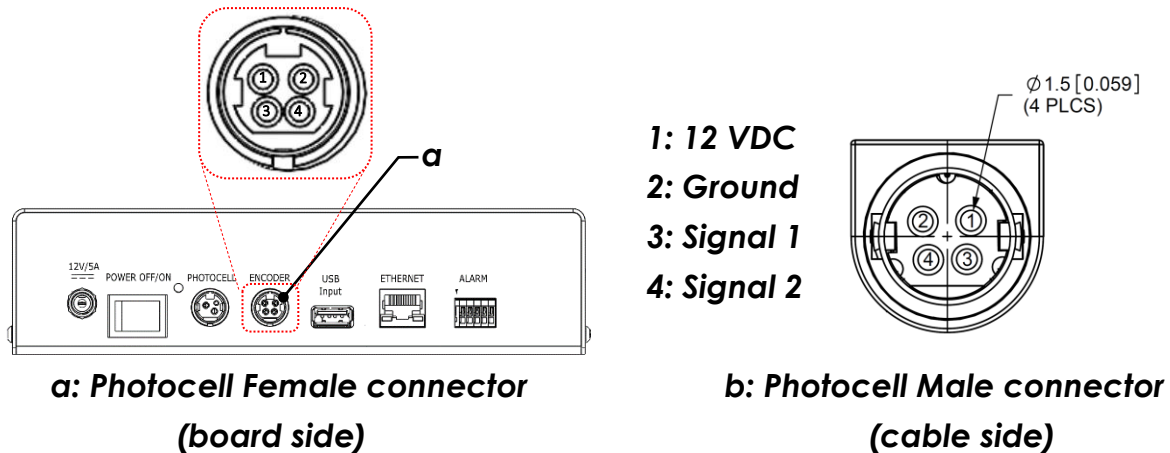


Figure 31

The print head resolution is **R=180 DPI**. For an encoder with **N** number of pulses per revolution, Wheel Diameter **D**, is calculated by equation below:

$$D = \frac{N}{\pi R} [in] \quad \text{or} \quad D = \frac{25.4N}{\pi R} [mm]$$

The units used in the shaft diameter calculation formula for **n=1** revolution is as shown below:

$$D[in] = \frac{N [pulse/rev] \times n[rev]}{\pi R[pulse/in]} \quad \text{or} \quad D[mm] = \frac{N [pulse/rev] \times 1[rev]}{\pi R[pulse/in]} \times \frac{25.4 [mm]}{1 [in]}$$

For example, the wheel diameter for a Shaft Encoder with **N=1800 pules per revolution** is:

$$D = \frac{1800 \times 1 \times 25.4}{180\pi} = 80.8mm (3.18")$$

## USB

USB port is used for data uploading on typical flash drives compatible with USB2.0 connections and should not be used for any other purposes.

**Notice:** Before turning ON the machine, insert the USB in the USB connector which is located on the side of the printer

**α: USB Port**

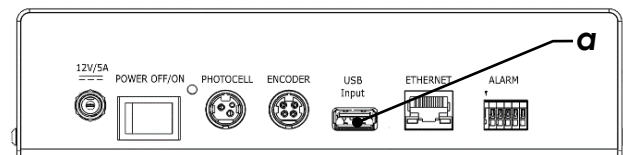


Figure 32

## Ethernet

Ethernet connection is capable of connecting print system to external controllers using IP based communication with PCs, PLCs, etc. Print system programming and message layout uploading/downloading is managed through this port.

**Notice:** For more information on print system configurations and Ethernet connection capabilities, please refer to "USER's MANUAL" accompanied with the device.

**α: Ethernet Port**

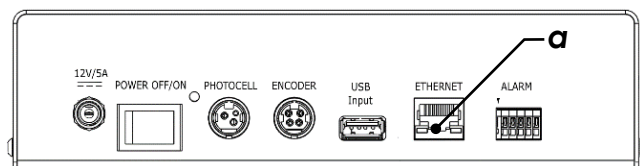
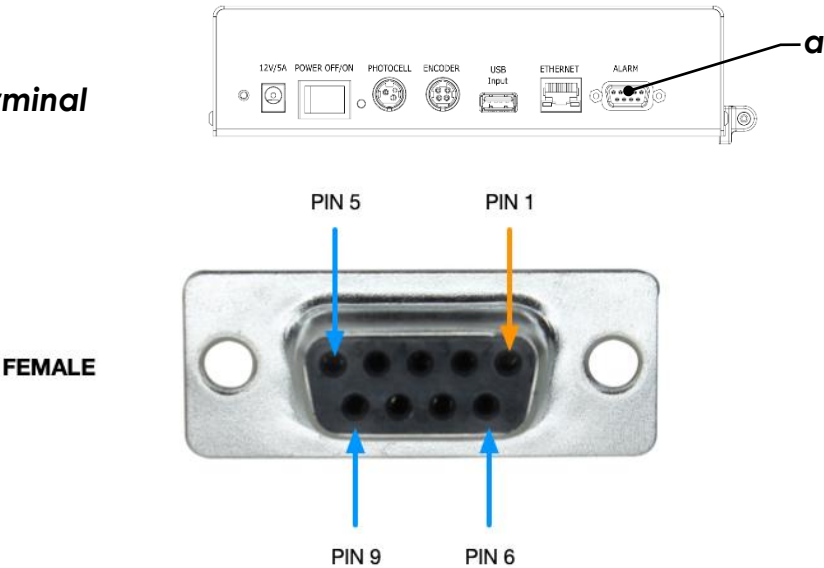


Figure 33

**External Alarm Terminal (Cartridge Ink System only)**

An external beacon alarm can be connected to the alarm terminal if necessary. The pinout is indicated below.

**a: Alarm Terminal**



| Pin# | Color      | Function        |
|------|------------|-----------------|
| 1    | Reserved   | -               |
| 2    | Red        | No Ink/Tag Lost |
| 3    | Grey (GND) | -               |
| 4    | Yellow     | Ink Low         |
| 5    | Green      | Print ON        |
| 6-9  | Grey (GND) | -               |

Table 2. External Alarm Terminal Pin Out

## Ink Data

Controller communicates with ink system while printing and it would stop if this connection were lost. Controller must be connected to the ink system via 9 Pin Data cable as shown in Figure 34.

**Notice:** Connect the cables provided accordingly before turning on the Printer.

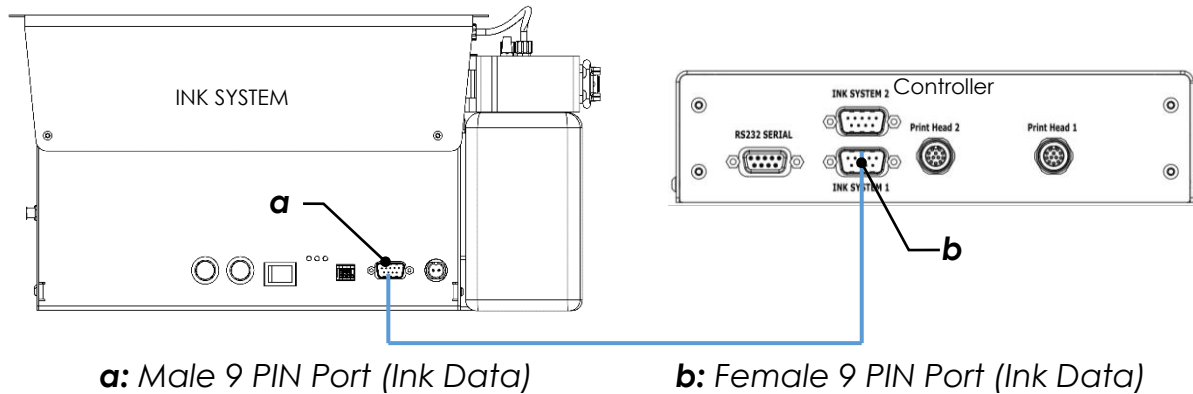


Figure 34

**Notice:** Connect the cables provided accordingly before turning on the Printer.

**Notice:** DO NOT Connect/Disconnect the connectors when the power button is ON.

**Notice:** Power, data and sensor input cables must be inserted appropriately in their respective locations. Where possible, route cables away from moving objects and secure via tie-wraps.

