



QL-850

USER GUIDE



QL-850 User Guide

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Obtaining Service

To obtain warranted service, please contact QuickLabel Technical Support through one of the Factory Sales and Service Centers.

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Ownership Information

Congratulations and thank you for your business. Your purchase of a QuickLabel digital label printer is an investment in production flexibility and packaging efficiency. Please record the model number and serial number of your product.

FCC Part 15 Compliance

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RoHS2 Compliance

The QL-850 Label Printer does not contain the substances specified within ANNEX II of “Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)”, that is, lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) exceeding their specified maximum concentration values tolerated by weight in homogeneous materials, except for the exemptions set in ANNEX III of the Directive and its amendments.

This information is offered in good faith to the best of our knowledge, but is subject to revision as new information becomes available.

WEEE Directive



European Union (and EEA) only.

These symbols indicate that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC), the Battery Directive (2006/66/EC) and/or your national laws implementing those Directives.

If a chemical symbol is printed beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in this battery or accumulator at a concentration above an applicable threshold specified in the Battery Directive.

This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE) and batteries and accumulators. Improper handling of this type of waste could have a possible impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE.

Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.

For more information about the recycling of this product, please contact your local city office, waste authority, approved scheme or your household waste disposal service.

(EEA: Norway, Iceland and Liechtenstein)

WEEE Compliance - India only

This product is not to be disposed of with your household waste, according to the e-waste (Management and Handling) Rules, 2011. This product should be handed over to a designated collection point, e.g., to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information regarding return and recycling of WEEE products, please contact QuickLabel.

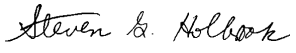
Also, this product complies with the "India E-waste Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 % by weight and 0.01 % by weight for Cadmium, except for the exemptions set in Schedule II of the Rule.



Battery - For CA, USA only

Included battery contains Perchlorate Material ---- special handling may apply.

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate> for details.

Declaration of Conformity Declaration de Conformité Übereinstimmungserklärung Dichiarazione di Conformità	
ID	DoC-QL-850
Manufacturer's name and address Nom et adresse du fabricant Hersteller Nome del costruttore	AstroNova, Inc. 600 East Greenwich Avenue West Warwick, RI 02893 USA
Brand Name(s) Nom(s) de marque(s) Markenname(n) Nome/i dei marchi	QuickLabel®
Model No. Modèle No. Model Nr. Modello No.	QL-850, QL-850 w/ Rewinder
Description of Products Description des produits Produktbeschreibungen Descrizione dei Prodotti	Color Label Printer
Standards to which conformity is declared Standards auquel la conformité appartient Normen für welche Übereinstimmung erklärt wird Norme per le quali si dichiara la conformità	FCC 47CFR Part 15 Subpart B (3/2017) IC ICES-003:2016 Ed.6 EN 55032 ED 2:2015 EN 55024:2010 + AMD1:2015 IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013 ANSI/UL 60950-1:2007 Ed.2 +R:14Oct2014 CSA C22.2#60950-1:2007 Ed.2+A1;A2
Application of Council Directives Application des Decisions du Conseil Anwendbar für die Richtlinien Applicazione delle Direttive del Comitato	2014/30/EU 2014/35/EU
I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standard. Je, Soussigné, déclare que l'équipement spécifié ci-dessus est en conformité avec la directive et le standard ci-dessus. Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Gerät den vorgenannten Richtlinien und Normen entspricht. Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle Direttive e Norme sopra specificate.	
Steven Holbrook Quality Assurance Manager AstroNova, Inc. CE Label First Affixed Date: 19	 Date of issue: <u>9/30/2019</u> Place of issue: <u>West Warwick, RI</u>
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Installation and Setup Overview

Refer to the installation and setup summary for an outline of the required steps.

1. Unpack the printer. *See “Unpacking the Printer” on page 12.*
2. Ensure all parts are included. *See “Checking the Included Parts” on page 14.*
3. Before installing the printer, select an appropriate location and ensure system requirements are met.
 - *See “Choosing an Installation Location” on page 15.*
 - *See “Installation Precautions” on page 16.*
 - *See “System Requirements” on page 16.*
4. Connect the power cable to the printer. Switch the printer power on. *See “Powering On” on page 16.*
5. Install the printer driver.
 - *See “Installing the Printer Driver (USB)” on page 17.*
 - *See “Installing the Printer Driver (Network)” on page 18.*
6. Use the After Shipping wizard in the QL-850 Maintenance Utility. *See “Using the After Shipping Wizard” on page 19.* This wizard will guide you through the following actions.
 - Foam support block removal - *See “Preparing the Maintenance Roller” on page 20.*
 - Ink cartridge installation - *See “Installing Ink Cartridges” on page 21.*
 - Printhead installation - *See “Installing the Printhead” on page 22.*
7. Load media. *See “Loading Media” on page 25.*

Unpacking the Printer

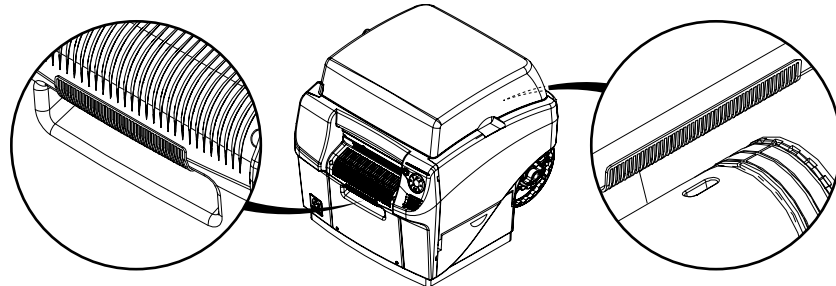
The printer is secured using packing tape and cushioning materials to protect it against vibrations and shock during transportation. Use the following procedure to unpack the printer. Keep the packing materials for future transportation.

Note: *If you open the top cover of the printer, you will see a foam block installed over the maintenance roller. You will remove this block later when using the After Shipping Wizard to prepare the maintenance roller, install ink cartridges, and install the printhead. See “Using the After Shipping Wizard” on page 19.*

1. Remove the packing straps from the shipping carton. Cut the tape securing the top of the carton. Then open the top of the carton.
2. Remove the accessory box and packing materials from the shipping carton.
3. Lift the shipping carton off the printer and shipping pallet.

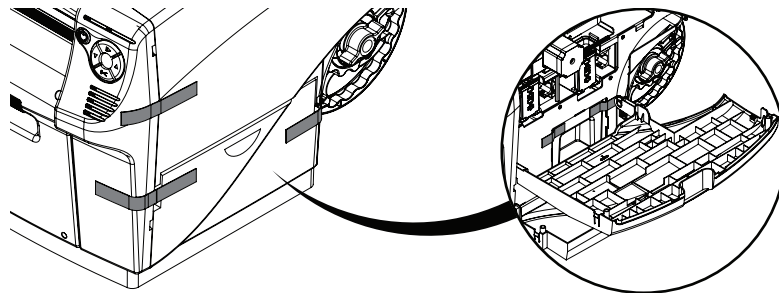
4. With help from another person, lift the printer off the shipping pallet.

Caution: The printer is heavy and moving it requires two people. One person should lift the front by the indicated lift point, while the other person should lift the back by the indicated lift point. Do not lift the printer by the mandrel. Lift the front of the printer by the recessed handle. Lift the rear of the printer by the flat area of the plastic frame above the mandrel. Keep the printer level while lifting it.

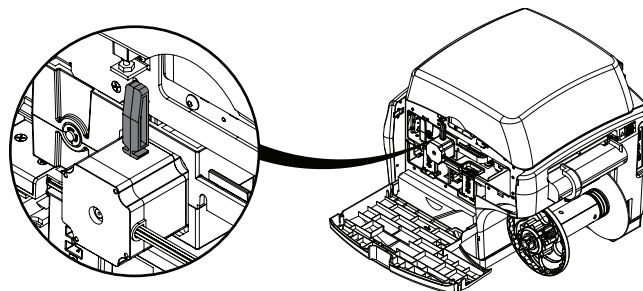


5. Place the printer on a sturdy, flat horizontal surface that can support at least 100 pounds (45.4 kilograms).
6. Remove all packing tape from the printer exterior. This tape is used to secure the doors and covers in place.

There is also tape holding the maintenance cartridge in place. Open the main side door and lower side door to access and remove this tape.

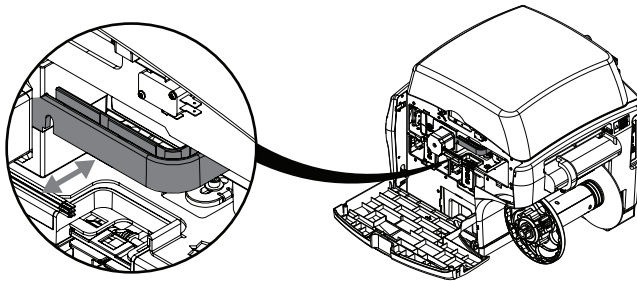


7. With the main side door open, remove the yellow transport unit shipping lock by rotating it counterclockwise approximately 45 degrees, aligning it, and then pulling it straight out. Save the lock for future shipping purposes.

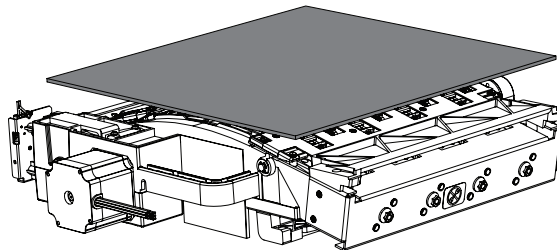


Note: The printer will function with the transport shipping lock installed. However, the transport unit cannot be removed while the lock is in place.

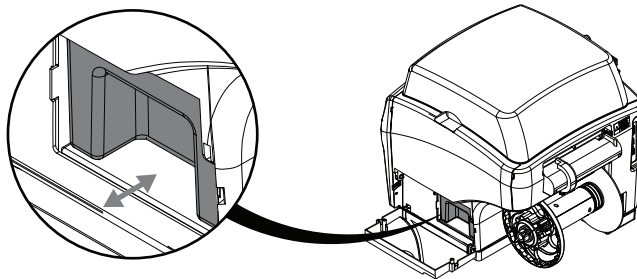
8. Grasp the transport unit handle and pull the transport unit straight out of the printer.



An absorbent pad is positioned above the transport unit for shipping. Remove this pad.



9. Reinstall the transport unit. Ensure it is fully inserted in the printer.
10. Close the main side door but leave the lower side door open.
11. Grasp the maintenance cartridge and pull it straight out of the printer. Then reinstall the maintenance cartridge. Ensure it is fully inserted in the printer.



12. Close the lower side door.

Checking the Included Parts

Check to make sure the following items are included with the printer.

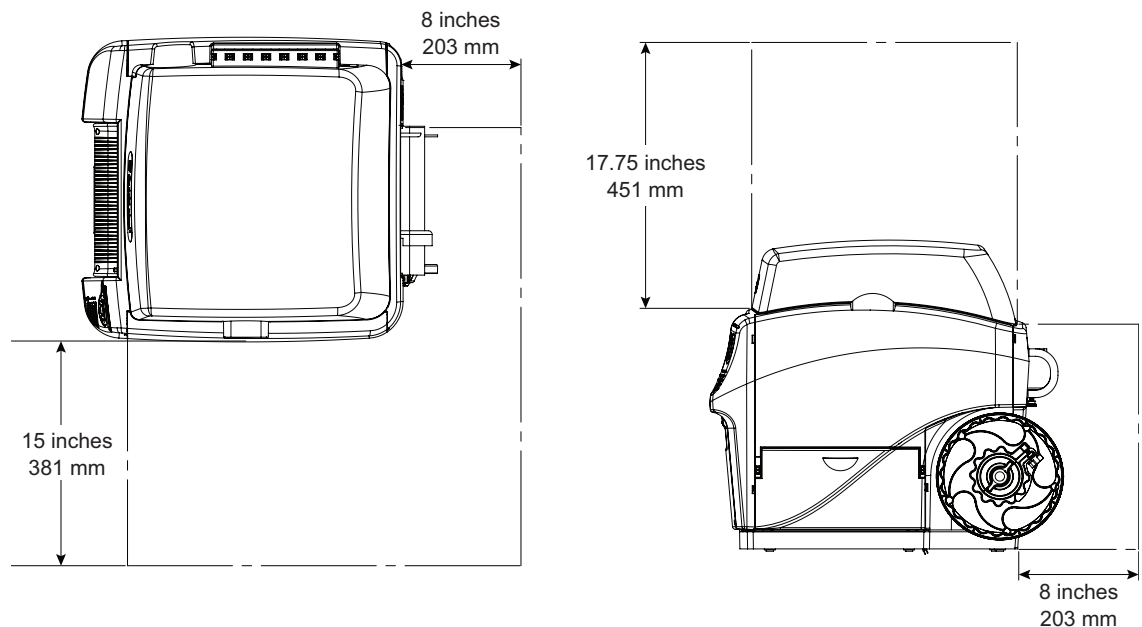
- Power cable
- USB cable (do not connect until prompted during driver installation)
- Printhead
- Four ink cartridges (one for each color)

Before Installing the Printer

Choosing an Installation Location

The installation environment must be as described in this section.

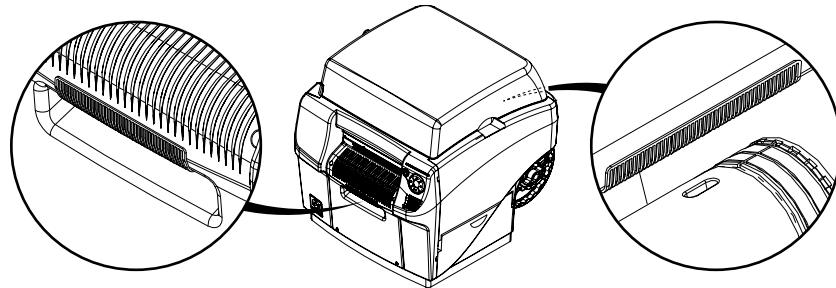
- The printer power cord must be able to connect to an outlet (100V - 240V AC). This outlet must be easily accessible.
- Avoid installing the printer near a faucet, water heater, humidifier, or refrigerator.
- Ensure the environment temperature is within 41 to 95 degrees Fahrenheit (5 to 35 degrees Celsius). For optimal print quality, an environment temperature of approximately 73 degrees Fahrenheit (23 degrees Celsius) is recommended.
- Ensure the environment humidity is within 20% to 80% (non-condensing) relative humidity. For optimal print quality, a relative humidity of approximately 60% is recommended.
- Avoid placing the printer in areas exposed to high temperature and humidity, extremely low temperature, severe temperature changes, or direct sunlight. Especially, avoid placing the printer near fire, outdoors, in distribution warehouses, or in refrigerated areas.
- Avoid installing the printer in areas subject to dust.
- The room must be properly ventilated.
- No printer feet should float. The printer must be held level constantly.
- When placing the printer on a desk, table, or other similar surface, it must be sturdy and stable enough to support the weight of the printer. The table must be rated for a minimum of 100 pounds.
- The minimum space required for installation and maintenance is shown below.



Installation Precautions

When installing the printer, observe the following precautions.

- Imaging faults can result from dew condensation that occurs when the printer is moved from a cold place to a warm place. Leave the unpacked printer as is for at least two hours before installing it.
- The printer is heavy and moving it requires two people. One person should lift the front by the indicated lift point, while the other person should lift the back by the indicated lift point. Do not lift the printer by the mandrel. Lift the front of the printer by the recessed handle. Lift the rear of the printer by the flat area of the plastic frame above the mandrel. Keep the printer level while lifting it.



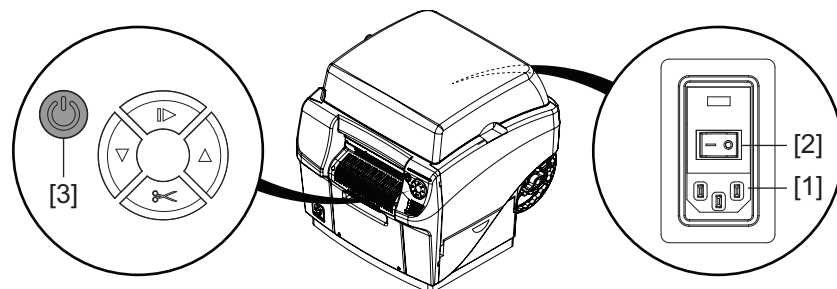
- The printer has rubber feet that help secure the printer and prevent accidental movement. When moving the printer on the installation surface, apply slight upward lifting pressure. Dragging the printer may result in damage to the rubber feet.

System Requirements

- Windows® 10/8/7
- Microsoft .NET Framework 4.0
- 350 MB free hard drive space
- Internet connection for software download
- One available USB 2.0 port for USB installation or network connectivity for network installation

Powering On

1. Connect the power cable to the printer power inlet [1]. Connect the other end of the power cable to the power source. Then turn on the power via the power inlet switch [2].



2. Press and hold the power key [3] for one second to turn the printer on.

The printer will begin the power-up process, including opening the printhead latch, and the green LED will flash momentarily. When the green LED stops flashing and remains on, the printer will be ready to use.

Note: The red error LED will be on until you use the After Shipping wizard later in this guide.

Note: If the printer is on, you can press and hold the power key [3] for three seconds to turn it off.

Installing the Printer Driver

Installing the Printer Driver (USB)

1. Ensure the QL-850 is powered on but **not** connected to your PC via the USB cable.

Important: Do not connect the USB cable until prompted later in this procedure.

2. Power on your PC and download the QL-850 installer program from www.QuickLabel.com/downloads. Run the "Setup.exe" file. The Installer wizard will open. Choose **Install Driver**.

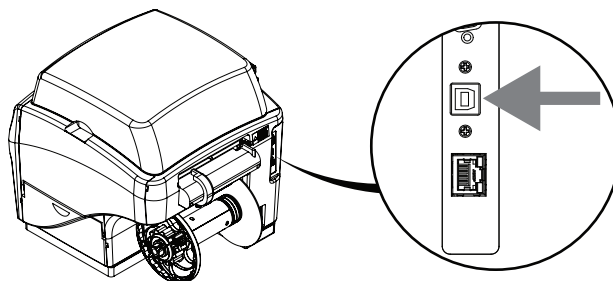
3. Choose **Install Printer Software**. The software installation wizard will start.

Note: If the Windows logo testing or publisher verification warning messages appear during installation, choose to continue the installation.

4. When prompted to select a printer connection method, choose **Configure to print using USB**. Then choose **Next**.

Note: A USB configuration is required for the initial installation. You can later install the printer as a network printer.

5. When prompted, connect the QL-850 to your PC with a USB cable. The installation will continue once the USB connection is made.



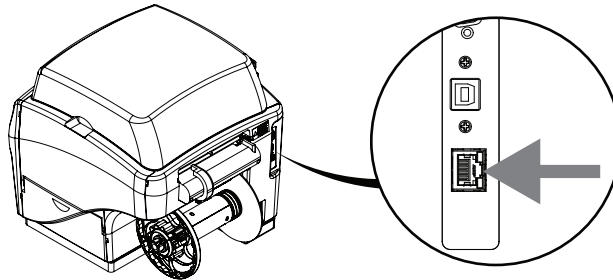
6. When prompted, select whether the QL-850 will be set as the default printer.
7. Choose **Finish**.

Installing the Printer Driver (Network)

Use the following instructions to install the printer via a network connection.

For detailed information about the topic of networking, refer to documentation applicable to your network environment and/or contact your network administrator.

1. Ensure the QL-850 is powered on and connected to the network via a LAN cable.



2. Power on your PC and download the QL-850 installer program from www.QuickLabel.com/downloads. Run the "Setup.exe" file. The Installer wizard will open. Choose **Install Driver**.
3. Choose **Install Printer Software**. The software installation wizard will start.

Note: If the Windows logo testing or publisher verification warning messages appear during installation, choose to continue the installation.
4. When prompted to select a printer connection method, choose **Configure to print over the network**. Then choose **Next**.
5. When prompted, view the list of printers discovered on your network.
 - If your QL-850 printer is on the list, select it.
 - If your QL-850 printer is not on the list, choose **Other Printer**. You can search for the printer by entering its IP address. See "[Changing Printer Networking Settings](#)" on page 18. When the printer is found, select it.

With your QL-850 printer selected, choose **Next**.
6. When prompted, select whether the QL-850 will be set as the default printer.
7. Choose **Finish**.

Changing Printer Networking Settings

You can view and change printer networking settings with the QL-850 Toolbox application. This application is available in the following situations:

- Your PC is connected to the printer via USB and the driver software has been installed for USB printing.

- Your PC is connected to the printer via the network and the driver software has been installed for network printing.

The QL-850 Toolbox application allows you to enable/disable DHCP and change the IP address of the printer.

Note: *Some QL-850 Toolbox features are not supported. Use only the features described in this procedure.*

1. Open the QL-850 Toolbox application from a PC connected to the printer via USB.
From the Windows Start Menu, choose **Start > All Programs > QuickLabel QL-850 > Toolbox**.
A web browser will open and display the QL-850 Toolbox application.
2. Choose the **Diagnostics** link to display the Diagnostics information.
The IP address for the printer is displayed on this page. Note the IP address for reference purposes.
3. If the IP address does not appear, or you would like to change the IP address, choose the **Network Config** link. Network configuration information will be displayed.
 - If you would like to automatically assign a new IP address based on DHCP, select the **dhcp** and **autoip** options. Then choose **Submit**.
 - If you would like to assign a specific IP address, ensure the **dhcp** and **autoip** options are not checked. Enter the new IP address in the **ip_address** field and choose **Submit**.
4. Choose the **Diagnostics** link to return to the Diagnostics information. Confirm the network settings before exiting the application.
Close the web browser to exit the QL-850 Toolbox application.

Using the After Shipping Wizard

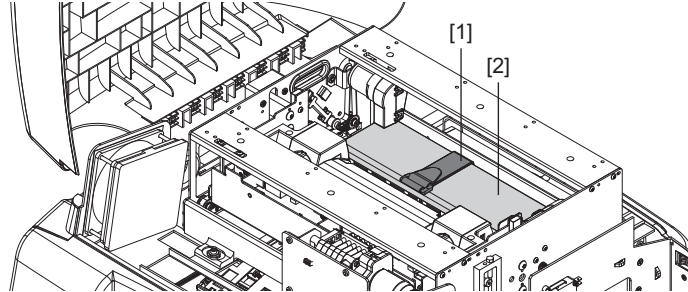
After installing the driver, the QL-850 Maintenance Utility will be available for use. You will use the After Shipping wizard in this utility to prepare the maintenance roller, install ink cartridges, and install the printhead.

1. Launch the QL-850 Maintenance Utility.
From the Windows Start Menu, choose **Start > All Programs > QuickLabel QL-850 > QL-850 Maintenance Utility**. A language and printer prompt will open.
Select a display language and the QL-850 printer you want to connect to. Choose **OK**.
2. Choose the **Cleaning** tab.
3. Choose **After Shipping**. Follow the on-screen instructions to complete this procedure. This wizard will guide you through the following actions.
 - Preparing the Maintenance Roller - See *"Preparing the Maintenance Roller"* on page 20.
 - Installing Ink Cartridges - See *"Installing Ink Cartridges"* on page 21.
 - Installing the Printhead - See *"Installing the Printhead"* on page 22.

Preparing the Maintenance Roller

A foam block is installed over the maintenance roller to protect it during shipping. Use the following instructions to remove this foam block.

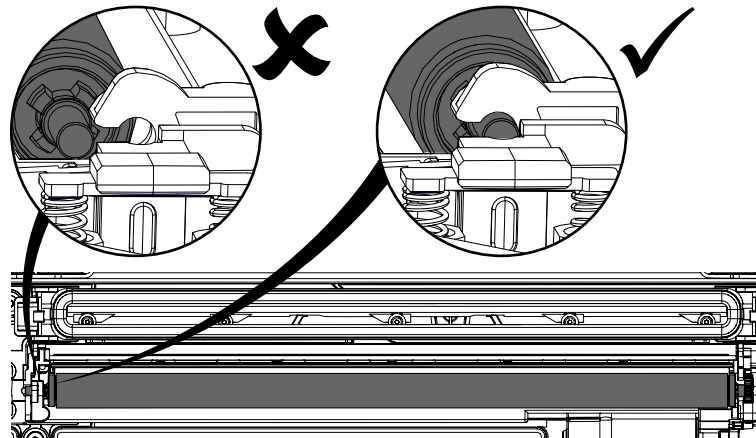
1. Open the top cover and remove the cinch strap [1].



2. Remove the foam support block [2] from the printer. Use caution when removing the block to avoid dislodging the maintenance roller assembly.

Save the foam support block and strap for future shipping purposes.

3. Verify that the maintenance roller assembly is level and installed properly. Make sure both ends of the roller are snapped into place.

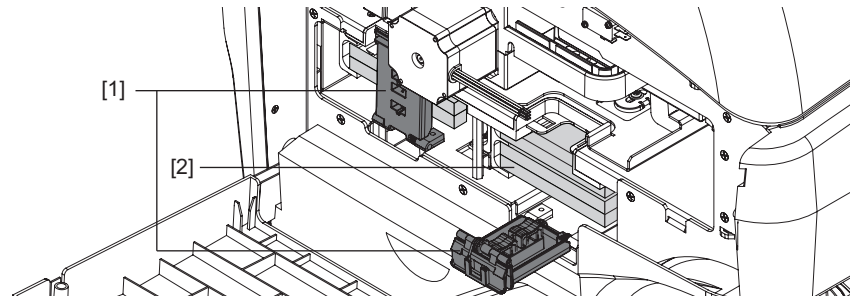


Installing Ink Cartridges

Use the following instructions to install ink cartridges.

Danger: For safety, keep ink cartridges out of the reach of children. If ink is accidentally ingested, contact a physician immediately.

1. Open the main side door. Open both ink cartridge latches [1]. Each latch can be opened by pressing down on the top of the locking mechanism and pulling outward.



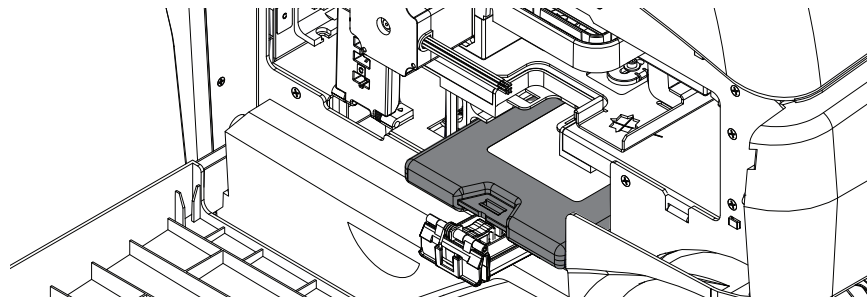
The ink cartridge latches have labels showing where each ink color will be installed.

2. Remove the four absorbent pads [2] from the ink cartridge slots. Save the pads for future shipping purposes.
3. Slide in the ink cartridge, nozzle end first, label side up. Push the cartridge in all the way.

You will feel slight resistance near the end of this process as the nozzle engages the ink needles inside the printer. Repeat this step for each color.

Caution: There are sharp needles in the ink cartridge slot. Never put your fingers in this area.

Note: The printer is designed so that ink cartridges cannot be inserted in the wrong slots. Do not attempt to insert ink cartridges in the wrong slots.



4. Make sure the ink cartridges are fully inserted. Push the ink cartridges in as far as they will go.
5. Close the ink cartridge latches. Then close the main side door.

Installing the Printhead

Use the following instructions to install the printhead.

