

RL-22DT/RL-42DT

*Thermal Printer
Version 3.007*

Operation Manual



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Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at www.ricelake.com or obtained by calling 715-234-9171 and asking for the training department.

About This Manual

This manual is intended for use by qualified service technicians responsible for installing and servicing the RL-22DT/RL-42DT printers.



Authorized distributors and their employees can view or download this manual from the Rice Lake Weighing Systems distributor site at www.ricelake.com.



Warning

Danger of explosion if battery is incorrectly replaced. Replace only with the equivalent type recommended by the manufacturer. Dispose of batteries according to the manufacturer's instructions.

1.0 Introduction

After unpacking, check to make sure all accessories are included:

- Barcode printer
- Power cord
- Switching power
- USB cable
- Label

1.1 Safety Instructions

- Keep the equipment away from humidity.
- Before you connect the equipment to the power outlet, check the voltage of the power source.
- Disconnect the equipment from the voltage of the power source to prevent possible transient over-voltage damage.
- Don't pour any liquid near the equipment, as it may result in electric shock.
- Only qualified service personnel should open the equipment.
- Don't repair or adjust energized equipment alone under any circumstances. Someone capable of providing first aid must always be present for your safety.

1.2 Printer Parts

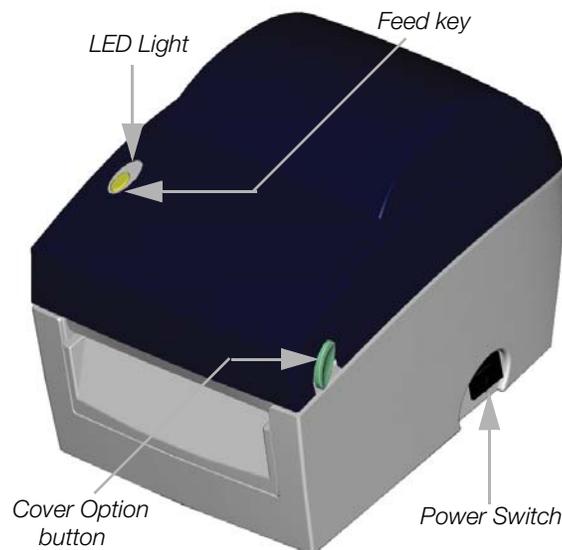


Figure 1-1. Outside of printer

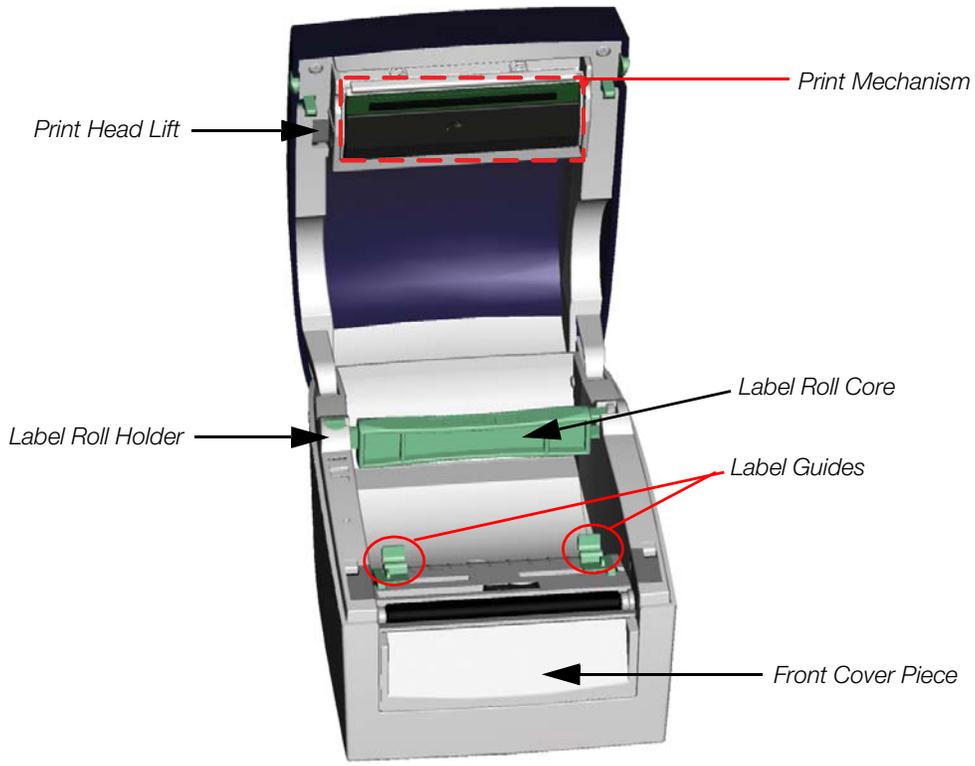


Figure 1-2. Inside of printer

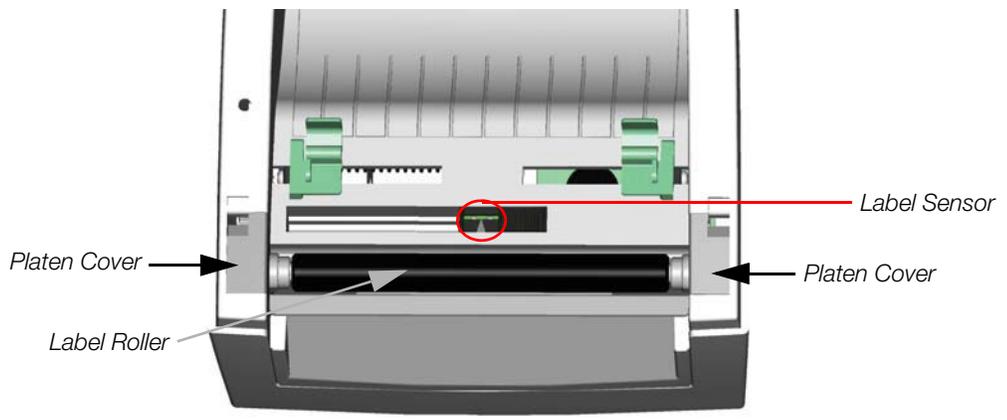


Figure 1-3. Inside of printer



Figure 1-4. Back of printer

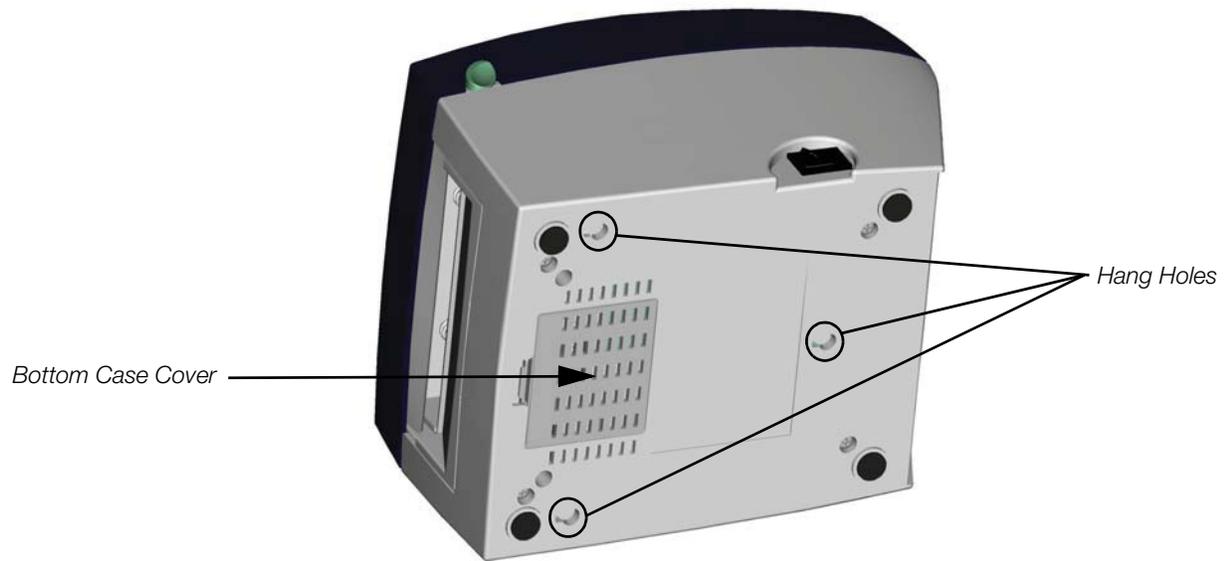


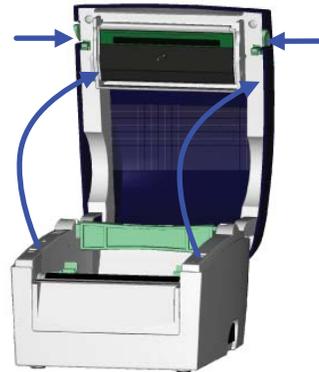
Figure 1-5. Bottom of printer

2.0 Installation

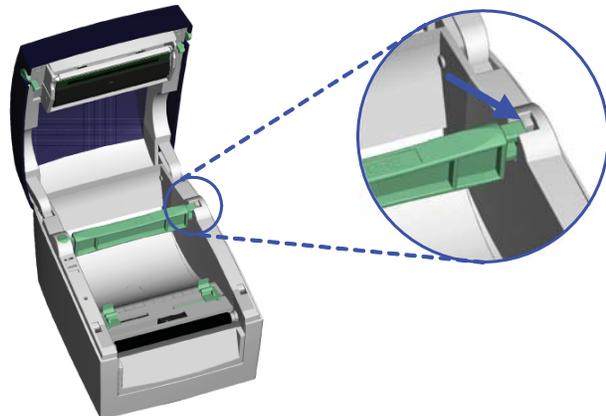
This section contains instructions on installing labels, the label roll core switch, and software and driver installation.

2.1 Label Installation

1. Place the printer on a horizontal surface and open the top cover.

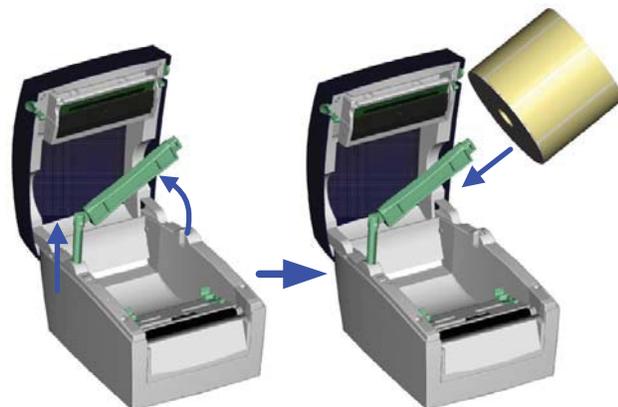


2. Press and release the lock of the label roll core.

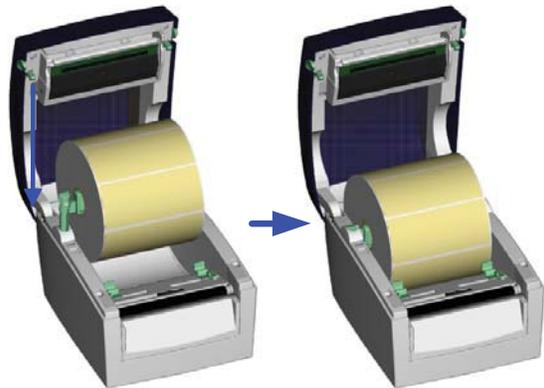


3. Pull up the label roll holder and lift the label roll core upward.

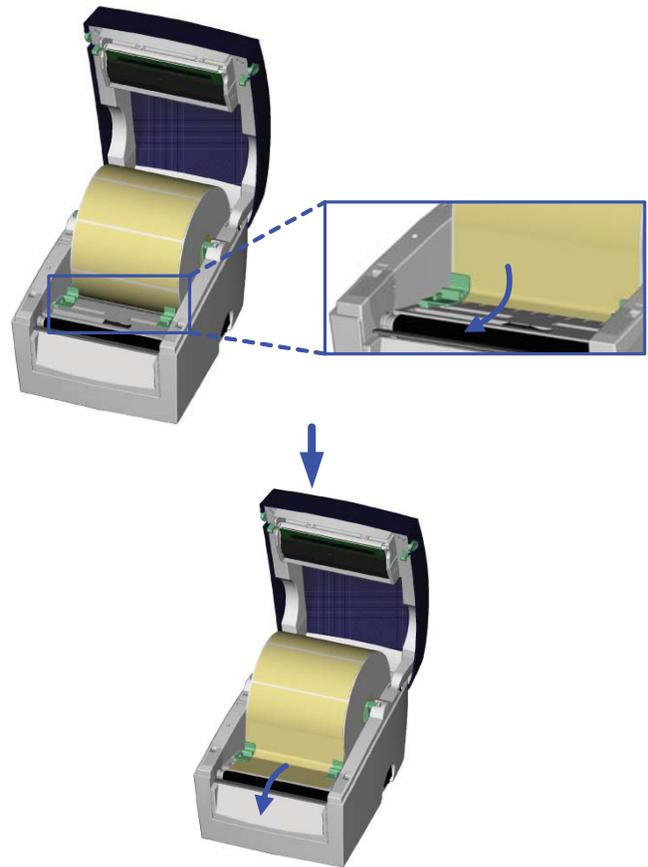
4. Place a new label roll onto the label roll core.



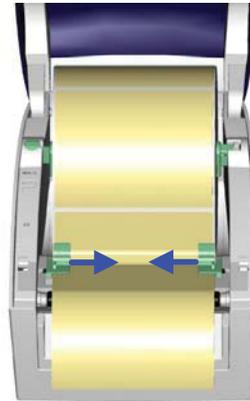
5. Flip the label roll core downward and pull back the label roll holder.
6. Pull and lock the label roll core to the original position.



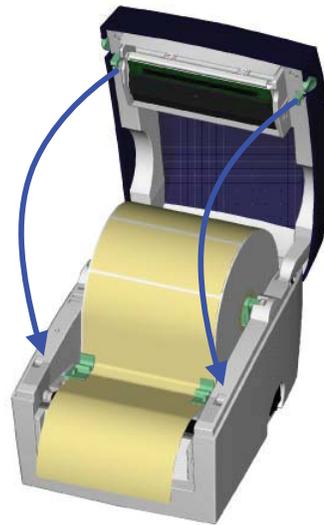
7. Put the label under the label guide and stretch it frontward.