## Serial Port (RS-232)

RS-232 port, shown in Figure 35, is used for data communication through PLC/PC for external command/TEXT through compatible RS-232 cables and should not be used for any other purposes (for more information please refer to "USER's MANUAL" accompanied with the device).

**Notice:** Before turning ON the machine, insert the RS-232 connector which is located on the side of the printer.

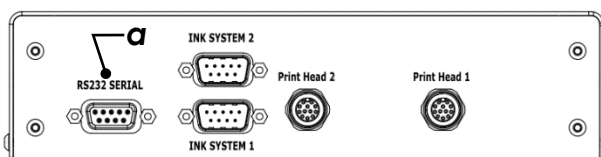


Figure 35

## Print Head Ports

Print head drivers need to be connected to the ports on the Controller (shown in Figure 36) via provided cables.

**Notice:** Connect the cables provided accordingly before turning on the Printer.

- a:** Head1 (12 PIN Female Port)
- b:** Head2 (12 PIN Female Port)
- c:** Groove

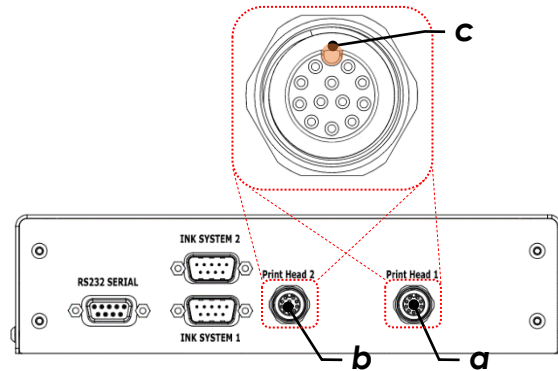


Figure 36

The ports on the controller are Female type and therefore must be connected to the Male Pin side of the cable. The plastic tongue on the cable connector must be aligned with the groove on the female connector and gently finger tighten the threaded part into the port. The arrow indicator on the connector shows the location of plastic tongue and must always be faced up.

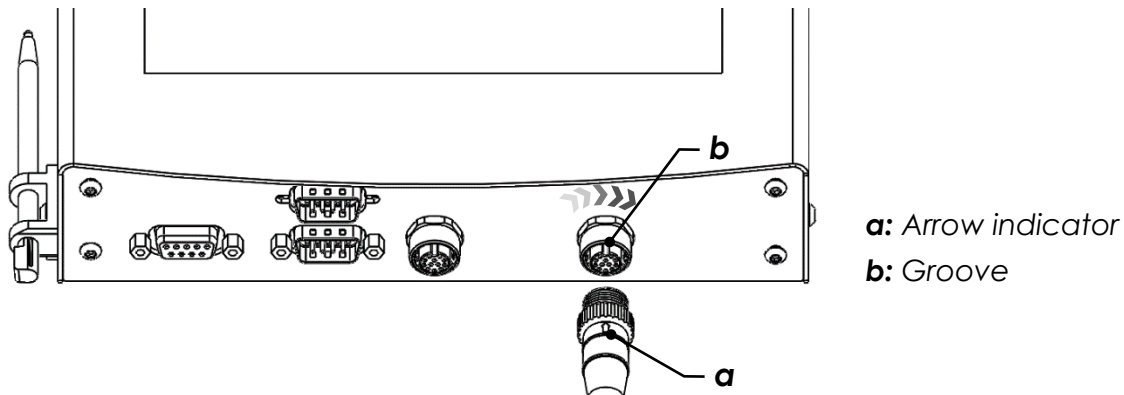


Figure 37

The other end of the cable is Round 12 Pin Female connector which also has an arrow indicator for the groove, must be aligned with the plastic tongue on the Print head port as shown in Figure 38.

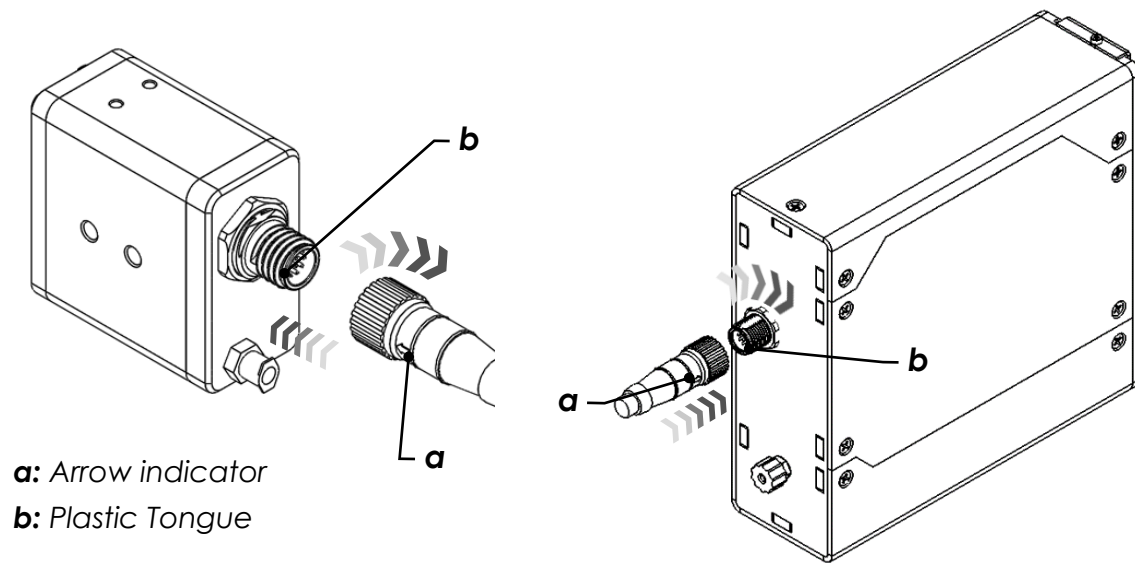


Figure 38

**Notice:** The threads on the connectors are meant to be finger-tightened and must never be over forced by wrench or mechanical tools.

# Start-up

## Adjusting Small Character Print head (17mm)

The pipe mounts allow users to adjust the print head position and all different angles easily.