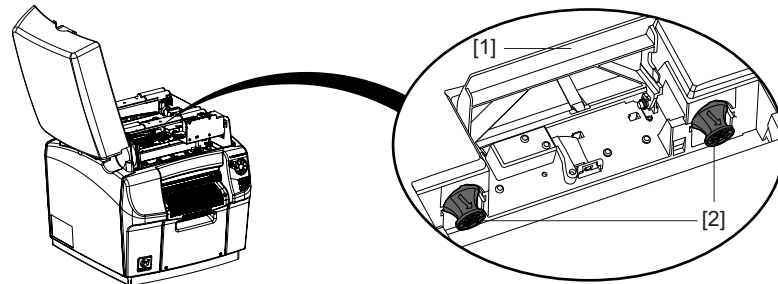
Caution: The printhead is sensitive to electrostatic discharge (ESD). Use ESD protection when handling the printhead.

Caution: Do not touch the printhead cartridge ink couplings, nozzle surface, or the electrical contacts when installing the printhead cartridge. Hold the printhead cartridge ONLY by the handles.

Caution: To avoid drying out the printhead, do not open the printhead packaging until you are ready to use it.

Caution: Open the printhead packaging over an appropriate receptacle to safely capture any excess shipping fluid.

1. Ensure the printer is powered on and the ink cartridges have been installed.
2. Open the top cover.
3. Make sure the printhead latch [1] is in the open (vertical) position. Remove the cap protectors [2] from the two fluidic couplings.



Note: The printhead latch will be in the open position. Do not close the latch before installing the printhead. If the latch is accidentally closed, do not pry it open. Turn the printer off and back on again. The latch automatically opens during power up if no printhead is installed.

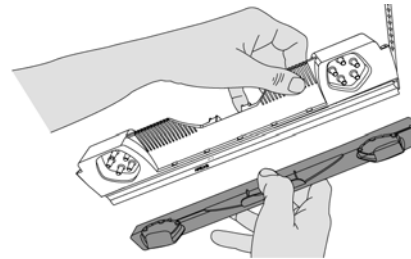
4. Remove the printhead from the packaging.

Note: If the foil packing is damaged, report the issue to Technical Support or your reseller.

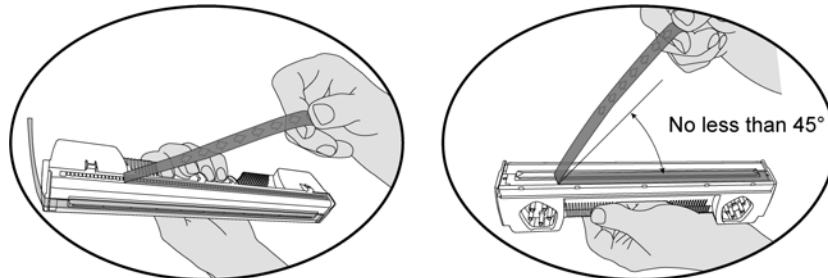
Caution: Do not place the unprotected printhead cartridge on any surface. Protect the printhead cartridge at all times from contamination such as dust or fibers.

5. Wipe any excess shipping fluid from the printhead cartridge with a clean, lint-free cloth.

6. Remove the orange protective plastic cover from the printhead cartridge, holding the printhead by the handle.
 - Remove the flaps covering the ink ports.
 - Remove the clip holding the cover near the center of the printhead cartridge.
 - Carefully remove the protective cover. Do not touch any of the ink ports or nozzle plate after the orange cover is removed.

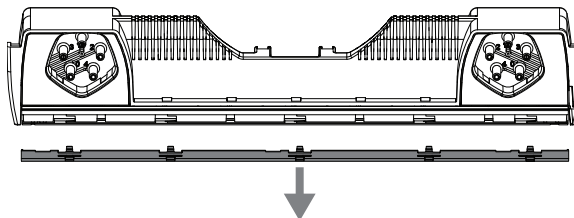


7. Hold the printhead cartridge by the handle with one hand. Carefully remove the protective plastic strips with the other hand.
 - Grasp the pull tab and slowly peel back the plastic strip covering the electrical contacts.
 - Grasp the pull tab and slowly peel back the plastic strip covering the printhead nozzles. Maintain an angle of no less than 45 degrees with the printhead surface when pulling on the strip.



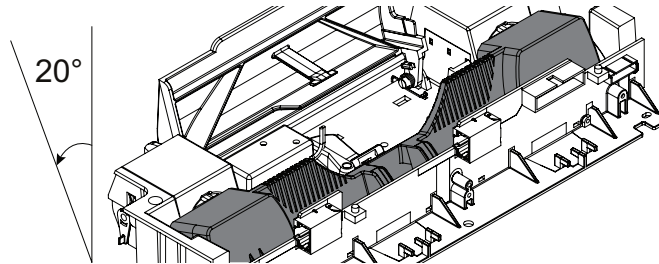
Caution: Dispose of the removed strips immediately and do not allow the removed strips to touch the electrical contacts or printhead nozzles.

8. Carefully remove the plastic bracket from the printhead cartridge.



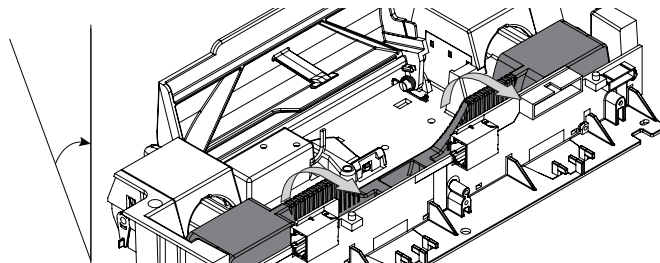
9. Point the ink ports away from the front (label exit side) of the printer.
10. Align the printhead cartridge with the printhead slot.

11. Tilt the top of the printhead cartridge toward the back of the printer, about 20 degrees. Then gently place the back of the printhead cartridge into the print engine.



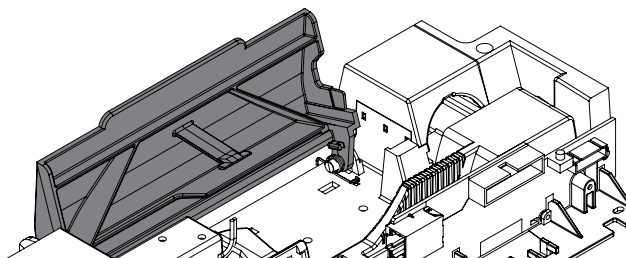
Caution: Avoid touching the printhead connector circuit board inside the printer.

12. When the back of the printhead is firmly in place, gently rotate the printhead cartridge forward into position against the stops on the printhead connector circuit board.



Caution: If the printhead will not rotate into position, do not force it. Remove the printhead and try again.

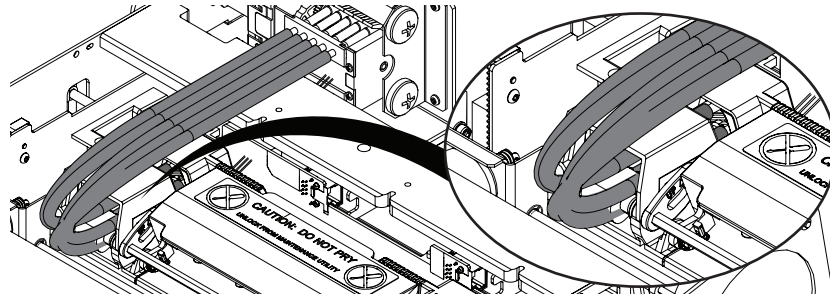
13. Slowly close the printhead latch. The fluidic couplings should advance and seal to the printhead cartridge.



Caution: If the latch will not close, do not force it. Remove the printhead and try again.

14. Close the top cover.
15. Finish the After Shipping wizard in the QL-850 Maintenance Utility.

- Open the top cover and verify that ink has filled all of the five tubes shown below.



Caution: If ink is not visible in all of the indicated tubes, contact Technical Support. Do not run the After Shipping Wizard in the QL-850 Maintenance Utility again or an ink overflow may occur.

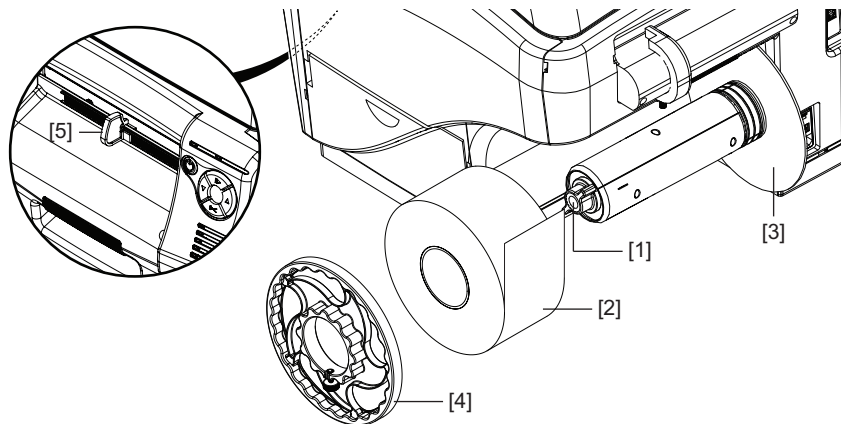
- Close the top cover.

Loading and Unloading Media

Loading Media

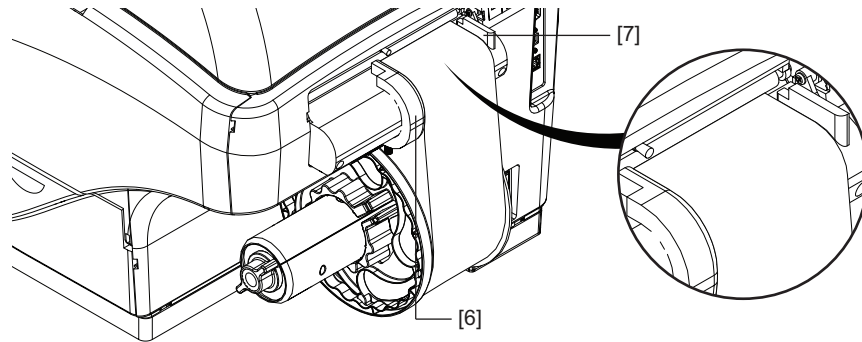
Note: If you are using gap media with wide gaps between labels, special handling instructions may apply. See [“Working with Wide Gap Media”](#) on page 28.

- Turn the wing nut [1] on the end of the mandrel counterclockwise to loosen the mandrel.



- Loosen the fastener on the outer flange [4]. Then remove the outer flange from the mandrel.
- Orient the media roll [2] as illustrated and put it on the mandrel. Make sure the roll makes contact with the inner flange [3].
- Turn the wing nut [1] on the end of the mandrel clockwise until you feel resistance. This secures the roll in place.
- Put the outer flange [4] on the mandrel. Make sure the outer flange makes contact with the roll [2].
- Tighten the fastener on the outer flange [4] until you feel resistance. This secures the outer flange in place.

7. On the front of the printer, slide the media exit guide [5] all the way to the right toward the control panel. You can adjust this guide before printing.
8. Place the media near the entry slot.
9. Loosen the thumbscrew on the adjustable media guide [6] and slide the guide to the width of the media. The edges of the media should lightly contact the edges of the fixed media guide [7] and the adjustable media guide [6]. Tighten the thumbscrew on the adjustable media guide [6].

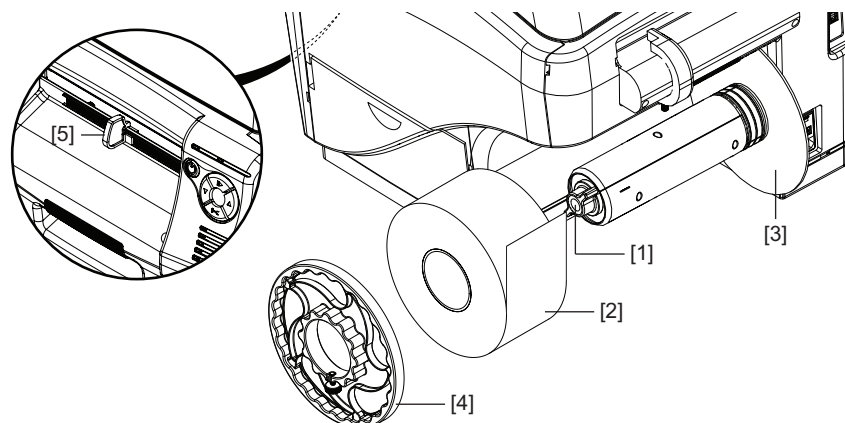


10. Slowly guide the media into the printer as illustrated. You will feel slight resistance as the media enters the roller area. Make sure there is no excessive slack in the media during this process.
11. The printer will beep three times to indicate the media has been detected. Release the media when the printer starts automatically feeding it into the printer. The printer will feed media and the loading process will be complete.

Loading Media with Manual Feed Mode

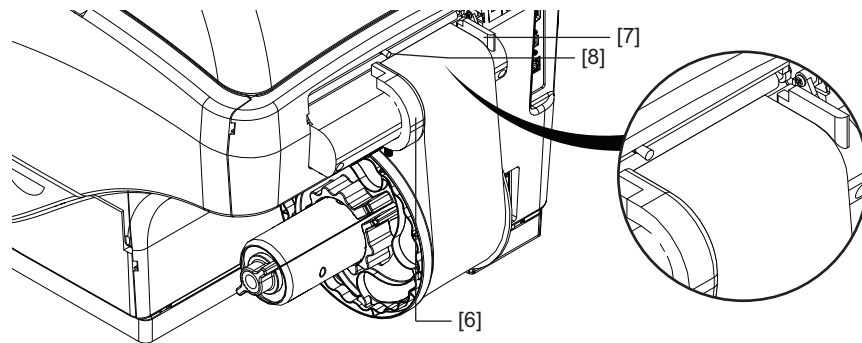
In most cases, the standard media loading procedure is the best method for installing a label roll. If you experience multiple failures using the standard method, use the alternate method described in this section.

1. Turn the wing nut [1] on the end of the mandrel counterclockwise to loosen the mandrel.

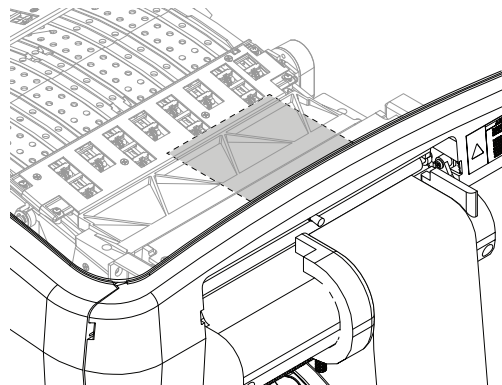


2. Loosen the fastener on the outer flange [4]. Then remove the outer flange from the mandrel.
3. Orient the media roll [2] as illustrated and put it on the mandrel. Make sure the roll makes contact with the inner flange [3].

4. Turn the wing nut [1] on the end of the mandrel clockwise until you feel resistance. This secures the roll in place.
5. Put the outer flange [4] on the mandrel. Make sure the outer flange makes contact with the roll [2].
6. Tighten the fastener on the outer flange [4] until you feel resistance. This secures the outer flange in place.
7. On the front of the printer, slide the media exit guide [5] all the way to the right toward the control panel. You can adjust this guide before printing.
8. Open the top cover. This step deactivates the automatic media loading feature.
9. Place the media near the entry slot.
10. Loosen the thumbscrew on the adjustable media guide [6] and slide the guide to the width of the media. The edges of the media should lightly contact the edges of the fixed media guide [7] and the adjustable media guide [6]. Tighten the thumbscrew on the adjustable media guide [6].



11. Lift the roller handle [8] to open the input pinch rollers.
12. Slowly guide the media into the printer as illustrated. Advance the media until it stops. The media will be positioned under the first star wheel on the transport unit. Make sure there is no excessive slack in the media during this process.

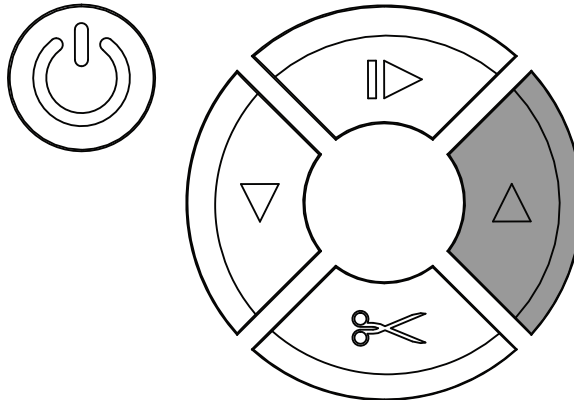


13. Release the roller handle [8] to close the input pinch rollers.
14. Close the top cover. The printer will feed media as needed and the media loading process will be complete.

Note: If the manual media feeding process fails, the media will be ejected back out of the printer.

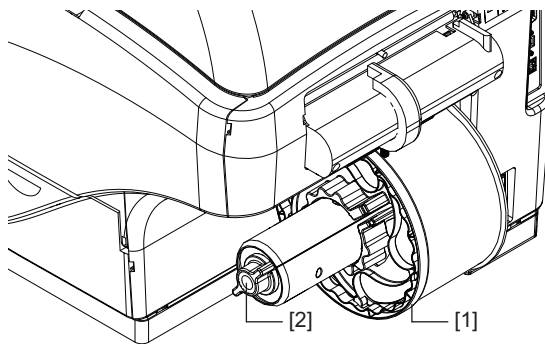
Unloading Media

1. Press and hold the back-feed key. The printer will back-feed media.



When the media has almost exited the back of the printer, back-feeding will stop and the printer will beep once. This confirmation tone alerts you that media is about to be unloaded.

2. To continue and unload media, press and hold the back-feed key again. Media will back-feed fully out of the printer.
3. Loosen the captive fastener on the outer flange [1]. Then remove the flange from the mandrel.



4. Turn the wing nut [2] on the end of the mandrel counterclockwise to loosen the mandrel. Loosen the wing nut until the media roll moves freely.
5. Remove the media roll from the mandrel.

Working with Wide Gap Media

Gap media with wide gaps between labels may require special handling. If the gaps are larger than 0.125 inches (3.175 mm), observe the following guidelines.

- Before loading media, trim excess liner from the leading edge of the media roll. If the leading edge has more than 0.125 inches (3.175 mm) of exposed liner material, it may be difficult to load media properly.
- Adjust the cut/stop position so a leading edge of 0.125 inches (3.175 mm) or less of exposed liner material results after each print job. Refer to the QL-850 Driver Help for details.

Working with Reflective Mark Media

Reflective mark media may require special handling to ensure proper top-of-form calibration. Observe the following guidelines when using reflective mark media.

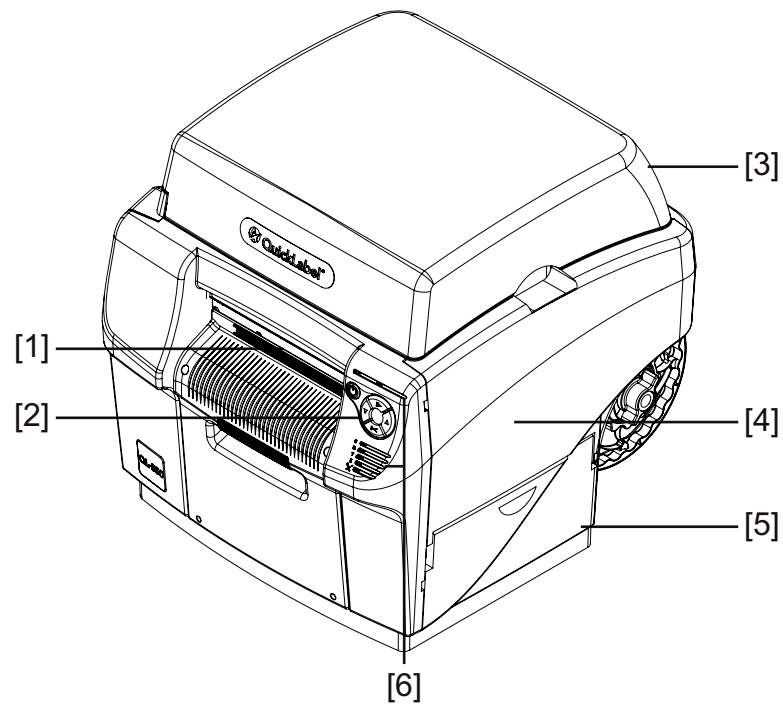
- Ensure the reflective mark meets the width, length, and density requirements. *See “Label Specifications” on page 123.*
- Before loading media, ensure that the leading edge of the media contains no reflective mark within the first $\frac{1}{4}$ inch from the cut edge. If any part of the reflective mark is within this area, cut the media directly behind the mark removing the entire mark but as little of the unmarked liner as possible. Then the media can be loaded into the printer without concern for a poor top-of-form calibration.
- If necessary, adjust the vertical offset in the printer driver. Also make sure the reflective sensor type is selected. Refer to the QL-850 Driver Help for details.

2

QL-850 Overview

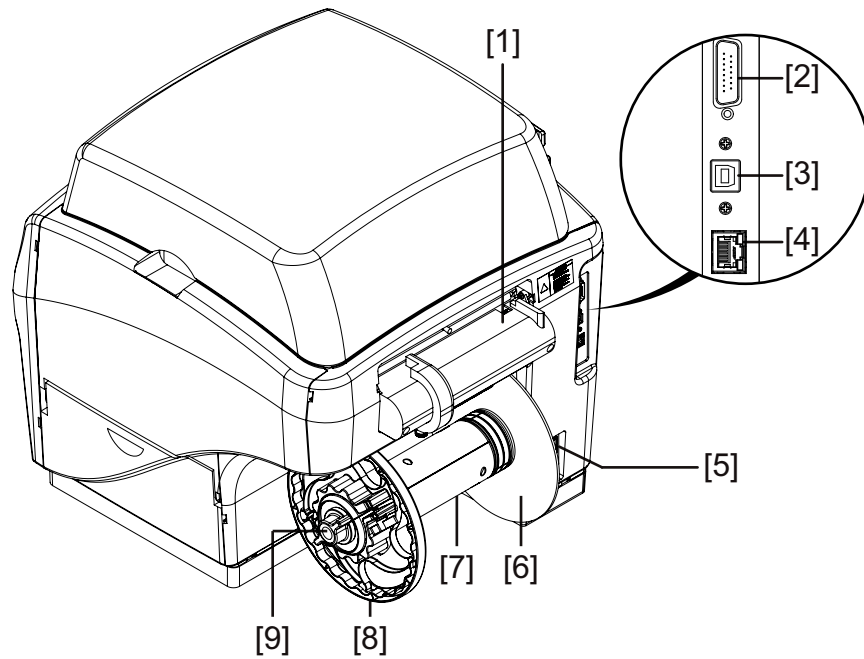
Printer Part Names and Functions

Front View



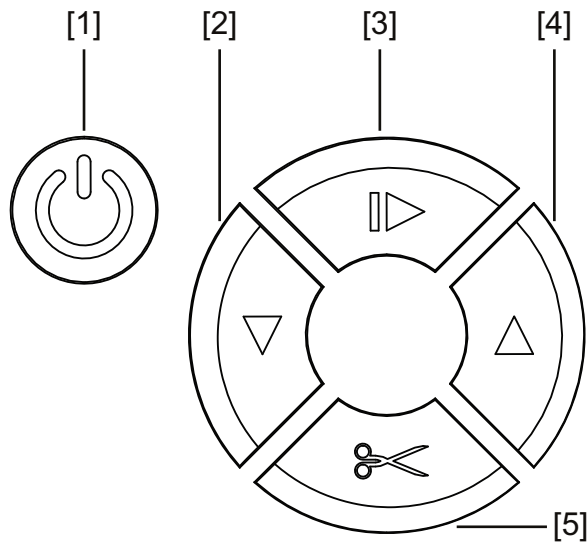
#	Part	Description
1	Media Exit Slot	Printed labels are ejected through this slot.
2	Operation Panel	Use these keys to operate various printer functions.
3	Top Cover	Open this cover to access the printhead.
4	Main Side Door	Open this door to access the transport unit and ink cartridges.
5	Lower Side Door	Open this door to access the maintenance cartridge.
6	LED Indicators	LEDs indicate the status of the printer.

Back View



#	Part	Description
1	Media Entry Slot	Media enters the printer through this slot.
2	Reserved	This port is not used. Do not connect to this port.
3	USB Port	Connect the USB cable here when using the USB connection method.
4	LAN Port	Connect the LAN cable here when using the LAN connection method.
5	Power Inlet	Connect the power cord here.
6	Inner Flange	Position the media roll edge so it touches this flange.
7	Mandrel	Install the media roll on the mandrel.
8	Outer Flange	Adjust this flange so it touches the media roll edge opposite the inner flange.
9	Wing Nut	Turn this nut to tighten or loosen the media roll lock on the mandrel.

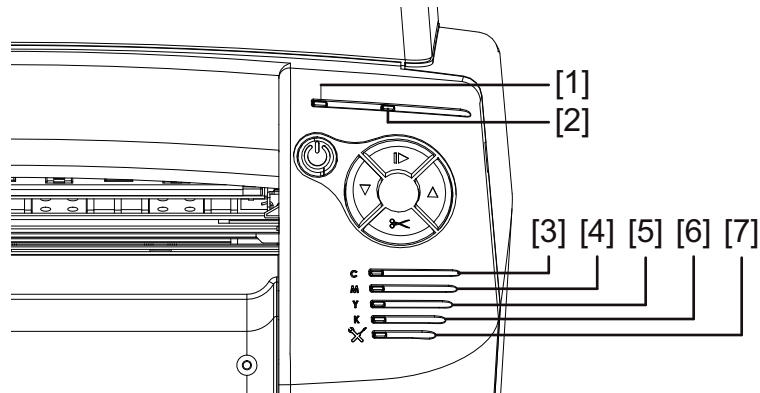
Operation Panel



#	Key	Description
1	Power	<ul style="list-style-type: none"> • If the printer power is off, press and hold this key for one second to turn the power on. • If the printer power is on, press and hold this key for three seconds to turn the power off. • Press and release this key to recover from some error conditions.
2	Feed	<ul style="list-style-type: none"> • Press and release the feed key to feed media one label length. • Press and hold the feed key to feed media until you release the key. • While paused, press and hold the feed key to perform a light printhead cleaning operation. Printhead cleaning options are also available in the QL-850 Maintenance Utility.
3	Pause/Resume	<ul style="list-style-type: none"> • While printing, press and release this key to pause the print job. • While paused, press and release this key to resume the print job. • While paused, press and hold this key for approximately three seconds to cancel the print job.

#	Key	Description
4	Back-Feed	<ul style="list-style-type: none"> Press and release the back-feed key to back-feed media one label length. Press and hold the back-feed key to back-feed media until you release the key. To unload media, press and hold the back-feed key until the printer beeps once. Press and hold the back-feed key again to continue and unload media.
5	Cut	If the printer is in the ready state, press and hold this key for approximately one second to cut media at the exit.

LED Indicators



#	LED	Description
1	Power	<p>This green LED indicates the power status of the printer.</p> <ul style="list-style-type: none"> Off - Printer is off or in sleep mode. Flashing - Printer is initializing or busy. Solid - Printer is on and ready.
2	Error	This red LED indicates when error conditions occur.
3	Cyan Ink	<p>These yellow LEDs indicate the status of each ink cartridge.</p> <ul style="list-style-type: none"> Off - Ink cartridge has sufficient ink. Flashing - Ink cartridge is low. Solid - Ink cartridge is empty.
4	Magenta Ink	
5	Yellow Ink	
6	Black Ink	

#	LED	Description
7	Non-Ink Consumables	<p>This yellow LED indicates the status of the following items.</p> <ul style="list-style-type: none"> • Printhead • Cutter • Aerosol Filter • Maintenance Cartridge • Maintenance Roller <p>The LED will illuminate based on remaining service life.</p> <ul style="list-style-type: none"> • Off - All items are above 20% service life remaining. • Flashing Slowly - One or more items are below 20% service life remaining. • Flashing - One or more items are below 10% service life remaining. • Solid - One or more items are at 0% service life remaining. <p>Refer to the System Logs tab in the Maintenance Utility to determine the affected items.</p>

Color Basics

Color in design and printing is a sophisticated topic. At QuickLabel, we have worked to make using the QL-850 printer as easy as possible. We understand that your goal is to design and print colorful, effective labels with consistency.

