

VariQuest[®]

Motiva[™] 400



User's Guide

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1 Setting up the *Motiva*[™] 400 Printer

This User's Manual is your complete step-by-step guide to quickly and easily setting up and printing with your new color label printer!

Locating the Printer

- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat build up.
- Do not place the printer near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Allow for adequate clearance in front of the printer to accommodate the printed label stock as it is leaving the printer to avoid the possibility of binding or jamming of the label stock.
- Allow for adequate overhead clearance for opening the top cover to allow easy access to the label stock and ink cartridge.

Unpacking and Inspecting the Printer

While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit. The following items should be included:

- Printer
- Power Adapter
- Separate Power Cord
- 6' USB Cable (If other USB cable is used, it must be 6' (2 M) or less)
- Color Ink Cartridge¹
- Starter roll of Motiva Brushed Gold Media¹
- Warranty Statement and Registration Card
- This manual and other printed information

Note: Save the carton and packing materials. They will come in handy when transporting the printer.

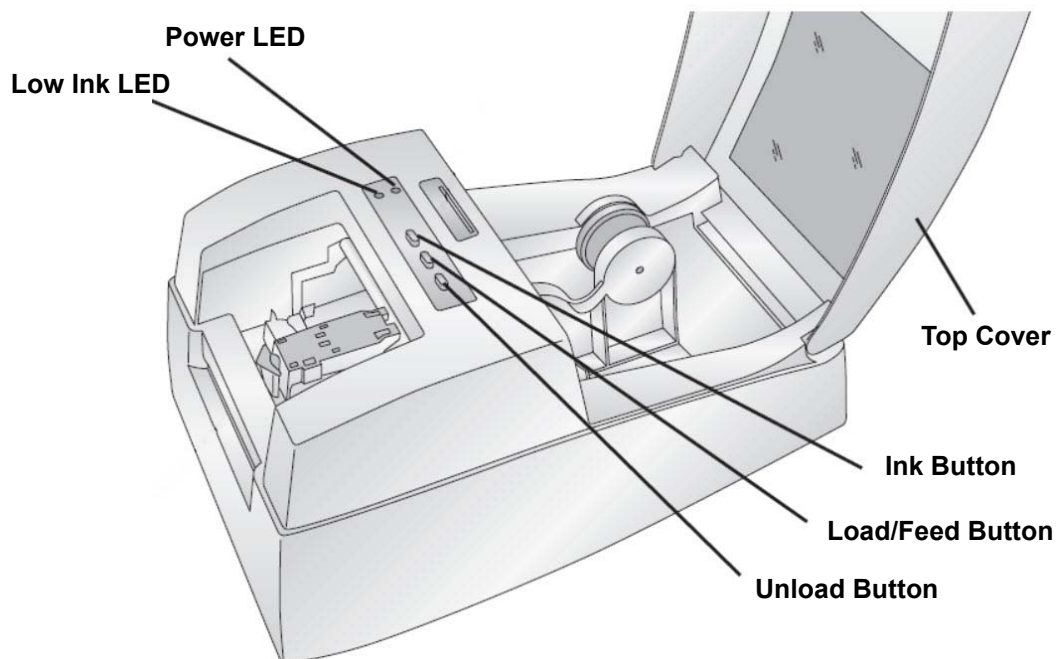


1: Motiva Pigment (Color) Ink Cartridge and Motiva Brushed Gold Starter Media may come packaged in a separate shipping box.