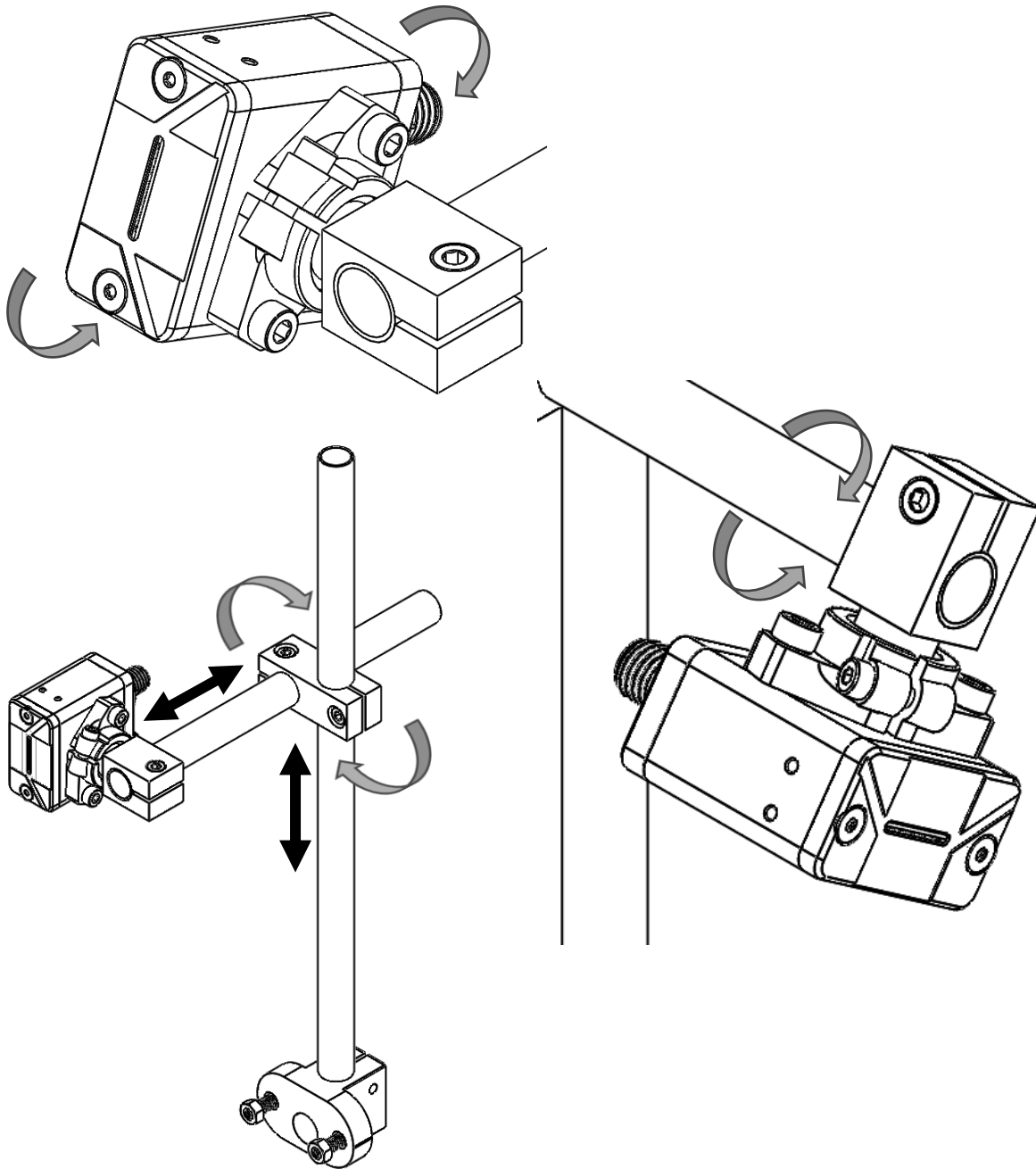
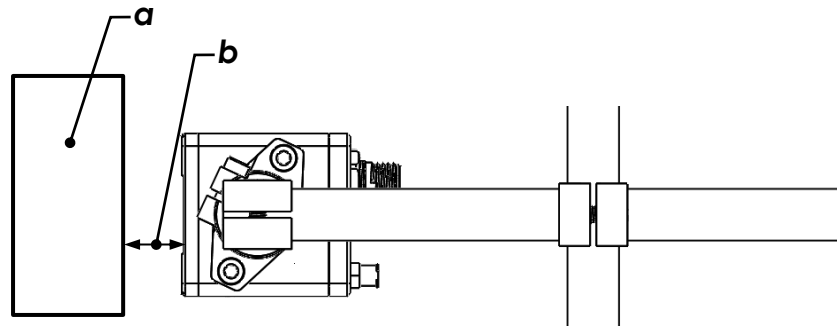


Figure 39

The **operating distance** between the exposed print nozzles on the cartridge and the desired printable surface is **1-10mm** (see Figure 40). This may vary depending on the printing speed and operating environment conditions.

It is recommended that always install the print head with the proper orientation that the ink tube is on the lower side of the data connector which aids the air bleeding.



**a:** Substrate

**b:** distance between Printhead and substrate [1-10 mm]

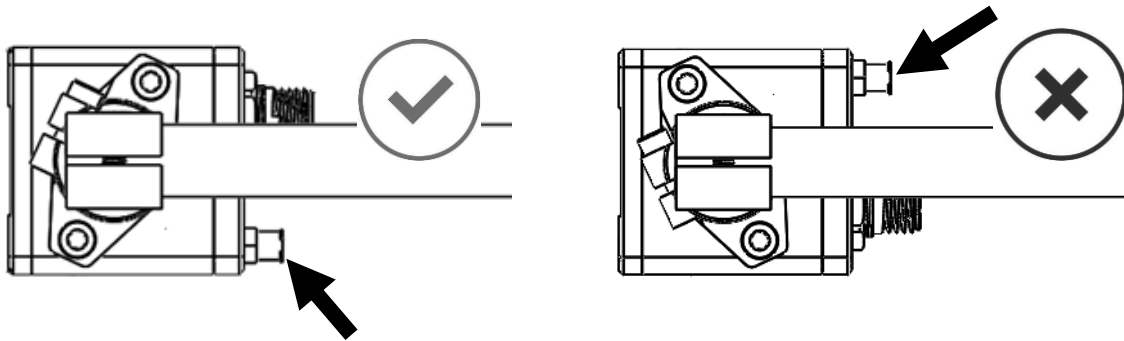
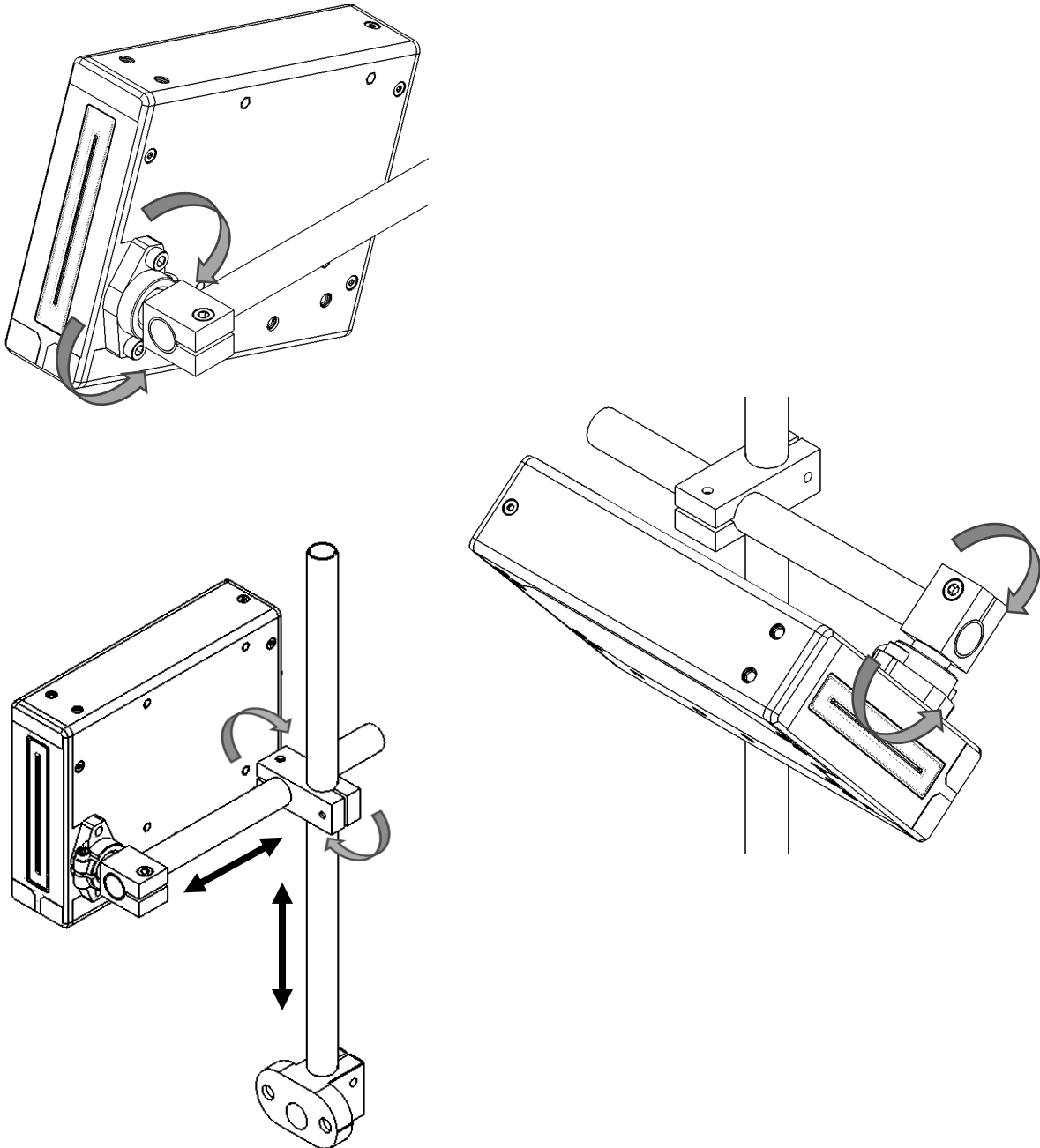


Figure 40

**Notice:** Care must be taken to ensure that no part of the moving object comes in direct contact with the printer head assembly, mounting parts, ink supply tube or any cables or cords.