8. Pull the label guide inward and make it fit the edge of the label.

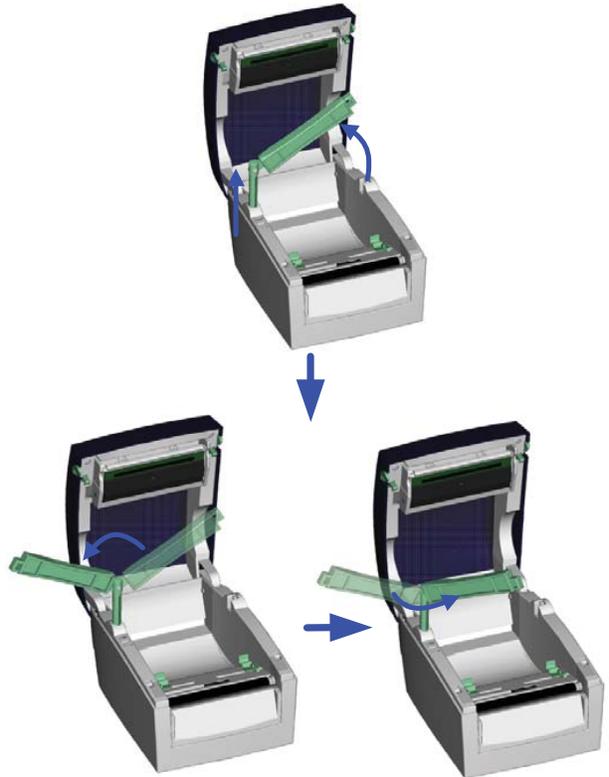


9. Close the top cover to complete the label installation.



2.2 Label Roll Core Switch

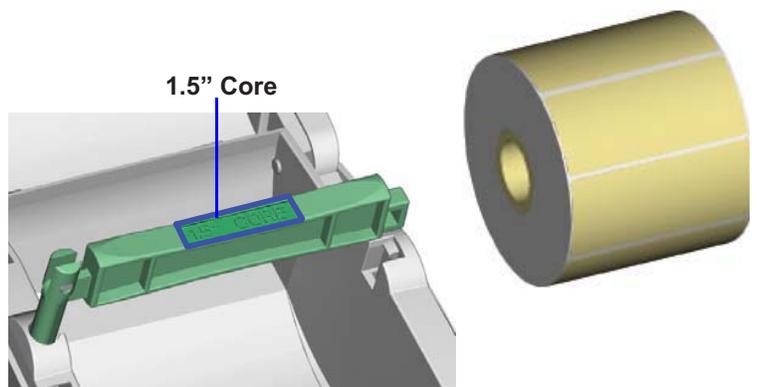
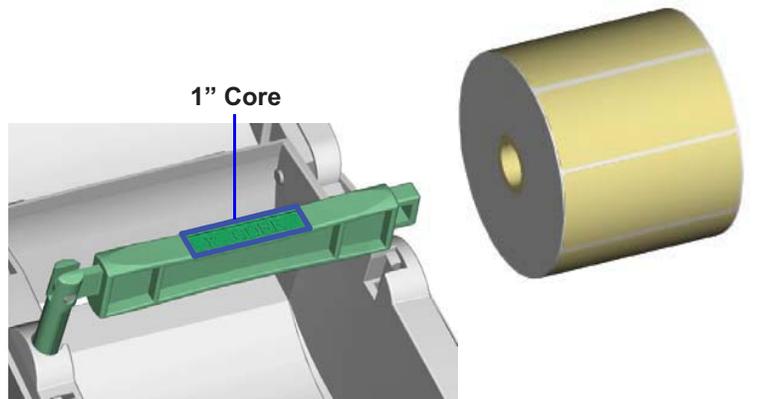
1. Pull the label roll holder to the topmost point, then lift the label roll core upward.
2. Turn the label roll core outward as the figure to the right illustrates.
3. Whirl the label roll core back to the original position.



NOTES: When the lock hole of the label roll core is on the upper side, it applies to a 1" core.

When the lock hole of the label roll core is on the lower side, it applies to a 1.5" core.

You can also distinguish it by the index on the label roll core as shown in the figure to the right.



2.3 PC Connection

To connect the printer to a PC, follow these steps:

1. Ensure the printer is powered off.
2. Take the power cable, plug the cable switch to the power socket, then connect the other end of the cable to the printer power socket.
3. Connect the cable to the USB/Serial port on the printer and an available port on the PC.
4. Power on the printer and the LED light will turn on.



Figure 2-1. PC connection illustration

2.3.1 Store Format - Autoform Capability

1. Design the form in *Label View* and save it as AUTOFR.
2. Generate a command file.
3. Exit *Label View* and bring up the file in Dos Edit (the file is AUTOFR.EJF).
4. Add a line at the beginning and add the interrupt command. This is added by holding down the CTRL key and pressing the P, and then the S keys. Two exclamation points should appear at the beginning of the line.
5. Add before PE the command PA1.
6. Turn the printer off for a minute and then on again to make sure the buffer is empty.
7. Download the form to the printer by choosing Print from Dos Edit.

This is now the form that will be printed every time the print button is pushed. This example works with only one variable field, which means that only gross or only net weight can be printed. Once this form is loaded in the printer the customer cannot use the printer any other label format.

2.3.2 Deleting the AUTOFR Form From the Printer

1. Turn the printer off for a minute, then turn it back on.
2. Send the interrupt command, CTRL S, and then FK“*”.
This will delete all stored forms from the printer memory.

This will open up doors for a simple label application, and works with most devices that are sending a single weight and capable of 9600 baud, 8 data bits.

3.0 Accessories

3.1 Stripper Module

The stripper module separates a label from its backing, allowing the user to apply a label without peeling. To install the stripper module, follow these instructions:

1. Make sure you have the module and two provided screws.
2. Power off the printer before installing the stripper module.

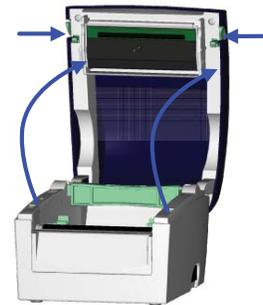
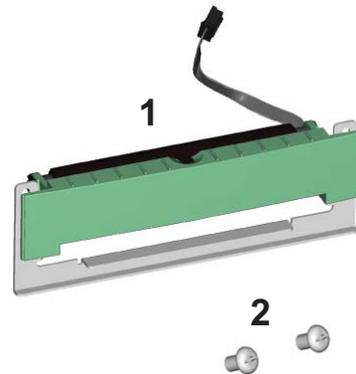


Note Label liner thickness is recommended to be $0.06\text{mm} \pm 10\%$ with basic weight $65\text{g/m}^2 \pm 6\%$.

The maximum width for the stripper is 110 mm.

When using the stripper module, it is recommended to set the stop position to 9 in. QLabel and the E value is 9.

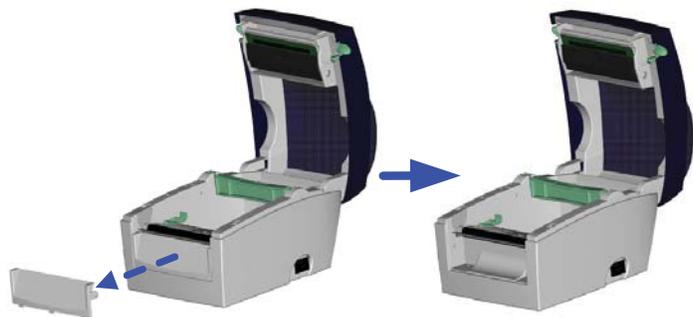
3. Place the printer on a horizontal surface and open the top cover.



4. Remove the front cover piece.

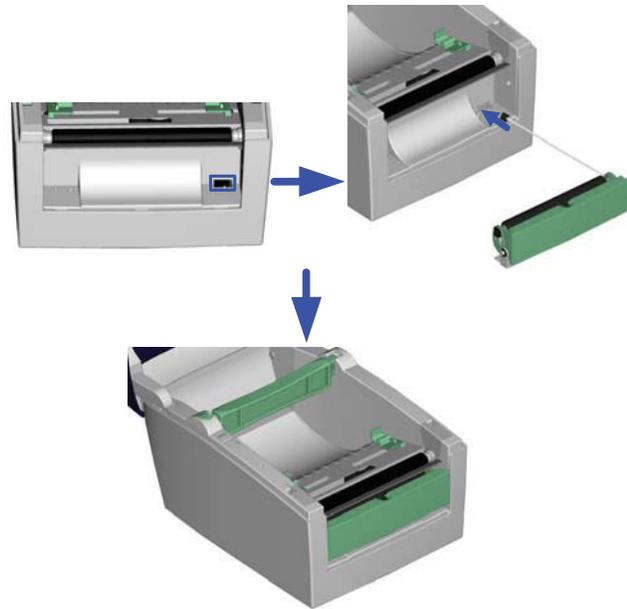


Note You can use a coin or screwdriver to open the front cover piece.

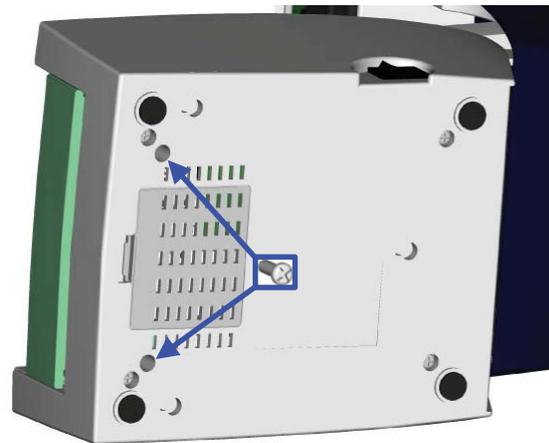


5. Push the stripper connector into the printer through the cable hole as shown in the figure to the right.

6. Place the stripper module on the fillister.

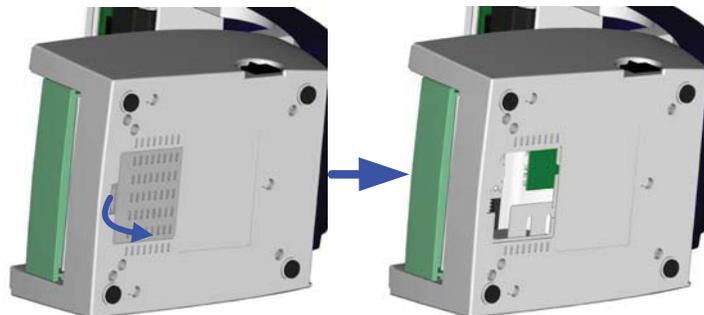


7. Turn the printer around and tighten screws to secure the stripper module.



8. Unlock the bottom case cover to see the main board of the printer.

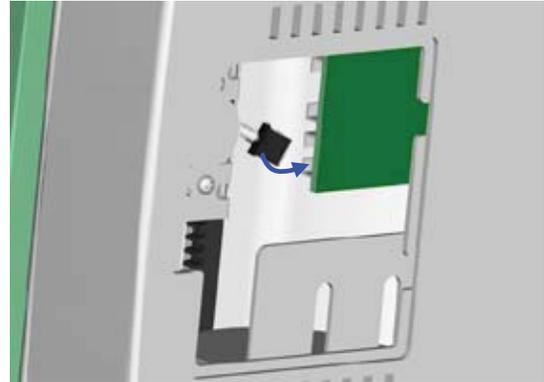
 **Note** You can use a coin or screwdriver to open the bottom case cover.



