Pro Label International, Inc.

ELECTRONIC HAND LABELLER

INSTRUCTION MANUAL

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Contents

1 Introduction

The labeller is robust by design and simple in construction. It contains few moving parts and has an open frame so that it requires minimal maintenance. It offers a fast, efficient and trouble-free hand labelling solution.

The labeller is electronically operated. It is activated by flexing the arm and dragging it across the labelling surface towards the operator. Under normal operating conditions it will apply up to six standard labels per second. The labeller comes standard with a multifit reel assembly that will take 17 to 25 mm tapes (larger available on request). It will accept 5” (125 mm) diameter rolls on a 2” (50.8 mm) I.D. core. This size roll will give a capacity of approximately 5,000 standard labels. The design is well balanced and ergonomically designed for ease of use.

A wide variety of materials have been chosen for the construction of the labeller, with characteristics chosen to decrease maintenance and to increase durability. Labeller operation is by photo switches, not the traditional micro switches which contain moving parts that can wear out and break. The label reel discs are made from polycarbonate which is practically unbreakable. All “plastic parts” are manufactured from onyx which is a combination of nylon and chopped carbon fibers helping reduce the overall weight of the labeller whilst ensuring maximum strength. Marine grade aluminium is used to fabricate the labeller chassis.

The labeller utilizes a M12 lithium-ion 12-volt battery which is compact in size and contains enough charge to power the labeller for up to 6 hours. Higher amperage M12 batteries can also be purchased which can increase battery life up to 12 hours if required.

Figure 1: LB8 labeller

2 Assembly

Unbox the labeller and make sure that you have all the following components before proceeding:

1 – LB8 hand labeller

1 – Battery charger

2 – M12 batteries

1 – 2mm L key

1 – Roller applicator (hard)

1 – Label arm with peel bar

Then remove from carton and inspect for any damage that may have occurred during shipping. Retain the carton for future storage. Once ready insert the M12 battery into the labeller handle through the bottom. Check the operating action by flexing the labeller arm. The labeller motor should operate.

Figure 2: LB8 Labeller open carton

3 Loading Labels

3.1 Separating the label reel discs

Hold the inner disc and rotate the outer disc in a clockwise direction. The reels will separate. (Figure 3).

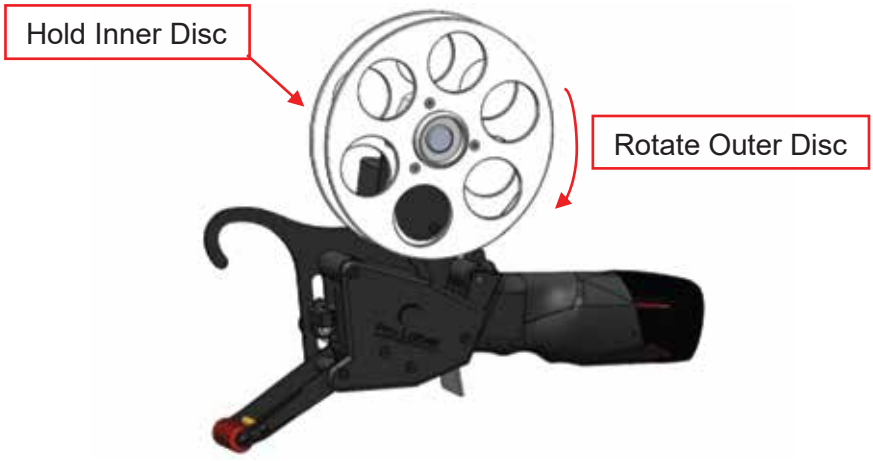


Figure 3: Separating label reel discs.

3.2 Loading the label roll onto the outer disc

Hold the outer disc of the labeller with the spigot facing upwards.
Place the roll of labels onto the spigot with the loose end leading away from you on the left hand side of the roll. (Figure 4)

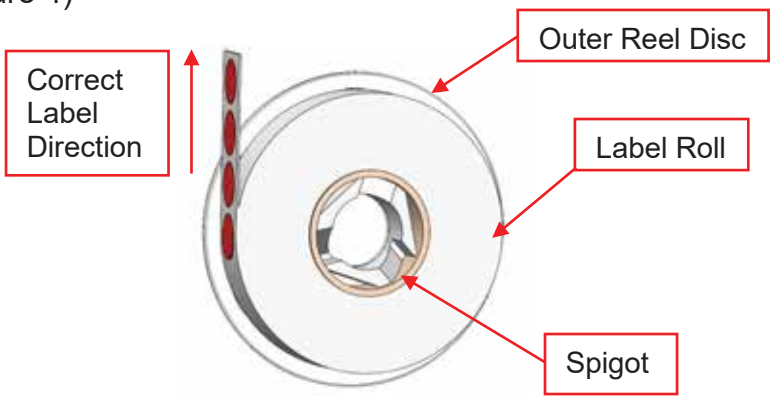


Figure 4: Loading the label roll onto the outer disc.