Color and Computers

While colors seem straightforward, describing colors using computers is not so simple. Different display technologies can cause the same file to look different, and sometimes different graphics programs or operating systems can display colors differently.

With printers there is frequently a difference between what is shown on a computer screen and what comes out of the printer. The same file printed on printers using different technologies may look very different as well.

Color Profiling

These technical differences are universal, and as a result of them, software developers, display manufacturers, and printer manufacturers have worked together to develop a way to successfully describe and use color taking into consideration the different technologies involved. This is called color profiling.

Color profiles have been developed to coordinate how each device displays or prints that color. When using the proper profiles, color can be relatively consistent across devices.

Color cannot be perfectly consistent because the human eye can see more colors than computer displays can show or printers can print. What's more, the ranges of colors available to displays and printers don't completely overlap.

Profiles help out when these ranges don't match; they help translate the differences to create the widest and most accurate range of colors a device can display.

Display Profiling

There are devices that can help you develop profiles for your display to ensure that what you see is close to what you are getting. Using QL-850 profiles will help with consistency in printing, while using both QL-850 and display profiles will help with the full design and printing process.

If color matching is important to you, you may consider profiling your computer display.

QuickLabel QL-850 Color Profiles

When printing, even the type of material printed on can change the way colors appear. QuickLabel has created color profiles for the materials you will be using in order to offer you the most accurate color reproduction possible.

A Profile for Each Device

The more of your devices that have profiles, the better. Since color is based on technology, software, and the laws of physics, each device works with color differently.

In addition to your graphics program and the QL-850, you may be able to add profiles for your display, your digital camera, and your scanner. This will help all of these devices use color in a coordinated way. At minimum, to use color profiling, you need to use a color profile for the QL-850.

3

Designing and Printing Labels

Designing Labels

This section describes several factors you should consider before you start designing labels.

Label Media Type Overview

This section describes the types of label media you can use with the QL-850 printer.

- **Reflective Mark Media** - Reflective mark media has black cue marks printed on the on the back of the label liner. These marks are read by a sensor on the printer to determine the starting point of new labels.

During the die cutting process for this type of label, the matrix can be removed and called “matrix out” or left intact and called “matrix in” material. Labels with matrix in allow you to print colors over the label edge.

- **Gap Media** - Gap media has spaces between each label resulting from the removal of the matrix during the die cutting process.

When the matrix material is removed and the liner exposed, the die cut labels are separated by gaps. These gaps are read by a sensor on the printer to determine the starting point of new labels.

- **Continuous Media** - Continuous media does not have reflective marks. It also does not have die cuts, and therefore contains no gaps. It is a continuous sheet of label material affixed to a liner.

Choosing Design Software

You can print to the QL-850 using any design software with printing functionality. There are many graphic design software applications available, and the programs you choose will depend on your desired workflow and design requirements.

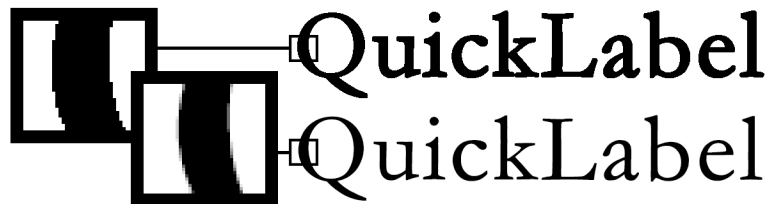
Design software is available from QuickLabel and other software vendors.

- **CQL Pro from QuickLabel** - This software product, developed by QuickLabel, makes it easy to create barcodes and position text and graphics on a label.
- **Third Party Applications** - There are a variety of graphic design programs available from other software companies such as Adobe and Corel. Adobe Photoshop, Illustrator, and similar professional image editing programs provide advanced tools for creating your artwork.

A common scenario is to use a mixed approach to designing labels. For example, you may want to edit a photographic element in Photoshop, create a logo in Illustrator, and then place both into a CQL Pro file for final layout and printing.

Disabling Anti-aliasing

Most graphic design software applications provide anti-aliasing features that result in the appearance of smooth color transitions. The following illustration shows text with anti-aliasing disabled (top) and enabled (bottom). Note the smooth color transitions when anti-aliasing is enabled.



When designing labels that will be printed on the QL-850, do not use anti-aliasing. This is especially important if you are printing text or barcodes. For example, an anti-aliased barcode may not scan correctly due to the color transitions between lines.

The process for enabling/disabling anti-aliasing varies based on the graphic design application. Refer to the documentation for your application for details.

Planning Full-Bleed and Non-Bleed Labels

In full-bleed labels, color prints up to the edge of the label. With non-bleed labels, color stops at a margin before the edge of the label.

Use the following guidelines when setting up a file for a **full-bleed label**.

- If you are using media with the matrix removed, you can print all the way to the edge of die-cut labels, but doing so may cause a small amount of ink to deposit onto the liner. In the event excess ink deposits on the liner, it will not dry and may smear onto other surfaces, including hands and other printed labels.
- The height and width of the label file “canvas” should be 0.04 to 0.08” (1-2 mm) larger than the height and width of the physical label.

Excessive width and length will result in increased ink on the liner. You may need to experiment to determine the optimal balance of bleed quality while minimizing ink deposited on the liner. As a guideline, no more than 0.02” (0.5 mm) of ink should be printed onto the liner.

- Design elements that will run to the edge of the label are the parts of the design that will “bleed” across the edge. Your bleed will most commonly be a solid color, pattern, or gradient background running off the edge of the label.

Use the following guidelines when setting up a file for a **non-bleed label**.

- The height and width of the label file “canvas” should be the same as the height and width of the physical label.
- All design elements should be placed inside a 0.063” (1.5 mm) border of the canvas. This will ensure such design elements never run to or over the edge of the label.

Setting up the Label Design Software

This section describes how to set up your label design software to print on the QL-850.

Setting up Labels in CQL Pro

CQL Pro is a software application developed by QuickLabel to access special features in our printers and allow customers to easily design and print labels.

For detailed label setup and printing instructions, please refer to the CQL Pro Help.

Setting up Labels in Third-Party Design Applications

You can design and print label files exclusively within a third-party application such as Adobe Photoshop or Illustrator. In this situation, use the following guidelines to ensure best results.

Note: You can also use third-party applications to design components of a label to be imported into CQL Pro. In this situation, save or export graphic files in a .BMP, .PCX, uncompressed .JPG, uncompressed .TIF, .GIF, .PNG, or .PDF format.

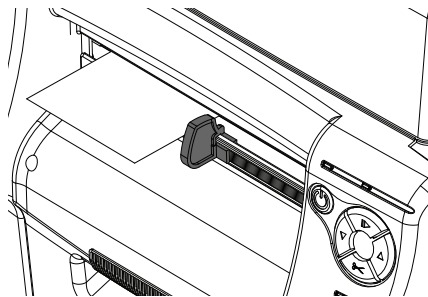
- **Select a resolution of 400 or 800 pixels per inch** - For raster-based design applications such as Adobe Photoshop, choose a resolution of 400 or 800 pixels per inch. This will provide sufficient image resolution to produce superior print quality. This setting is not used in vector-based design applications such as Adobe Illustrator.
- **If the application supports color management, enable it** - Professional design applications support color management. This option is typically found in the application's print window.

Printing Labels

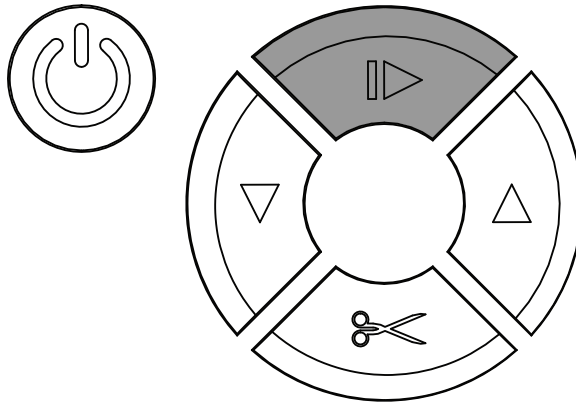
1. Ensure the label media has been loaded.
2. If you are printing from a third-party design application, ensure the printer driver preferences are configured.
3. Open the label file using the appropriate software. Then choose to print the label, and enter the number of copies you would like to print.

Note: If your software has a collate option, disable it before printing.

4. Print the labels.
5. Adjust the media exit guide as needed. The edge of the media should lightly contact the edge of the media exit guide.



6. If necessary, you can pause, resume, and cancel print jobs from the operation panel on the front of the printer. You can also perform a printhead cleaning operation while paused if needed.

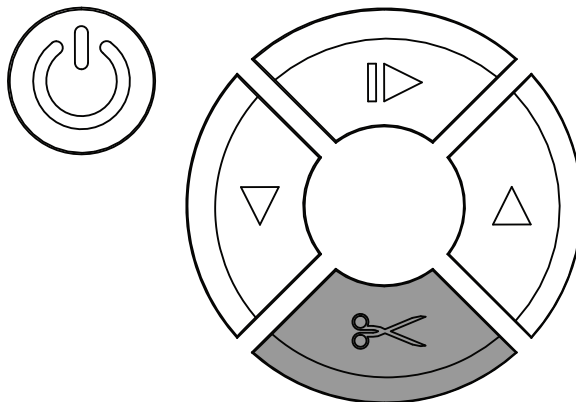


- While printing, press and release the pause/resume key to pause the print job.
- While paused, press and release the pause/resume key to resume the print job.
- While paused, press and hold the pause/resume key for approximately three seconds to cancel the print job.
- While paused, press and hold the feed key to perform a light printhead cleaning operation. Printhead cleaning options are also available in the QL-850 Maintenance Utility.

7. Receive the printed labels.

Note: Do not pull the printed labels in any direction as they exit the printer. Pulling the labels may result in a media jam.

- If **Cut at End of Job** is checked in the printer driver **Media** tab, the printed labels will automatically be cut at the end of the job.
- If **Cut at End of Job** is not checked in the printer driver **Media** tab, the printed labels will not be cut at the end of the job. Instead, you can use the manual cut feature by pressing and holding the cut key for approximately one second.



Estimating Ink Use

You can use the QL-850 Toolbox application to estimate ink use for print jobs. This is accomplished by printing a “virtual” print job and viewing projected ink use estimates.

Note: Some QL-850 Toolbox features are not supported. Use only the features described in this procedure.

1. Open the QL-850 Toolbox application from a PC connected to the printer.
From the Windows Start Menu, choose **Start > All Programs > QuickLabel QL-850 > Toolbox**.
A web browser will open and display the QL-850 Toolbox application. Under the Available Printers, select a printer that is powered on and connected to the host PC.
2. Choose the **Ink Usage** link to display the Ink Usage information.
3. Check the Ink Estimation Mode **Enabled** option. Then choose **Submit**. A red “Ink Estimation Mode” indicator message will appear.
This step places the printer in a virtual printing mode. Print jobs you send will not be printed, but their associated ink use calculations will appear in the Ink Usage screen.
4. Print the label job. Observe the following guidelines to ensure an accurate ink estimate.
 - Print a high number of copies (such as 100).
 - Print with the same driver settings (media, resolution, size, etc.) as will be used in the actual print job.

When the virtual print job ends, the ink estimates will appear in the Ink Usage page of the QL-850 Toolbox. You may need to choose the **Ink Usage** link to refresh the page.

Ink Usage

Printed Ink (uL)					Job	Pages	Mode	Media
Cyan	Magenta	Yellow	Black	Black				
79	148	231	45	44	1	100	Best	Gloss Paper

Ink Estimation Mode
Enabled

Ink estimates do not consider auto-maintenance cleaning operations. The estimate only predicts the amount of ink that will be deposited onto labels during the print job.

Note: Two fields are used to display black ink usage estimates. Add these two estimates to obtain the total estimate for black ink usage.

5. Determine the ink use per label by dividing the micro liter (uL) estimates for each color by the number of copies (pages) printed.
6. If necessary, print other virtual jobs for ink estimation. The most recent print job will be listed at the top of the Ink Usage screen.
7. When you are finished printing virtual jobs for ink estimation, disable ink estimation mode. Uncheck the Ink Estimation Mode **Enabled** option. Then choose **Submit**.

Close the web browser to exit the QL-850 Toolbox application.

4

Printer Maintenance

Replacing Ink Cartridges

When the remaining ink level becomes low, a low ink message will be displayed on the Status Monitor and in the System Logs tab of the maintenance utility. When an ink cartridge is out of ink, an out of ink message will be displayed and printing will stop.

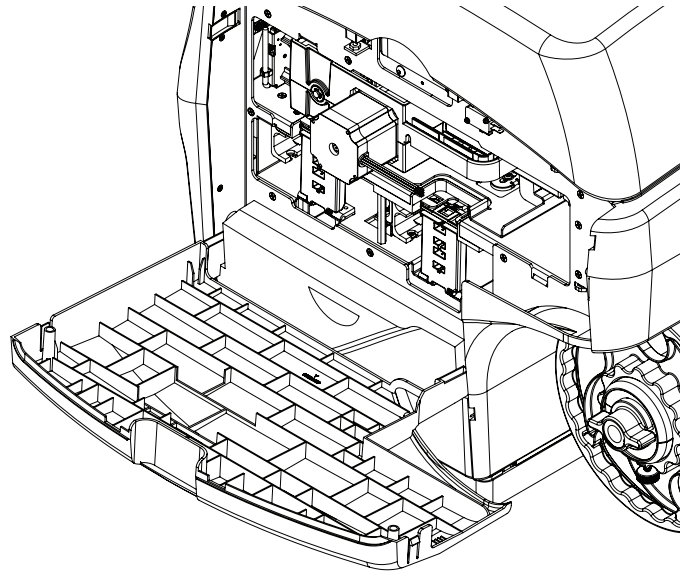
Additionally, four yellow LEDs on the printer indicate ink status. Flashing LEDs indicate low ink. Illuminated LEDs indicate empty ink.

The printer has four ink cartridges: black (K), cyan (C), magenta (M), and yellow (Y). Confirm the ink status and replace the appropriate ink cartridge.

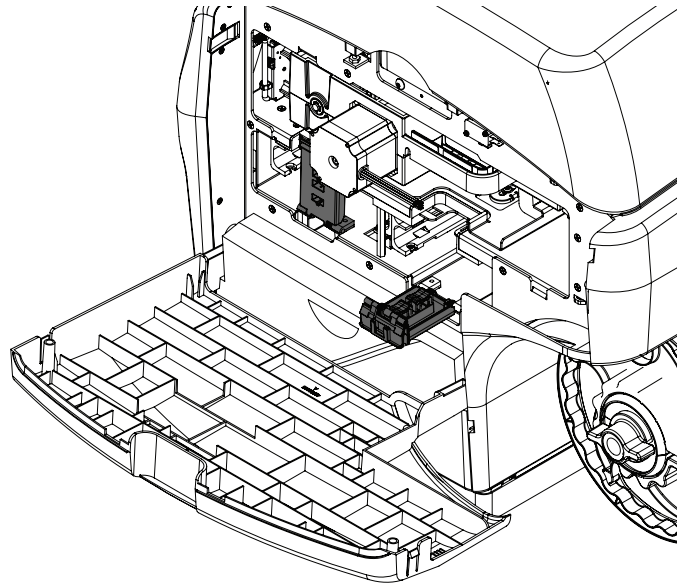
Use the following instructions to replace ink cartridges. Before you begin, make sure the printer is in an idle state.

Danger: For safety, keep ink cartridges out of the reach of children. If ink is accidentally ingested, contact a physician immediately.

1. Open the main side door.



2. Open the ink cartridge latch for the empty ink cartridge. The latch can be opened by pressing the top of the locking mechanism and pulling outward.

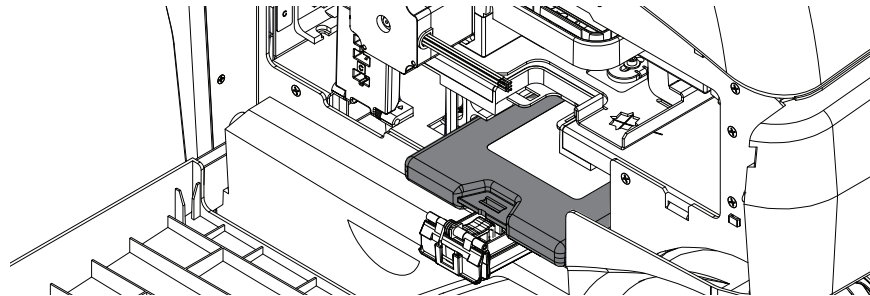


3. Remove the empty ink cartridge.
4. Slide in the new ink cartridge, nozzle end first, label side up. Push the cartridge in all the way.

You will feel slight resistance near the end of this process as the nozzle engages the ink needles inside the printer.

Caution: There are sharp needles in the ink cartridge slot. Never put your fingers in this area.

Note: The printer is designed so that ink cartridges cannot be inserted in the wrong slots. Do not attempt to insert ink cartridges in the wrong slots.



5. Make sure the ink cartridges are fully inserted. Push the ink cartridges in as far as they will go.
6. Close the ink cartridge latch.
7. Close the main side door.

Cleaning

Cleaning the Printer Exterior

Over time, the plastic exterior panels of the printer may accumulate dust, dirt, etc. You can clean these panels as needed.

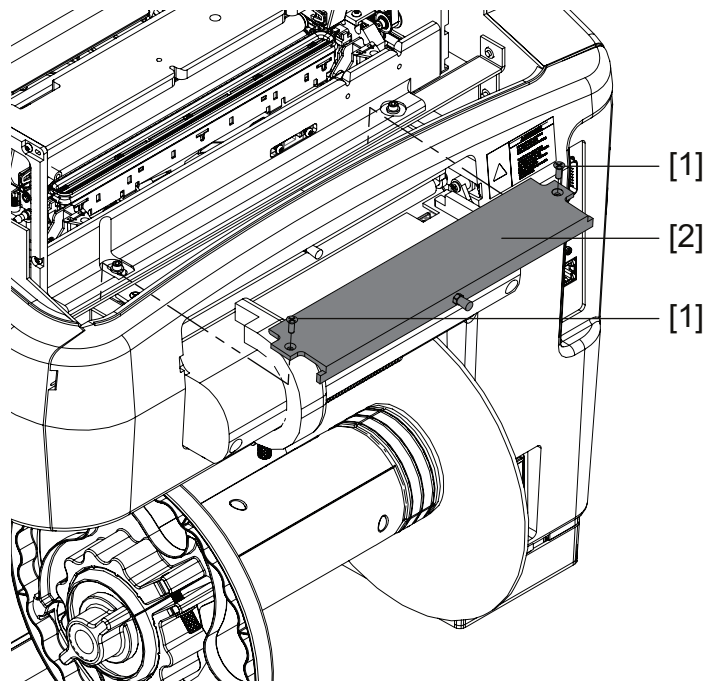
1. Dampen a clean, lint-free cloth with water.
2. Gently clean the plastic exterior surfaces using the cloth.

Anti-static electronic equipment cleaner may be used for exterior cleaning as needed.

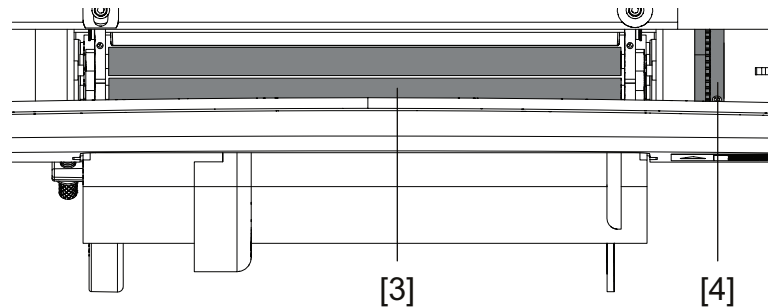
Cleaning the Input Pinch Rollers

As media is fed into the printer, it is advanced by a series of rollers just inside the media entry slot. Over time, these rollers may accumulate dust or adhesive residue. You can clean these input pinch rollers as needed.

1. Remove media from the printer.
2. Power off the printer.
3. On the rear of the printer, turn the power inlet switch off.
4. Open the top cover.
5. Disconnect the roller cover plate [2] by removing the two screws [1]. Slide the plate outward, and then up away from the printer. Removing the plate may require a small amount of force because of the tight fit. Set the plate and screws aside.



6. Use a clean, lint-free cloth dampened with isopropyl alcohol to clean the pinch rollers [3]. If necessary, you can rotate the rollers by turning the drive pulley [4].



Note: If isopropyl alcohol is insufficient, Goo Gone® may be used as an alternative.

7. Position the roller cover plate [2] in the mounting location and install the two screws [1]. Installing the plate may require a small amount of force because of the tight fit.
8. Close the top cover.

Cleaning the Maintenance Tray Area

During normal operation, waste ink is collected in the maintenance cartridge. Occasionally, drops of ink may be deposited outside of the cartridge into the maintenance tray area. You can temporarily remove the maintenance cartridge and clean the maintenance tray area as needed.

Note: For safety, keep the maintenance cartridge out of the reach of children. If ink is accidentally ingested, contact a physician immediately.

- To prevent ink from leaking from a used maintenance cartridge, avoid dropping the cartridge or storing it at an angle. Otherwise, ink may leak and cause stains.
- Ink adheres to the maintenance cartridge after it has been used. Handle the maintenance cartridge carefully. The ink may stain clothing.

Note: Wear protective gloves to prevent ink from staining your hands during this procedure.

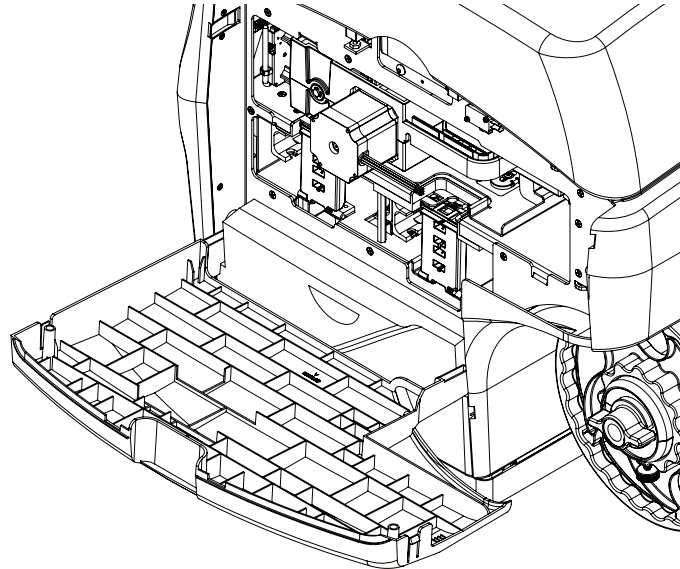
1. Power off the printer.
2. On the rear of the printer, turn the power inlet switch off.
3. Open the lower side door.
4. Grasp the maintenance cartridge and carefully slide it out of the printer. Put the maintenance cartridge on a flat surface during the cleaning procedure.
5. Dampen a clean, lint-free cloth with deionized water.
Do not use paper towels, napkins, or any other material that may leave lint or debris behind while cleaning. Problems can occur if lint enters the interior of the printer.
6. Use the cloth to clean the empty maintenance tray area inside the printer.
7. When you are finished cleaning the maintenance tray area, reinstall the maintenance cartridge.
8. Close the lower side door.

Cleaning the Transport Belts

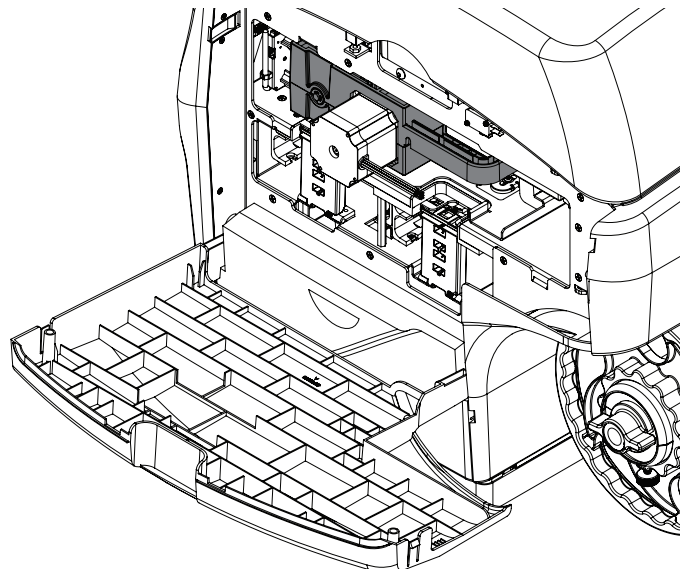
Belts on the transport unit advance media through the printer. Occasionally, drops of ink may be deposited onto the belts. You can clean the transport belts as needed.

Note: Wear protective gloves to prevent ink from staining your hands during this procedure.

1. Remove media from the printer.
2. Open the main side door.

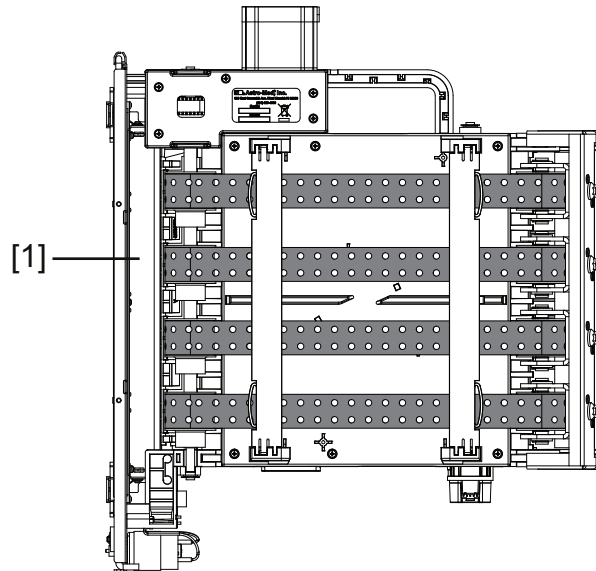


3. Grasp the handle on the transport unit. Then pull the transport unit straight out of the printer.



Note: If the yellow transport unit shipping lock is installed, you will not be able to remove the transport unit. You must first remove the shipping lock by rotating it counterclockwise and then pulling it straight out. This lock is usually removed during the unpacking process.

4. Place the transport unit on a flat surface.
5. Dampen a clean, lint-free cloth with deionized water.
Do not use paper towels, napkins, or any other material that may leave lint or debris behind while cleaning. Problems can occur if lint enters the interior of the printer.
6. Hold the transport unit cutter frame [1] with one hand. With your other hand, use the cloth to clean the four belts on the transport unit.



Note: If deionized water is insufficient, Goo Gone® may be used as an alternative.

7. If necessary, you can grasp and move the belts manually in either direction to expose more belt surface area for cleaning. All four belts will move at the same time.
8. If the belts are damp from cleaning, allow them to dry completely before reinstalling the transport unit.