Identifying Printer Parts

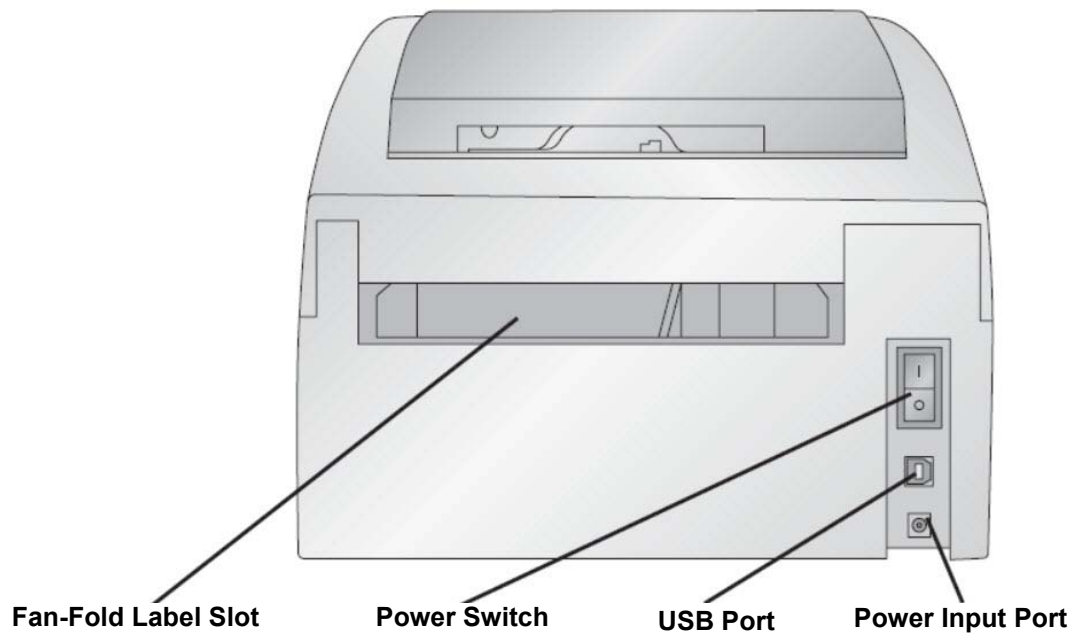
This illustration shows the front of the printer with its control buttons and LED indicator lights.

- **Ink Low LED** illuminates when a cartridge has 10% or less of its ink remaining.
- **Power LED** indicates that the printer is on and ready to receive print jobs.
- **Ink Button** moves the carriage to the center for loading the ink cartridge. Once the cartridge is loaded, press the ink button again.
- **Load/Feed Button** is pressed to load label stock or form feed the label stock through the printer.
- **Unload Button** unloads the installed label stock by reversing it through the printer.



Identifying Printer Parts

This illustration shows the input ports and power switch located on the rear panel of the printer.



2 Hardware and Software Setup

Installing Label Stock

The *Motiva™* 400 carries a large variety of paper label stock that has been converted and ready for use with your printer.

Install Label Stock:

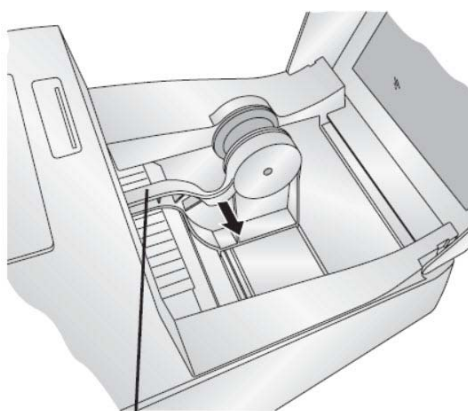
1. Open the Top Cover.
2. Pull the spring-loaded label stock guide out far enough to fit the label stock.
3. Remove any shipping tape from the label stock roll to ensure it can unroll freely, making certain that no adhesive is exposed.



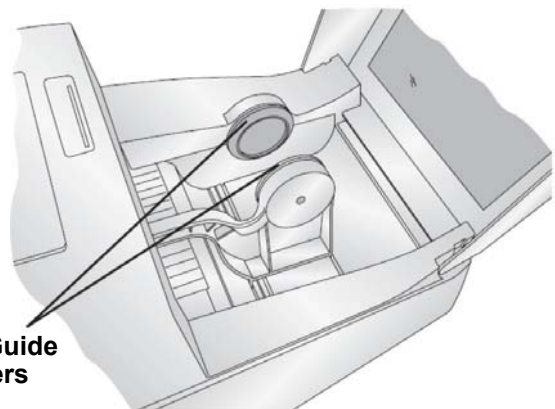
CAUTION!