3.3 Assembling the label reel

Place the two label reel discs together.
Hold the inner disc and rotate the outer disc while pressing the two together. Ensure that the two discs are fully engaged. (Figure 5)

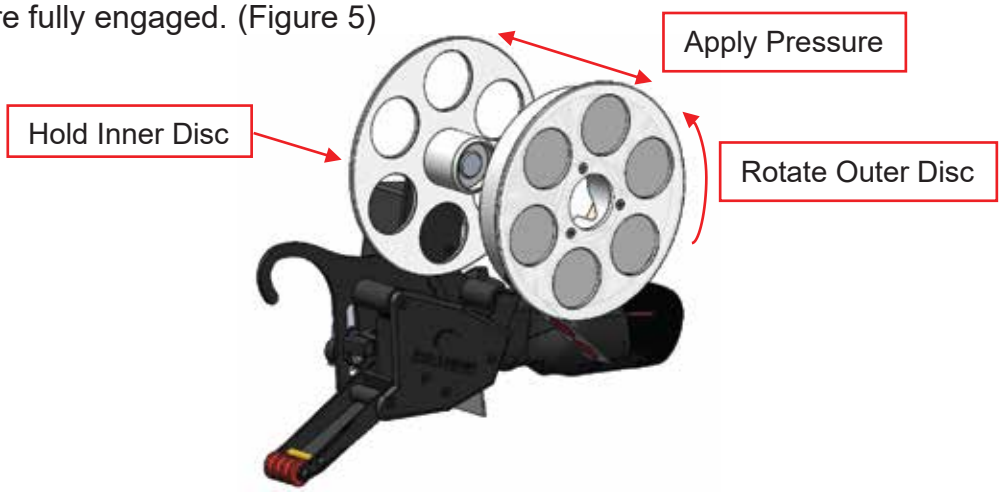


Figure 5: Assembling the label reel.

3.4 Feeding the tape into the labeller

Extend approximately 20 cm of tape from the roll so that it feeds out towards the handle side of the labeller. (Figure 6)

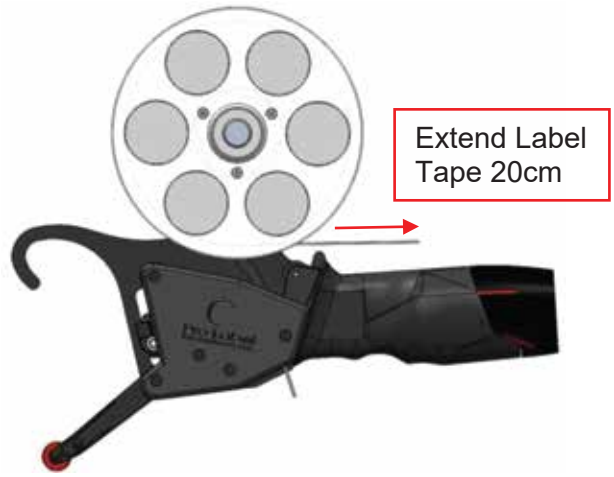


Figure 6: Feeding tape step 1.

Feed the tape in through the takeup roller and extend the tape approximately 10 cm past the front roller. Then slide the tape into the side of the label sensor, and feed under the arm roller. (Figure 7)