9. Plug the connector into the main board.

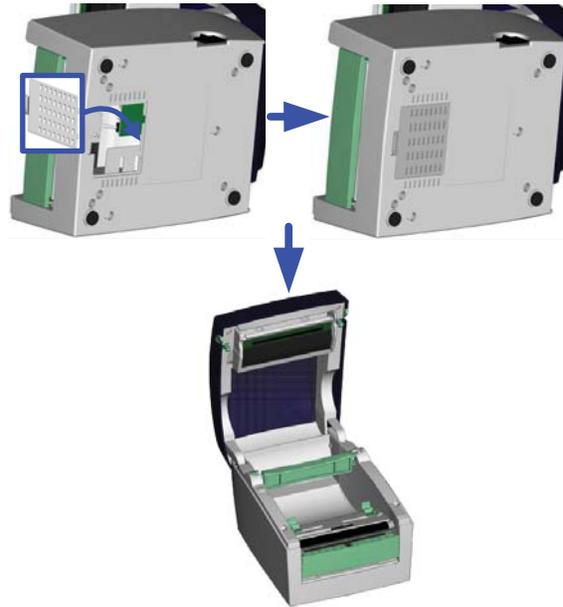


There are two sockets on the main board; one is for the stripper module installation and the other is for the cutter installation. Before plugging the connector into the socket, check the pin first.



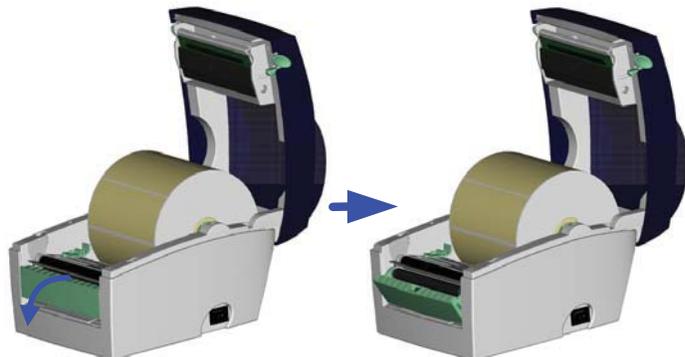
10. Lock the bottom case cover.

11. Turn the printer back to proceed with label installation.

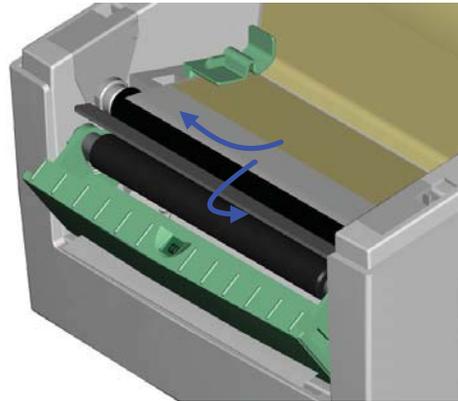


12. Flip the stripper module downward to open it.

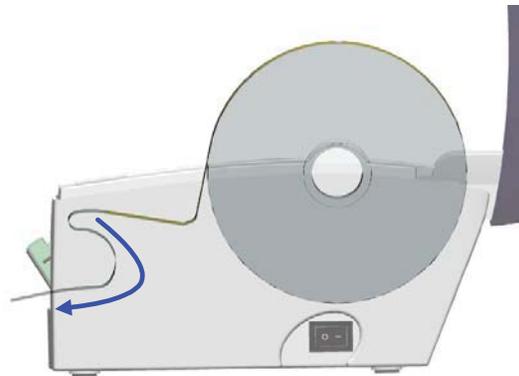
13. Follow the instructions in Section 2.1 on page 4 to install the label.



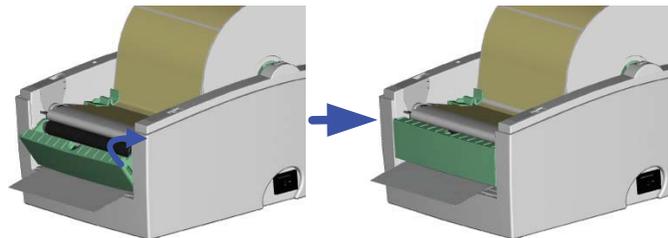
14. Peel off the first label and feed the liner through the roller and the stripper module bar.



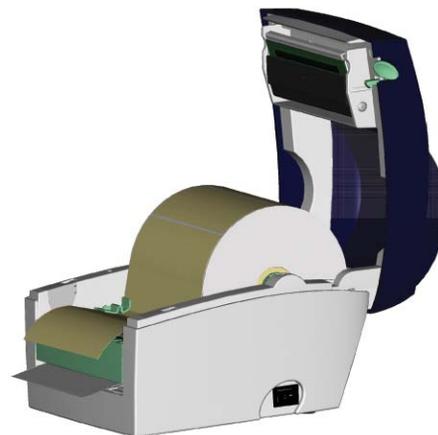
15. Follow the direction shown in the figure to the right to feed the liner across the stripper module.



16. Flip the stripper module upward to close it.



17. Press the FEED key to adjust the position of the label and complete the installation.



3.2 Cutter Installation

The *RL-22DT/RL-42DT* printers feature a photo-eye, which detects gaps between labels. When a gap is detected, the cutter will separate the label from the roll. To install the cutter, follow these instructions:

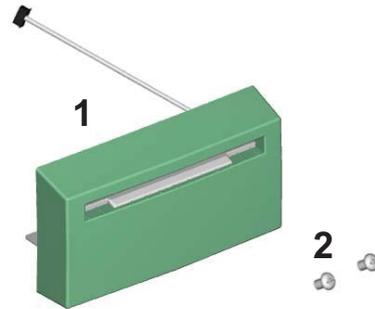
1. Make sure you have the cutter module and two provided screws.
2. Power off the printer before installing the cutter module.



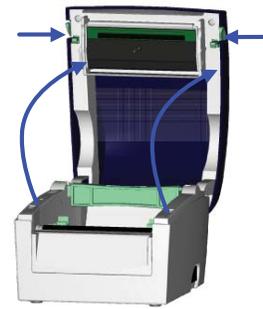
Note

Do not cut self-adhesive labels! The traces of adhesive will pollute the rotary knife and impair safe operation.

The service life of the cutter is 1,000,000 cuts for paper weights up to 120g/m², and 500,000 cuts for paper weights 120g/m² to 170g/m².



3. Place the printer on a horizontal surface and open the top cover.



4. Remove the front cover piece.



Note

You can use a coin or screwdriver to open the front cover piece.