Any exposed adhesive surface can attach itself to the inner workings of the print mechanism and cause a media jam. Take care to ensure no adhesive is exposed.

Note: *If you are using fan-fold label stock or label stock other than standard square / rectangular die-cut labels, see “Adjusting Label Stock Gap Sensor Position” on page 2-3 and “Fan-Fold Label Stock” on page 2-6 for additional instructions.*



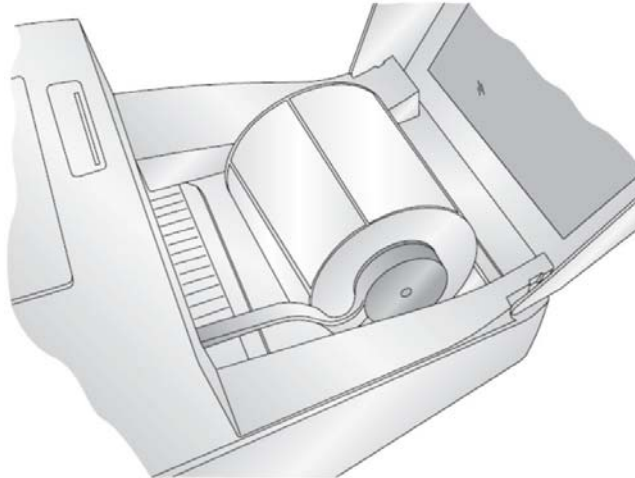
Label Stock Guide



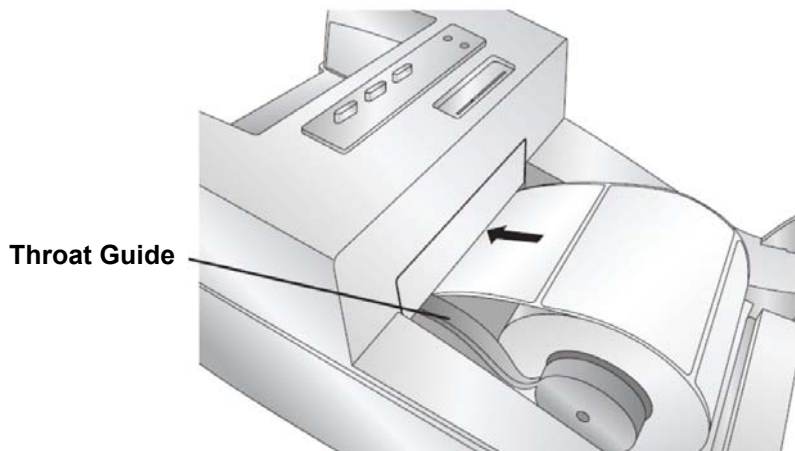
Stock Guide
Rollers

Installing Label Stock

- Place the label stock between the stock guide rollers and release the spring loaded stock guide to hold the label stock. The stock guide rollers allow the label stock roll to move freely.



- Place the leading edge of the label stock between the throat guide and the side of the printer.