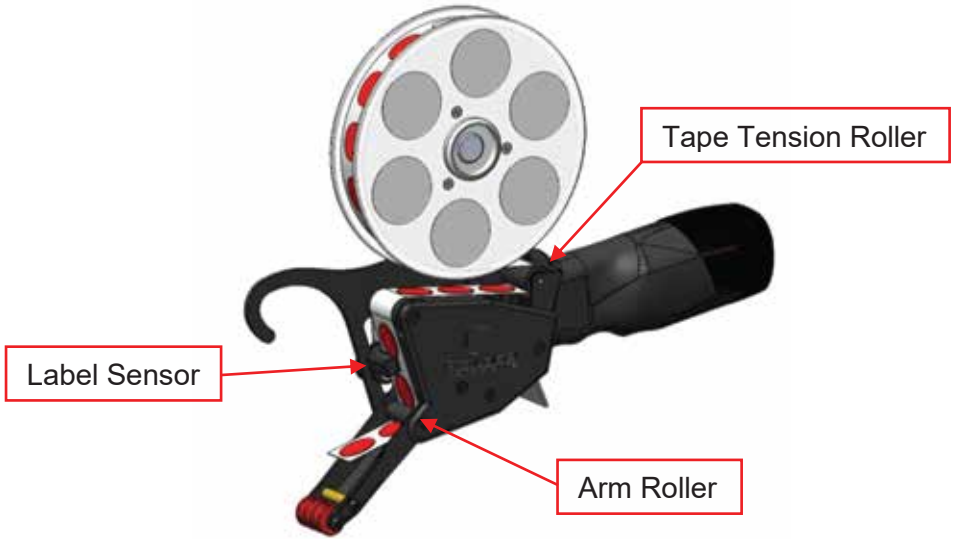


Figure 7: Feeding tape step 2.

Continue to feed the tape under the brass guide roller and the roller applicator and extend approximately 15 cm before folding the tape back under the arm. (Figure 8)

Figure 8: Feeding tape step 3.

Place the end of the tape into the drive area
With the power on, flex the labeller arm to start the motor and slide the tape into the drive. (Figure 9)
The tape will automatically feed through the drive and out past the tape cutter.
To manually feed the tape, turn the pinch roller with your thumb while feeding the tape into the drive area.

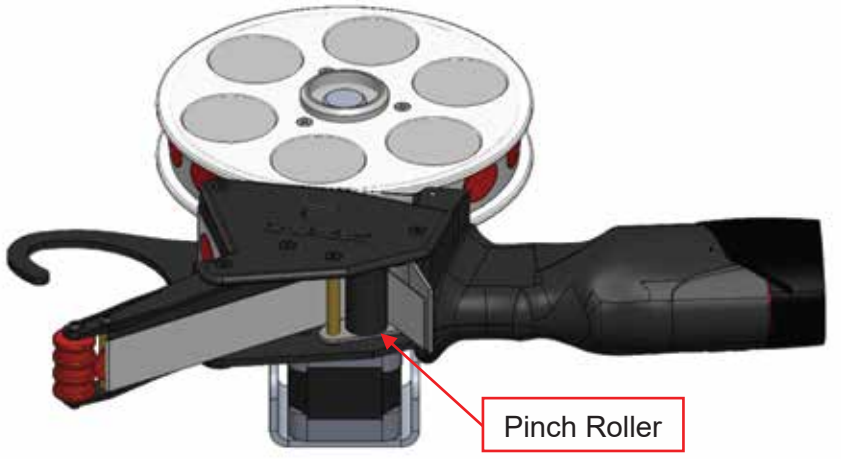


Figure 9: Feeding tape step 5.

Trim excess tape by tearing it across the tape cutter. (Figure 10)
NOTE: Ensure that the tape has loaded correctly and is not twisted or caught in the drive. If this occurs, clear the drive as in Section 2 of “UNLOADING TAPE”, remove the damaged section of tape and reload the tape.

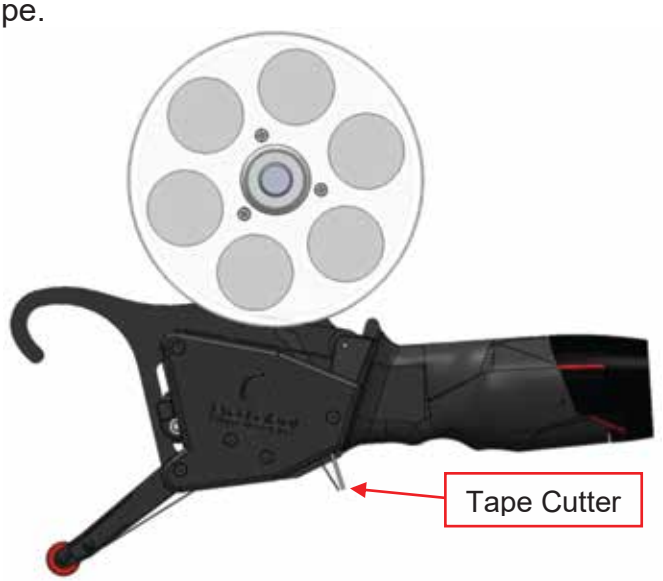


Figure 10: Feeding tape step 8.

3.5 Setting the label presentation

Move the label sensor up or down so that 50% of label presentation exists. (Figure 11)

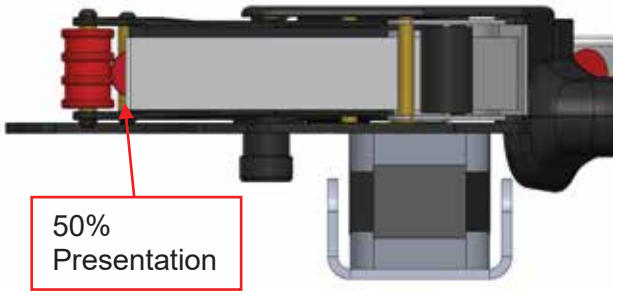


Figure 11: Setting the label presentation.