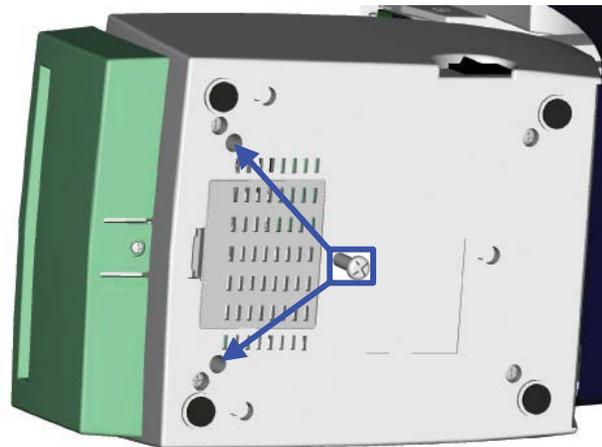


5. Push the cutter connector into the printer through the cable hole as shown in the figure to the right.

6. Place the stripper module on the fillister.

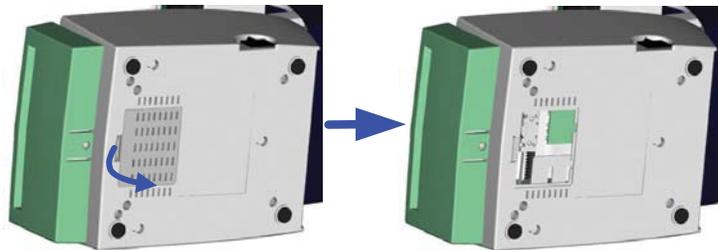


7. Turn the printer around and tighten screws to secure the cutter module.



8. Unlock the bottom case cover to see the main board of the printer.

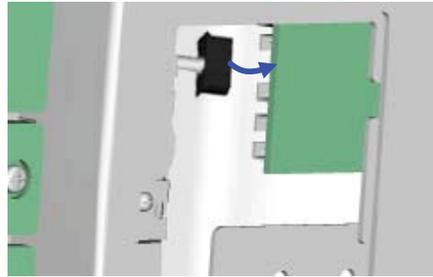
 **Note** You can use a coin or screwdriver to open the bottom case cover.



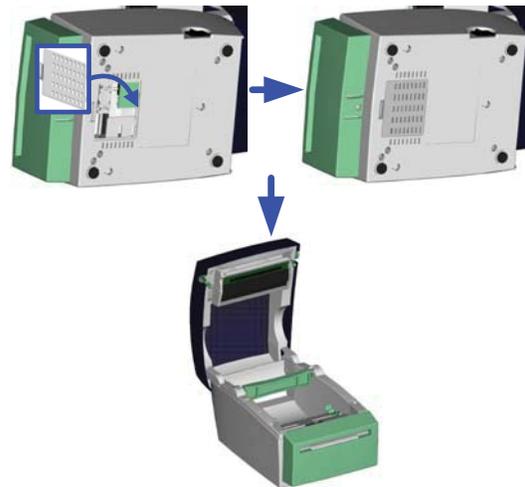
9. Plug the connector into the main board.



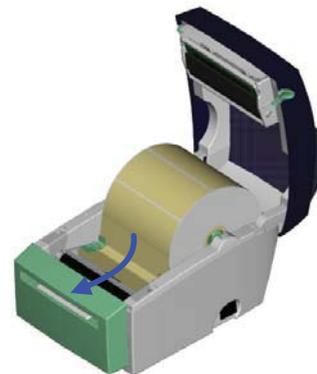
There are two sockets on the main board; one is for the stripper module installation and the other is for the cutter installation. Before plugging the connector into the socket, check the pin first.



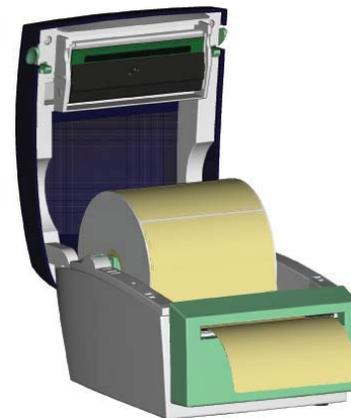
10. Lock the bottom case cover.
11. Turn the printer back to proceed with label installation.



12. Follow the instructions in Section 2.1 on page 4 to install the label.



13. Feed the label through the cutter and press the FEED key to complete the installation.



4.0 Control Panel

The control panel allows access to printer diagnostics and settings. This section provides information on LED status, the FEED key, self-tests, auto-sensing, dump mode, see-through sensor, and error messages.

4.1 LED Status

 **Note** Below descriptions apply only to firmware version G3.000 or later.

Press and hold the FEED key then power on the printer, the printer will beep 3 times and enter into Self-Test status. If you keep holding the FEED key, the status will change in sequence to Auto Sensing Mode, Dump Mode, See-through Sensor on/off, and then return to Self-Test again. These different statuses can change the setting of printer; they are described as follows:

	LED LIGHT	BEEP	STATUS	DESCRIPTION
	Green	1	Standby Mode	Normal status
	Press and hold the FEED key, then power on the printer.			
	Red (flash)	3	Auto-Sensing Mode	Printing self-test page. For operation instructions, refer to Section 4.3 on page 17.
	Orange (flash)	1	Auto-Sensing Mode	The printer is currently in auto-sensing mode. For operation instructions, refer to Section 4.4 on page 17.
	Green (flash)	1	Dump Mode	The printer is currently in dump mode. For operation instructions, refer to Section 4.5 on page 18.
	Orange	1	See-through sensor on/off	Set the see-through sensor on or off. For operation instructions, refer to Section 4.6 on page 18.
	Return to Self-Test			
	Red (flash)			Printer is currently downloading firmware.

Table 4-1.

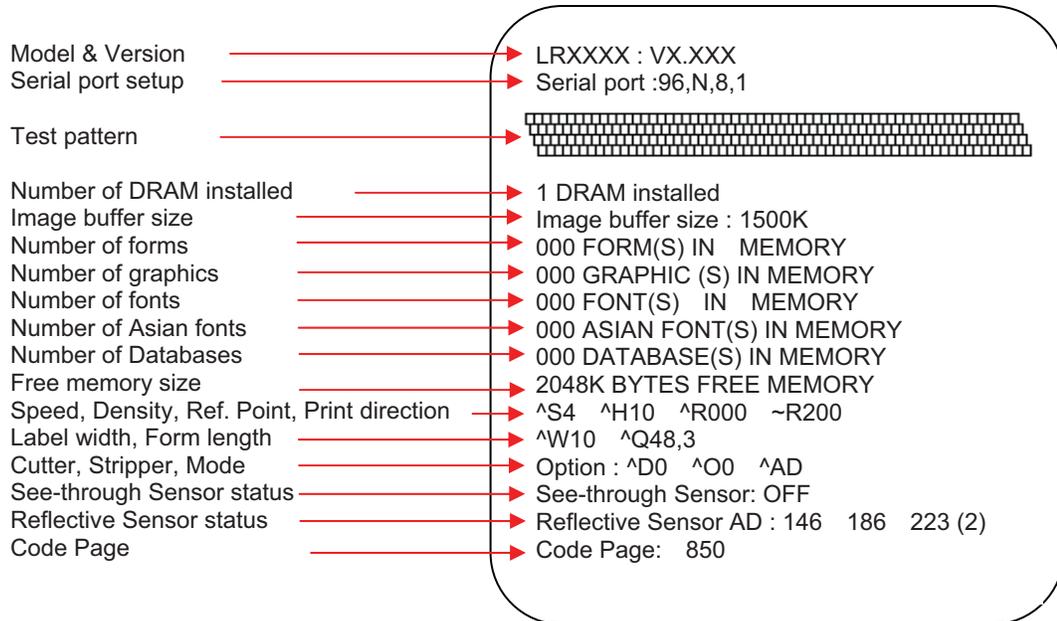
4.2 Feed Key Introduction

After pressing the FEED key, printer will send the media (according to media type) to the specified stop position. When printing with continuous media, pressing the FEED key will feed media out to a certain length. When printing with labels, pressing the FEED key will feed one label at a time. If the label is not sent out in a correct position, please proceed with the Auto sensing (see Section 4.4 on page 17).

4.3 Self-Test

The Self-Test function in a printer will help user to figure out whether the printer is operating normally. In the Self-Test Mode, the printer will print out a test sample as below figure. The printer will go back to standby mode after printing out the test sample. Below are the Self-Test procedures:

1. Power off the printer, then press and hold the FEED key.
2. Power on the printer (while still holding the FEED key); release the FEED key after the printer beeps 3 times.
3. After about 1 second, printer would automatically print out the following. This means the printer is operating normally.



Self-Test includes the internal printer data setting.