## Adjusting Large Character Print head (72mm)

The pipe mounts allow users to adjust the print head position and all different angles easily.



The **operating distance** between the exposed print nozzles on the cartridge and the desired printable surface is **1-15mm**. For upward printing, the printable distance would drop to **2-5mm**. This may vary depending on the printing speed and operating environment conditions.

It is recommended that always install the print head with the proper orientation that the ink tube is on the lower side of the data connector which aids the air bleeding.

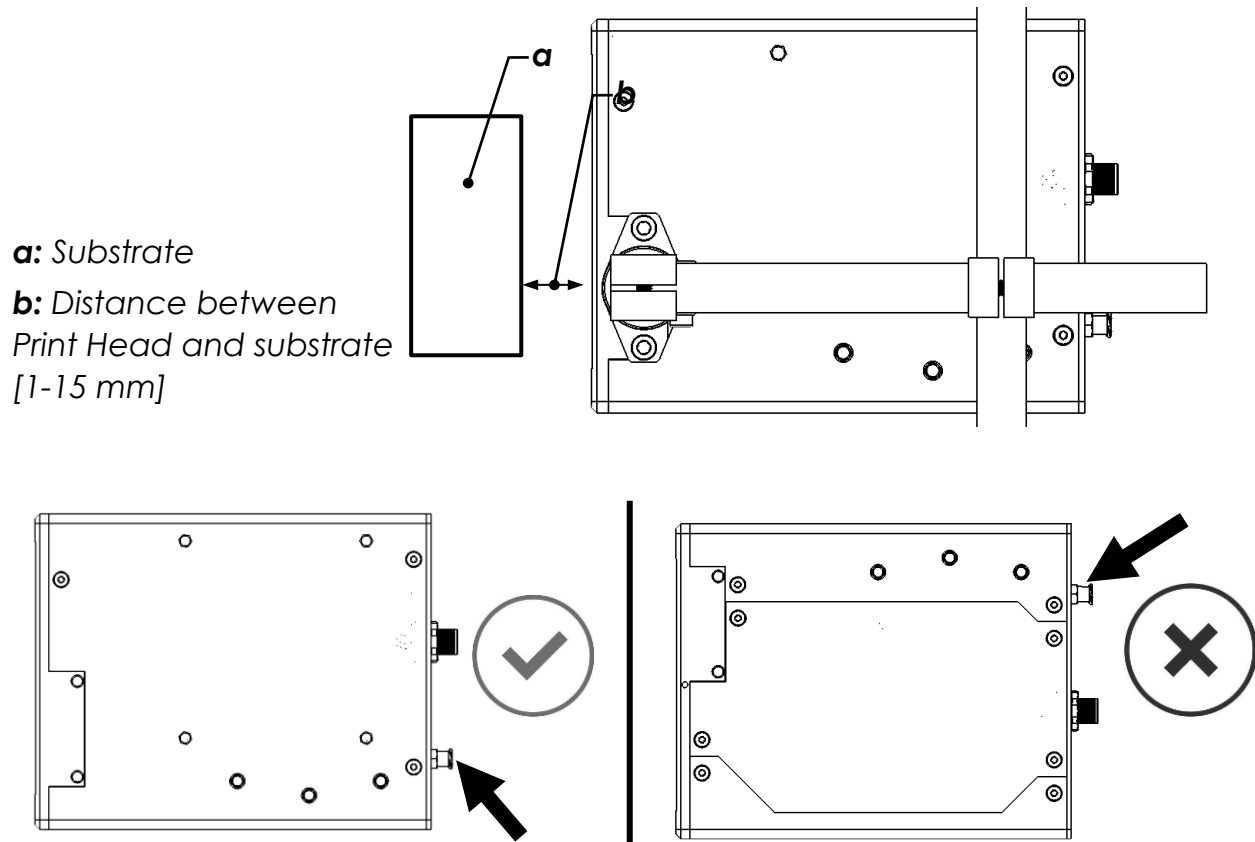


Figure 41

**Notice:** Care must be taken to ensure that no part of the moving object comes in direct contact with the printer head assembly, mounting parts, ink supply tube or any cables or cords.

## Adjusting the Ink Level (For Rare Cases)

For those rare cases that the height of the print head and bulk ink system could not be adjusted with the L-shape mount mentioned in Page 11 & 12, an extra ink level adjustment / fine-tune mechanism could be used in the bulk ink system to deal with ink starvation issue.

If possible, try not to use this INK LEVEL ADJUSTMENT MECHANISM.

**Notice:** DO NOT start the conveyor during the adjustment process.

- Unscrew the 4 X M3 screws shown in Figure 42 and take out the cover plate.

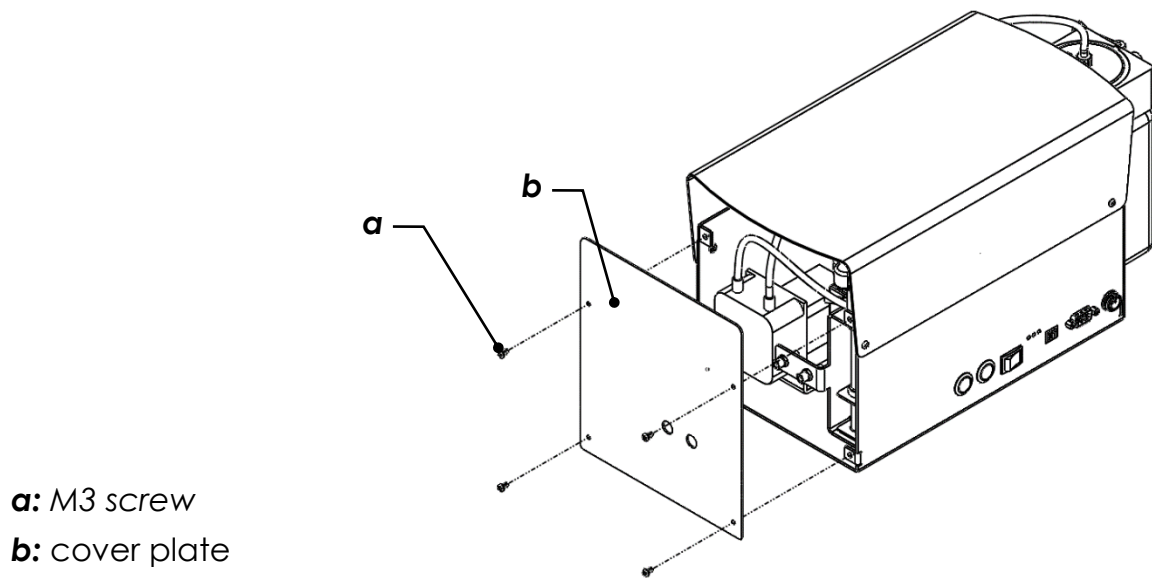
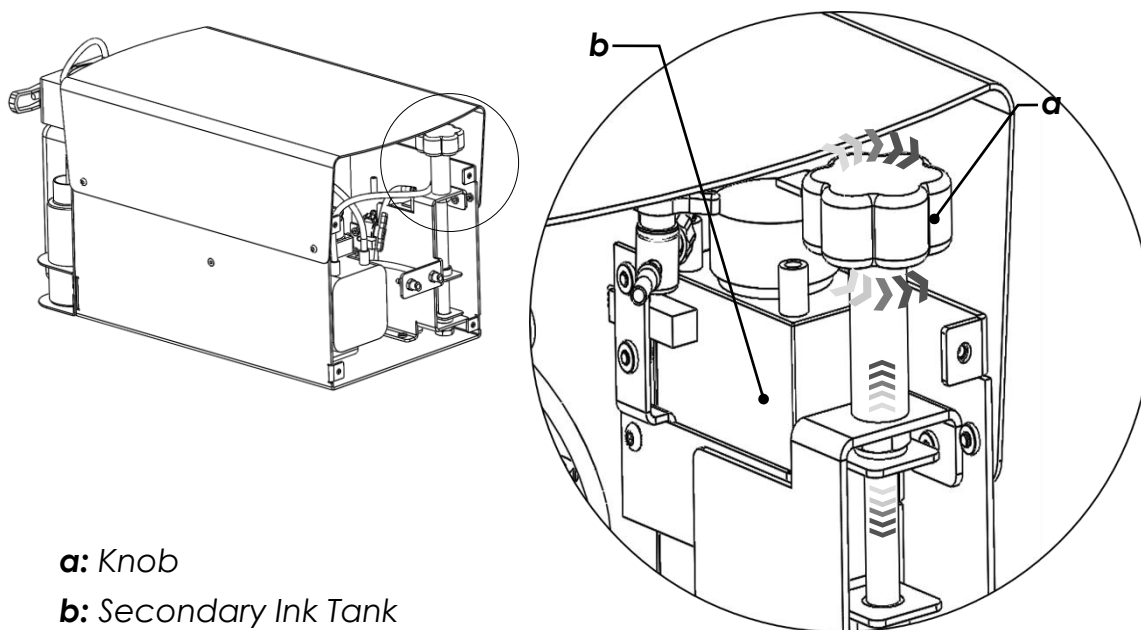