3.6 Label Feeding Pattern Overview

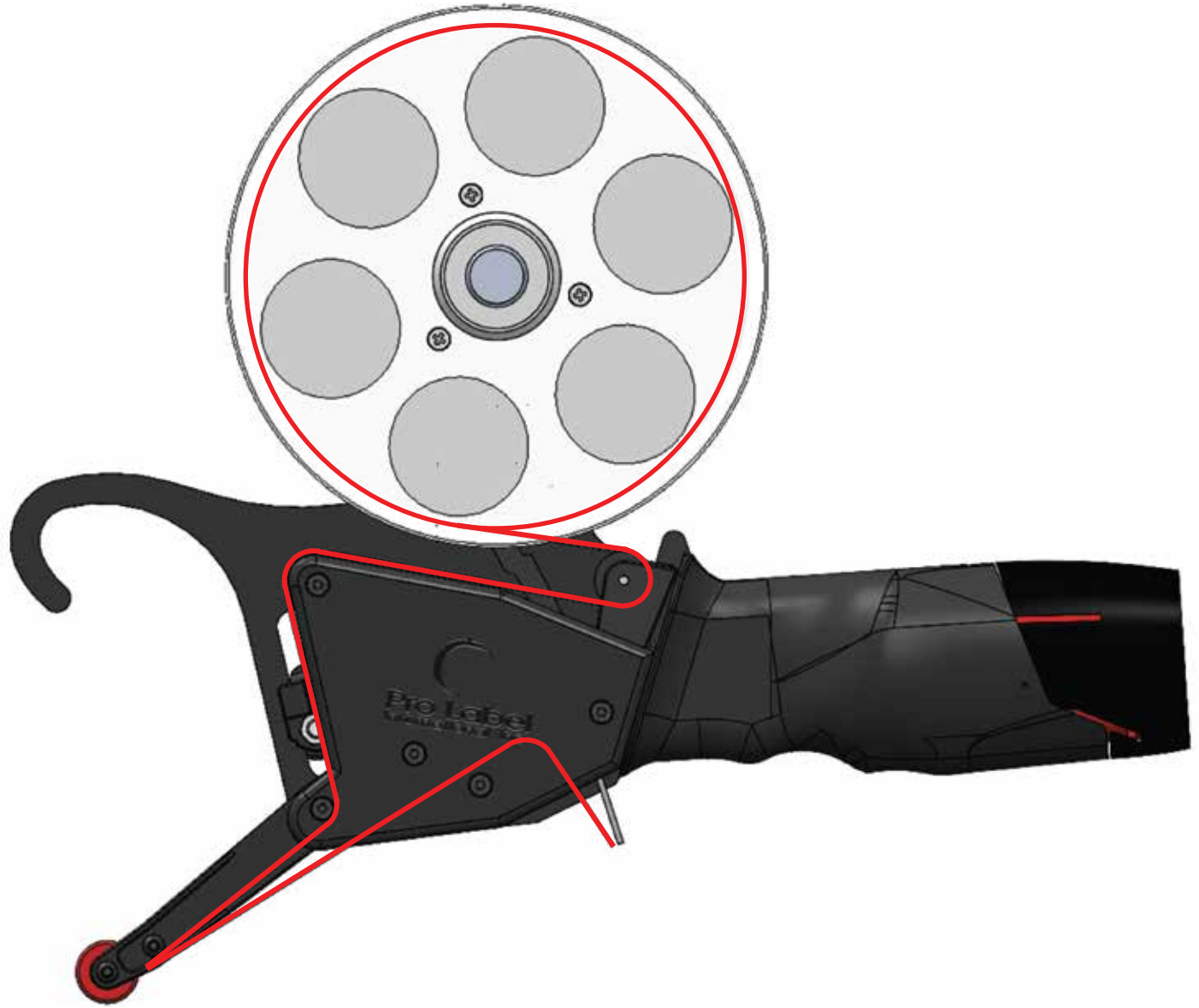


Figure 12: Label feeding pattern overview

4.0 Unloading Labels

Tear tape on the tape cutter. (Figure 13)