Figure 4-1. Self-test print page

4.4 Auto-Sensing

The printer can automatically detect the label and store the result of detecting. By doing this, the printer will calibrate the printing position of the label and the user can print without setting label length. To perform Auto-Sensing:

1. Check if the label is correctly loaded in the printer.
2. Power off the printer, press and hold the FEED key.
3. Power on the printer (while still holding the FEED key). Keep holding the FEED key, wait until the LED flashes red and then release the FEED key. The printer will automatically detect the label size/length and record it.
4. A Self-Test page will be printed after Auto-Sensing is complete. The printer will then return to Standby mode.

4.5 Dump Mode

When the label setting and the print result don't match, it is recommended to go into the Dump Mode to check for mistakes in data transmission between the printer and the PC. Test procedures to enter the Dump Mode are as follows:

1. Power off the printer, press and hold the FEED key.
2. Power on the printer (while still holding the FEED key) and the printer will beep 3 times.
3. Release the FEED key when LED flashes green. Printer will automatically print "DUMP MODE BEGIN." This means the printer is in Dump Mode.
4. Send commands to the printer, and check if the print result matches the commands sent.
5. To cancel (get out of the Dump Mode), press the FEED key, the printer will automatically print out "OUT OF DUMP MODE". This indicates that printer is back in the standby mode. Powering off the printer is another way to exit the Dump Mode.

4.6 See-Through Sensor On/Off

There are two types of sensor in RL22DT/RL42DT printer - Reflective Sensor and See-through Sensor. Users can set one of them as active sensor. By default, the Reflective Sensor is turned on and the See-through Sensor is turned off. However, the reflective sensor may not be able to detect the label gap on special label materials. For example, when printing on labels with thick liner, colored liner, or back graphics, then the see-through sensor would need to be enabled. To turn the See-through Sensor on:

1. Power off the printer, press and hold the FEED key.
2. Power on the printer (while still holding the FEED key) and the printer will beep 3 times. Keep holding the FEED key, wait for the LED light turn to orange and then release the FEED key. The printers will automatically print "SEE-THROUGH SENSOR IS ON". This indicates that the See-Through Sensor is turned on (and the Reflective Sensor is turned off).
3. To turn off the See-Through Sensor, please repeat above-mentioned procedures. Then the printer will print "SEE-THROUGH SENSOR IS OFF" to indicate that the See-Through Sensor is turned off.
4. For checking the status of See-through Sensor (on or off), please perform Auto Sensing once. If LED light is green when doing Auto Sensing, then the See-through Sensor is on. If LED light is orange, then the See-through Sensor is off.



Note When the See-through Sensor is enabled, the Label Sensor must be placed in the center of the printer.

4.7 Error Messages

LED LIGHT	BEEP	DESCRIPTION	SOLUTION
Red	4 beeps twice	Print head is not firmly closed.	Re-open print head and make sure it closes tightly.
Red (flash)	None	Print head temperature is too high.	Wait for the print head temperature to drop to normal range. The printer will go back to standby mode and the LED light will stop flashing.
Red	2 beeps twice	<ul style="list-style-type: none"> • Unable to detect paper • Paper is used up 	<ul style="list-style-type: none"> • Make sure the movable sensor mark is at the correct position. If the sensor is still unable to detect paper, repeat auto-sensing. • Replace with new label roll.
Red	2 beeps twice	Abnormal paper feed	Possible causes: card tags or paper fell into the gap behind the platen roller; can't find label gap/black mark; black mark paper out. Please adjust according to actual usage.
Red	2 beeps twice	Memory is full; printer will print "memory full"	Delete unnecessary data in the memory by powering the printer off/on, then sending the P1 command.
Red	2 beeps twice	Can't find the file; printer will print "Filename cannot be found."	Use "~X4" command to print out all the files, then check whether the file exists and the names are correct.
Red	2 beeps twice	File name is repeated; printer will print "Filename is repeated"	Change the file name and download again, or delete the file.

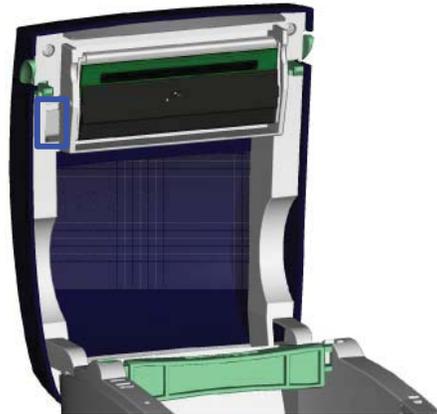
Table 4-2. Error messages

5.0 Maintenance and Adjustments

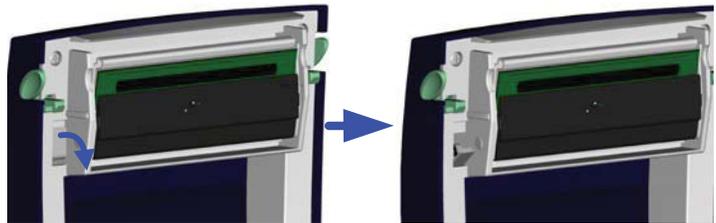
Occasionally, you may need to install a new print head, clean the thermal print head, or adjust the cutter.

5.1 Print Head module Installation/Removal

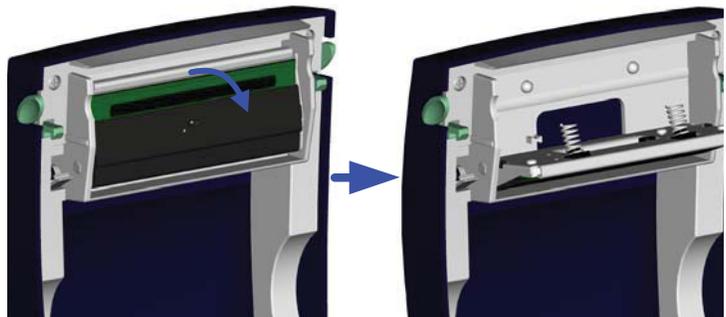
1. Power off the printer before removing or installing the print head.
2. Open the top cover to see the print head lift, which is on the left side of the top cover.



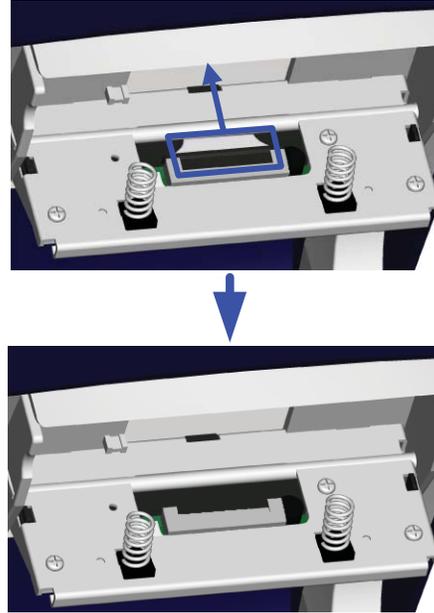
3. Flip the print head lift downward to release it.



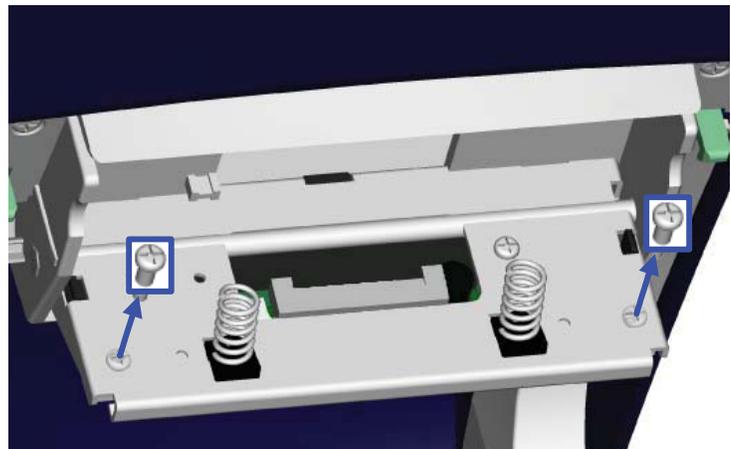
4. The print head bracket can be flipped downward after the print head lift is released.