Cleaning the Ink Cartridge Contacts

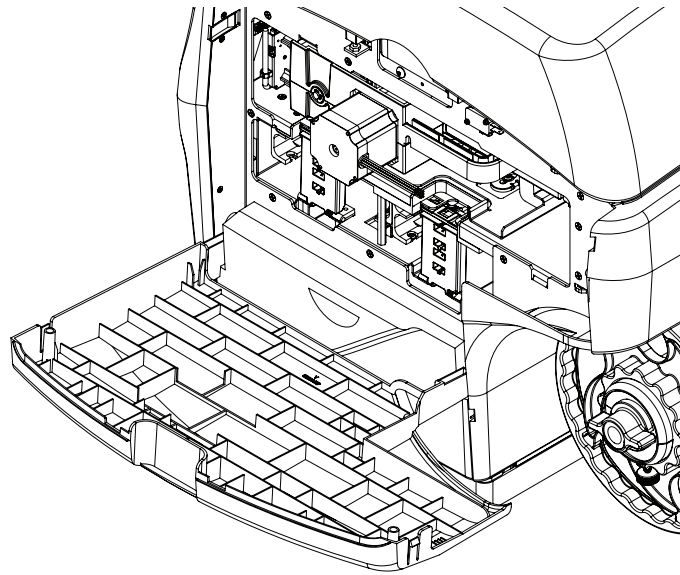
If an ink cartridge is installed but not recognized by the printer, you can clean the electrical connection points to resolve the issue.

Use the following instructions to clean the electrical contacts on the ink cartridges. The electrical contacts in the ink cartridge slots inside the printer can also be cleaned.

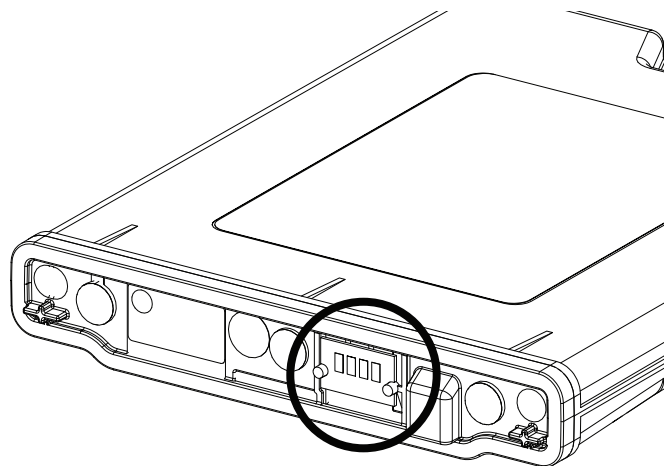
Note: Wear protective gloves to prevent ink from staining your hands during this procedure.

1. Power off the printer.
2. On the rear of the printer, turn the power inlet switch off.

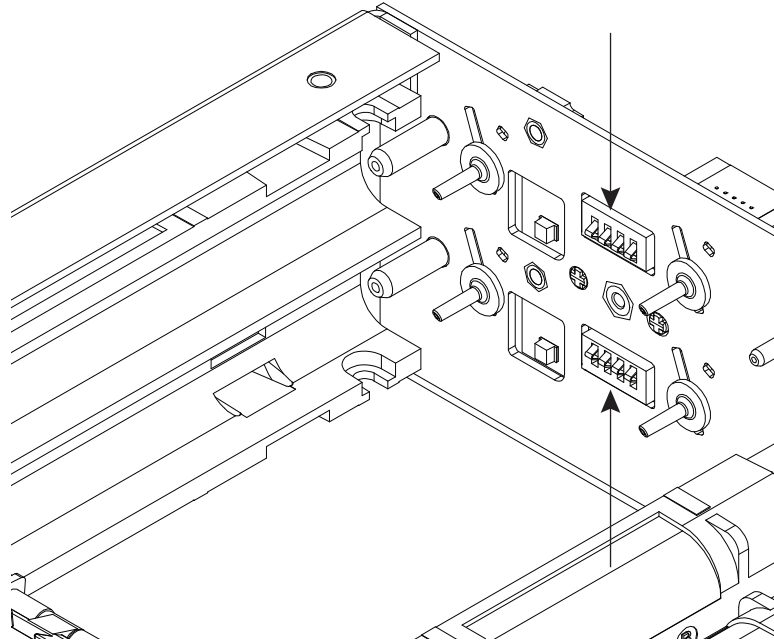
3. Open the main side door.



4. Release the two ink cartridge latches.
5. Carefully slide all four ink cartridges, one at a time, out of the unit.
6. Use a swab or lint-free cloth dampened with isopropyl alcohol to clean the ink cartridge electrical contacts.



7. Use a swab dampened with isopropyl alcohol to clean the ink cartridge connection contacts inside the printer.



8. Insert all four ink cartridges into the unit, one at a time, according to the ink color indicated on the ink cartridge latches.
9. Close the two ink cartridge latches.

Cleaning the Printhead Manually

When heavy and light automated cleanings are not sufficient in nozzle restoration, a manual cleaning method can be used.

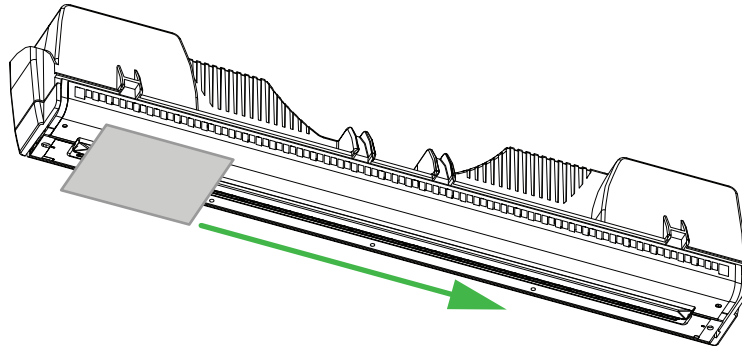
This process requires a clean lint-free cloth, de-ionized or distilled water, and the original printhead packaging cap. A cleaning cloth is available from QuickLabel (part number 14806000).

1. Remove the printhead using the printhead replacement function in the Parts Replacement tab of the QL-850 Maintenance Utility.

Although the printhead will not be replaced, this procedure can be used to remove the printhead and reinstall it.

2. Fill the orange packaging cap with approximately an 1/8th of an inch of de-ionized or distilled water. Place the printhead in the cap. Allow the printhead to soak for approximately 5 minutes.

If the orange printhead packaging cap is not available, the printhead can be wiped with a lint free cloth thoroughly wet with de-ionized or distilled water. Wipe the printhead in one direction only.



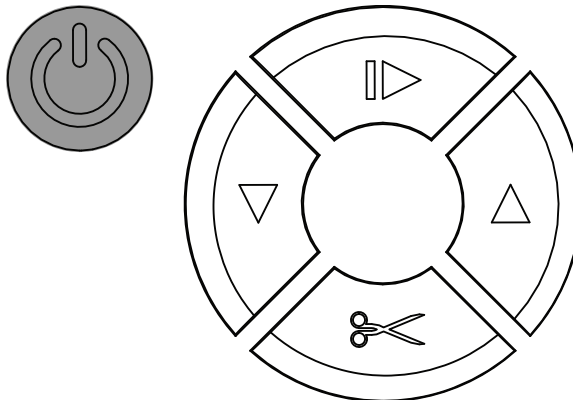
3. Wipe the printhead with a dry lint-free cloth to remove excess water. Ensure that the electrical contacts on the printhead are dry and clear of all ink and water.
4. Reinstall the printhead in the printer and close the latch. Complete the printhead replacement procedure.

Powering Up After Extended Downtime

If the QL-850 has been powered down or unplugged for two weeks or longer, you must use the following procedure before printing again.

Note: The printer will power down automatically after eight hours of idle time.

1. Press and hold the power key for one second to turn the power on.



The printer will begin the power-up process, and the green LED will flash momentarily. When the green LED stops flashing and remains on, proceed to the next step.

2. Launch the QL-850 Maintenance Utility.

From the Windows Start Menu, choose **Start > All Programs > QuickLabel QL-850 > QL-850 Maintenance Utility**. A language and printer prompt will open.

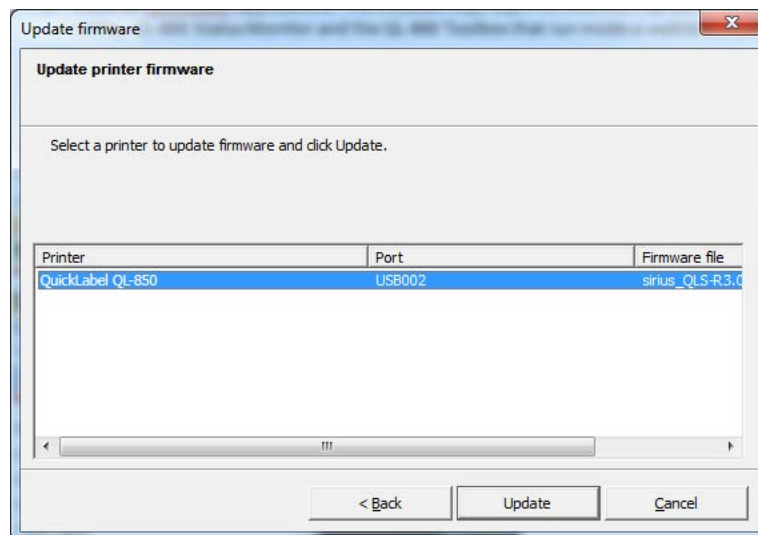
Select a display language and the QL-850 printer you want to connect to. Choose **OK**.

3. Choose the **Cleaning** tab.
4. Choose **Before Moving**, and then follow the on-screen instructions. When the process is complete, proceed to the next step.
5. Choose **After Moving**, and then follow the on-screen instructions. When the process is complete, the printer will be ready for regular use again.

Upgrading the Print Module Firmware

The print module inside the QL-850 has its own firmware. Upgrading this firmware is not possible using the QL-850 Maintenance Utility. However, a dedicated upgrade application is installed with the printer driver software. Use the following instructions to upgrade the print module firmware.

1. Obtain the print module firmware file from the QuickLabel website or QuickLabel Technical Support. The file will have a name similar to the following example.
sirius_QLS-R3.0r27835.bin
2. Close all QuickLabel applications. Make sure the following applications are not running before continuing to the next step.
 - CQL Pro
 - QL-850 Maintenance Utility
 - QL-850 Status Monitor
 - QL-850 Toolbox (web browser utility)
3. Launch the QL-850 Update Firmware application.
From the Windows start menu, choose **Start > All Programs > QuickLabel QL-850 > QL-850 Update Firmware**. A file selection window will open.
4. Select the firmware file. Then choose **Open**. The Update Firmware window will open.



The printer names in this window correspond to the printer names in the Windows Devices and Printers window.

5. Select the printer to be upgraded. Then choose **Update**.

The firmware upgrade process will begin. This process requires several minutes. The displayed progress bar only indicates upgrade activity and is not an indicator of the percent complete.

Near the end of the upgrade process, the print module will automatically shut down and restart. You will hear maintenance functions running during this process. Once the print module has completed restarting, the upgrading progress bar window will close.

6. When the upgrade is complete, choose **Cancel** to close the Update Firmware window and close the upgrade application.
7. After the print module restarts, a full printer shutdown is required to synchronize the print module and paper path components. Press and hold the front panel power button until the green LED starts to blink and a beep is heard.

Once the shutdown is complete and the green LED is off, the printer can be turned back on by pressing and holding the front panel power button.

Error 1001 - Paper Path Error

The printer did not move media into the proper position within the expected time.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Look for and clear a potential jam.
 - If a jam is present, cut the media. Press and hold the pause/resume key to cancel the job. Then clear the jam.

Cut a fresh edge on the media and then reload it. The remainder of the job can be sent again.
 - If no jam is present, press and hold the pause/resume key to cancel the job. Press and release the feed key as needed until the last label printed is aligned with the exit. Resend the print job.

Error 1002 - No Media at Pinch

Media is not detected at the loading pinch (where the media enters the printer). This error may also occur if the mandrel rewinds freely for too long without being stopped by tensioned media.

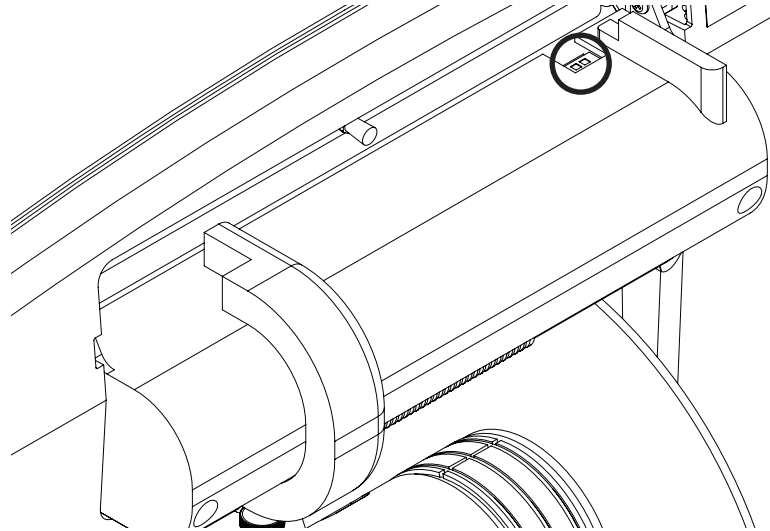
Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Load media.
2. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

3. If the job fails to resume or is canceled, turn the printer power off and disconnect the power cable from the power outlet.

Visually inspect the feed sensor where media enters the printer and clean debris with a lint-free cloth.



If adhesive is present, use a swab dampened with isopropyl alcohol to clean the affected areas.

If isopropyl alcohol is insufficient, Goo Gone may be used as an alternative. Use Goo Gone sparingly when cleaning sensors. Using excessive amounts may result in sensor damage.

4. Make sure the mandrel does not have excessive slack. Avoid pulling slack media off the mandrel.

Error 1003 - Unwind too Slow

The mandrel is moving slower than expected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Ensure that the wing nut on the end of the mandrel is tightened by turning it clockwise.
2. Look for and clear obstructions at the unwind mandrel.
3. Check for media slack between the media entry slot and roll. Reload media if necessary.
4. Ensure the outer diameter of the roll is 8 inches or less.
5. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1004 - Unwind too Fast

The mandrel is moving faster than expected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1005 - Out of Media

The media roll is empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Load media.
2. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1006 - Cutter Jam

The cutter did not make it to the opposite side, or the cutter may not be moving.

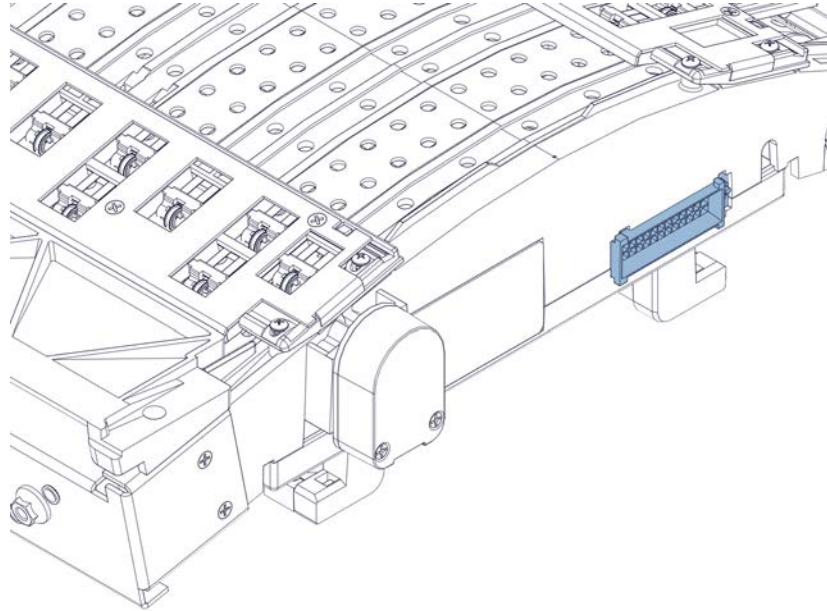
Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

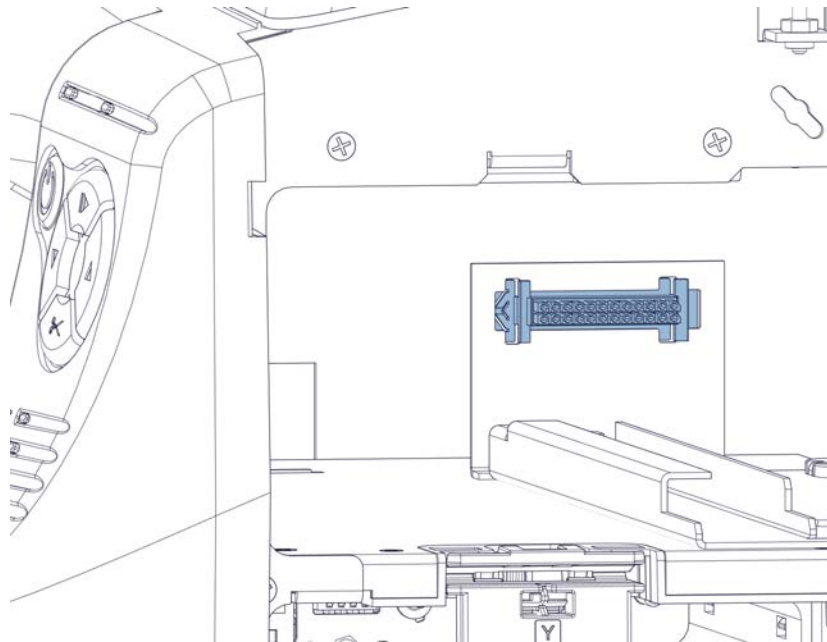
1. Press and hold the power key on the operation panel for three seconds to turn the printer off. On the rear of the printer, turn the power inlet switch off. Clear the obstruction in the cutter area. On the rear of the printer, turn the power inlet switch on. Power on the printer.
2. If the cutter is not moving at all, remove media from the printer. Remove and then reinstall the transport unit. Ensure it is fully inserted in the printer.

3. An electrical connection is not being made where the transport unit plugs into the printer. Examine both connectors and make sure the connectors' pins are clean and not pushed in or damaged.

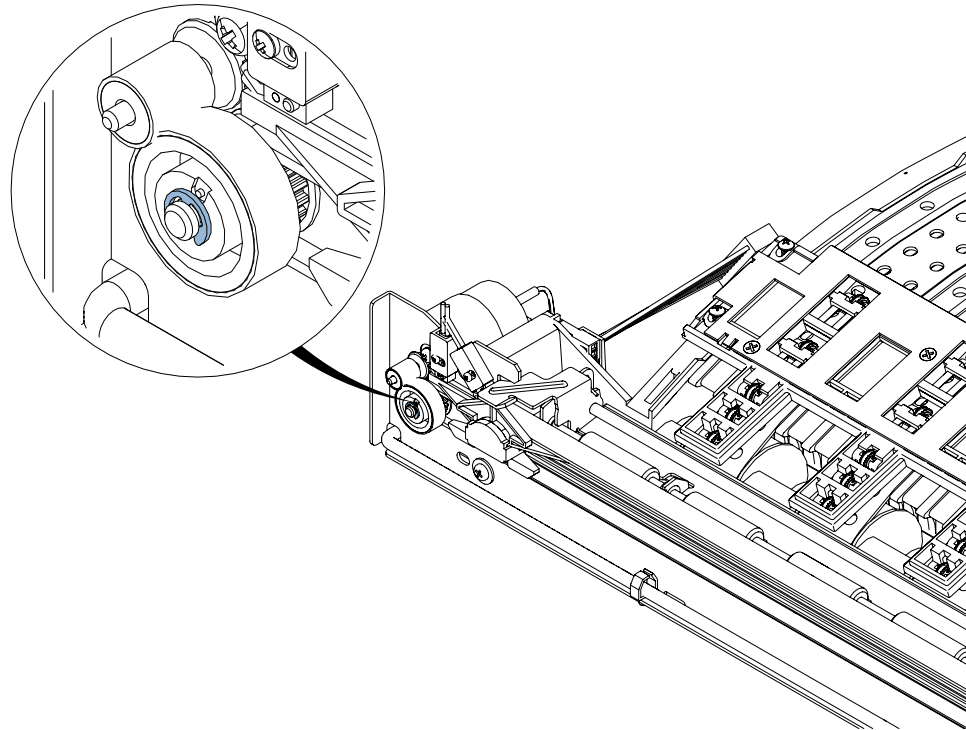
The connector on the transport unit is illustrated below.



The mating connector inside the printer is illustrated below.



4. Examine the cutter assembly on the transport unit. Make sure all parts are intact. Ensure the metal locking washer that retains the white plastic gear is installed.



5. Ensure that the cut is occurring through the label liner between labels. If necessary, adjust the cut/stop position in the Print Settings tab of the QL-850 Maintenance Utility.

Error 1007 - Reserved

This error is reserved (not applicable).

Error 1008 - Continuous Media Selected

Attempting an operation incompatible with continuous media (a single label feed, for example).

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.

Error 1009 - Can't Calibrate Media

The printer cannot read TOF marks.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Confirm the media meets specifications.
3. This message can occur when changing media types. For example, when switching to reflective after the previous job was printed on gap material.

When switching material types, the job should be sent to the printer before loading the media. There will be a brief delay before an error is produced due to unloaded media. Media can be loaded during this time. If media is not loaded before the error is produced, clear the error and re-attempt the load. The job will not be lost.

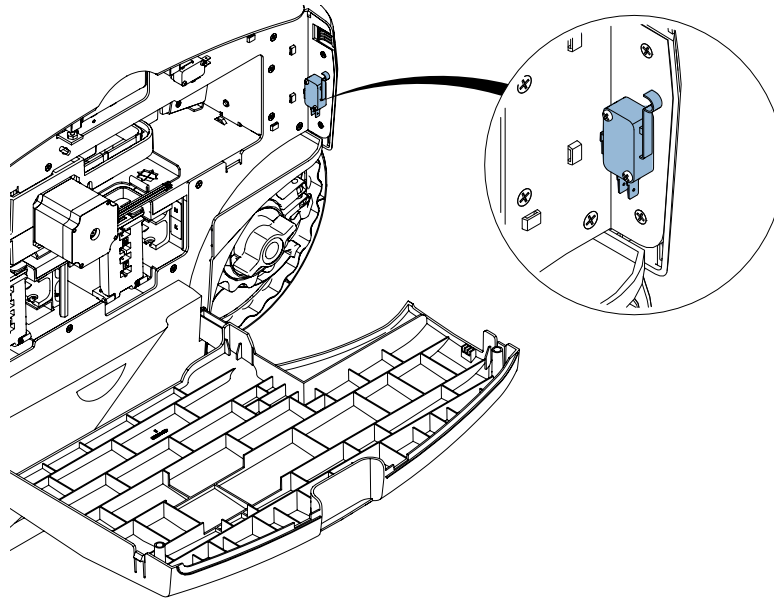
Error 100A - Main Side Door Open

The main side door was opened during a print job.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Close the door.
Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.
2. If the door is closed and the error persists, ensure that the door switch is engaged when the door is closed. Bend the switch arm outward if necessary.



Error 100B - Top Cover Open

The top cover was opened during a print job.

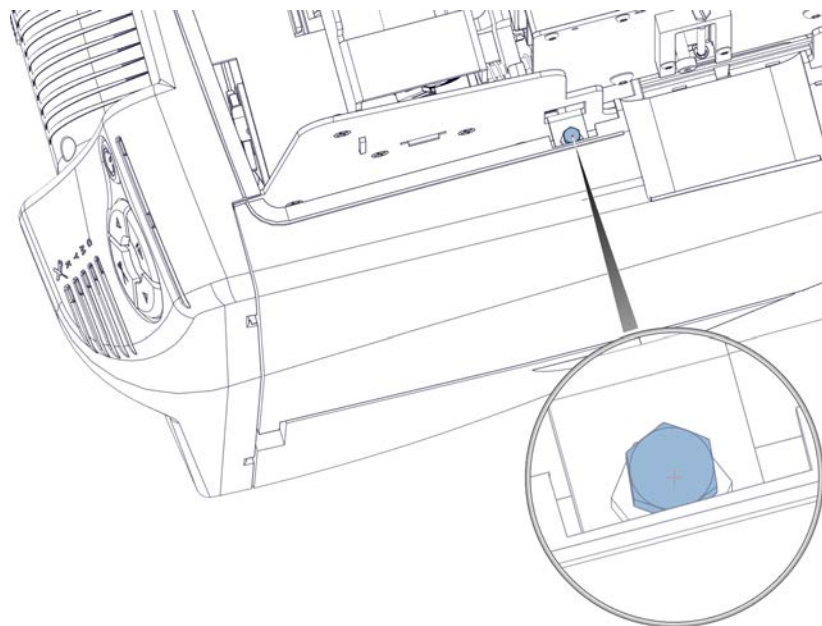
Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

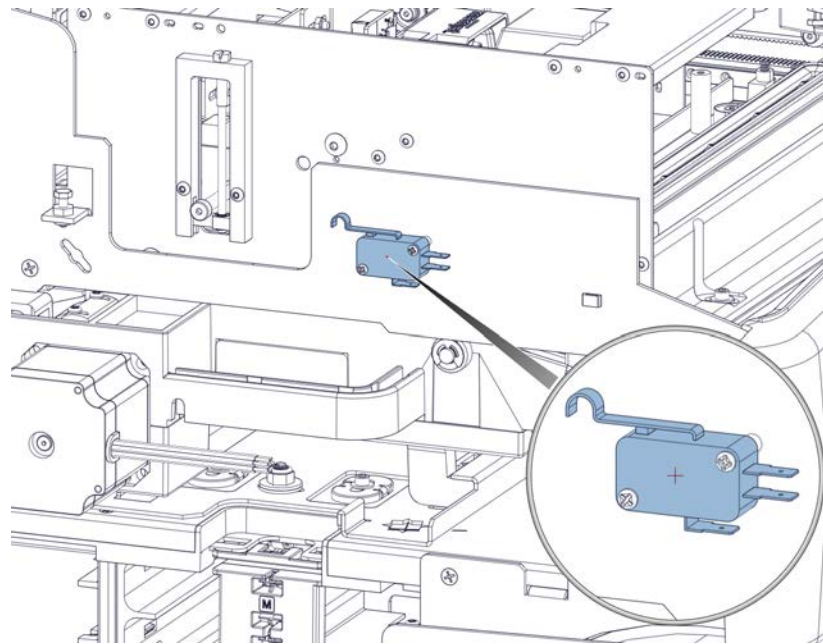
1. Close the top cover.

Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

2. If the top cover is closed and the error still occurs, ensure that the cover switch is engaged when the cover is closed. The closed position of the cover is controlled by a screw that acts as a stop. Adjust this screw to lower the closed position of the cover.



3. If the top cover is closed and the error persists, ensure that the cover switch is engaged when the door is closed. Bend the switch arm upward if necessary.



Error 100C - Maintenance Cartridge Missing

The printer cannot detect the maintenance cartridge.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Install the maintenance cartridge. If a maintenance cartridge is installed, try repositioning it.
Press and release the power key to clear the error.

Error 100D - Transport not Installed

The printer cannot detect the transport unit.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Install the transport unit. If the transport unit is installed, try repositioning it.
Press and release the power key to clear the error.

Error 100E - Belt Motor Stall

The belt motor has stalled.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Remove and then reinstall the transport unit. Ensure it is fully inserted in the printer.
2. Remove the transport unit and inspect it.

Ensure no label media or excessive ink build-up is restricting movement of the belts.

Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 100F - Pinch Motor Stall

The pinch motor has stalled.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Inspect the loading pinch (where the media enters the printer).