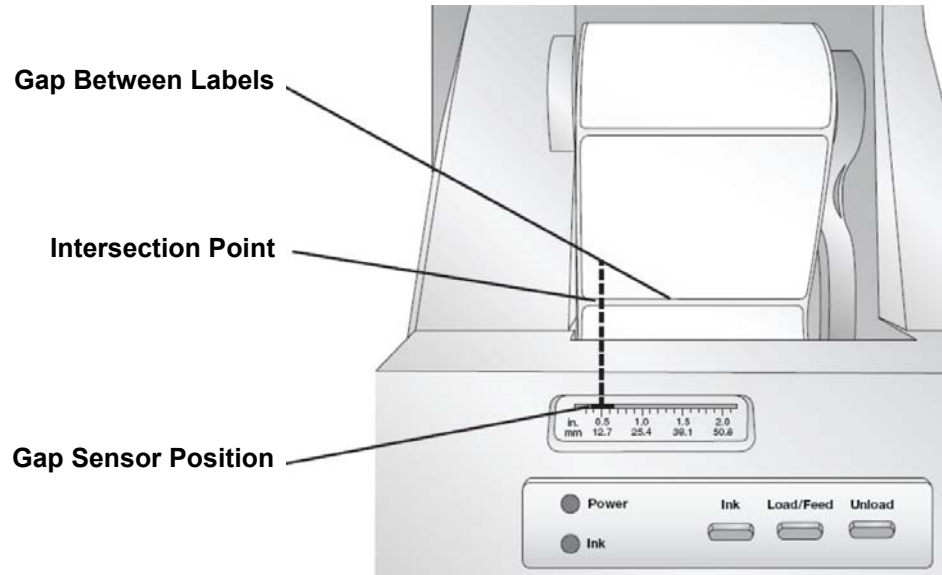
- Quickly continue feeding the label stock further into the printer until you feel resistance from the feed rollers. The printer will sense the label and automatically feed it through the printer. If the printer fails to feed the label stock, press the **Load/Feed** button to manually engage the feed roller while continuing to guide the label stock into the printer.

Tip! To ensure the label stock is fed straight, push label stock into the printer quickly until the entire front edge is touching the feed roller. For wider stock, use both hands to maintain even forward pressure while pushing the stock into the printer.

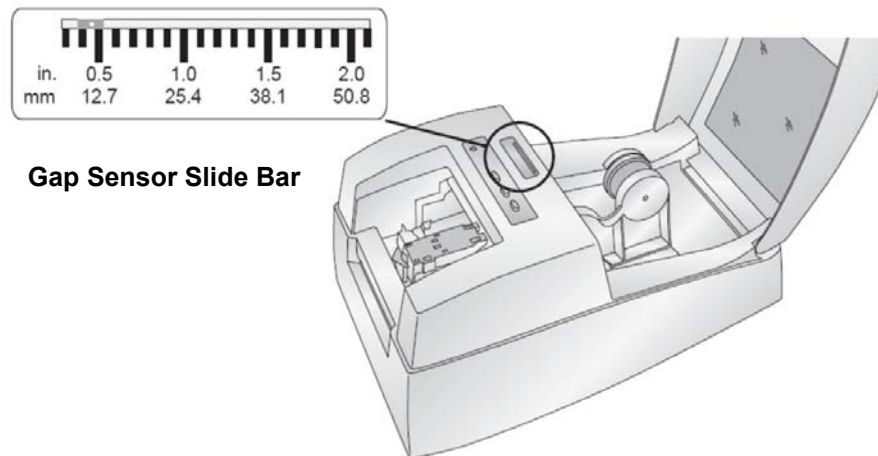
Adjusting Label Stock Gap Sensor Position

The stock gap sensor (TOF Sensor) "sees" the gap between label stock by shining light from the top of the label and attempting to read that light from a sensor on the bottom.

By default, the stock gap sensor is set to read the gap 0.5" from the left side of the label stock. If the gap in your label stock intersects with gap position as shown on the slide bar, you do not need to adjust this and you can skip this section. For most label stock, no adjustment is needed.



If you are using label stock other than standard square / rectangular die cut labels, such as circular die-cut labels or through-hole stock, use the following instructions to adjust the label stock TOF sensor.