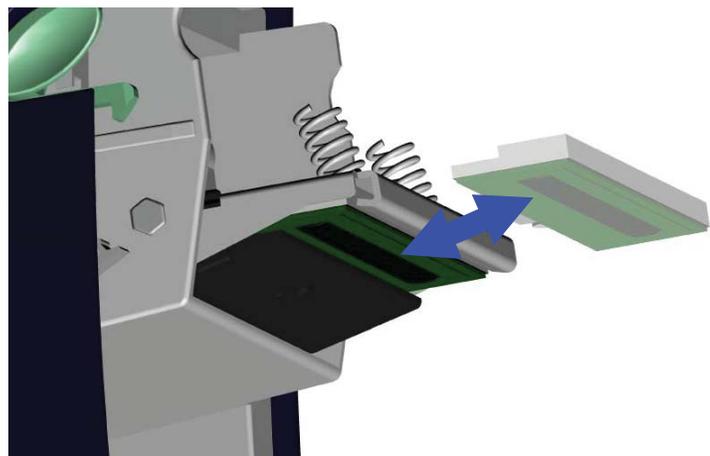
5. Remove the print head connector.



6. Remove the print head screws.



7. From the underneath of the print head bracket, hold the front end of the print head to remove it and install a new one.
8. After the new print head is installed, tighten the print head screws, plug the print head connector, restore the print head bracket, and lock the print head lift to complete installation.
9. Clean the print head to remove any finger prints, etc.



5.2 Thermal Print Head Cleaning

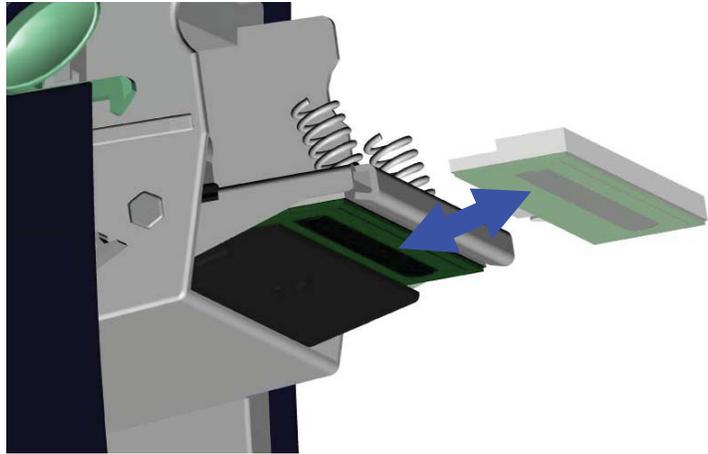
Unclear printouts may be caused by a dusty print head, ribbon stain, or label liner glue. Therefore, when printing, it is necessary to keep the top cover closed. Also, check and prevent paper/label from being stained or dusty to ensure print quality and to prolong the print head life. To clean the print head:

1. Power off the printer.
2. Open the top cover.
3. If there are label pieces or other stains on the print head (see arrow in figure at right), use a soft cloth with industrial use alcohol to wipe away the stain. Make sure there are no metal or hard particles on the print head before cleaning.



Note

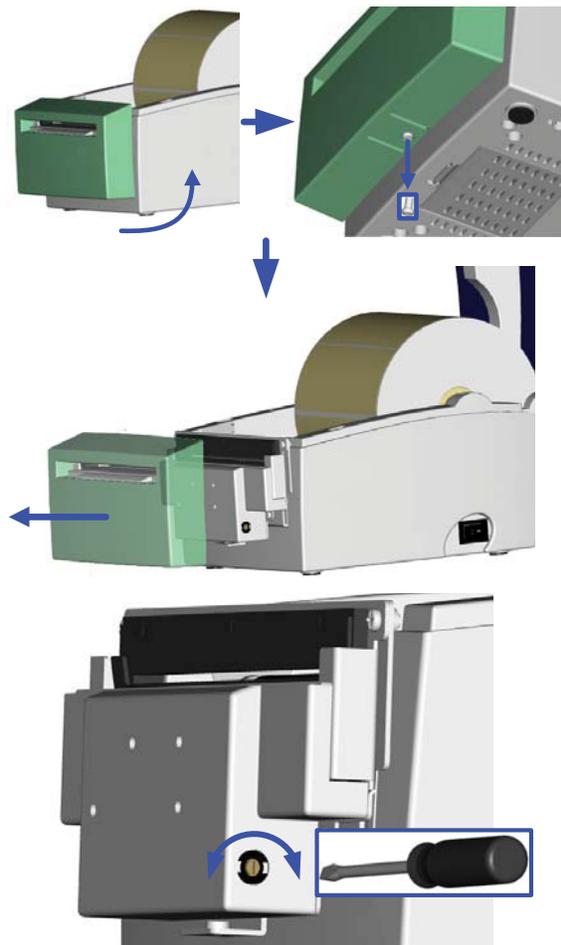
Weekly cleaning for the print head is recommended.



5.3 Cutter Adjustment (Paper Jams)

When using the cutter module, paper jams may occur from time to time. Paper jams can be resolved by adjusting the cutter.

1. Turn the printer around to see the cutter cover screw.
2. Unscrew the cutter cover screw to remove the cutter cover.



3. The cutter adjustment screw is on the side of the cutter. Use a screwdriver to turn the cutter adjustment screw counter-clockwise for releasing the paper-knife of the cutter. Then, remove the jammed label.
4. After the jammed label is removed, turn the cutter adjustment screw clockwise to restore the paper-knife.

6.0 Appendix

6.1 Control Commands

Dump Mode

Syntax	~S,DUMP
Parameter	None
Description	When the printout result doesn't match to the label format setting, it is recommended to go into the Dump Mode to troubleshoot data transmission between the printer and the PC. When in Dump Mode, the printer will not process commands; it will only print out the contents of the commands. This will confirm whether the commands were received correctly. To get out from the Dump Mode, please press the FEED key, and then the printer will automatically print out "OUT OF DUMP MODE" and return to standby mode. You can also power off the printer to exit Dump Mode.

Table 6-1. Dump mode

^Gn - Enable/Disable See-Through Sensor

Syntax	^Gn
Parameter	n = 0, disable see-through sensor n = 1, enable see-through sensor n = 2, Auto Mode
Description	The reflective sensor may not be able to detect the label gap on special label materials. For example, when printing on labels with thick liner, colored liner, or back graphics, the see-through sensor would need to be enabled since the reflective sensor may not work correctly.  Note When the see-through sensor is enabled, the moveable sensor must be placed in the center of the printer.

Table 6-2. See-through sensor

^Hx - Print Darkness Setting

Syntax	^Hx
Parameter	x = 00 ~ 19
Description	Sets the darkness of printing

Table 6-3. Print darkness setting

6.2 Specifications

Feature	RL-22DT	RL-42DT
Resolution	203 dpi (8 dot/mm)	
Print Mode	Direct Thermal	
CPU	32 Bit	
Memory	4MB Flash, 8MB SDRAM	
Print Speed	2 IPS ~ 4 IPS	
Print Length	Max.1727mm (68") Min.12.7mm(0.5")	
Print Width	Max.54 mm (2.12")	Max.108 mm (4.25")
Sensor Type	Adjustable Reflective sensor; Fixed transmissive, center aligned	
Sensor Detection	Type: Label gap and black mark sensing. Detection: Label length auto sensing and / or program command setting	
Media	Label Roll OD: Max. 127mm (5") Core Diameter: 1" (25 mm), 1.5" (40 mm) Width: 15 mm (0.6 ") ~ 60 mm (2.36") Thickness: 0.06~0.20 mm	Label Roll OD: Max. 127mm (5") Core Diameter: 1" (25 mm), 1.5" (40 mm) Width: 25 mm (1 ") ~ 118 mm (4.65") Thickness: 0.06~0.20 mm
Printer Language	EZPL (Firmware downloadable)	
Resident Fonts	9 resident Windows bit mapped fonts (6, 8,10,12,14,18,24,30 and 16X26), can be rotated in 8 orientations and expandable 8 times horizontally and vertically. Scalable Font (Code Page 850 & 852) in 4 orientations.	
Fonts Download	Windows bit mapped font: can be rotated in 8 orientations and expandable 8 times horizontally and vertically. Asian font: can be rotated in 4 orientations and expandable 8 times horizontally and vertically. True Type Font: can be rotated in 4 orientations.	
Image Handling	BMP, PCX, Support ICO, WMF, JPG, EMF file through software.	
Barcodes	Code 39, Code 93, Code 128 (subset A, B, C), UCC/EAN-128 K-Mart, UCC/EAN-128, UPC A / E (add on 2 & 5), I 2 of 5, I 2 of 5 with Shipping Bearer Bars, EAN 8 / 13 (add on 2 & 5), Codabar, Post NET, EAN 128, DUN 14, MaxiCode, HIBC, Plessey, Random Weight, Telepen, FIM, China Postal Code, RPS 128, PDF417, Datamatrix code & QR code	
Interfaces	Serial port: RS-232 (Baud rate : 4800 ~ 115200 , XON/XOFF , DSR/CTS) USB port: V2.0	
Control Panel	One Tri-color LED: Power Function Key: FEED	
Power	Auto Switching 100/240VAC, 50/60 Hz	
Environment	Operation: 41°F to 104°F (5°C to 40°C) Storage: -4°F to 122°F (-20°C to 50°C)	
Cert. Approval	CE, FCC Class A, CCC, CB, cUL, BSMI	
Humidity	Operation: 30-85%, non-condensing. Free air. Storage: 10-90%, non-condensing. Free air.	
Printer Dimensions	Length: 218 mm (8.58") Height: 172 mm (6.77") Width: 100 mm (3.94") Weight: 1.2 Kg	Length: 218 mm (8.58") Height: 166 mm (6.53") Width: 168 mm (6.61") Weight: 1.5 Kg
Options	Rotary Cutter Module Stripper Module RTC Internal Ethernet Adapter Card	Rotary Cutter Module Stripper Module Internal Ethernet Adapter Card Parallel port