Figure 42

Adjust the height of the secondary ink tank to the desired height by turning the knob. Turn it Counter-Clock-wise (C.C.W.) in case of starvation to bring the secondary tank up as shown in Figure 43.

**Notice:** Dripping for a few seconds after purging is normal and there is no need to adjust the secondary ink tank level. Shortly after releasing the purge button, a click sound can be heard (from Solenoid valve) and dripping will gradually stop after that.



**a:** Knob

**b:** Secondary Ink Tank

Figure 43

After adjusting the tank level, mount the cover plate back in place as shown in Figure 42.

If possible, try not to use this INK LEVEL ADJUSTMENT MECHANISM

## Mounting Ink Bottle

To replace the ink bottle, follow the steps below.

The ink bottle has an NFC tag ((NFC)) which should face toward and stay as close as possible to the Antenna (See Figure 44).

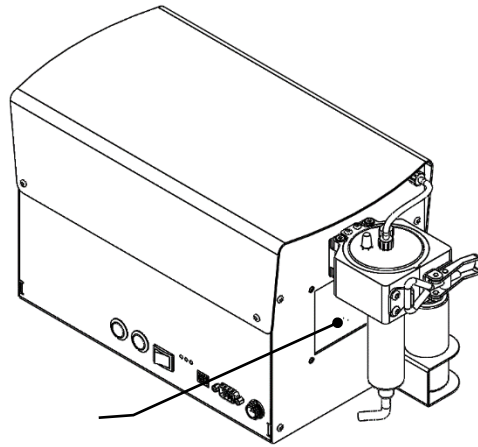
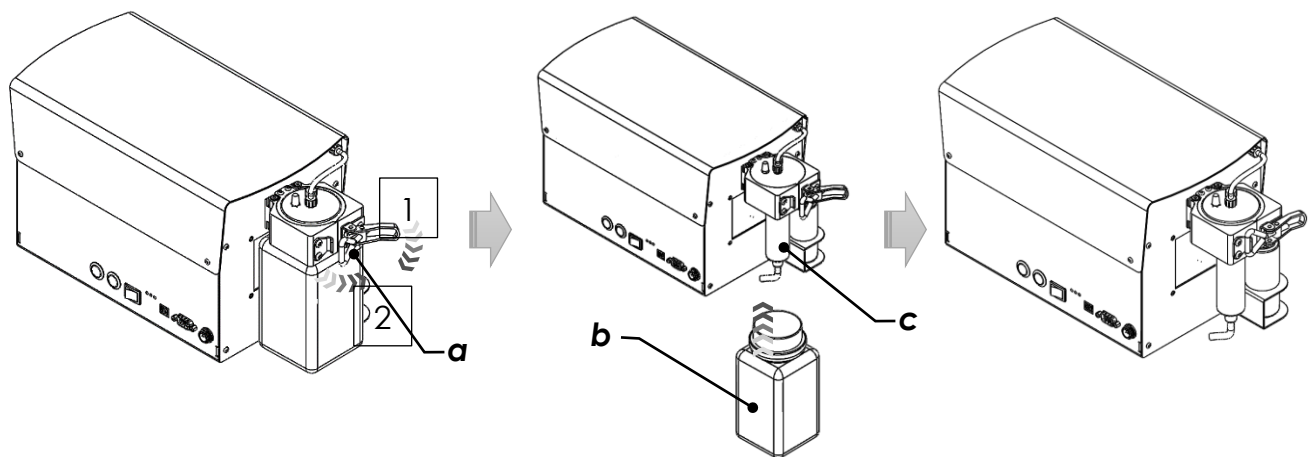


Figure 44

**Notice:** If the bottle is not placed properly, antenna will not read the tag and ink system will stop working (Red LED will Light).

To open the latch, pull the handle toward yourself and release the triangular catch. Bring the bottle in and lock the clamp around the neck.



**a:** Latch      **b:** Ink Bottle      **c:** Filter

Figure 45

## Priming / Purging

The ink system must be primed and purged before the first print. It is recommended that a lint-free absorbent material be held or placed under the print head and the print-head tube inlet during purging, as ink will be expelled during this process.

The ink will be drawn through a long cylindrical filter mounted on the bottle clamp assembly. Please beware that for the first run it will take some time to fill the filter, internal and external ink tubes, and secondary ink tank.

**Important Notice:** *Priming and purging are different concepts, but they have been used interchangeably in the literature and in this document.*

### Initial purge (First time Ink system Startup)

- When the system is turned ON for the first time, it will attempt to run an autofill cycle.
- Autofill cycle will stop after a while for safety precautions while only a small portion of 2ndary container is filled. Pressing check ☒ button will initiate another autofill cycle.
- It might take around 5-7 attempts to fill the ink into the 2ndary tank.
- When the floating level probe inside tank reaches the trigger point auto purge will stop and pressing check button will not function anymore.
- Now that the secondary tank is full enough, the ink must be carried to the print head by pressing Prime (purge) button.
- Upon pressing the prime(purge) button Solenoid valve will activate (a click sound will be heard), and the pump will start filling immediately.

**Notice1:** *The purge button is a momentary push button and will stop purging as soon as it is released. For proper purging please push and hold the button if required (see Figure 46).*

**Notice2:** *Purge is estimated to be completed after a certain amount of time and it will automatically stop as a safety measure to avoid over-pressurizing the internal tank (secondary tank), after certain period.*

- After priming/purging stopped automatically, the Green LED will blink and during blinking the system will be locked to recover.
- Repeat the previous step (Push and Hold Prime button) until the ink starts flowing through ink tube and eventually bleeds from nozzles. (You will see ink coming through the ink tube)

**Notice 4:** There is a delay after releasing the purge button to avoid over filling, known as waiting time. The Green LED will blink in this wait period and none of the push-buttons will be in function

- Carefully examine the ink tube and make sure there are no air bubbles in it.
- The expelled ink from nozzles may contain air bubbles, Keep purging as long as you see air bubbles coming out of nozzles.
- Blot or dab the print nozzles with an absorbent material to remove expelled ink.