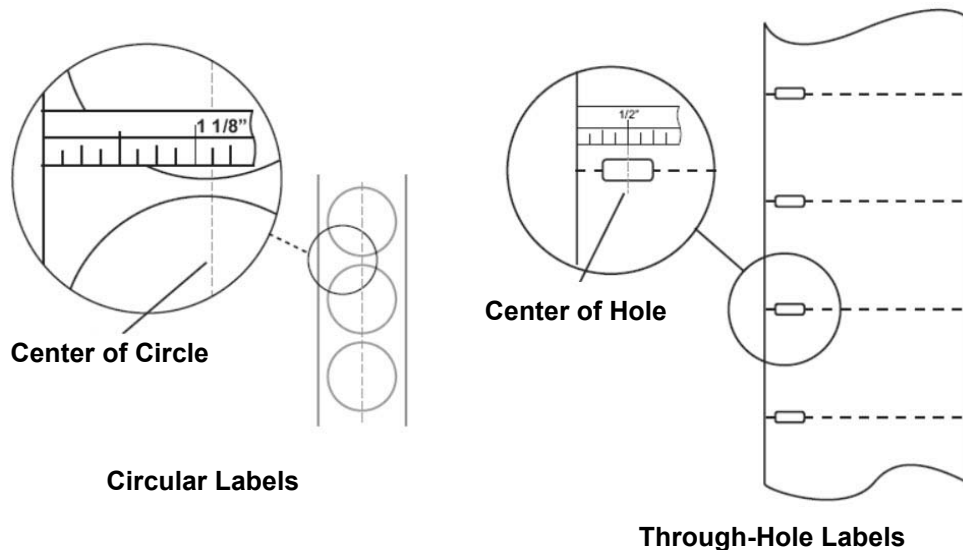
Adjusting Label Stock Gap Sensor Position

Circular Labels

When using Circular Labels, you must adjust the Stock Gap sensor to correspond with the very top of the label where the circles are closest together. If the sensor is too far to the right or left, the printer will still sense the label but the image may be offset downward because the printer will start printing at the wrong position. If you are using stock that has multiple labels across, make sure the sensor corresponds to a place on the stock that has a label and not a vertical gap.

The **Sensor Bar** has a guide in inches and millimeters to help identify where to set the bar to align the sensor over any identifying mark or top of a circular shape. To do this:

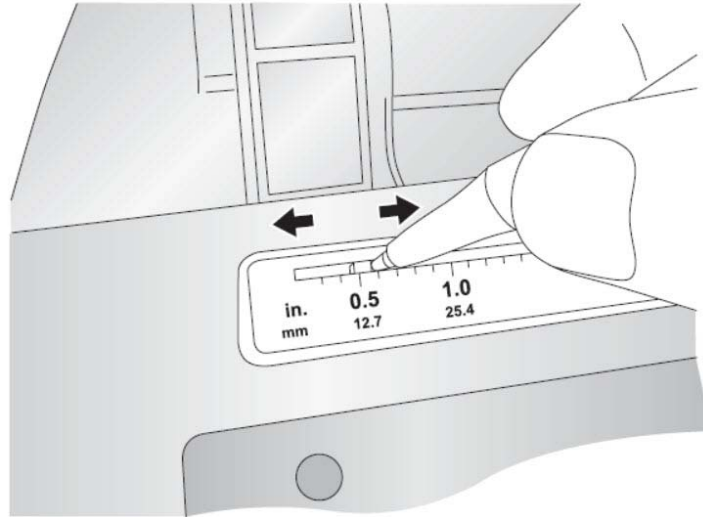
1. Measure the distance from the edge of the label stock to the correct position on the stock.
2. Set the sensor bar to this measurement (e.g., For a two inch circular die-cut label, measure from the edge of the label stock to the center of the circle. For this example it should be about 1 1/8 inches.)
3. Set the **Sensor Bar** to the measured value.



Through Hole Labels

When using card stock or label stock that has a hole punch or a notch to identify a transition from backing to label, you can adjust the Sensor Bar to position it over the identifying mark.

To adjust the sensor position use a pen to move the slide bar to the correct position.