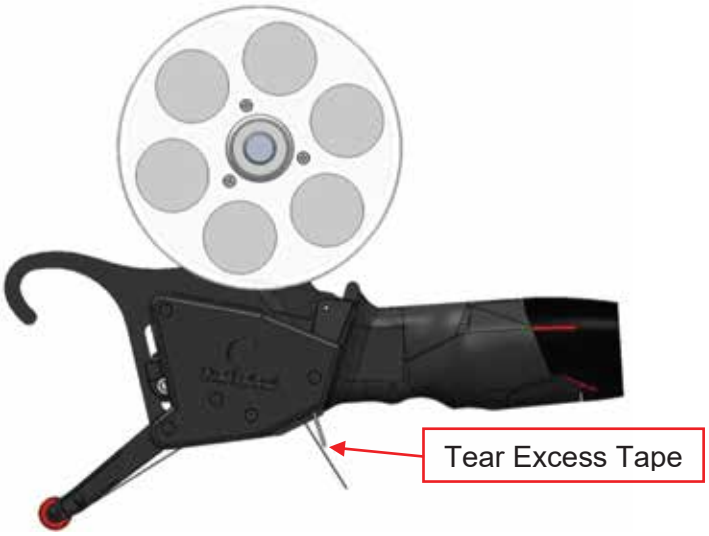


Figure 13: Unloading labels step 1.

Push the tape cutter away from the handle with a thumb to release the pressure on the pinch roller and free the grip on the tape. (Figure 14)

Figure 14: Unloading labels step 2.

While the tape cutter is depressed, rotate the reel assembly clockwise to re-roll the tape. (Figure 15)

Figure 15: Unloading labels step 3.

5.0 Labeller Maintenance

The following items may require replacement due to wear and tear on the labelling machine.

5.1 Replacing the Roller Applicator

Remove both of the socket head screws from the labeller arm by using two Allen Keys (supplied).

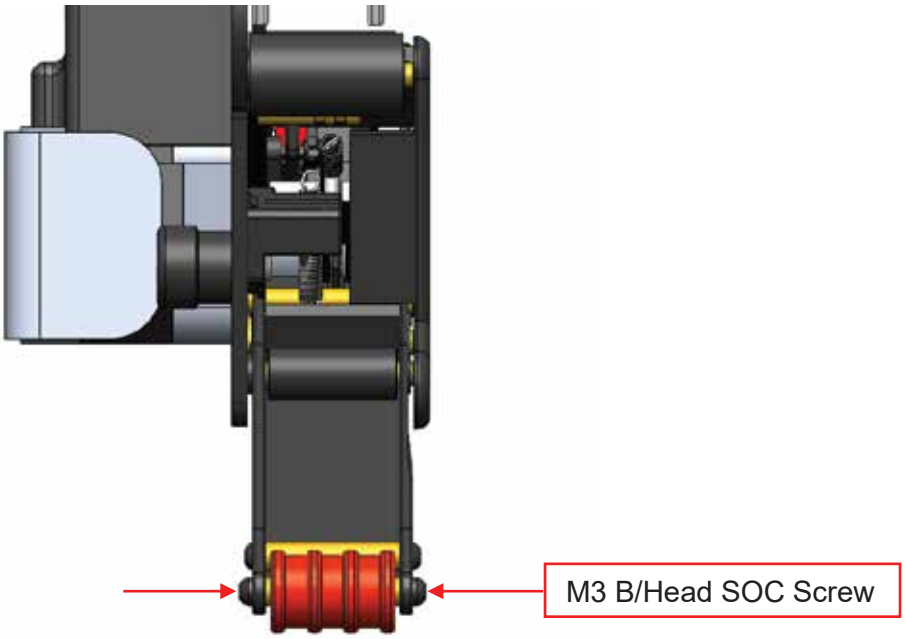


Figure 16: Replacing the roller applicator step 1.

Remove the sleeve from the applicator and fit to new applicator.

Figure 17: Replacing the roller applicator step 2.

Re-assembly is the reverse procedure.

5.2 Replacing the Arm

Remove the front cover using an Allen Key. (Figure 18)