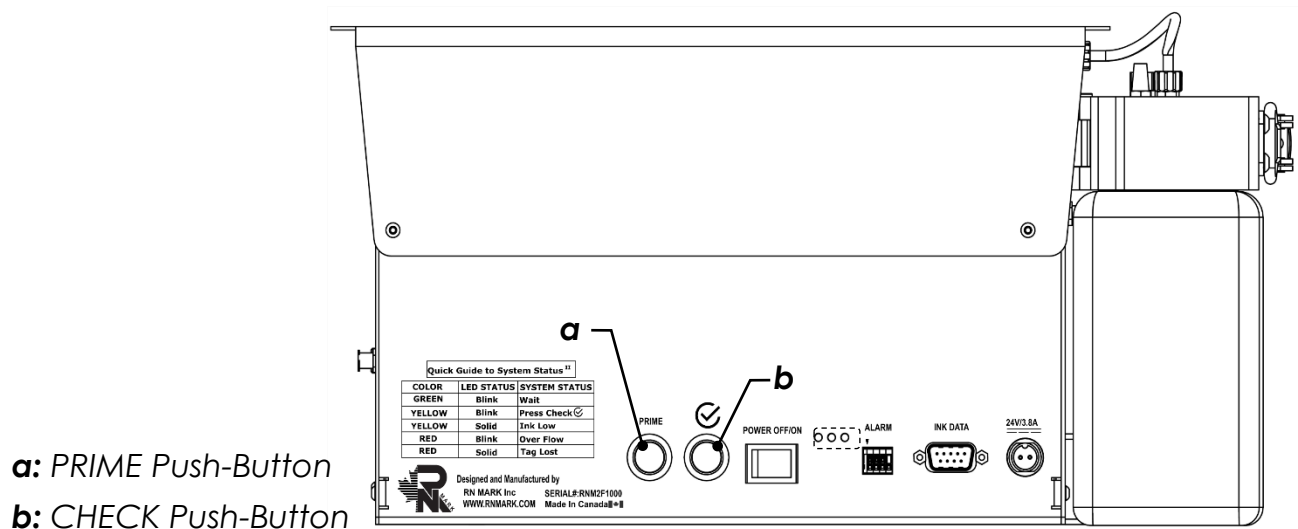


Figure 46

## Regular purge

If the printer has been inactive for a while, the ink will dry on the nozzles of the print-head and temporarily clog some of them. In some cases, due to negative relative pressure, air can be sucked in through loose connections and create an air pocket inside the head. This will yield to missing nozzles and poor print quality. To clean the clogged nozzles, you need to:

- 1) Spray Solvent cleaner on the nozzles to dissolve the external dried ink.

**IMPORTANT Notice:** If your ink is oil-based avoid spraying solvent spray and skip this step.

- 2) Push the Prime button once and hold it to purge and clear the nozzles.
- 3) Gently dab the excess ink from nozzles using a lint free paper towel

**Notice 1:** Do not over-purge the ink system as the secondary ink system has limited capacity and professional service is required in case of overflow.

**Notice 2:** *Make sure the hoses and the fittings are air-tight and fixed in place.*

If the printer is Dual head (200 or 140) and is fed by single bulk ink system, each head must be purged individually. For individual purge, close the external valve for other head and follow the purge steps. After successfully purge for one head, switch the valves (shut the corresponding valve and turn the other valve to open position) and purge the other head as well. Finally, when both heads are fully purged put the stopcock valves in open position for both heads.

**IMPORTANT Notice:** Never purge while both valves are closed, otherwise the secondary tank will be over-pressurized and may leak or burst.

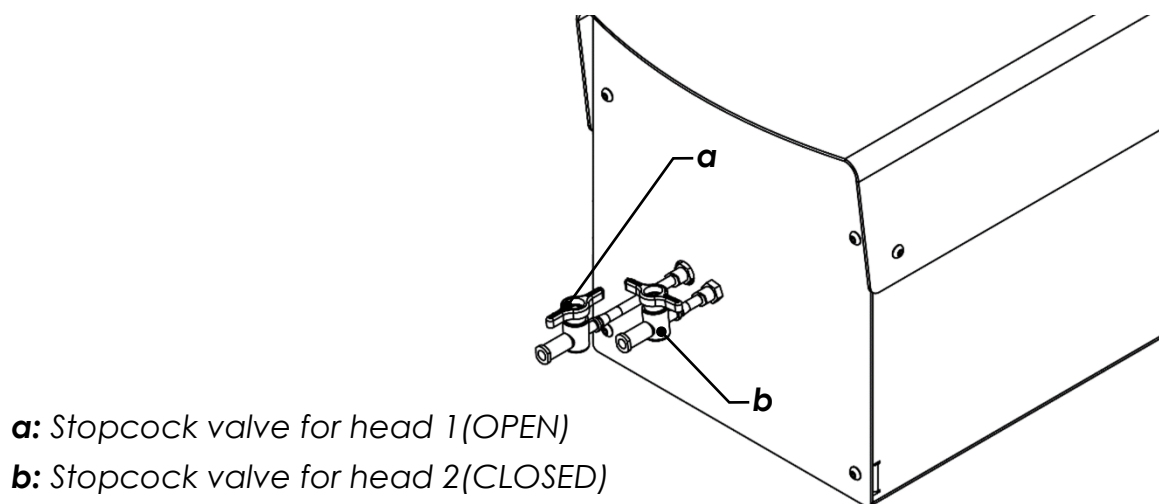


Figure 47

## Downward purge

If the large character print head is purged by push button in downward printing mode, ink level may raise causing some leakage. We strongly recommend not to use the push button and instead use a syringe to purge the ink out.

Bring the print head to skyscraping mode, fill the syringe with air, Remove the breathing tube and plug the syringe to the breathing port.

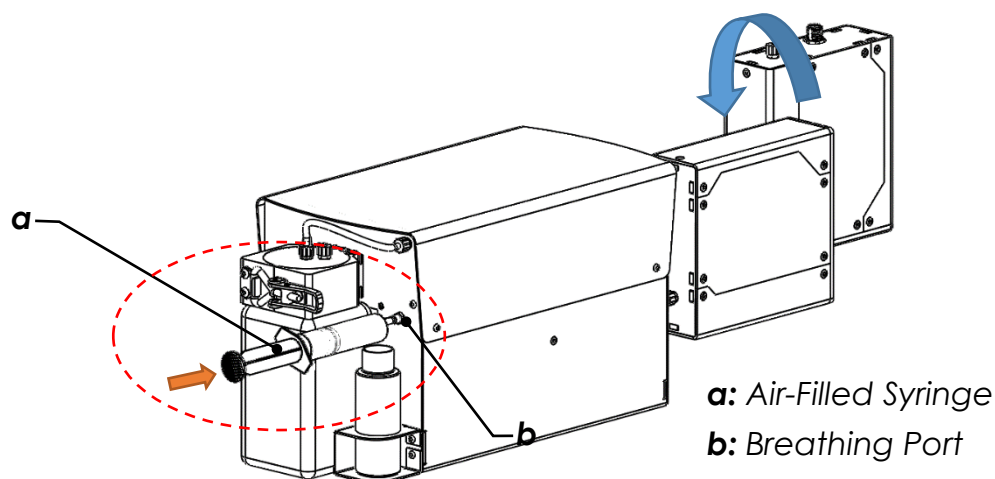


Figure 48

Push the piston in and hold it until the autofill starts, this will purge the excess ink out and keep the ink level at its lowest.

Remove the syringe and put the breathing tube back. Retain the syringe for future use. Gently put the head back to the downward printing mode dab the excess ink and print.