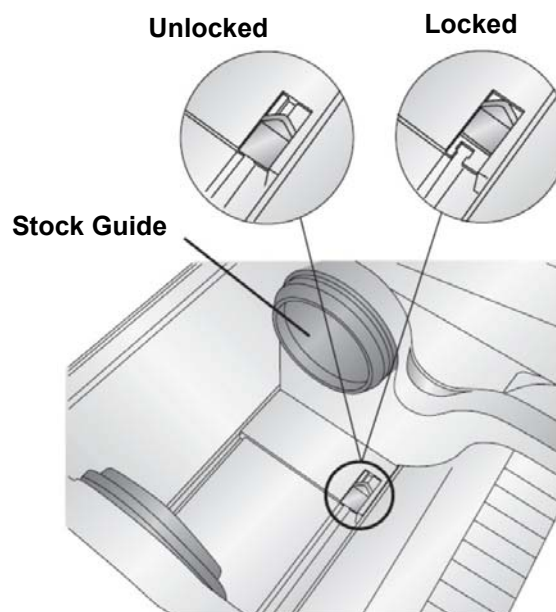
Adjusting Label Stock Gap Sensor Position

Fan-Fold Label Stock

You can use fan-fold label stock by feeding it through the fan-fold slot in the back of the printer.

Before feeding the fan-fold stock through the back of the printer, lock the stock guide in the out position so the stock guide rollers will not interfere with the label stock. The stock guide is spring loaded and under normal circumstances it will pinch any label stock roll inserted into the printer.

To lock the stock guide push the tab located on the bottom of the moveable stock guide to the out/locked position.



Installing Ink Cartridge

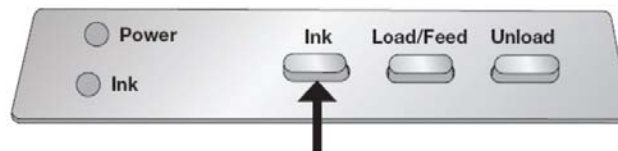
When the cartridge reaches 10% remaining, the **VariQuest Design Center Software** will prompt you to replace the cartridge. If quality still looks acceptable, you can choose to ignore this warning. However, you may waste labels if the cartridge runs out of ink before the next warning at 0%. If you choose to replace the cartridges follow the procedure below.

Note: *Ink Cartridge Levels are estimated based on analysis of the printed images by the driver during spooling. This analysis estimates the number of ink droplets (spits) required to print the image and subtracts that amount from the total amount in the cartridge. There is no real time sensor that shows the actual amount of ink in the cartridge.*

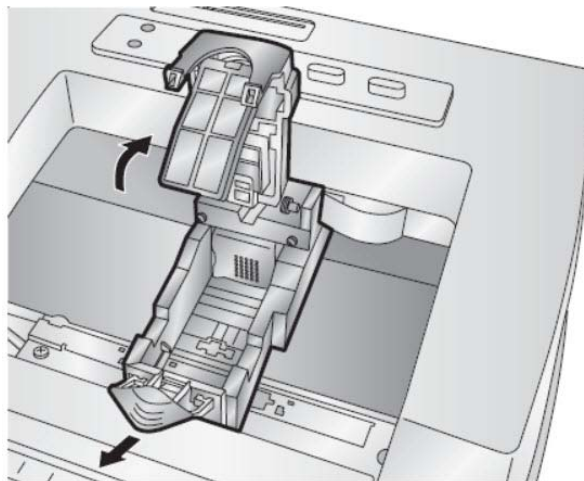
After installing a new cartridge, you can run an alignment print to achieve maximum quality. However, this requires cancelling the print job.

To replace the print cartridge:

1. Open the **Top Cover** of the printer.
2. Press the **Ink Button** on the printer. The Cartridge Carrier will align itself to the center of the print area.



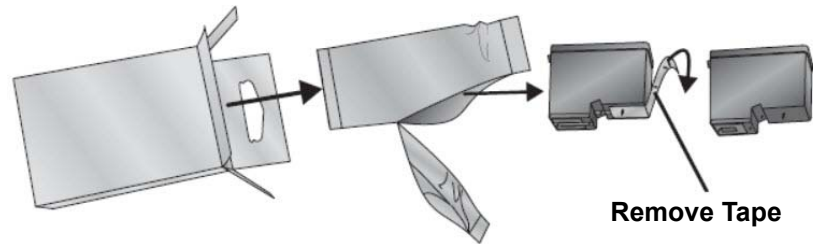
3. Press the **Cartridge Cover Release** to open the **Cartridge Holder**. Remove the cartridge (if installed).