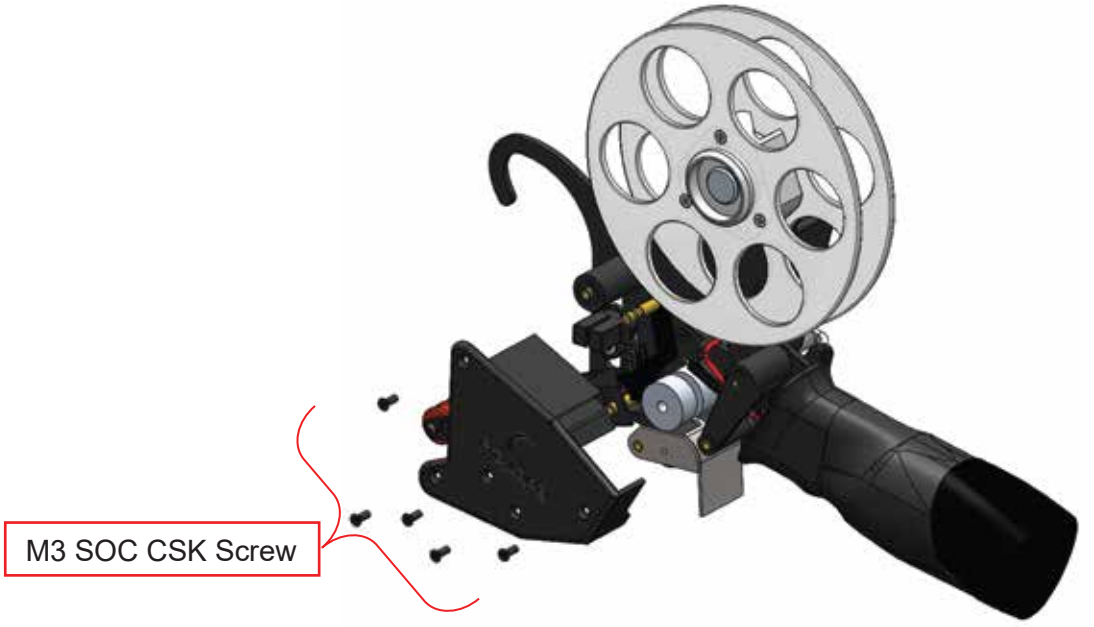


Figure 18: Removing front cover.

Remove the two springs from the spring pedestal, taking care not to lose the springs. NOTE: Do not stretch the springs. Remove the screw which will allow the spring pedestal to be removed. The start sensor can then be moved out of the way. The arm can now be removed, taking care not to lose the arm roller. (Figure 19)

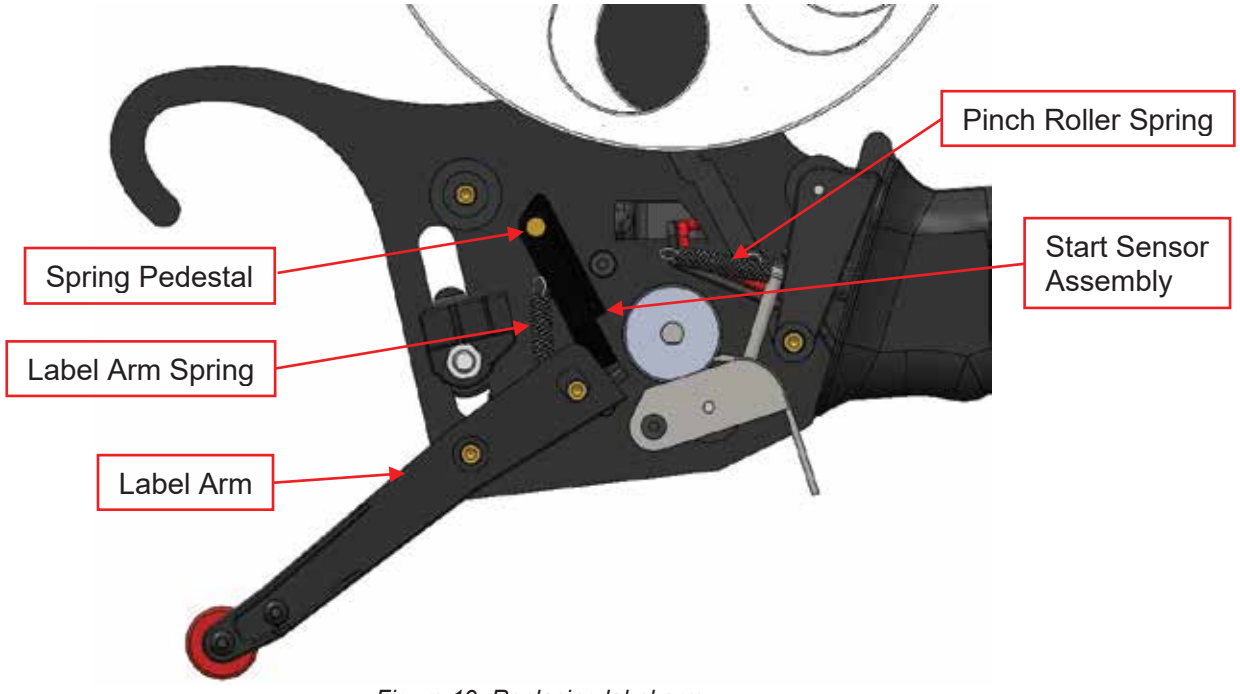


Figure 19: Replacing label arm.