# Maintenance and Services

## Shipping Bulk Ink System

In case you need to ship the ink system you need to drain the ink inside the secondary tank and shut the internal stopcock valve. For moving it, you just need to shut the internal stopcock valve off and after relocating put it back in to open position. Follow the steps below to close the stopcock valve.

**Important Notice:** You will receive the bulk system with this valve closed, please make sure to open the valve before operation otherwise the secondary tank could burst or leak.

- 5) Disassemble the controller and print head if required.
- 6) Unscrew the 4XM3 screws as shown in Figure 49 and take the top cover off.

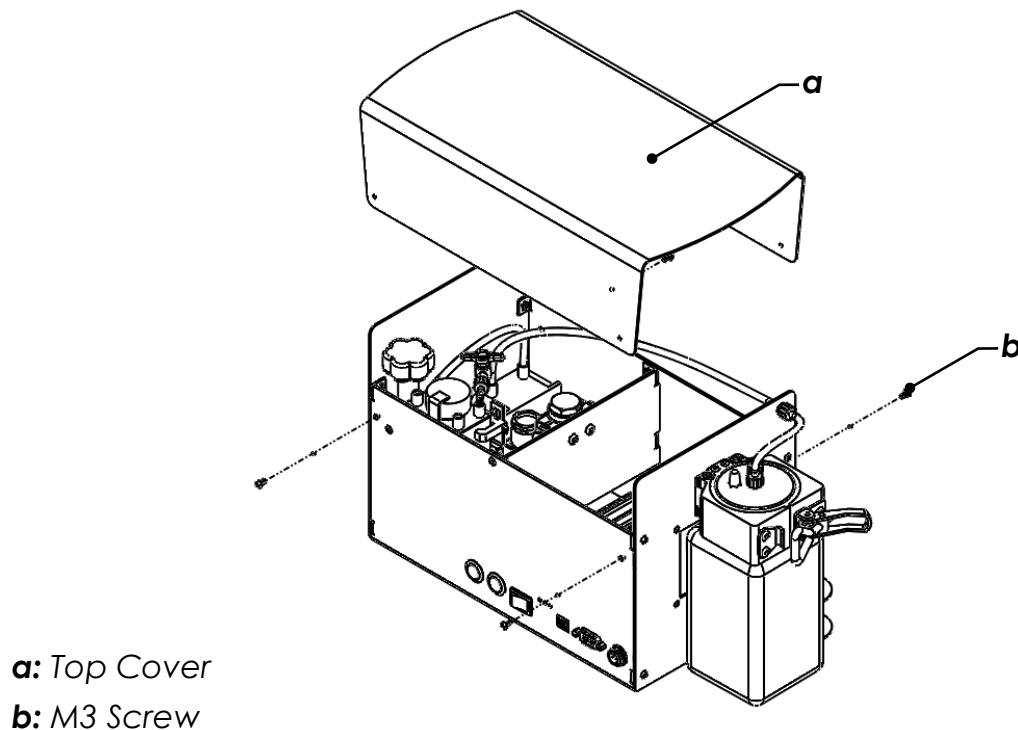
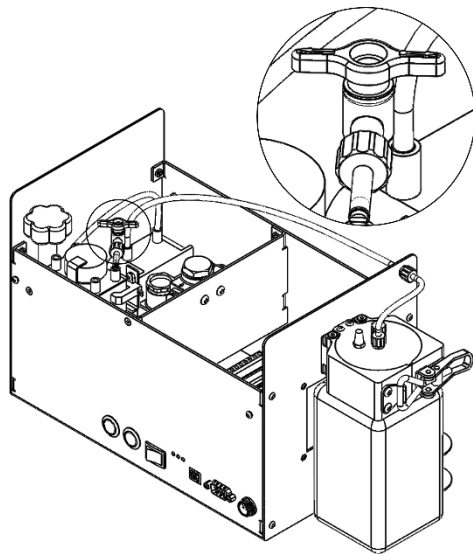
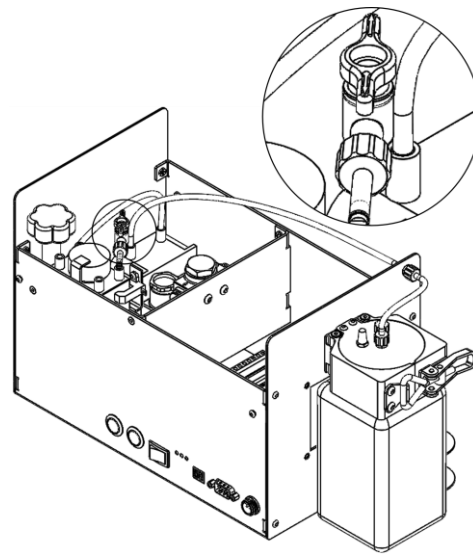


Figure 49

- 7) Open/close the stop cock valve. The valve must be OPEN when the printer is in function, otherwise the secondary tank can burst or leak.
- 8) After relocating open the valve and put the top cover back.



**a: Stopcock Valve CLOSED**  
(During Shipping)

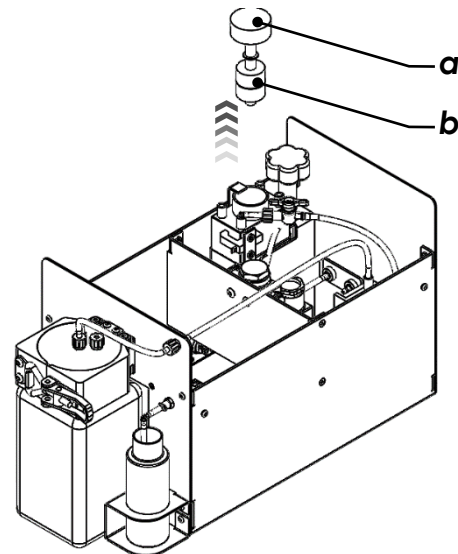


**b: Stopcock Valve OPEN**  
(During Operation)

Figure 50

If the bulk system is required to be shipped, the ink inside the system must be drained.

- 1) Unscrew the cap for the internal tank and carefully take out the level sensor.



**a: Internal (2ndary) Ink Tank Cap**  
**b: Ink Level Sensor**

Figure 51

- 2) Use a syringe to draw the leftover ink and cap the tank when there is no ink left inside.

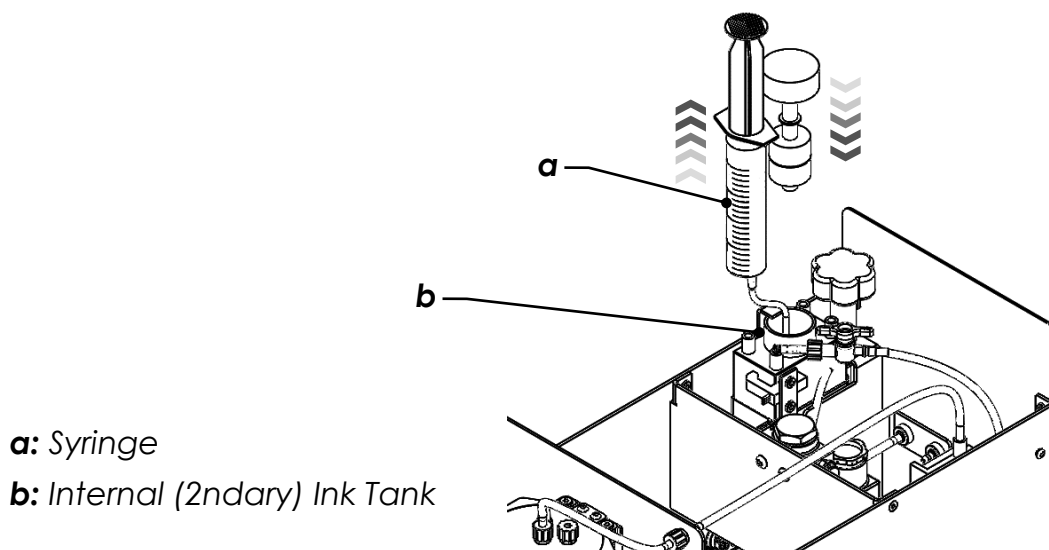


Figure 52

- 3) Shut the stopcock valve off as showed in Figure 50.
- 4) Cap the ink outlet as shown in Figure 15.
- 5) Remove the tube from ink inlet and hold it up to drain the ink inside the filter and tubing with gravity (See Figure 53).