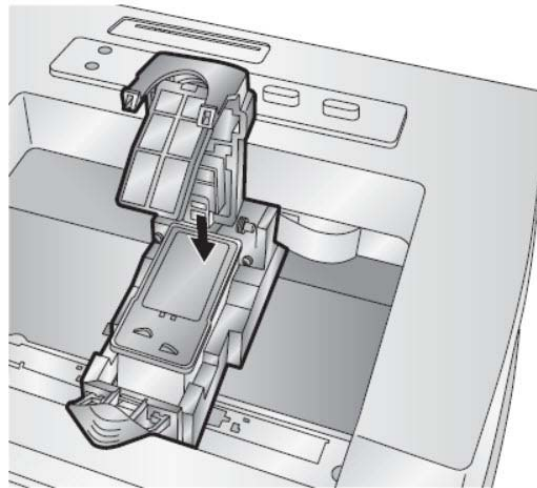
Installing Ink Cartridge

Fan-Fold Label Stock

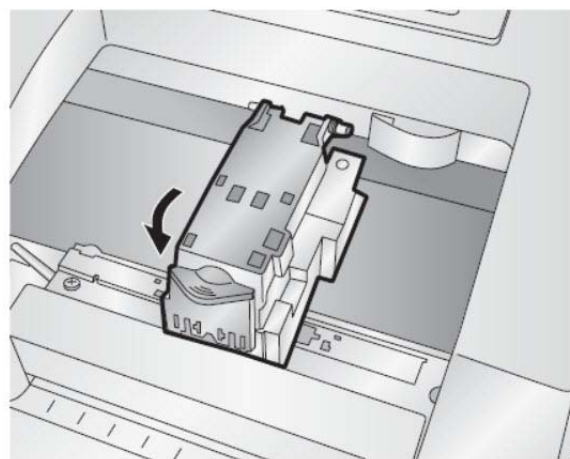
4. Remove the new cartridge from its packaging. *Be sure to remove the protective tape covering the copper contacts.*



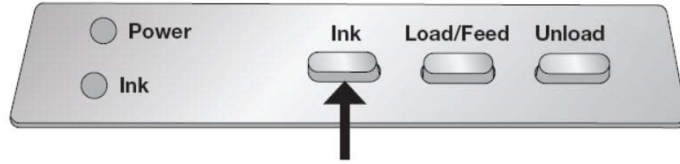
5. Replace/install the cartridge copper end first.



6. Push cartridge cover downward until it snaps in place.



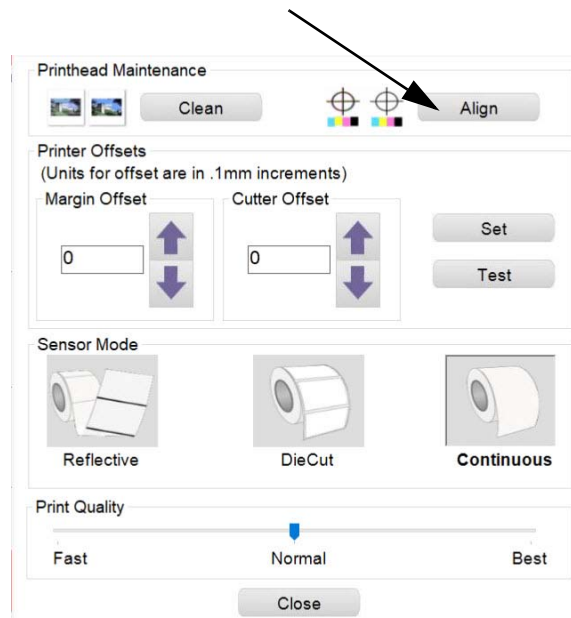
- Press the Ink button on the printer to indicate the new cartridge is now installed.