Make sure there is no label media or other debris on or near the pinch rollers that could restrict the rollers from turning.

2. Clean the input pinch rollers.

Error 1010 - Can't Start Vacuum Fans

There is an electronics failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
2. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1011 - Unwind Over Current

Unwind motor requires more current than should be supplied.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Look for and clear obstructions at the unwind mandrel.
Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1012 - TOF Mark not Found

The printer cannot read TOF marks.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Confirm the media meets specifications.
3. Make sure the printer profile is set up correctly and the correct sensor type is selected in the printer driver.

Error 1013 - Internal Error

There is an electronics failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1014 - Internal Error

There is an electronics failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1015 - Internal Error

There is an electronics failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1016 - Can't Tighten Unwind

The printer cannot tighten media at the supply mandrel.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Look for and resolve issues at the unwind mandrel.

Error 1017 - Print Engine Start Timeout

The printer did not detect a top-of-form mark after the job was set to start.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Look for and clear a potential jam.
2. Remove and then reinstall the transport unit. Ensure it is fully inserted in the printer.
3. Confirm that the label dimensions set up in the driver match the actual material label size.

Error 1018 - Reserved

This error is reserved (not applicable).

Error 1019 - Reserved

This error is reserved (not applicable).

Error 101A - TOF Calibration

The printer is not ready to start calibration.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and hold the pause/resume key to cancel the job.
Press and release the power key to clear the error.

Error 101D - Not Printing Timeout

Printing has started, but there is too much time/space between printed labels.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Check for peeled off labels.
2. Make sure the label size defined in the printer driver matches the actual label dimensions.
3. Data starvation is occurring. *See “Addressing Data Starvation” on page 100.*

Error 1020 - Shared Memory Read Timeout

There is an internal communications failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1021 - Shared Memory Write Timeout

There is an internal communications failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1022 - Shared Memory Response Timeout

There is an internal communications failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1023 - System Initialization Timeout

The print engine was not online in the expected time.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
2. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1024 - Unexpected Engine Response

There is an internal communications failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.

3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1025 - Shutdown Timeout

There was a failure to shut down the print engine.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Turn the printer off using the power inlet switch on the rear of the printer.

Error 1030 - Can't Erase EEPROM

An internal EEPROM failure occurred.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1031 - Can't Program EEPROM

An internal EEPROM failure occurred.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.

3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1032 - Invalid EEPROM Checksum

An internal EEPROM failure occurred.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1038 - Upgrade Failure

There was an internal upgrade failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1039 - Upgrade Failure

There was an internal upgrade failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 103A - Upgrade Failure

There was an internal upgrade failure.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1040 - Failed to Read Job Status

Corrupt or incomplete job status message was received from print engine.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to clear the error.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1042 - Can't find Job Parameter

Job status message does not contain valid horizontal offset parameter.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and hold the pause/resume key to cancel the job. Reprint the job.
2. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1043 - Can't find Job Parameter

Job status message does not contain valid vertical offset parameter.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and hold the pause/resume key to cancel the job. Reprint the job.
2. Press and hold the power key on the operation panel for three seconds to turn the printer off. Wait three seconds. Then press and hold the power key for one second to turn the printer on again.
3. On the rear of the printer, turn the power inlet switch off. Wait three seconds. Then turn the power inlet switch on. Power on the printer.

Error 1044 - Can't find Job Parameter

Job status message does not contain valid top-of-form parameter.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1045 - Can't find Job Parameter

Job status message does not contain valid cut at end of job parameter.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1046 - Can't find Job Parameter

Job status message does not contain valid cut every N parameter.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Press and release the power key to resume the job. Or press and hold the pause/resume key to cancel the job.

Error 1050 - The Maint Cartridge is Full

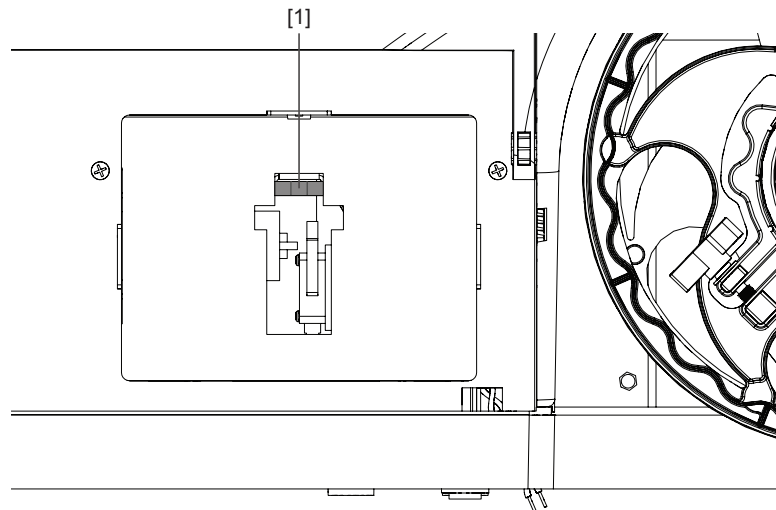
A print job cannot start if the maintenance cartridge is full.

Solutions

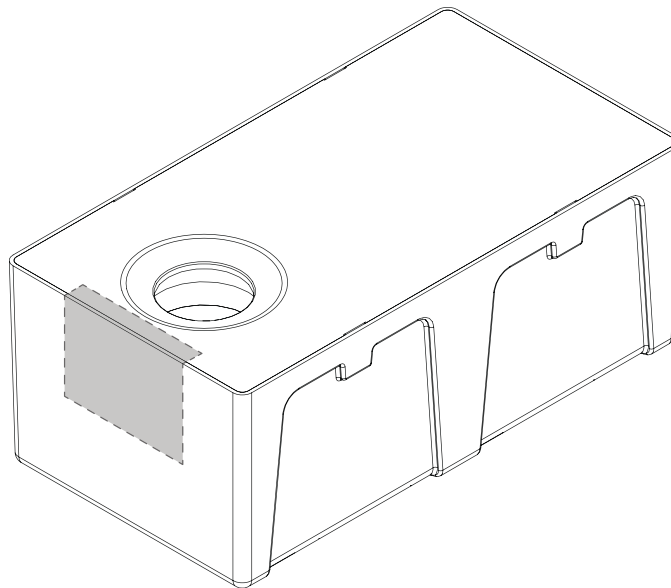
Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Install a new maintenance cartridge.
2. Press and release the power key to clear the error.
3. If your printer model has a maintenance cartridge sensor, clean the sensor and the maintenance cartridge. If ink is present on the sensor or the exterior of the maintenance cartridge, false sensor readings may occur.

Open the lower side door and remove the maintenance cartridge. Use a clean, lint-free cloth dampened with isopropyl alcohol to clean the optical sensor [1] inside printer.



Use a clean, lint-free cloth dampened with isopropyl alcohol to clean the indicated area on the maintenance cartridge.



Insert the maintenance cartridge and close the lower side door.

Error 1051 - Not ready to print

The printer is unable to start a print job in the current state.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Complete the current task.
Press and release the power key to clear the error.

Error 2001 - Faulty Printhead

The printhead is damaged or has a poor electrical connection.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Remove the printhead using the printhead replacement function in the Parts Replacement tab of the QL-850 Maintenance Utility.
Clean the electrical contacts on the printhead with a clean, lint-free cloth and isopropyl alcohol.
Finish using the printhead replacement function but reinstall the same printhead.
2. Replace the printhead.

Error 2002 - Incorrect Printhead

The installed printhead is not appropriate for this printer.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Install a genuine QuickLabel printhead.

Error 2003 - Printhead Missing

The printhead is not installed, has a poor electrical connection, or a printhead latch is not recognized as being closed.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Remove the printhead using the printhead replacement function in the Parts Replacement tab of the QL-850 Maintenance Utility.

Clean the electrical contacts on the printhead with a clean, lint-free cloth and isopropyl alcohol.

Finish using the printhead replacement function but reinstall the same printhead.
2. Replace the printhead.

Error 2004 - Unlicensed Printhead

A qualified electrical component is not being found by the system.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Install a genuine QuickLabel printhead.

Error 2005 - Unusable Printhead

A qualified electrical component is not appropriate for the system.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Remove the printhead using the printhead replacement function in the Parts Replacement tab of the QL-850 Maintenance Utility.

Clean the electrical contacts on the printhead with a clean, lint-free cloth and isopropyl alcohol.

Finish using the printhead replacement function but reinstall the same printhead.
2. Replace the printhead.

Error 2006 - Printhead Unprimed

The printhead is detected as not primed.

The printhead is primed when you run the After Moving function in the Cleaning tab of the QL-850 Maintenance Utility.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. If the printhead has been primed and used successfully and then this error occurs, the printer may have been powered off using the power inlet switch on the rear of the printer after priming.

Run the After Moving procedure in the Cleaning tab of the QL-850 Maintenance Utility to re-prime the printhead. After priming the printer, turn the printer off with the power key on the operation panel first for the settings to be saved.

2. Remove the printhead using the printhead replacement function in the Parts Replacement tab of the QL-850 Maintenance Utility.

Clean the electrical contacts on the printhead with a clean, lint-free cloth and isopropyl alcohol.

Finish using the printhead replacement function but reinstall the same printhead.

Error 2007 - Maintenance Busy

The printer is performing maintenance.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Wait until the printer has finished the maintenance operation.

Error 2008 - 1000 Series Error Occurred

Error 2008 in the Maintenance Utility log indicates that a 1000 series error has occurred or did previously occur. The specific 1000 series error can be viewed in the Status Monitor. 1000 series error details are not retained in the Maintenance Utility log.

Error 2009 - Maintenance Jam

Mechanical components in the print module have failed to move.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

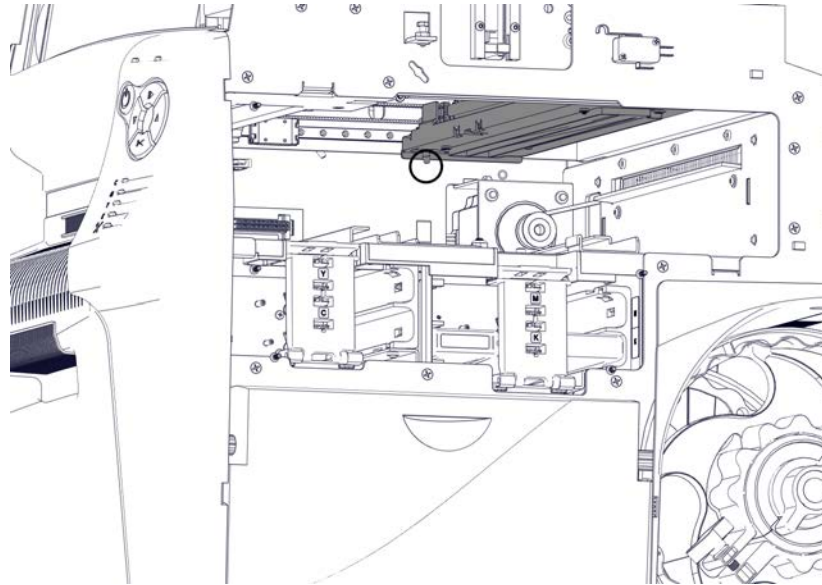
1. It is often best to monitor the motion of print module parts with the cover up. Power down the printer, open the cover, and restart the printer.

Observe the positional calibration routine as well as the start up maintenance. Problems with the printhead lift can often be observed here. Listen carefully when the printer attempts to lift the printhead from a lowered position. There is often a chirp or squeaking sound that can be heard if the lift motor has stalled.

2. Open the top cover and check for obstructions.

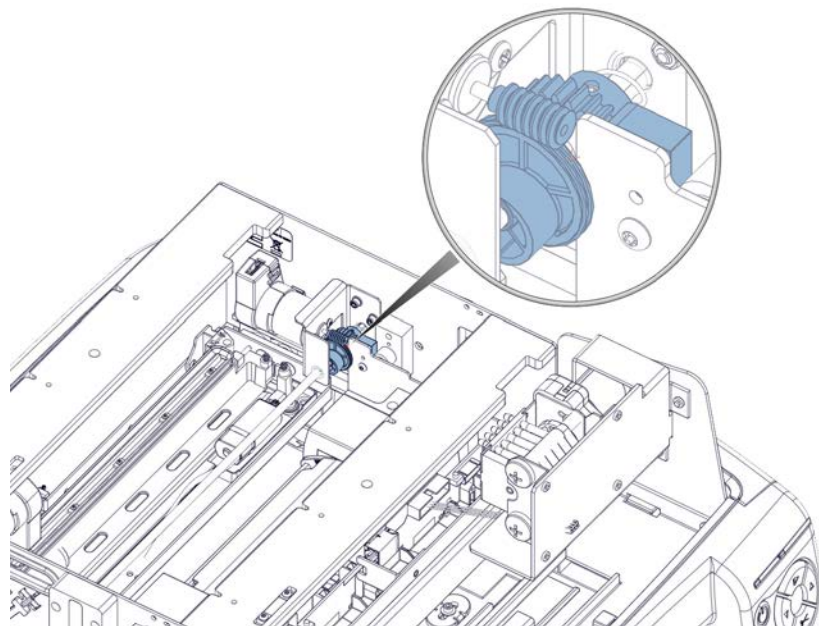
Open the main side door. Remove the transport unit and inspect it. Make sure the star wheel assemblies are tightened. If they are not tightened, or if they are bent, the assemblies may come in contact with the maintenance assembly and prevent it from moving.

3. Inspect the waste ink tube from the maintenance sled. This can shift position and prevent the maintenance sled from moving into position. The waste ink tube connects to the maintenance sled at the illustrated port.

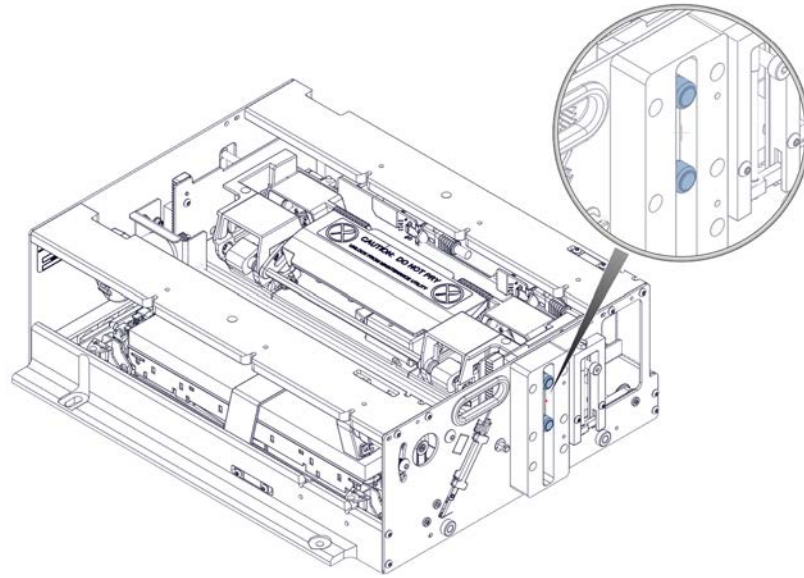


4. Tension in the printhead harness bundles can restrict motion and make it more difficult for the printhead to move up and down. Check the harness routing.
5. Inspect the gears of the printhead positioning motor.

The worm gear and lift gear combination is illustrated below. Make sure the gears are in alignment and there is no damage or significant wear in the black plastic lift gear.



6. Inspect the cam rollers on the print engine. Ensure both rollers are present.



Error 200A - Black Cartridge is Missing

The black ink cartridge was not detected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 200B - Magenta Cartridge is Missing

The magenta ink cartridge was not detected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 200C - Yellow Cartridge is Missing

The yellow ink cartridge was not detected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 200D - Cyan Cartridge is Missing

The cyan ink cartridge was not detected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 200E - Multiple Cartridges are Missing

Multiple ink cartridges were not detected.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 200F - Black Ink Out

The black ink cartridge is empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Replace the ink cartridge.

Error 2010 - Magenta Ink Out

The magenta ink cartridge is empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Replace the ink cartridge.

Error 2011 - Yellow Ink Out

The yellow ink cartridge is empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Replace the ink cartridge.

Error 2012 - Cyan Ink Out

The cyan ink cartridge is empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Replace the ink cartridge.

Error 2013 - Multiple Inks Out

Two or more ink cartridges are empty.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Replace the ink cartridges indicated by the front panel LEDs.

Error 2014 - Missed TOF

The top-of-form mark was not found within the expected time.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Ensure the printer driver is set up correctly for your label size and sensor type.

Error 2015 - Page Sequence Error

The print job could not start.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Check for obstructions in the paper path and re-attempt the print job.

Error 2016 - Cartridge Error

There was an error communicating to an ink cartridge.

Solutions

Use the following solutions to troubleshoot the issue. The most likely solutions are listed first, followed by other possibilities. Check to see if the issue is resolved after performing each recommended solution. If the issue is not resolved, proceed to the next solution. If the issue persists after performing all solutions, contact Technical Support.

1. Clean ink cartridge electrical contacts and reinstall the ink cartridge.

Error 2017 - Encoder Error

The media motion is not consistent across the print encoder.

The first step in diagnosing the cause of the error is determining when the error occurs after sending the print job. Error timing and related solutions are described in the following sections.

Error Occurs Prior to Media Moving

The error occurs as the printhead moves into the print position but before media moves forward to start printing. This can be confirmed by sending a print job and watching the media mandrel.

1. If the media does not move after the printhead moves to the print position, the printer may be receiving corrupt data.

This may occur when using CQL Pro software. The corrective action is to reduce the size of the image slightly. For example, if your label is 8" x 8", then use a 7.980" x 7.980" image.

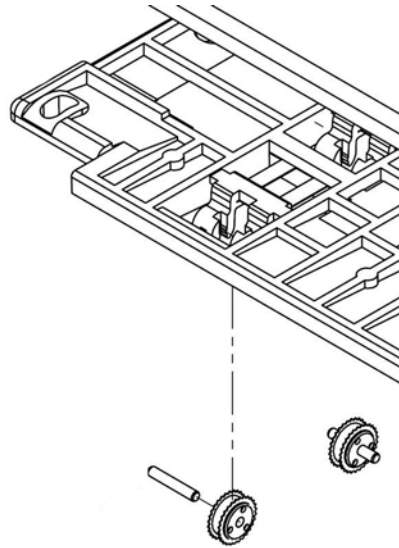
Error Occurs During Printing

The error occurs after the printhead moves into the print position and after media moves forward to start printing.

1. In the **General** tab of the printer driver, if the **Rotate 180°** option is unchecked, check it and reprint the label. Rotating the label by 180 degrees may prevent this error from occurring.
2. Media is tracking poorly. This may occur under the following conditions.
 - Media is wound loose on the roll. Reload media and ensure media is tightly wound around the roll.
Roll is not secure on the mandrel. Secure the roll and tighten the wing nut.
 - Misalignment of unwind/rewind - If the media is not squarely aligned with the rewinder inner flange, adjust the position of the rewinder as needed.
Loosen the thumb screws that fasten the rewinder to the bracket. Slide the rewinder left/right as allowed by the adjustment slots until the media is squarely aligned with the inner flange. Then tighten the thumb screws.
3. The transport speed is incorrect.
 - Dry (sticky) ink under the transport unit belts is causing drag on the belts.

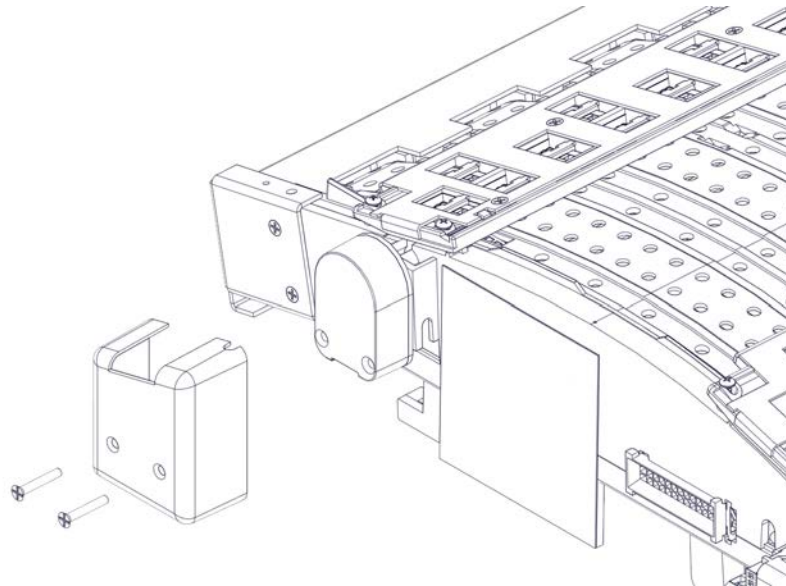
4. There is a star wheel malfunction.
- A star wheel is not spinning. Replace the affected star wheel or the star wheel assembly.
 - A star wheel has become unseated. Remove and reinstall the affected star wheel.

Proper operation is for the star wheel to spin on the dowel pin that snaps into the star wheel bracket. If the bore in the star wheel is too tight, the star wheel will not spin.



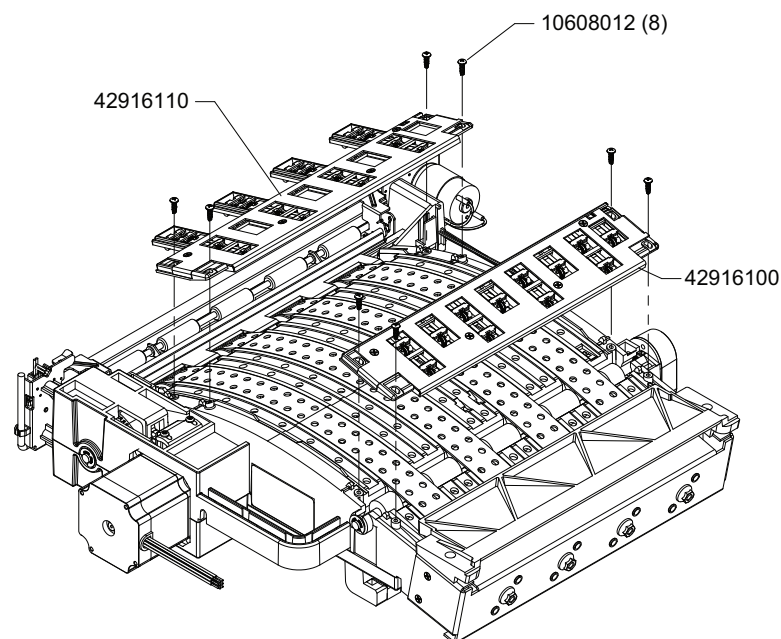
5. The encoder rollers on the transport unit are dirty or dusty. Clean the rollers.
- a) You will remove the star wheel assembly near the media entrance, and you must first unplug a sensor harness. This harness connects the sensor on the star wheel assembly to the encoder sensor.

This harness is protected by a cover. Remove the cover by unfastening the two screws. Then unplug the harness.

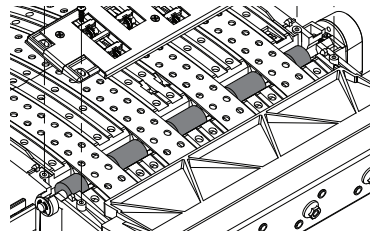


Note: Use caution when working near the encoder disc. The encoder disc is a sensitive component that can be damaged by debris, scratches, etc.

- b) Remove the star wheel assembly near the media entrance (42916100) by unfastening the screws. The assembly is secured by four screws.



- c) Use a clean, lint-free cloth dampened with isopropyl alcohol to clean the transport encoder rollers. If necessary, you can rotate the rollers by hand during cleaning.



- d) Plug in the sensor harness.
Move the harness under the protective cover. Then fasten the two screws to secure the cover.

Caution: Do not overtighten these screws. The screws should just contact the cover. Overtightening can result in 2017 / 2100 errors.

Error 2100 - Unspecified Paper Path

The media motion is not consistent across the print encoder.

Solutions

Contact Technical Support.

Error 3XXX - Software Communication Error

Errors in the 3000 series indicate software communication errors.

Solutions

Contact Technical Support.

6

Troubleshooting

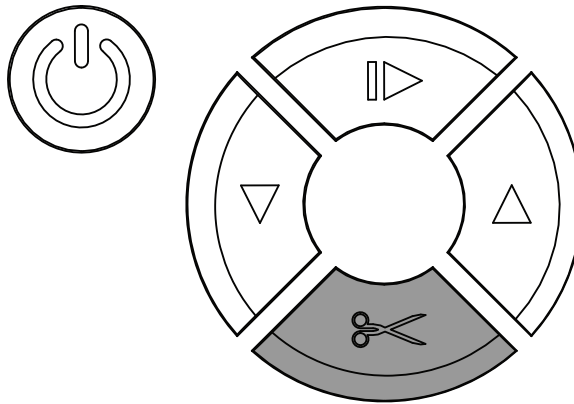
Removing a Media Jam

If a media jam occurs during a print job, the red error LED will light on the front panel and the specific error message will be displayed in the Status Monitor.

Note: After clearing a media jam, you will need to reprint labels that were not completed before the jam occurred.

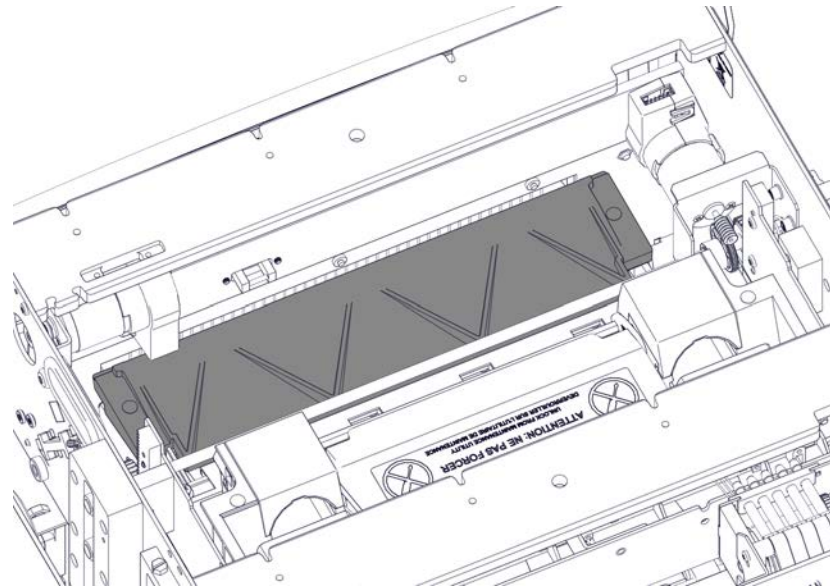
Caution: Use caution when removing a media jam. The printer contains sensitive components that can be damaged by debris, impact, excessive force, etc.

1. If media is exiting the front of the printer, perform a manual cut by pressing and holding the cut key for approximately one second.



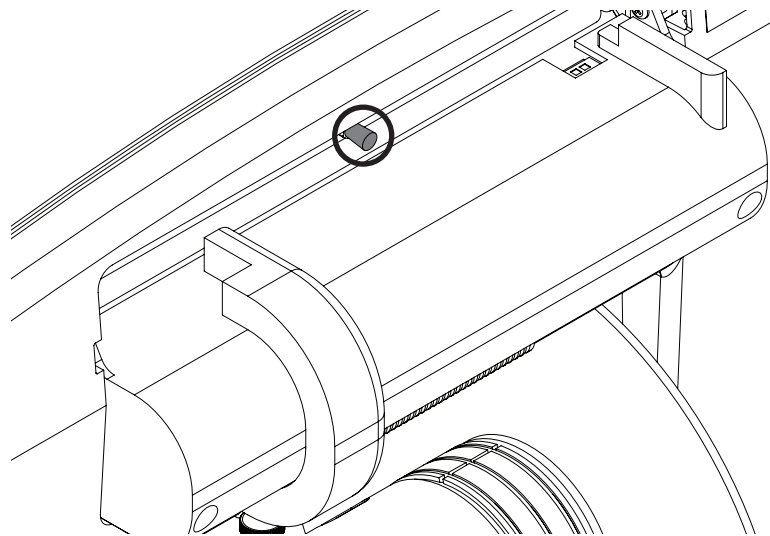
2. Power off the printer.
3. On the rear of the printer, turn the power inlet switch off.
4. Open the top cover and main side door.
5. Inspect the printer and locate the jam. With the top cover and main side door open, you can view most of the media travel path.