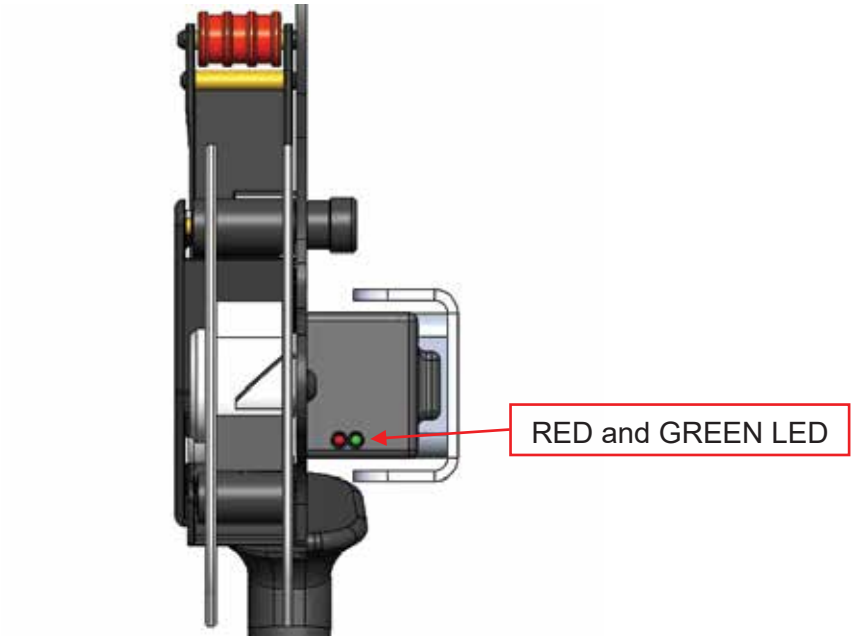
Remove the spring from the arm and the roller applicator assembly as per the first two steps of "*Replacing the Roller Applicator*" Reassembly is the reverse procedure, taking note of the following points.

- Ensure the arm roller is fitted when arm is replaced onto the labeller
- When replacing / realigning the start sensor, ensure that the little dimple on the sensor bracket is engaged into the body.
- When replacing the pinch roller spring, fit to the pedestal first and then to the pinch roller bracket arm, *making sure that the spring is not stretched*.

6.0 Battery Charging Instructions

6.1 Charge Indicator

When the red LED starts to flash this is indicating that the battery requires charging. Eventually the red LED will stop flashing as a result of the battery being completely empty and requires charging. The green LED will only turn on every time a label is dispensed. When the battery is completly empty the green LED will also not turn on.



6.2 Battery Charger Operating Instructions

The indicator light is GREEN Sustained light when the charger does not have a battery. When a battery is placed within the charger it will automatically charge, when it detects that the battery is not fully charged. At the same time, the indicator light turns to green flashing. When the battery is full charged, the green Flashing turns to constant green light. If the battery is placed within the charging port, and the red light and green light is flashing back and forth non-stop, this is indicating that the battery is damaged.

If the battery is placed within the charging port, and the red light is constantly on it is indicating that the charger is faulty.

Figure 20: Battery charger

6.3 Battery Charger Safety Rules

Protect the battery charger from rain and moisture. Water penetration in a battery charger increases the risk of electric shock.

Do not charge other batteries, The battery charger is suitable only for charging matched lithium-ion batteries within the listed voltage range, otherwise there is danger of fire and explosion.

Keep the battery charger clean. Contamination may increase the risk of electric shock.

Before using, always check the charger, cable and plug. If defects are detected, do not use the charger; never open the charger. Instead, have it opened and repaired only by qualified personnel who will use original spare parts. Damaged chargers, cables and plugs increase the risk of electric shock.

Do not operate the charger on easily inflammable surface (e.g. paper, textiles, etc.) or combustible surroundings. The heating of the charger during charging may cause a fire.

Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.

Disconnect charger from the power supply when not in use. This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening.

Risk of electric shock. Do not touch the un-insulated portion of output connector or un-insulated battery terminal.