Aligning the Ink Cartridge

Cartridge alignment aligns the Color Cartridge for bidirectional printing and calibrates the printer to each individual cartridge. You will automatically be prompted to perform this alignment each time you install a new cartridge. You may also manually align the cartridge via the status monitor.

For alignment you need to have label stock that is equal to or larger than 4" x 2" (101.6 mm x 50.8 mm) installed. If your stock does not meet this requirement you can use the sample roll that came with the printer. You may also choose to disable alignment via the settings area of the status monitor. See the VariQuest Software User's Guide for more information.



Aligning the Ink Cartridge

Fan-Fold Label Stock

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3 Print Functions

Print Using VariQuest Design Center Software or PC

See the **VariQuest Software User's Guide** for details about printing using the VariQuest software or printing from a PC.

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4 Troubleshooting

Clearing a Label Jam

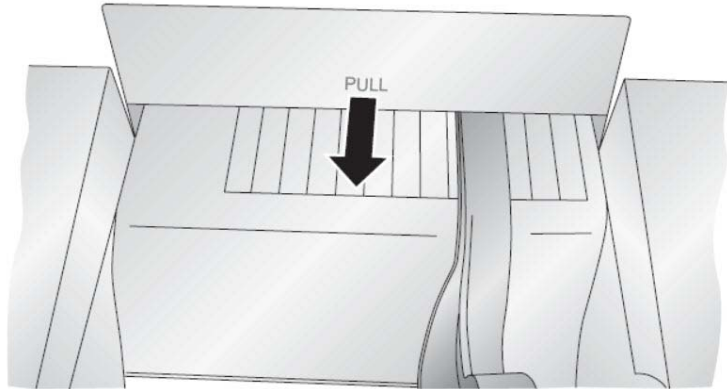
If there is a label jam in the printer mechanism, try to remove the jam by opening the cover and removing the jam from the printer feed output area.

If the jam can not be located, you can remove the cover over the feed input area. Pull on the center of the cover as shown below to release the tabs on the sides.



CAUTION!

To prevent future jams, use rubbing alcohol to remove any adhesive left in the printer feed area.



Cleaning the Printer

The printer case can be cleaned with an ammonia-based window cleaner and a lint-free cloth.

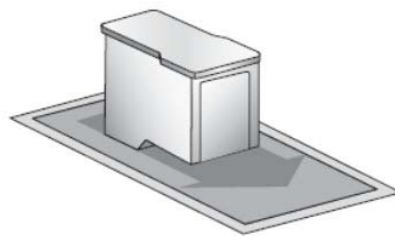
Over time, ink over spray may gather at the base of the printer. The printer is designed using a vacuum system to gather most of this ink on a series of saturation pads. Eventually, these pads may need to be replaced. Contact tech support to determine if pad replacement is necessary.

Cleaning the Ink Cartridge

It may be necessary to clean the ink cartridge nozzles if you notice reduced print quality, or if you suspect a cartridge nozzle has become slightly dried out or clogged.

To correct print quality problems:

1. Remove the print cartridge.
2. Moisten a lint-free cloth with water.
3. Hold the cloth against the nozzles for **three seconds**. This will “wick” some additional ink onto the damp cloth.
4. Wipe in one direction only.
5. Repeat the process.



Printhead Maintenance

The **VariQuest[®] Motiva[™] 400** is factory calibrated and should not need adjustment or cleaning. However, if necessary, some functions can be adjusted by the software. See Chapter 9, Printer Adjustments of the Design Center Software User's Guide for details.

Technical Support

Contact Information

For technical assistance, please contact your authorized VariQuest dealer or the VariQuest Technical Support team:

- **Email:** techsupport@variquest.com
- **Phone:** 1-800-328-0585

Additional information is located in the **VariQuest[®] Software** User's Guide located at resources.variquest.com.

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