6. Remove the transport entrance guide. This guide is located on the transport unit near the media entrance pinch.



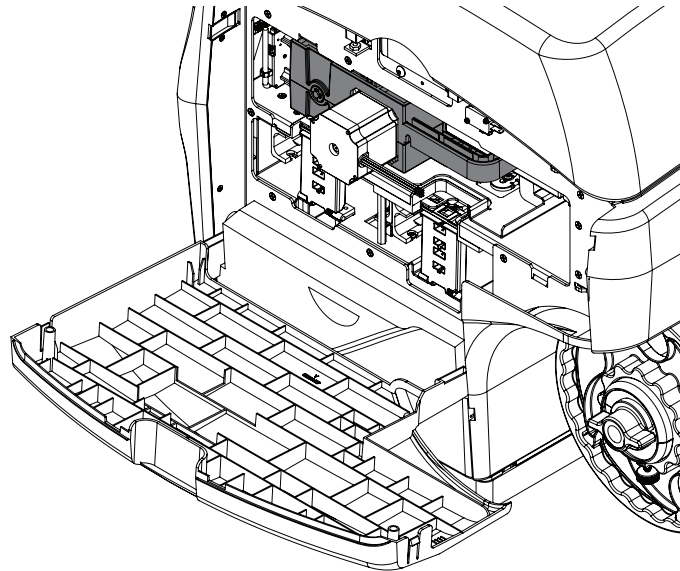
The entrance guide is secured by magnets. Simply remove the guide.

7. Carefully cut the media under the transport entrance guide. You can use scissors or a blade to start the cut, and then tear the rest of the way with your hands.
Caution: Use caution when cutting media inside the printer. Do not cut near ink tubes, belts, or wires.
8. Lift the roller handle to open the input pinch rollers. Then remove the media from the printer.



9. Release the roller handle and the rollers will return to their normal position.

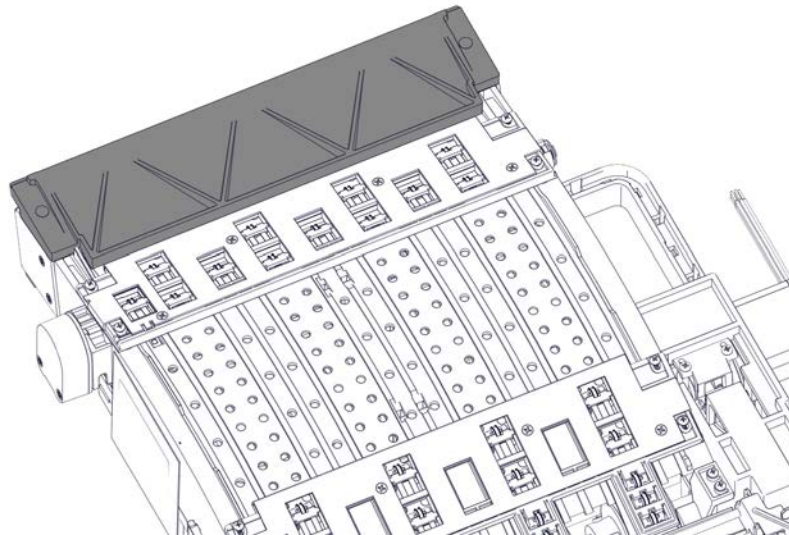
10. Grasp the handle on the transport unit. Then pull the transport unit straight out of the printer.



Note: If the yellow transport unit shipping lock is installed, you will not be able to remove the transport unit. You must first remove the shipping lock by rotating it counterclockwise and then pulling it straight out. This lock is usually removed during the unpacking process.

11. The next steps will vary based on the media jam location. Refer to the related section for details.
 - Input pinch rollers - See *“Removing a Media Jam in the Input Pinch Rollers”* on page 89.
 - Transport unit - See *“Removing a Media Jam in the Transport Unit”* on page 90.
 - Transport area - See *“Removing a Media Jam in the Transport Area Inside the Printer”* on page 92.

12. After the jam has been removed, reinstall the transport entrance guide on the transport unit.



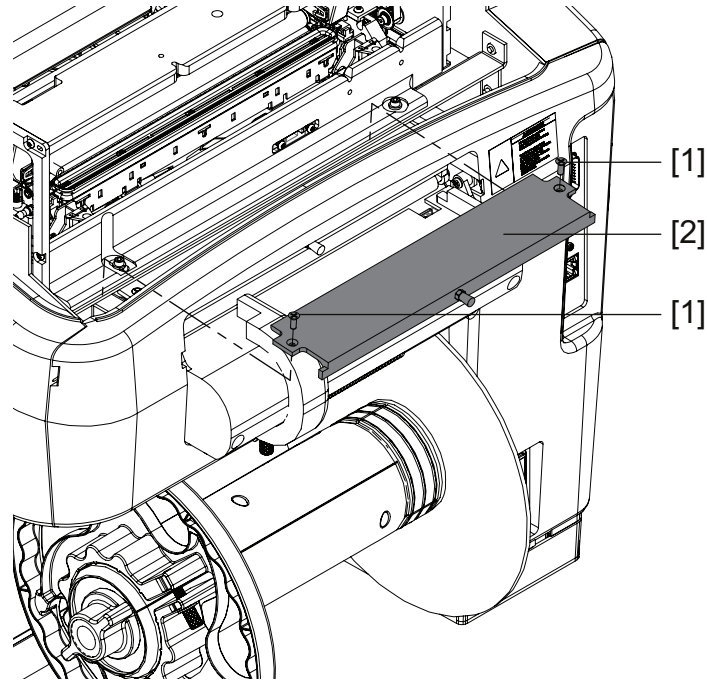
The entrance guide is secured by magnets, simply snap the guide into position.

13. Reinstall the transport unit.
14. Close the top cover and main side door if they are open.
15. Power on the printer.
16. Reload the media.

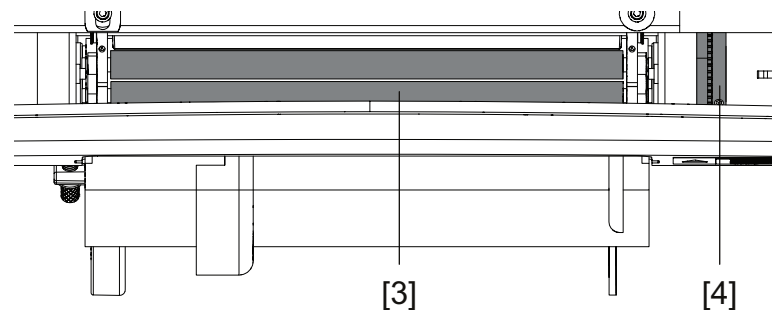
Removing a Media Jam in the Input Pinch Rollers

1. Remove the media roll from the printer. Use scissors to cut the media near the roll to allow for roll removal.
2. Power off the printer.
3. On the rear of the printer, turn the power inlet switch off.
4. With the top cover open, inspect the area near the input pinch rollers. If the jam is in an accessible location, remove it.

5. If the jam is located between the input pinch rollers, you can remove a cover plate to access the rollers.
 - a) Disconnect the roller cover plate [2] by removing the two screws [1]. Slide the plate outward, and then up away from the printer. Removing the plate may require a small amount of force because of the tight fit. Set the plate and screws aside.



- b) Rotate the rollers [3] as necessary by turning the drive pulley [4]. Remove the jam when it is accessible.



- c) Position the roller cover plate [2] in the mounting location and install the two screws [1]. Installing the plate may require a small amount of force because of the tight fit.

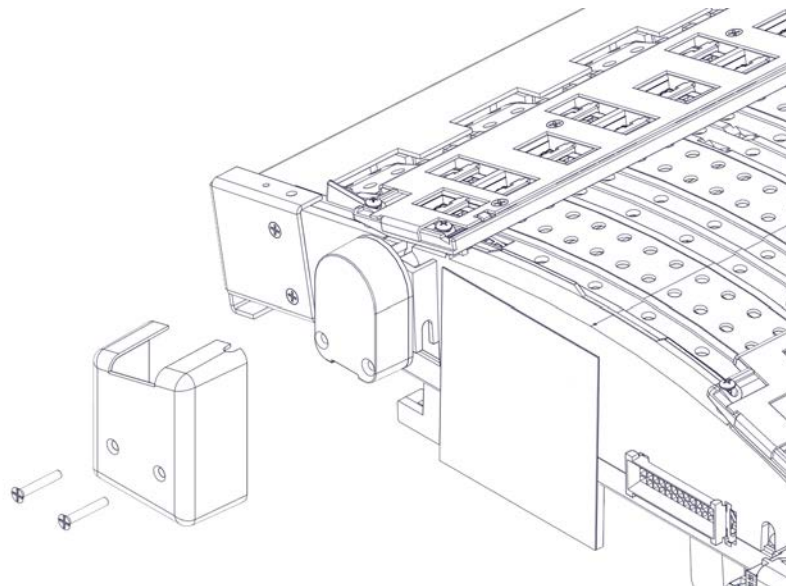
Removing a Media Jam in the Transport Unit

Note: Before removing the transport unit, make sure that the media has been cut at the media exit and under the transport entrance guide. See “Removing a Media Jam” on page 86.

1. Place the transport unit on a flat surface.
2. If the jam is located in an accessible location, remove it.

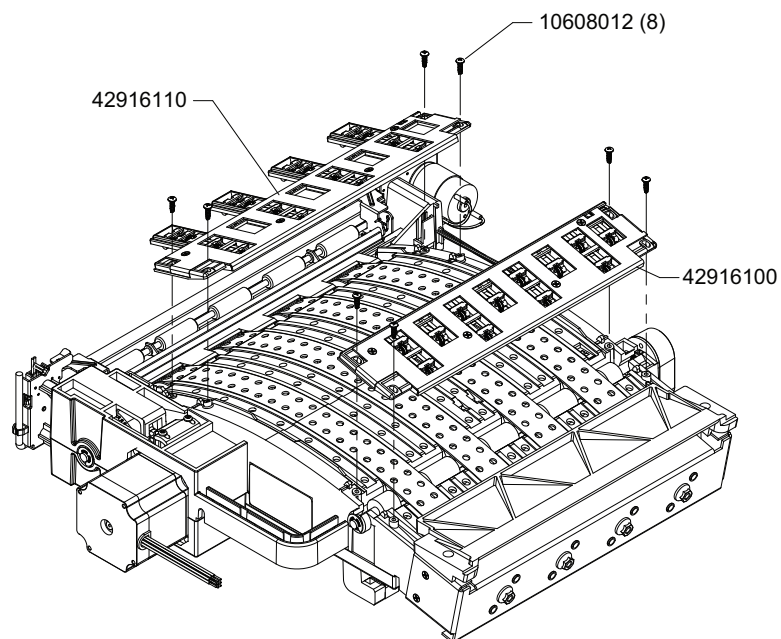
3. If the jam is located under one of the star wheel assemblies, remove the affected star wheel assembly.
 - a) If you will remove the star wheel assembly near the media entrance, you must first unplug a sensor harness. This harness connects the sensor on the star wheel assembly to the encoder sensor.

This harness is protected by a cover. Remove the cover by unfastening the two screws. Then unplug the harness.



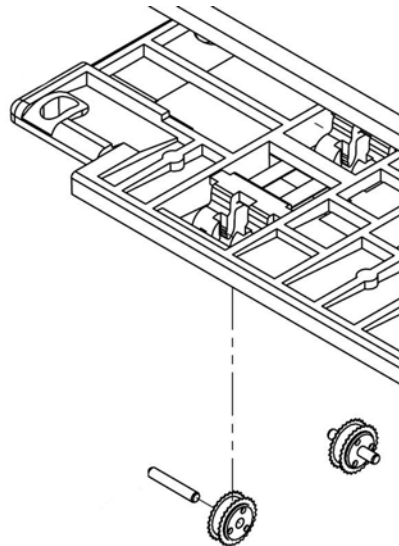
Note: Use caution when working near the encoder disc. The encoder disc is a sensitive component that can be damaged by debris, scratches, etc.

- b) Remove the affected star wheel assembly by unfastening the screws. Each assembly is secured by four screws.



- c) Remove the jam.

- d) Inspect each star wheel on the assembly. Make sure the wheels spin freely on the dowel pins, and the dowel pins are snapped into the bracket. If a star wheel is misaligned or disconnected, remove the star wheel and its dowel pin. Then reinstall the wheel in the bracket.



- e) Reinstall the affected star wheel assembly by fastening the four screws. Make sure the star wheel bracket is straight and not misaligned.
- f) If you removed the star wheel assembly near the media entrance, plug in the sensor harness.

Move the harness under the protective cover. Then fasten the two screws to secure the cover.

Caution: Do not overtighten these screws. The screws should just contact the cover. Overtightening can result in 2017 / 2100 errors.

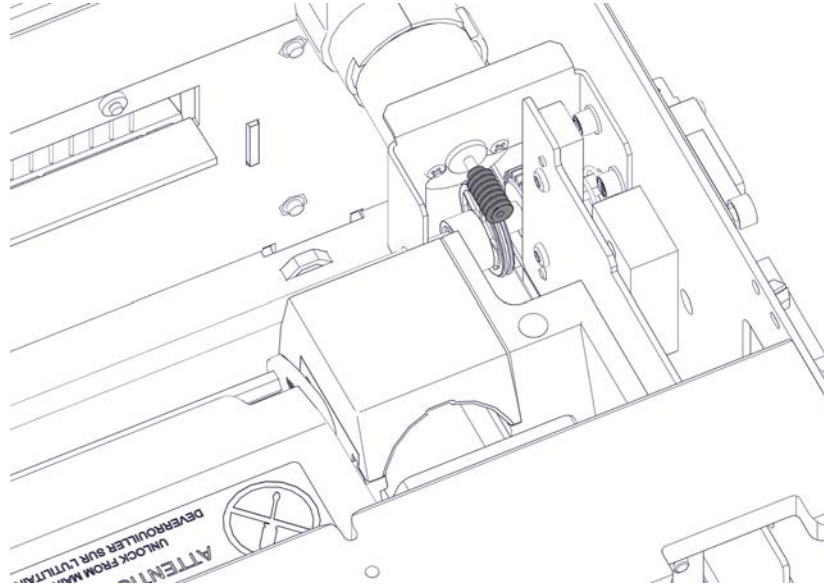
Removing a Media Jam in the Transport Area Inside the Printer

1. Power off the printer.
2. On the rear of the printer, turn the power inlet switch off.
3. Examine the printer interior. With the transport unit removed, you will be able to locate media jams inside the printer.
4. If the jam is located in an accessible location, remove it.

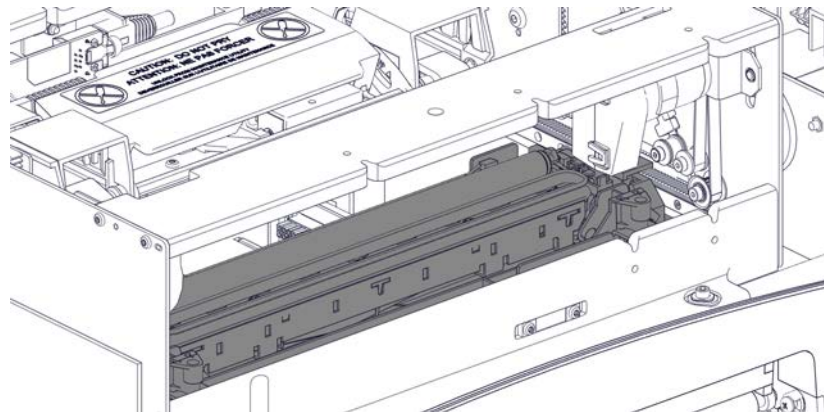
5. If the jam is located up in the printhead area, manually lift the printhead and move the maintenance sled.

Caution: The following instructions must be completed in a short period of time. Leaving the printhead in the uncapped position too long will result in dried ink nozzles.

- a) Turn the worm gear counterclockwise to raise the printhead.



- b) Slide the maintenance sled away from the printhead toward the media entrance pinch.



- c) Remove the jam when it is accessible.
- d) Power on the printer. The printhead and maintenance sled will automatically be adjusted during the power-up sequence, and the printhead will be moved to the capped position.

Known Issues

Printing Variable Data on Continuous Media Results in Blank Media Feeding

This issue results from printing under the following conditions:

- In the **Media** tab of the printer driver, **None** is selected as the **Sensor** type (continuous media).
- The print job contains labels with variable data such as barcodes or serial numbers that change during printing.

When printing under these conditions, and there is no more data available to print, the printer will not pause and wait for more data. Instead, it will continue to feed media as if printing. This has the potential to create long sections of unprinted media.

To resolve this issue, enable the **Buffer** option in the **General** tab of the printer driver. The entire job will be rendered in the spooler before it is sent to the printer.

This issue does not occur when using **Gap** or **Reflective** as the **Sensor** type. The printer will automatically pause and resume appropriately as data is received. It also does not occur when printing static labels.

Color Shifts or Drops Out During Printing

This issue results due to loss of ink or excessive air in the ink lines internal to the printer.

To resolve this issue, perform the following steps:

- Cancel the print job. Perform the **Before Moving** function in the **Cleaning** tab of the QL-850 Maintenance Utility. There is no need to physically move the printer. Refer to the QL-850 Driver Help for details.
- Resume printer use. If the problem continues or recurs, reset the printhead by performing the **Printhead** replacement function in the **Parts Replacement** tab of the QL-850 Maintenance Utility. Either replace the printhead or reuse the same printhead in the procedure. Refer to the QL-850 Driver Help for details.
- Resume printer use. If the problem persists, contact Technical Support.

Powering On with the Main Side Door Open Results in Incomplete Initialization

When the printer is powered on, components within the printer are initialized and prepared for use. You will be able to hear these components mechanically adjusted as the printer completes this routine. However, if the main side door is open, this sequence may be interrupted and the initialization process will fail.

This condition is not indicated by an error message. The initialization process will stop and only the sump pump motor will be running. To correct this issue, ensure the main side door is closed prior to powering on the printer.

Resolving Windows 7/8/10 USB Installation Issues

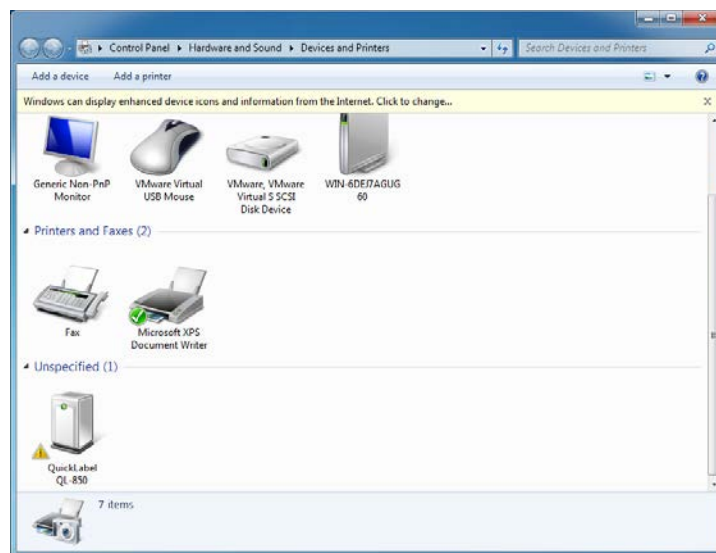
When you install the printer driver via USB, you first run the installation wizard and then connect the printer to your PC via the USB cable.

If you connected the USB cable before running the installation wizard, Windows 7/8/10 will not recognize the printer correctly. In this case, the QL-850 will be listed as an Unspecified item in the Devices and Printers window.

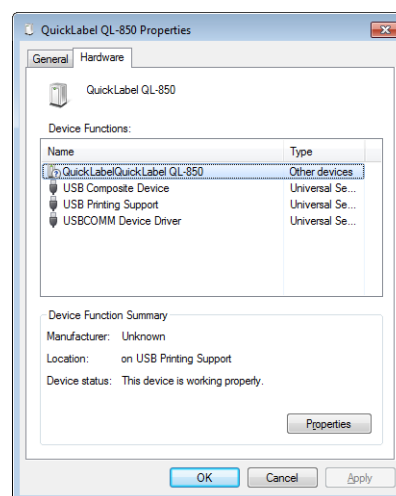
Use the following procedure to correct this issue. This procedure assumes you have already installed the printer driver.

Note: This procedure requires administrator level access in Windows.

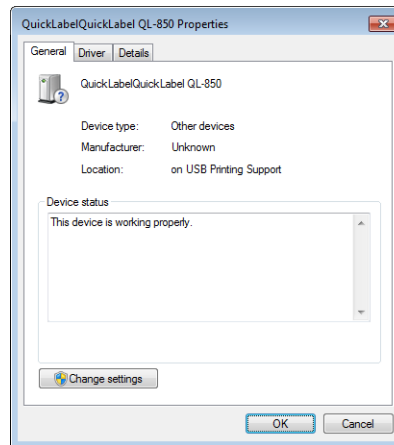
1. Open the Devices and Printers window.



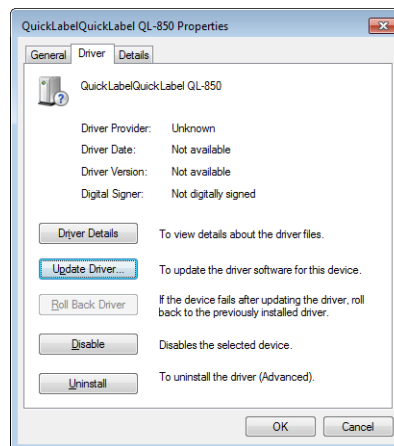
2. Right-click the QuickLabel QL-850 in the Unspecified list. Then choose **Properties**. The QuickLabel QL-850 Properties window will open. Choose the **Hardware** tab.



3. Select QuickLabel QL-850 and choose **Properties**. The Properties window will open. Choose the **General** tab.



4. Choose **Change Settings**. Then choose the **Driver** tab.

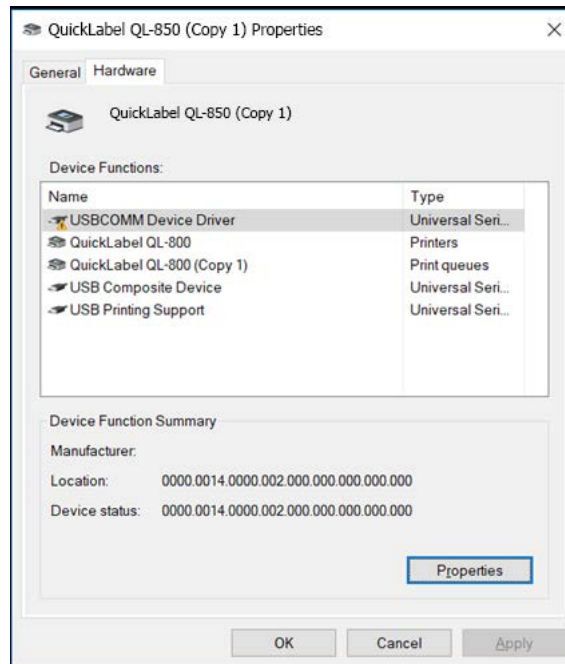


5. Choose **Update Driver**. When you are prompted, select the **Search automatically for updated driver software** option. Windows will locate the driver on your system and create a printer item.

Resolving USB Communication Issues

USB communication issues may prevent you from connecting to the printer with the QL-850 Maintenance Utility, Status Monitor, or CQL Pro software.

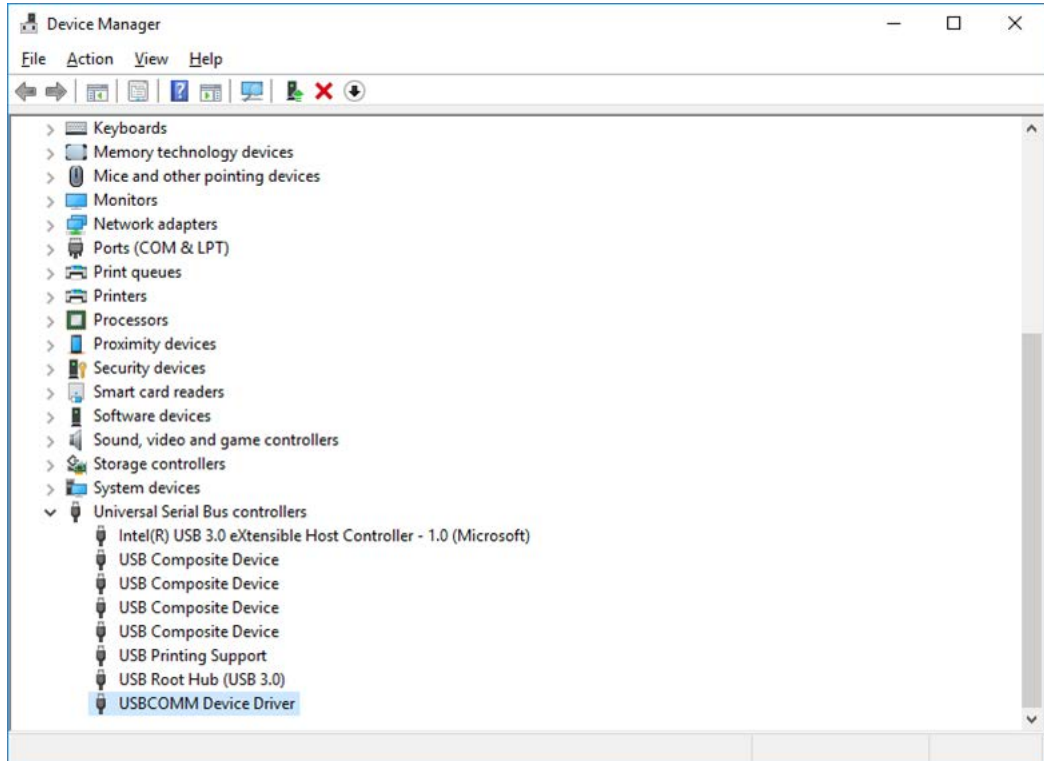
In this situation, a warning symbol will displayed over the printer icon in the driver properties window.



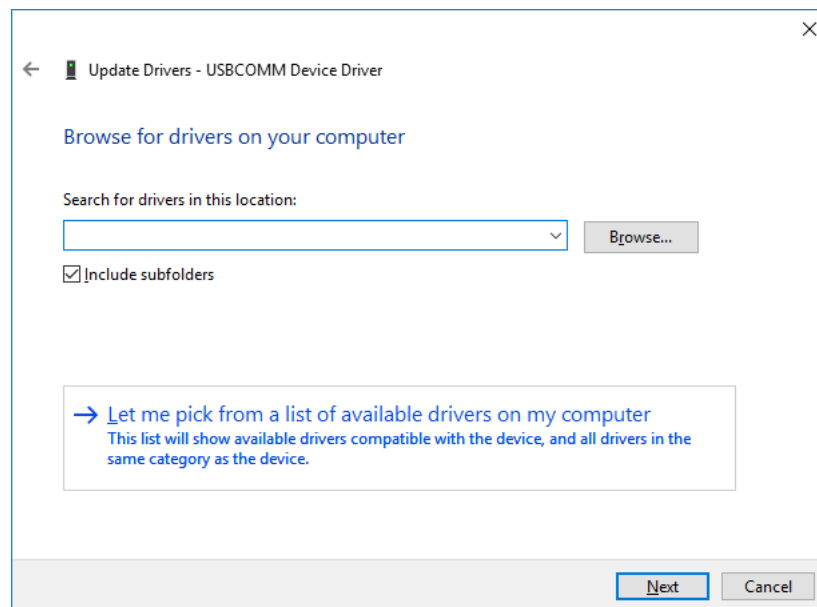
Use the following procedure to correct USB communication issues.