Table 6-4. Printer specifications

6.3 Compliance Statements

FCC COMPLIANCE STATEMENT FOR AMERICAN USERS

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 harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

EMS AND EMI COMPLIANCE STATEMENT FOR EUROPEAN USERS

This equipment has been tested and passed with the requirements relating to electromagnetic compatibility based on the standards EN 55022:1998+A1:2000+A2:2003, CISPR 22, Class A EN 55024:1998+A1:2001+A2:2003, IEC 61000-4 Series EN 61000-3-2 / 2000 & EN 61000-3-3 / 1995. The equipment also tested and passed in accordance with the European Standard EN55022 for the both Radiated and Conducted emissions limits.

RICE LAKE SERIES TO WHICH THIS DECLARATION RELATES IS IN CONFORMITY WITH THE FOLLOWING STANDARDS

EN55022 : 1998, CISPR 22, Class A / EN55024 : 1998 IEC 61000-4 Serial / EN61000-3-2 : 2000 / EN 61000-3-3 : 1995 / CFR 47, Part 15/CISPR 22 3rd Edition : 1997, Class A / ANSI C63.4 : 2001 / CNS 13438 / IEC60950-1 : 2001 / GB4943 : 2001 / GB9254 : 1998 / GB17625.1 : 2003 / EN60950-1 : 2001



Warning

Danger of explosion if battery is incorrectly replaced

Replace only with the equivalent type recommended by the manufacture.

Dispose of used batteries according to the manufacturer's instructions.

6.4 Serial Interface

The serial default setting is: 9600 baud rate, no parity, 8 data bits, 1 stop bit, and XON/XOFF protocol.



The total current output from the serial port cannot exceed 500mA.

PC		PRINTER
DB9 Socket		DB9 Plug
---	1_____1	+5V, max 500mA
RXD	2_____2	TXD
TXD	3_____3	RXD
DTR	4_____4	N/C
GND	5_____5	GND
DSR	6_____6	RTS
RTS	7_____7	CTS
CTS	8_____8	RTS
RI	9_____9	N/C

Table 6-5. RS232 Housing (9-pin to 9-pin)

6.5 USB Interface

RL-22DT/RL-42DT printers use a Type B connector type.

Pin Number	1	2	3	4
Function	VBUS	D-	D+	GND

Table 6-6. USB interface Specs

6.6 Internal Interface

UART1 wafer		Ethernet module
N.C	1_____1	N.C
TXD	2_____2	RXD
RXD	3_____3	TXD
CTS	4_____4	RTS
GND	5_____5	GND
RTS	6_____6	CTS
E_MD	7_____7	E_MD
RTS	8_____8	CTS
E_RST	9_____9	E_RST
+5V	10_____10	+5V
GND	11_____11	GND
+5V	12_____12	+5V

Table 6-7. Internal interface specs

6.7 Troubleshooting

Symptom	Remedy
LED light is not lit	Check the power connector
LED light indicates error messages after printing stops	<ul style="list-style-type: none"> Check for software setting or program command errors Replace with suitable label Check if label may run out Check if label is jammed/tangled up Check if mechanism is closed (Thermal Print Head not positioned correctly) Check if sensor is blocked by label Check for abnormal cutter function or of no actions (if cutter is installed)
Nothing is printed on label	<ul style="list-style-type: none"> Check if label is placed upside down or if label is not suitable for the application>Select the correct printer driver Select the correct label and print type
Label is jammed	Clean the label jam; if the label is stuck on the thermal print head, remove by using a soft cloth and alcohol
Only some of the contents is printed	<ul style="list-style-type: none"> Check if label is stuck on the Thermal Print Head Check if application software has errors Check if start position setting has errors/paper width/length Check if power supply is correct
Part of the label isn't printed completely	<ul style="list-style-type: none"> Check if Thermal Print Head is stained or dusted Use internal command "~T" to check Thermal Print Head can print completely Check the media quality/size
Printout is not in the desired position	<ul style="list-style-type: none"> Check if sensor is covered by paper or dust Check if liner is suitable for use, please contact reseller for more information Check if label roll edge is aligned with Label Width Guide
Page skipping occurs	<ul style="list-style-type: none"> Check if error occurs on label height setting Check if sensor is covered by dust
Unclear printout	<ul style="list-style-type: none"> Check print darkness setting Check if Thermal Print Head is covered with glue or stain
Label isn't cut straight	Check if label is set up straight
Label isn't cut	Make sure label thickness does not exceed 0.16 mm
Label couldn't feed or unexpected cutting occurs	<ul style="list-style-type: none"> Check if cutter is installed properly Check if paper feed is working normally
The stripper module isn't working correctly	<ul style="list-style-type: none"> Check if stripper module sensor is covered with dust Check if label is installed properly

Table 6-8. Troubleshooting

RL-22DT/42-DT Limited Warranty

Rice Lake Weighing Systems (RLWS) warrants that all RLWS equipment and systems properly installed by a Distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by RLWS. All systems and components are warranted against defects in materials and workmanship for two years.

RLWS warrants that the equipment sold hereunder will conform to the current written specifications authorized by RLWS. RLWS warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, RLWS will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

- Upon discovery by Buyer of such nonconformity, RLWS will be given prompt written notice with a detailed explanation of the alleged deficiencies.
- Individual electronic components returned to RLWS for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in a publication, *Protecting Your Components From Static Damage in Shipment*, available from RLWS Equipment Return Department.
- Examination of such equipment by RLWS confirms that the nonconformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; RLWS shall be the sole judge of all alleged non-conformities.
- Such equipment has not been modified, altered, or changed by any person other than RLWS or its duly authorized repair agents.
- RLWS will have a reasonable time to repair or replace the defective equipment. Buyer is responsible for shipping charges both ways.
- In no event will RLWS be responsible for travel time or on-location repairs, including assembly or disassembly of equipment, nor will RLWS be liable for the cost of any repairs made by others.

THESE WARRANTIES EXCLUDE ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER RLWS NOR DISTRIBUTOR WILL, IN ANY EVENT, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

RLWS AND BUYER AGREE THAT RLWS'S SOLE AND EXCLUSIVE LIABILITY HEREUNDER IS LIMITED TO REPAIR OR REPLACEMENT OF SUCH GOODS. IN ACCEPTING THIS WARRANTY, THE BUYER WAIVES ANY AND ALL OTHER CLAIMS TO WARRANTY.

SHOULD THE SELLER BE OTHER THAN RLWS, THE BUYER AGREES TO LOOK ONLY TO THE SELLER FOR WARRANTY CLAIMS.

NO TERMS, CONDITIONS, UNDERSTANDING, OR AGREEMENTS PURPORTING TO MODIFY THE TERMS OF THIS WARRANTY SHALL HAVE ANY LEGAL EFFECT UNLESS MADE IN WRITING AND SIGNED BY A CORPORATE OFFICER OF RLWS AND THE BUYER.

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