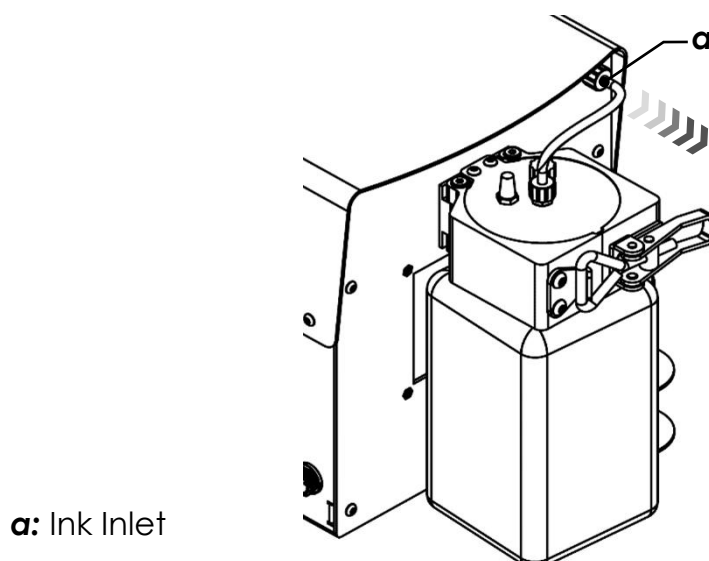


Figure 53

- 6) After the filter is drained, put the tube back and use an empty bottle or a Nylon Bag to cover the filter.

**Notice:** If the filter is not properly sealed, the ink will dry inside, and the leftover ink may leak.

- 7) Put everything back (follow the steps in reverse), wrap the bulk ink system with stretch film and secure it with bubble wraps. Please use original packaging for shipment.

**Notice:** If the ink system is only being relocated inside the facility, you only need to disassemble the top cover, shut the valve, and move the ink system to the desired location. Open the valve and put the top cover and tubing back.

## Shipping Print Heads

The printer head may require cleaning and maintenance due to environmental or product debris such as dust, hair, fibers etc. Care must be taken during cleaning to ensure the exposed print nozzles are not damaged.

**Notice:** Use only RNJET Spray cleaner for print-head maintenance.

### Small Character Print Head

- Spray some cleaner solution on the nozzles. Fold a lint free paper towel to size of 5" x 5" or 13 cm x 13 cm and spray some cleaner on it.

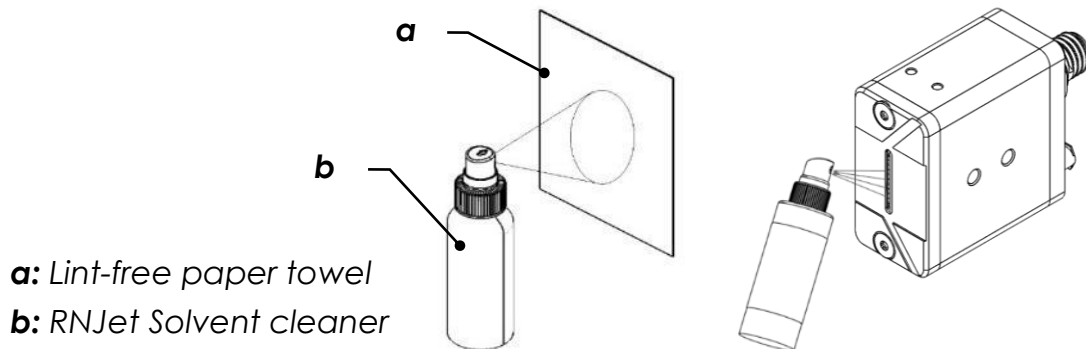


Figure 54

- Fold the sides in a way that it wraps around head and use a stretch wrap to seal the print head airtight.

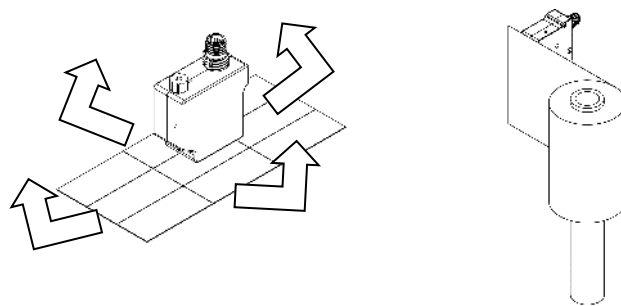


Figure 55

**Note:** Please note that this step is particularly important to keep the nozzles wet by minimizing ink evaporation to prevent clogging of the nozzles during shipment.

## Large Character Print Head

- Spray some cleaner solution on the nozzles. Fold a lint free paper towel to size of 5" x 5" or 13 cm x 13 cm and spray some cleaner on it.

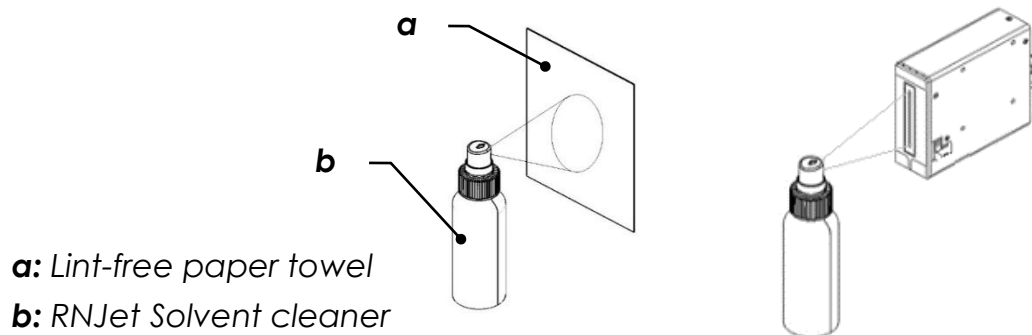


Figure 56

- Fold the sides in a way that wraps around head and put the protection plate back. Use a stretch wrap to seal the print head airtight.

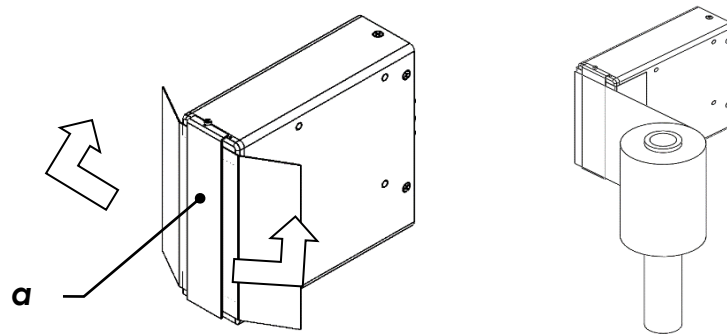


Figure 57

**Note:** Please note that this step is particularly important to keep the nozzles wet by minimizing ink evaporation to prevent clogging of the nozzles during shipment.

## Technical Support

Telephone and Video Chat technical support are available from Monday to Friday 9:00am to 5:00pm EST.

Toll-Free: 1 866 551 9406

Sales: 1 905 597 4977

Sales: 1 905 597 4978

Tech Sup: 1 647 242 2215 (WhatsApp Available)

Tech Sup: 1 647 242 8969 (WhatsApp Available)

Questions and comments can also be sent to: [ts@rnjet.com](mailto:ts@rnjet.com)

[WWW.RNJET.COM](http://WWW.RNJET.COM)