Note: This procedure requires administrator level access in Windows.

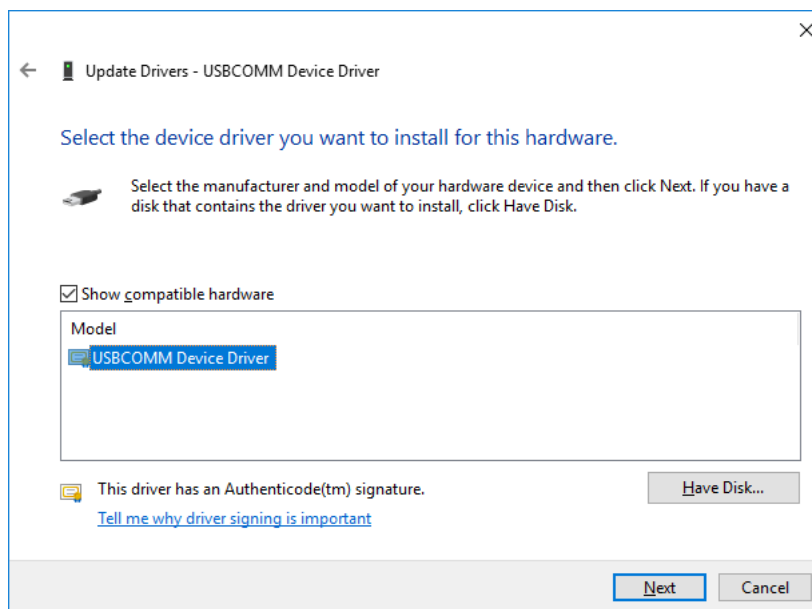
1. Open the Device Manager window.



2. Expand the Universal Serial Bus controllers option.
3. Right-click **USBCOMM Device Driver** and select **Update Driver**. You will be prompted to select a search method. Choose **Browse my computer for driver software**. The Browse for drivers on your computer window will open.



4. Choose **Let me pick from a list of available drivers on my computer**. The device selection window will open.



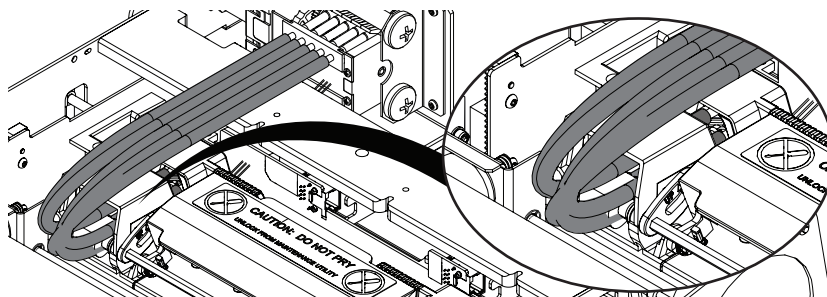
5. Select **USBCOMM Device Driver**. Then choose **Next** and follow the on-screen instructions to complete this procedure.

Identifying and Resolving Priming Problems

The printer is primed when you use any of the following features:

- **After Moving** function in the **Cleaning** tab of the QL-850 Maintenance Utility
- **After Shipping** function in the **Cleaning** tab of the QL-850 Maintenance Utility
- **Printhead** replacement function in the **Parts Replacement** tab of the QL-850 Maintenance Utility

A successful priming operation can be verified by opening the top cover and examining the ink tubes illustrated below. If the five tubes are filled with ink, the printer is primed.



If ink is not visible in all of the indicated tubes, the priming function was not successful. In this situation, do not use any priming functions again or an ink overflow may occur.

Instead, you may need to perform a special restorative pre-prime under the guidance of Technical Support. When the restorative pre-prime has finished, you will be able to prime the printhead using the **After Moving** function in the **Cleaning** tab of the QL-850 Maintenance Utility.

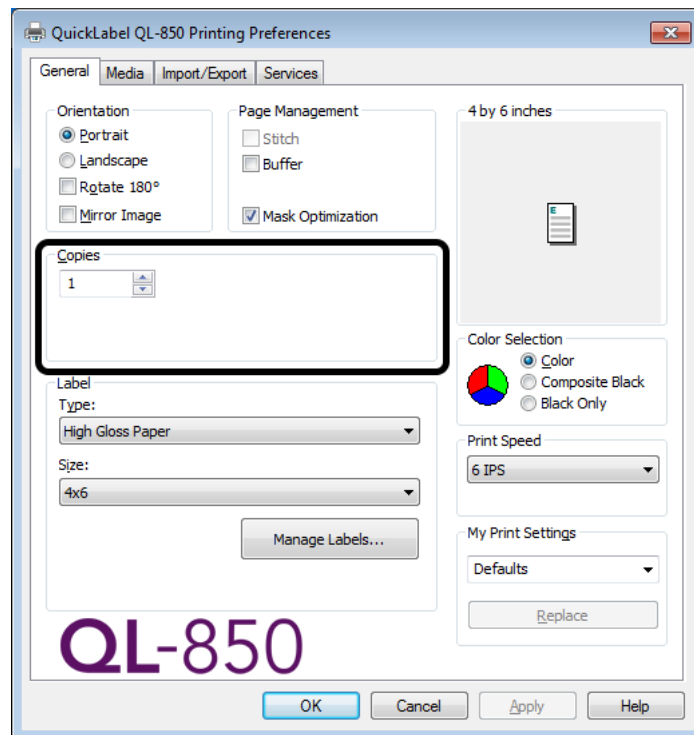
Note: The restorative pre-prime procedure consumes ink. Only use this function as needed and with the guidance of Technical Support.

Addressing Data Starvation

Data starvation can occur when an application produces page data for each individual page in a job rather than data for a single page and then printing it multiple times.

For some jobs, data for each individual page is necessary, such as when printing unique labels or labels containing unique data like serialization.

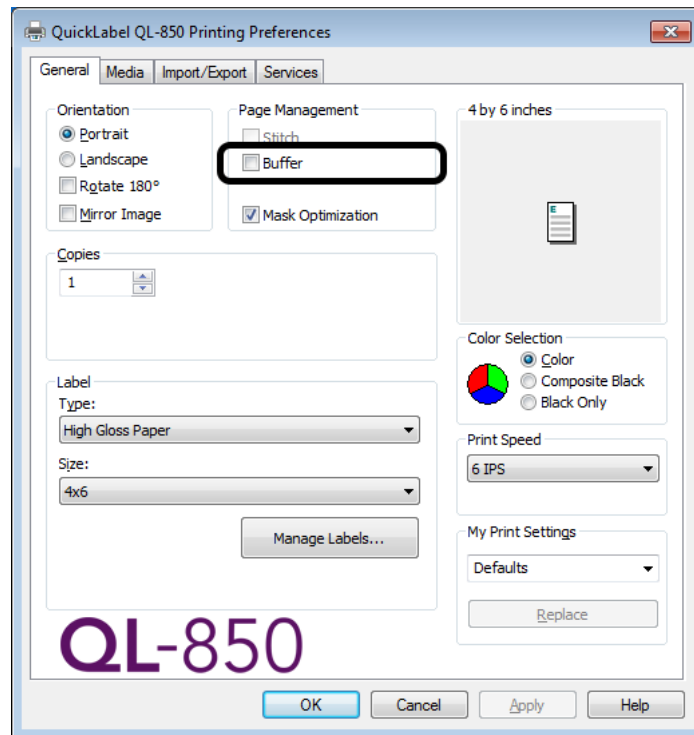
Some graphic design applications produce individual page data by default. In some cases, this can be avoided by setting the print quantity in the QL-850 driver instead of the application's print dialog.



If setting the quantity in the print driver is not an option, or the job contains variable data, then the printer may become “starved for data” at some point during the job.

Data starvation is a condition where labels are being printed faster than they can be sent to the printer. At times, the printer does not have any data to print.

This condition usually results in automatically pausing and resuming when more data is available to print. In some situations, this may result in an error (101D). If either of these situations is to be avoided, then the entire job can be set to be rendered before sending to the printer. This can be done by enabling the **Buffer** option in the QL-850 driver.



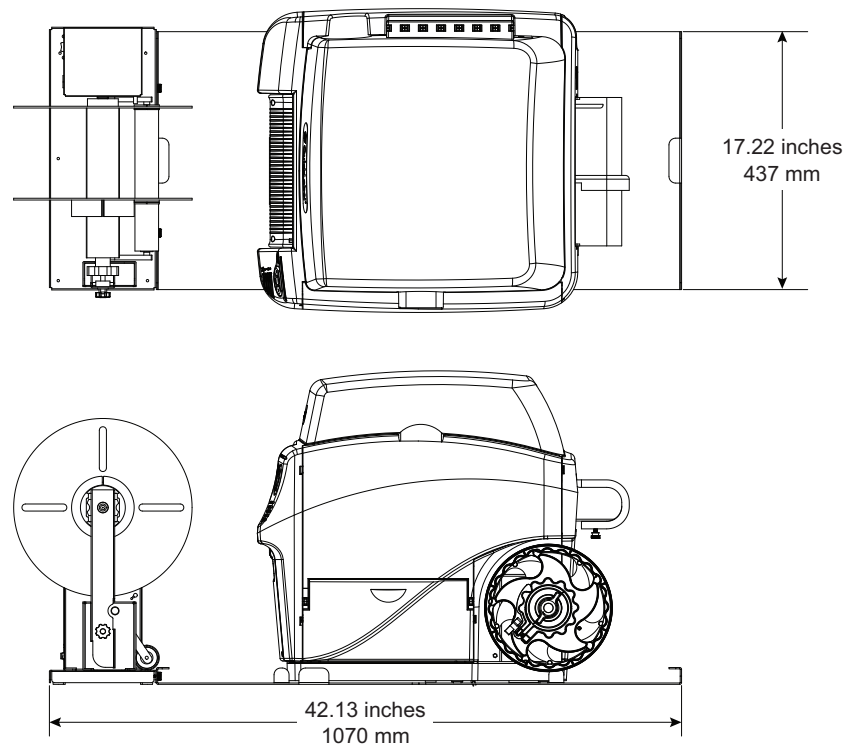
7

Rewinder

Before Installing the Rewinder

Before installing the rewinder, observe the following precautions.

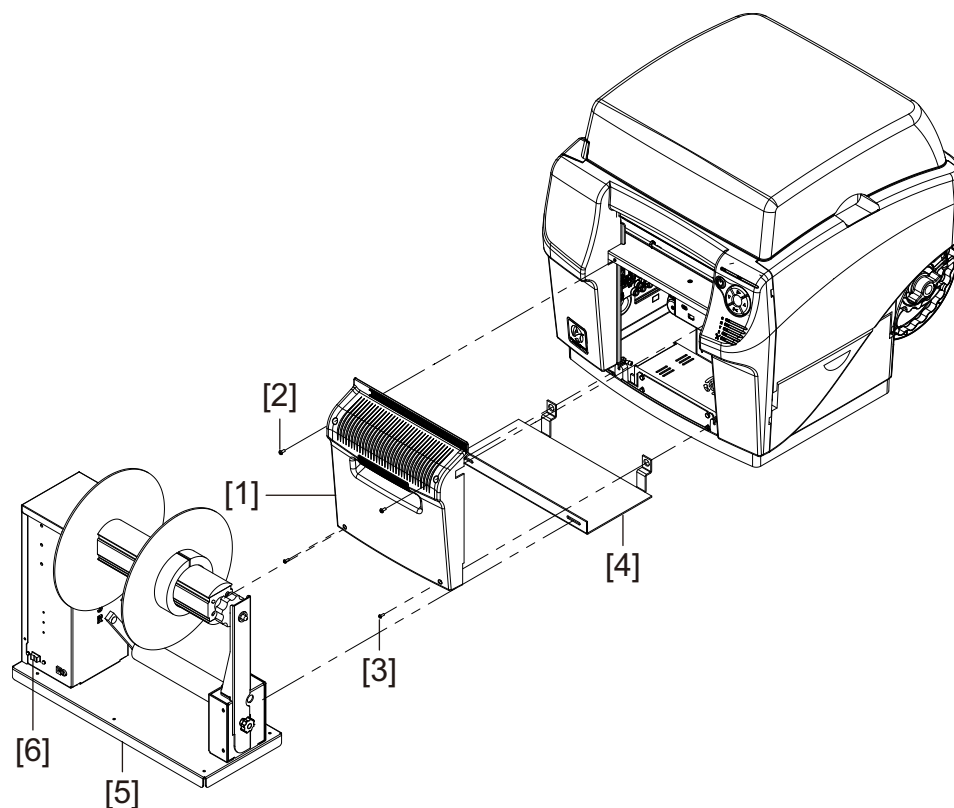
- No rewinder feet should float. The rewinder must be held level constantly.
- The rewinder must be installed on the same plane as the printer.
- The rewinder weighs 25 pounds (11.3 kilograms). When placing the rewinder on a desk, table, or other similar surface, it must be sturdy and stable enough to support the weight of the printer, rewinder, and roll media. A table that can support at least 150 pounds (68 kilograms) is recommended.
- The rewinder and associated bracket require a surface 14 inches (356 mm) in length and 21 inches (534) in width.
- Do not turn the rewinder mandrel by hand to rewind the media. Turning the mandrel by hand can result in rewinder damage.
- The minimum space required for installation and maintenance is shown below.



Installing the Rewinder

Use the following instructions to install the rewinder. Refer to the following illustration during this process.

Note: These instructions assume you are using the rewinder accessory only. If you are also using the unwinder accessory, the installation procedure will differ. See “Installing the Rewinder when using the External Unwinder” on page 104.



1. Ensure the power switch [6] on the rewinder is in the off position.
2. Power off the printer. On the rear of the printer, turn the power inlet switch off.
3. Disconnect the accessory cover [1] by removing the two upper [2] and two lower [3] screws.

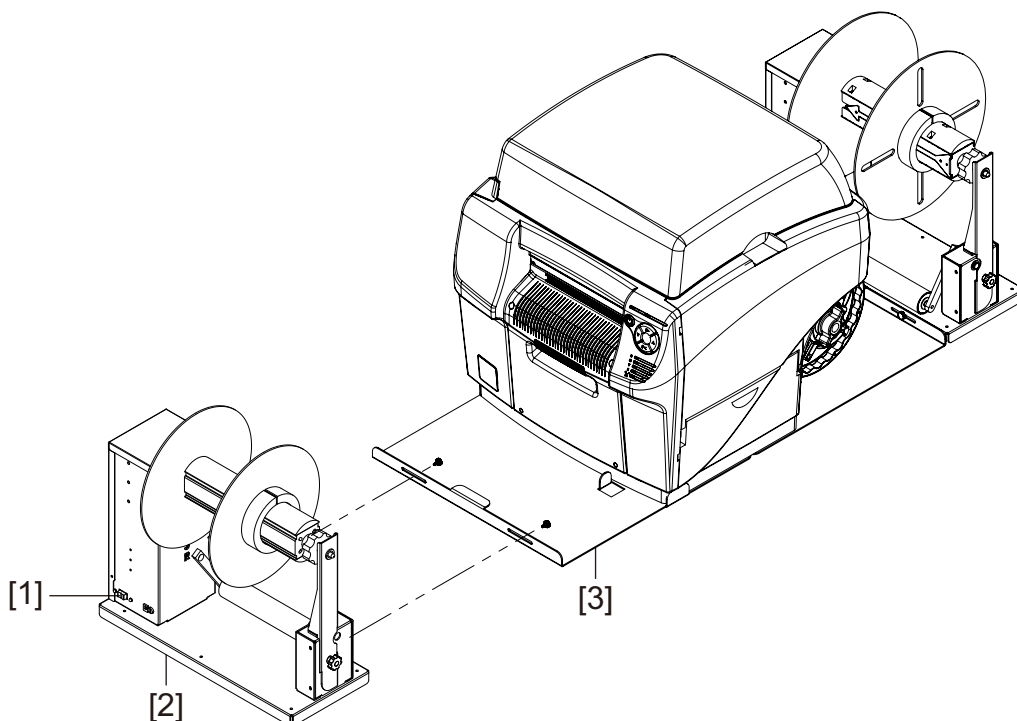
Note: The upper and lower screws are different sizes. Keep these screws separated to ensure correct installation later in the procedure.

4. Orient the rewinder bracket [4] as illustrated. Insert the tabs from the bracket into the printer and align them with the lower accessory cover mounting bosses.
5. Reinstall the accessory cover [1] using the two upper [2] and two lower [3] screws. The lower screws will capture and secure the tabs from the rewinder bracket [4].
6. Remove the two thumb screws from the rewinder [5].
7. Align the rewinder [5] with the rewinder bracket [4]. Ensure the thumb screw mounting locations align with the slotted holes on the bracket.

8. Install the two thumb screws through the bracket [4] slots and into the rewinder [5].
Note: Do not fully tighten the thumb screws at this time. You will tighten the thumb screws after ensuring proper alignment in the rewinding procedure.
9. Plug the power jack into the power slot on the rewinder. Insert the power plug into an AC power receptacle.
10. On the rear of the printer, turn the power inlet switch on. Power on the printer.

Installing the Rewinder when using the External Unwinder

Use the following instructions to install the rewinder when also using the external unwinder. Refer to the following illustration during this process.



Note: These instructions assume you are using the rewinder accessory and the external unwinder accessory. If you are using only the rewinder accessory, the installation procedure will differ. See “Installing the Rewinder” on page 103.

1. Before installing the rewinder, ensure the external unwinder is installed properly. See “Installing the External Unwinder” on page 108.
2. Store the rewinder bracket in case it is needed in the future.
The bracket supplied with the rewinder is not needed during this procedure. Instead, the rewinder will be attached to the front end of the unwinder bracket.
Note: Do not discard the rewinder bracket. It is required for installing the rewinder when not using the external unwinder.
3. Ensure the power switch [1] on the rewinder is in the off position.
4. Remove the two thumb screws from the rewinder [2].

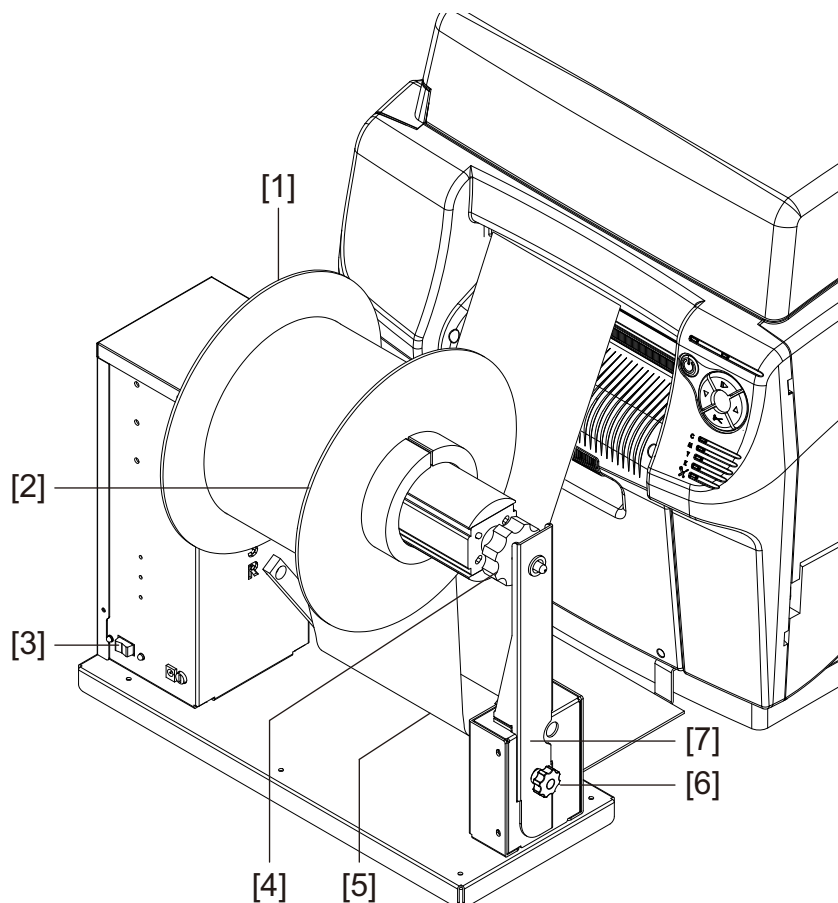
5. Align the rewinder [2] with the unwinder bracket [3]. Ensure the thumb screw mounting locations align with the slotted holes on the bracket.
6. Install the two thumb screws through the bracket [3] slots and into the rewinder [2].
Note: Do not fully tighten the thumb screws at this time. You will tighten the thumb screws after ensuring proper alignment in the rewinding procedure.
7. Plug the power jack into the power slot on the rewinder. Insert the power plug into an AC power receptacle.

Rewinding Labels

The rewinder automatically winds printed media exiting the QL-850 onto rolls. The setup process for rewinding labels requires an empty label core and tape.

Note: Do not turn the rewinder mandrel by hand to rewind the media. Turning the mandrel by hand can result in rewinder damage.

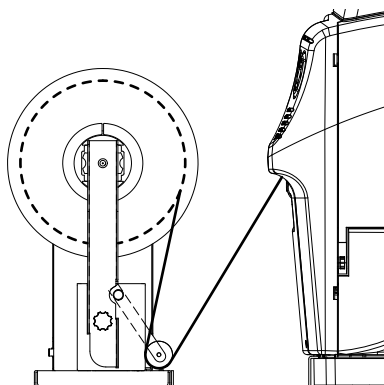
1. Ensure the power switch [3] on the rewinder is in the off position.



2. Turn the thumb screw [6] counterclockwise to loosen and remove the removable roll support arm [7].
3. Turn the rewinder mandrel adjustment knob [4] counterclockwise to loosen the mandrel.
4. Remove the outer flange [2] from the mandrel.

5. Load an empty label core on the mandrel.
Use an empty label core of the same width as the label media you will be using. Install the roll core on the rewinder, sliding it until it contacts the inner flange [1]. The outer flange [2] will be installed after you fasten the label media to the roll core.
6. Start a print job. Pause the job when the printed media advances slightly past the rewinder.
7. Guide the media under the rewinder dancer arm [5] and up around the empty label core. The inside edge of the media should be aligned squarely with the inner flange [1].
If the media is not squarely aligned with the inner flange, adjust the position of the rewinder as needed.
 - Loosen the thumb screws that fasten the rewinder to the bracket. Slide the rewinder left/right as allowed by the adjustment slots until the media is squarely aligned with the inner flange. Then tighten the thumb screws.
8. Fasten the end of the media to the core with tape. Ensure the printed side faces out.
9. Reinstall the outer flange [2] and then turn the mandrel adjustment knob [4] clockwise to tighten the mandrel.
10. Install the removable roll support arm [7]. Then tighten the thumb screw [6] to lock it into position.
11. Turn the power switch [3] on the rewinder to the on position.

When the dancer arm is in a lowered position, the rewinder mandrel will rewind media as needed. Do not turn the mandrel by hand to rewind the media. The media rewind path is illustrated below.



12. Resume the print job on the QL-850 printer. The rewinder will rewind media automatically as needed. The rewinder will stop when the printer stops advancing media or when the printer is out of media.

8

External Unwinder

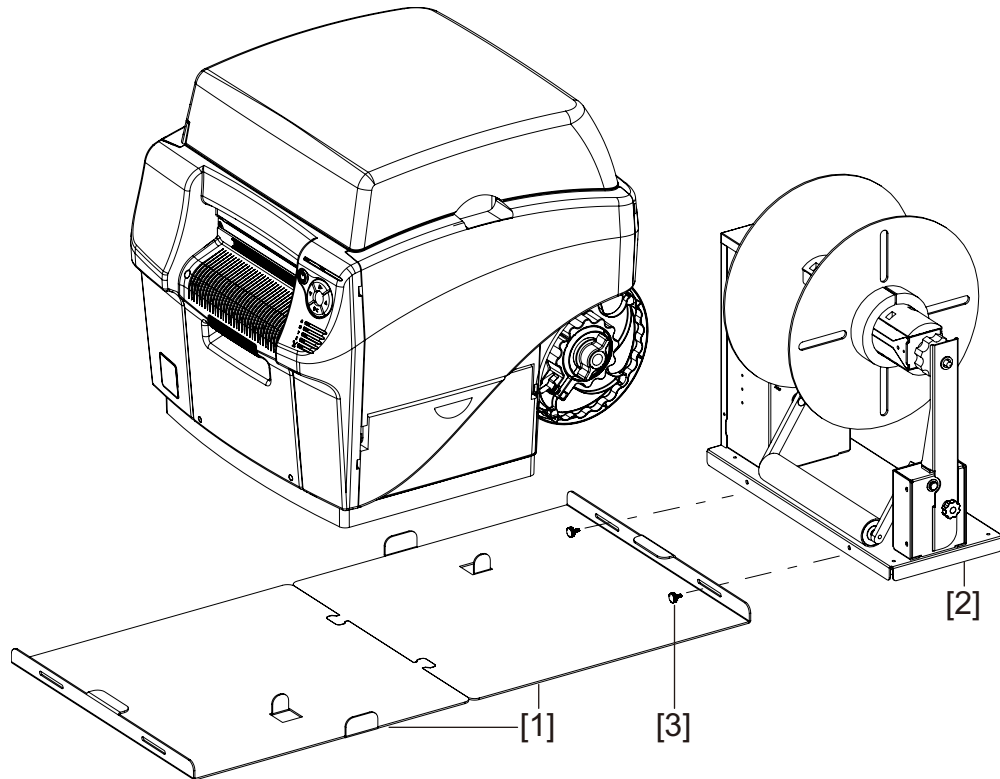
Before Installing the External Unwinder

Before installing the unwinder, observe the following precautions.

- No unwinder feet should float. The unwinder must be held level constantly.
- The unwinder must be installed on the same plane as the printer.
- The unwinder weighs 25 pounds (11.3 kilograms). When placing the unwinder on a desk, table, or other similar surface, it must be sturdy and stable enough to support the weight of the printer, unwinder, and roll media. A table that can support at least 150 pounds (68 kilograms) is recommended.
- The unwinder and associated bracket require a surface 43 inches (1093 mm) in length and 21 inches (534) in width.
- If you are installing both the rewriter and unwinder, a surface 51 inches (1296 mm) in length and 21 inches (534 mm) in width is required.
- Do not turn the unwinder mandrel by hand to unwind the media. Turning the mandrel by hand can result in unwinder damage.

Installing the External Unwinder

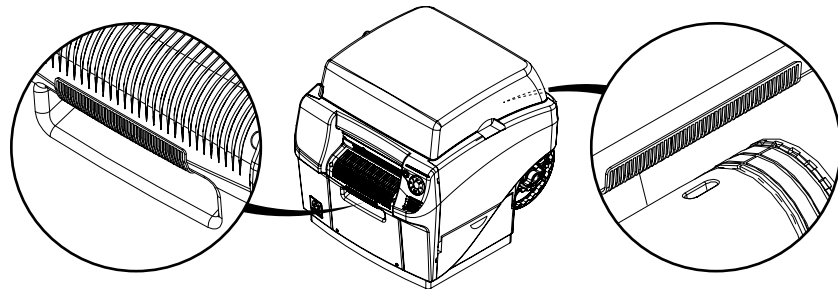
Use the following instructions to install the unwinder. Refer to the following illustration during this process.



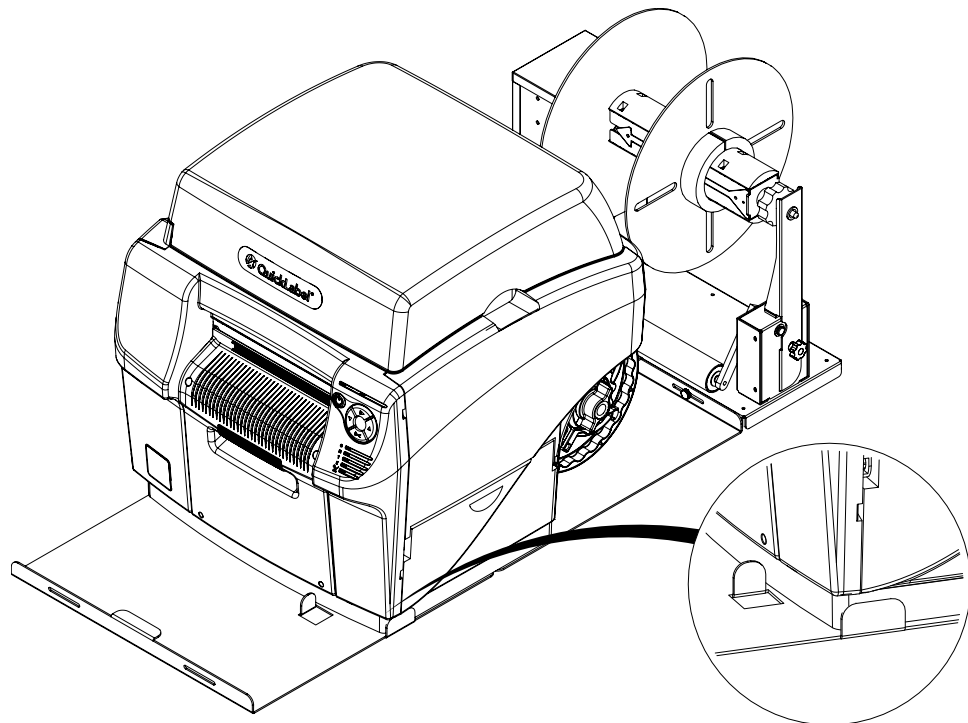
1. Use the **Before Moving** feature in the **Cleaning** tab of the QL-850 Maintenance Utility. This utility will prepare the printer for lifting and moving onto the brackets. Refer to the QL-850 Driver Help for details.
 2. Power off the printer. On the rear of the printer, turn the power inlet switch off.
 3. Ensure the power switch on the unwinder [2] is in the off position.
 4. Arrange the brackets [1] as illustrated. Insert the tabs into the corresponding slots on the brackets.
 5. Align the unwinder [2] with the bracket. Ensure the thumb screw mounting locations align with the slotted holes on the bracket.
 6. Install the two thumb screws [3] through the bracket slots and into the unwinder [2].
- Note:** Do not fully tighten the thumb screws at this time. You will tighten the thumb screws after ensuring proper alignment.
7. With help from another person, lift the printer and then place it on the brackets.

Caution: The printer is heavy and moving it requires two people. One person should lift the front by the indicated lift point, while the other person should lift the back by the indicated lift point. Do not lift the printer by the mandrel. Lift the front of the printer by the

recessed handle. Lift the rear of the printer by the flat area of the plastic frame above the mandrel. Keep the printer level while lifting it.

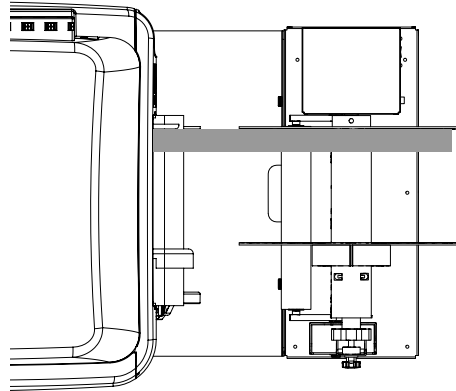


The printer should sit level on the brackets as shown. The front of the printer should make contact with the raised tab on the bracket.



8. Plug the power jack into the power slot on the unwinder. Insert the power plug into an AC power receptacle.
9. On the rear of the printer, turn the power inlet switch on. Power on the printer.
10. Use the **After Moving** feature in the **Cleaning** tab of the QL-850 Maintenance Utility. This utility will prepare the printer for printing. Refer to the QL-850 Driver Help for details.

11. Use a straight edge such as a ruler to align the unwinder with the printer. The inside edge of the inside flange should be aligned with the fixed media guide on the media entry slot.



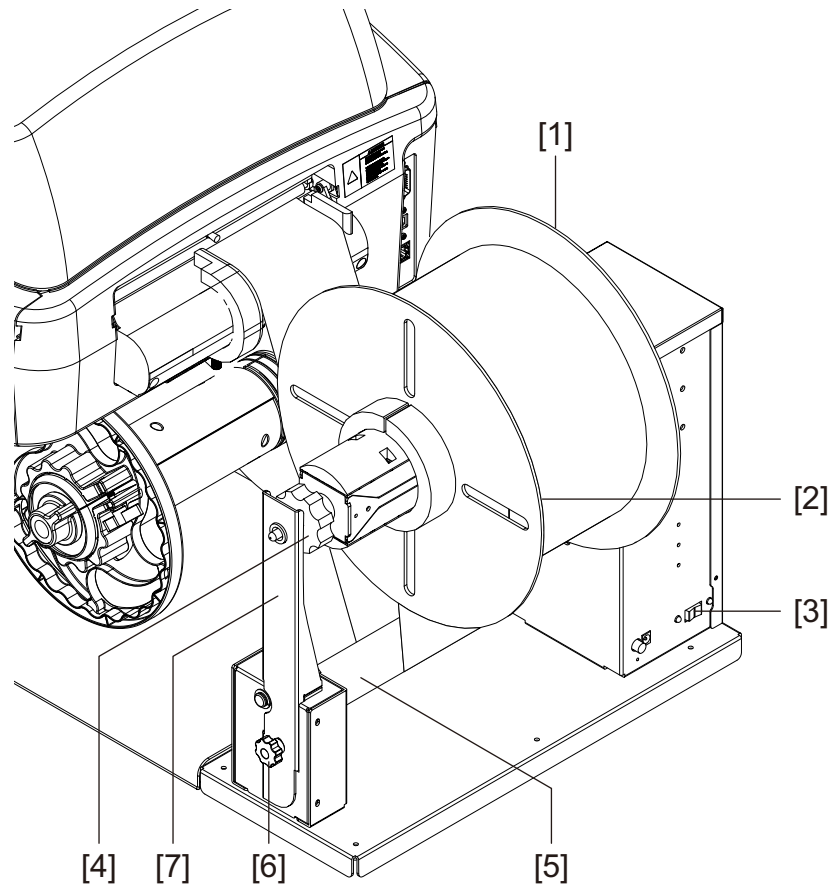
Slide the unwinder left/right as allowed by the adjustment slots until the flange is squarely aligned with the fixed media guide. Then tighten the thumb screws.

Unwinding Labels with the External Unwinder

The unwinder automatically unwinds media into the QL-850 for printing. This option is used when feeding rolls over eight inches in diameter.

Note: Do not turn the unwinder mandrel by hand to unwind the media. Turning the mandrel by hand can result in unwinder damage.

1. Enable **External Unwind Mode** in the **Print Settings** tab of the QL-850 Maintenance Utility. Refer to the QL-850 Driver Help for details.
2. Ensure the power switch [3] on the unwinder is in the off position.



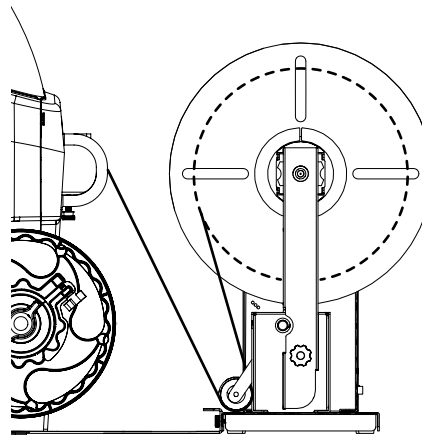
3. Turn the thumb screw [6] counterclockwise to loosen and remove the removable roll support arm [7].
4. Turn the unwinder mandrel adjustment knob [4] counterclockwise to loosen the mandrel.
5. Remove the outer flange [2] from the mandrel.
6. Load a roll of labels on the mandrel. The media should unwind over the top of the roll toward the printer. Ensure the side of the roll contacts the inner flange [1].
7. Reinstall the outer flange [2] and then turn the mandrel adjustment knob [4] clockwise to tighten the mandrel.
8. Install the removable roll support arm [7]. Then tighten the thumb screw [6] to lock it into position.

9. Guide the media under the unwinder dancer arm [5] and up to the media entry slot. The inside edge of the media should be aligned squarely with the fixed media guide on the media entry slot.

If the media is not squarely aligned with the fixed media guide, adjust the position of the unwinder as needed.

- Loosen the thumb screws that fasten the unwinder to the bracket. Slide the unwinder left/right as allowed by the adjustment slots until the media is squarely aligned with the fixed media guide. Then tighten the thumb screws.
10. While holding the media near the media entry slot, turn the power switch [5] on the unwinder to the on position. The unwinder will remove slack and provide back tension during the loading process.

The media unwind path is illustrated below.



11. Finish loading media using either the standard method or the manual feed method. Refer to the related section for details and illustrations.
 - **Standard** - Position the adjustable media guide. Guide the media into the printer and release the media when the printer starts feeding media. *See "Loading Media" on page 25.*
 - **Manual** - Position the adjustable media guide. Open the top cover. Lift the roller handle and then guide the media into the printer until it is positioned under the first star wheel on the transport unit. Release the roller handle and then close the top cover. The printer will start feeding media. *See "Loading Media with Manual Feed Mode" on page 26.*

9

Shipping and Storage

Shipping Precautions

Before shipping this printer, please read this section thoroughly. These shipping precautions must be followed to reduce the risk of printer damage during shipping.

Please contact Technical Support if you have any questions or concerns about shipping your printer.

Caution: *Do not ship a printer without following the shipping precautions. Failure to follow the precautions may result in catastrophic printer damage that will not be covered by any warranty.*

Use the Before Shipping Feature

Use the **Before Shipping** feature in the **Cleaning** tab of the QL-850 Maintenance Utility.

The maintenance wizard will guide you through the following actions:

- Draining ink from the printhead
- Removing the printhead
- Removing ink cartridges
- Securing the maintenance roller

Caution: *If you are unable to use the Before Shipping function due to an error condition, leave the ink cartridges installed in the printer. This will help prevent ink leakage if there is a problem.*

Pack the Printer Carefully

Observe the following guidelines when packing the printer for shipping.

- Install the original protective caps on the two fluidic couplings in the printhead area.
- Install the four absorbent pads in the ink cartridge slots.
- Pack the printer in the original packaging material and shipping carton. The printer should be shipped in its original packaging and strapped to the shipping pallet.
- If you are sending the printer to QuickLabel for factory service, please do not ship the printhead or ink cartridges. Store the printhead in its original plastic tray and packaging material.

Storage Precautions

Before storing ink or printheads, please read this section thoroughly. These storage precautions must be followed to reduce the risk of damage during storage.

Please contact Technical Support if you have any questions or concerns about storage.

Printhead Storage

This section provides information about storage and transportation for printheads and guidance on likely performance if held beyond the specified storage period.

Printhead Transportation

- IEC 60721-3-2 Class 2K2
- -13° F to 140° F (-25° C to 60° C)
- Printheads can be cumulatively exposed to temperatures between 113° F to 140° F (45° C to 60° C) for up to 72hrs

Printhead Storage

- 18 months from date of manufacture
- IEC 60721-3-1 Class 1K3
- 23° F to 113° F (-5° C to 45° C)

Physical orientation: Store and transport the cartridge as indicated by the “this side up” arrow symbol on the packaging. Do not store or transport the cartridge with its long axis vertically oriented.

Longer Printhead Storage (Beyond Specification)

If the storage has been relatively well controlled at 64° F to 86° F (18° C to 30° C), 2 years storage life should be realized. Extended storage at greater than 95° F (35°C) beyond specified life is not recommended.

Failure Due to Exceeding Storage Life

Failure due to exceeding printhead storage life would primarily be caused by the breakdown of the foam in the protective case of the printhead. The shipping fluid interacts with foam and can cause decomposition and particles which would be trapped in the printhead. To some extent these will be flushed through printhead maintenance routines but the particles which are not will clog nozzles and cause streaks. For printheads with extended storage life, heavy cleaning maintenance before the first print will improve the first print performance. The performance of these printheads should improve with the quantity of ink printed, as remnant particles are dislodged.

Ink Storage

This section provides information about storage and transportation for ink and guidance on likely performance if held beyond the specified storage period.

Ink Transportation

- IEC 60721-3-2 Class 2K3
- -13° F to 158° F (-25° C to 70° C)
- 95% humidity at 104° F (40° C)
- Based on maximum 72 hrs exposure at the temperature extremes

Ink Storage

- IEC 60721-3-1 Class 1K3
- 23° F to 113° F (-5° C to 45° C)
- 5-95% humidity
- 2 years from date of manufacture

Sub-zero Ink Storage/Transport Conditions

Inks should tolerate such extreme conditions. Before use, the inks should be brought to room temperature and ink cartridges given a gentle shake to remix the ingredients. The amount of agitation that occurs during handling on installation in the printer is likely enough. If inks are cold on startup of the printer, they will not have proper viscosity and firing behavior could be affected.

Failure Due to Exceeding Storage Life

Failure due to exceeding ink shelf life would primarily be evidenced by degradation in print quality associated with earlier than normal printhead failure (for example: a change in ink pH which could lead to material compatibility problems or corrosion of printhead components). The rate and failure mechanism however is not readily predicted.

10

Safety Warnings and Precautions

Before using this printer, please read this section thoroughly. Warnings to heed and important matters are described here to prevent user injury and printer damage.

Do not attempt to operate this printer in any way other than those mentioned in the User Guide.

Location

Make sure there is sufficient space around the printer.

Warning

- Never place items on the printer. If such items were to fall on the printer, this could cause a fire, electrical shock, or damage to the printer.
- The electrical contacts inside the printer become extremely hot during normal operation. To avoid causing a fire, never store flammable substances like alcohol, thinner, etc. near the printer.

Caution

Avoid using the printer in the following types of locations.

- Where the printer is exposed to open air or high humidity. This could cause a fire, serious electrical shock, or damage to the printer. Also, if the printer is carried into a warm room on a cold day, this could cause condensation inside the printer. If this happens, allow the printer to sit for at least 1 hour at room temperature to adapt to the ambient temperature and humidity.
- Never place the printer on a slanted or unstable stand or table. If the printer is dropped or slides off, this could cause personal injury.
- Never expose the printer to dust. This could cause a fire, serious electrical shock, or damage to the printer. Also, never locate the printer near a water faucet or in any other location where it will be exposed to water. This could cause serious electrical shock.
- Never set up the printer in a location that is exposed to direct sunlight, high temperature, or open flame. This could cause a fire or electrical shock.
- Use the printer in an environment where temperature and humidity are within the ranges of 41 to 95 degrees Fahrenheit (5 to 35 degrees Celsius) and 20% to 80% RH (with no condensation).
- Never block the ventilation ports on the printer. A blocked ventilation port could cause heat to build up inside the printer and cause a fire. Also, place the printer in an area where you can disconnect the power cord immediately; keep the area around the power cord connection free of obstacles. This allows you to unplug the power cord quickly in an emergency.

Power Supply and Power Cord

Warning

- To avoid causing a fire or serious electrical shock, always use the power cord provided with this printer. To avoid a fire or electrical shock, do not use an extension cord.
- To avoid causing a fire or serious electrical shock, make sure that the power plug is securely and completely inserted into the power source. To avoid personal injury from an electrical shock, never handle the power cord or plug when your hands are wet.

Caution

- Be sure to turn off the printer before removing the power plug from the outlet.
- Check the power plug and cord for any problem (abnormal heat, rust, bend, cracks, scratches, etc.) at least once a month. If any problem with the power plug or cord is found, replace it. Using it without replacement can result in a fire or electrical shock hazard.
- To avoid damaging the power plug, which could cause a short circuit and cause a fire or electrical shock, never pull on the power cord to unplug the cord from the power supply. Always grip the plug to remove it from the power supply.
- If the printer will not be used for a long period, for your safety disconnect the power cord from the power source.
- Never use any power source other than the one rated for the printer. This printer is designed to be used in the region where purchased. Also, make sure the power source can supply sufficient power for the printer. This could cause a fire or serious electrical shock, or damage the printer.

General Safety

Warning

- If you find a large ink leak, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer, this could cause a fire or serious electrical shock.
- Never clean the printer with water or any flammable liquid (alcohol, benzene, thinner, etc.) either applied directly or with a cloth. If you accidentally spill liquid on the printer, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer, this could cause a fire or serious electrical shock.
- If the printer emits smoke, unusual odors, or makes noises, leaving it could cause a fire or serious electrical shock or damage to the printer. Switch the printer off immediately, disconnect the power plug from the power source, make sure that the printer has stopped smoking, and call for service. Do not attempt to repair the printer by yourself. This could cause a fire or serious electrical shock.
- Use only a slightly damp cloth, thoroughly wrung out, to clean the printer surfaces. Never use alcohol, thinner or any other flammable liquids. If such materials come into contact with electrical components inside the printer, this could cause a fire or serious electrical shock.

Caution

- There are high voltage points inside the printer. To avoid a fire or electrical shock, never attempt to disassemble or repair the printer.
- Never insert or drop any metal objects into the printer when it is open. This could cause a fire or serious electrical shock, or damage the printer. If something falls into the printer accidentally, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer, this could cause a fire or serious electrical shock.
- If the printer is dropped and damaged, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer, this could cause a fire or serious electrical shock.
- To avoid a fire or electrical shock, never use flammable sprays around the printer.
- Never remove the fixed covers from the printer. This could cause a serious electrical shock.

Important

- While the printer is printing, do not open any covers and do not remove the power plug.
- Do not apply excessive force or strong shock to the printer. Doing so can result in a machine failure or impair printer quality. Be sure to open/close the covers slowly.

Moving the Printer

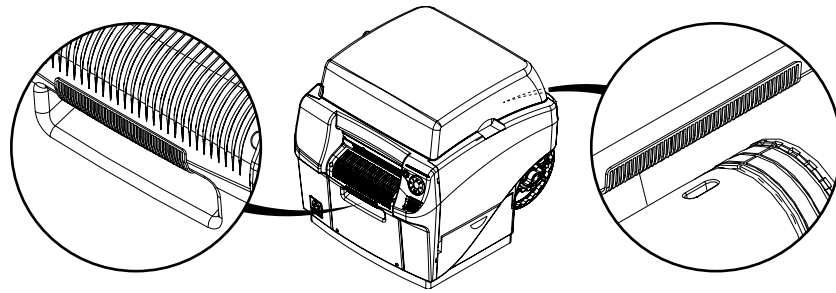
Warning

- Call the dealer for advice before you ship the printer a long distance or move the printer by car or truck where it may be subjected to shock and vibration. Moving the printer without the proper preparation could subject it to shocks and vibrations which could damage the printer and cause a fire.

Caution

- Before moving the printer, use the appropriate procedures to drain ink from the printhead or entire print system. The Before Moving and Before Shipping features are located in the Cleaning tab of the QL-850 Maintenance Utility. Refer to the QL-850 Driver Help for details.
- Before you move the printer to another location in the same building, disconnect the power cord and make sure that all other cables are disconnected.
- The printer is heavy and moving it requires two people. One person should lift the front by the indicated lift point, while the other person should lift the back by the indicated lift point. Do not lift the printer by the mandrel. Lift the front of the printer by the recessed

handle. Lift the rear of the printer by the flat area of the plastic frame above the mandrel. Keep the printer level while lifting it.



- Always hold the printer level and carry it slowly. If ink is spilled inside the printer while moving it, this could cause a fire or serious electrical shock or damage the printer.

Important

- To prevent machine failures, do not relocate or transport this printer with the covers open.

Ink Cartridge and the Maintenance Cartridge

Caution

- Always store these items out of the reach of small children. This prevents accidents. If a child accidentally swallows ink, seek medical attention immediately.
- If ink gets into your eyes, wash it out with flowing water immediately. If irritation persists, consult a physician.
- If ink comes into contact with your skin, rinse it off with flowing water immediately. If irritation persists, consult a physician.
- Never drop or apply excessive force to an ink cartridge or the maintenance cartridge. Ink can stain clothing and the work area.
- Never attempt to disassemble or modify the ink cartridges. They contain ink, which may leak out and smear your clothes or things around you.

Important

- Do not install or remove the ink cartridge or maintenance cartridge unless it needs to be replaced. Doing so can accelerate wear of the printer components.

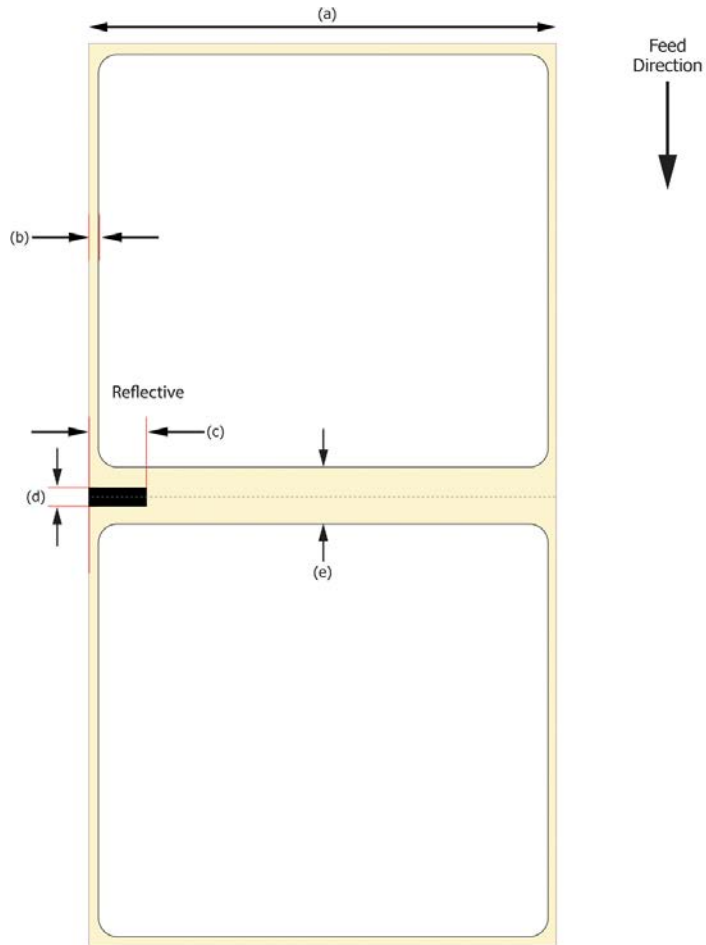
Printer Specifications

Printer	
Printing Technology	Thermal Inkjet
Resolution	1600 x 1600 dpi, 1600 x 800 dpi
Label Size/Print Area	Width 2.0" (51 mm) - 8.3" (211 mm)
	Length 1.0" (25 mm) - 30.0" (762 mm)
Print Speed	6 ips at 1600 x 1600 dpi 12 ips at 1600 x 800 dpi
Media Sensing	Gap, Reflective (bottom-only), Continuous; Non-adjustable/fixed sensors
Ink Cartridge Capacity	QuickLabel QL-850 CMYK dye cartridges, 250mL
Maintenance Cartridge Capacity	Approximately 1 million printed inches or 850 mid-job cleanings Near full warning at approximately 80% full
Printhead Life	Approximately 250,000 linear inches. Printhead life varies with image content and duty cycle, and is reported by the QL-850 Maintenance Utility so the user can anticipate end of life. Printing of vertical lines will accelerate printhead wear.
Maintenance Roller Life	Approximately 1 million printed inches or 850 mid-job cleanings
Ventilation Filter	Approximately 500,000 linear inches
Cutter Blade	Approximately 100,000 cuts on paper liner

Printer	
Label Media	Width: 2.125" (54 mm) - 8.425" (214 mm)
	Length: 1.125" (29 mm) - 30.125" (765 mm)
	Types: Gloss Paper, Matte Paper and Synthetic pressure-sensitive; Paper Tag Stock
	Roll: 8" OD (203 mm) QuickLabel® paper and synthetic labels on 3" ID (76.2 mm) core
	Thickness: 5.5 mil - 7.5 mil (0.140 mm - 0.191mm)
Control Panel	5 buttons - Power, Pause, Feed, Back Feed, Cut 7 LEDs - Power/Status, Error, Ink Out C/M/Y/K, Service
Wait Time to Ready	On -> Ready 60 seconds
Connectivity	USB 2.0; 10/100 BaseT Ethernet, RJ-45 connection
Software	CQL Pro® label creation and print management program suite and QL-850 Windows® 10/8/7 Server 2012/2008 64/32-bit driver
Barcodes	All major barcodes supported, including 2D Datamatrix and QR Code

Printer	
Environmental	<p>Printer Operating 41° F to 95° F (5° C to 35° C), 20% to 90% Relative Humidity (non-condensing) Printer should be installed on level surface with no more than 1° tilt in any axis No longer than 8 weeks powered off or in standby.</p>
	<p>Printer Non-Operating 23° F to 113° F (-5° C to 50° C), 5% to 95% Relative Humidity (non-condensing) No longer than 2 weeks powered off or in standby.</p>
	<p>Ink Storage 32° F to 95° F (0° C to 35° C), 35% to 85% Relative Humidity (non-condensing)</p>
	<p>Ink Warranty 24 months from date of production or 6 months after installation in printer</p>
	<p>Atmospheric Pressure 1060hPa (795mmHg) - 700hPa (525mmHg)</p>
Power Requirements	100-240 VAC 50-60 Hz, 2.6A
Power Consumption	Operating: 260W (max) Idle: 60W (max)
Dimensions	23.7" L x 20.3" W x 20.8" H (602 mm x 515 mm x 528 mm)
Weight	No Supplies: 64 lbs. (29 Kg)
	With Supplies: 71 lbs. (32 Kg)
	Packaged: 79 lbs. (36 Kg)
Optional Accessories	Automatic Label Roll Rewinder

Label Specifications



Label	
Rollstock	8" OD (203 mm) QuickLabel® paper and synthetic labels
Label Size/Print Area	Width: 2.0" - 8.3" (51 mm - 211 mm)
	Length: 1.0" - 30.0" (25 mm - 762 mm)
Construction	Width (a): 2.125" - 8.425" (54 mm - 214 mm)
	Edge Trim Left / Right (b): 0.063" (1.59 mm)
Reflective Mark	Width (c): 0.75" (19 mm) minimum
	Length (d): 0.125" (3.175 mm)
	Density: >1.1 (reflective measured with X-Rite 504) Non-glossy finish

Label	
Other Features	Gap (e): 0.118" (3.0 mm) - 0.75" (19 mm)
	Multi-Across/Down: Yes, 1.0" (25 mm) min. width, 1.0" (25 mm) min. length Maximum of 0.25" horizontal and vertical gaps
	Butt Cut Label Construction: acceptable if no print required for length of reflective mark
	Splices: clear tape splices are permissible

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