7.0 Updating Software

Remove the LB8's electronics cover using an Allen Key. (Figure 21)

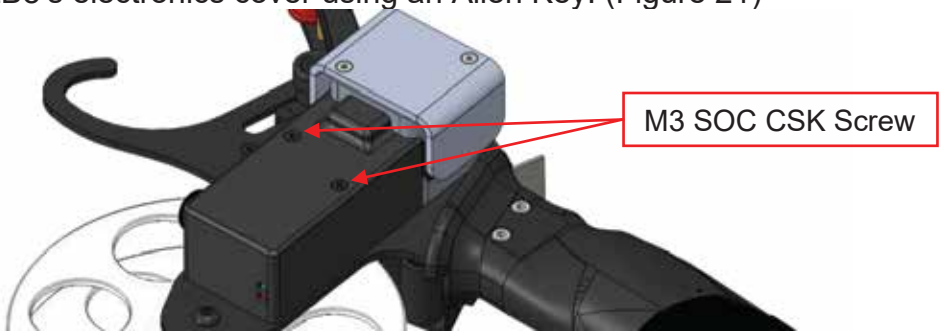


Figure 21: Removing electronics cover.

The small red circuit board on the labeller has a USB port. Place a fresh battery in the labeller and connect a cable from this to an available USB port on your PC. The cable required is USB A (PC end) to micro-USB.

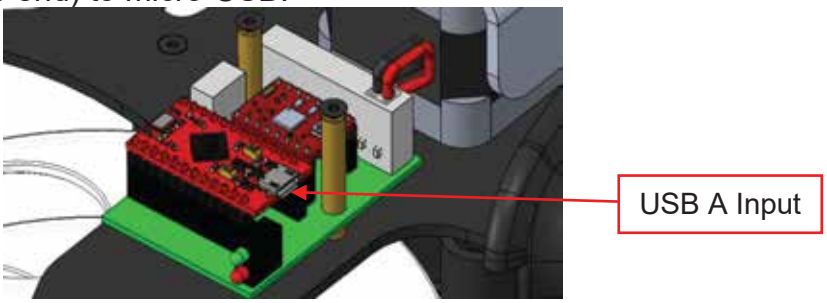


Figure 22: USB A port

The new software will be sent via email. Download the new software and unzip the "LB8 Updater" onto a convenient folder on your PC. Open the new folder "LB8 Updater".

Double click "Update Software". Watch the program run. It should identify two COM ports on the PC, then flash the software on the LB8.

If it ends with "avrdude done. Thank you. Press any key to continue" then it was successful. Press a key, unplug the cable and try out the LB8. If errors were displayed, please contact your local dealer for further instructions.

8.0 Parts List

Table 1: LB8 parts list

ITEM NO.	Description	Part No	Drawing No	QTY.
1	BODY HAND LABELLER	LB8-0001	B-02-081	1
2	STEPPING MOTOR	LB7-0109	A5081	1
3	KNURLED DRIVE ROLLER	LB7-0006	A4911	1
4	SCREW CS SOC HD ZP M3 X 40	RFF_LZ00340 (MODIFIED)	N/A	2
5	SCREW CS SOC HD BL M3 X 8	RFF_LZB00308	N/A	18
6	BRAKE ARM	LB7-0021	A4922	1
7	TAPE TENSION BRACKET	LB8-0009	A5604	1
8	PINCH ROLLER/TAKE UP SHAFT	LB7-0024	A4946	1
9	GUIDE ROLLER	LB7-0023	A4928	1
10	COVER PEDESTAL	LB7-0014	A4915	5
11	PINCH ROLLER ASSEMBLY	LB7-0105	A4960	1
12	M5 BRASS WASHER	RFF_EFB005	N/A	1
13	LABEL ARM WITH PEEL BAR 17-25MM	LB7-0015	A4921	1
14	APPLICATOR SPINDLE	LB7-0017	A4917	2
15	APPLICATOR SLEEVE	LB7-0019	A4931	2
16	10 DIAM X 25MM GUIDE ROLLER	LB7-0018	A4927	1
17	ROLLER APPLICATOR (SOFT POLY)	LB7-0059	N/A	1
18	M3 X 6 BHSS B/Z	RFF_HZB00306	N/A	4
19	ANGLED BRACKET	LB7-0027	A4932	1
20	START SENSOR	LB7-0037	A4935	1
21	SPRING PEDESTAL	LB7-0028	A4916	1
22	ADJUSTMENT KNOB	LB7-0039	A4936	1
23	BRAKE ARM SPRING	LB7-0034	A4963	2
24	SPRING MOUNT	LB8-0010	A5605	1
25	TAPE REEL ASSY 17-25MM	LB7-0104	B-4-13	1
26	TAPE REEL SPINDLE	LB7-0005	A4910	1
27	M5 X 12 BHSS BL ZP	RFF_HZB00512	N/A	1
28	31.5 X 16MM DIAM GUILDE ROLLER	LB7-0012	A4926	1
29	M4 HEX NUT	RFF_QZ004	N/A	2
30	TERMINAL CLAMP, HANDLE	LB8-0003	A5610	1
31	TAPE TENSION SPRING	LB7-0035	A4963	1
32	SELF TAPPING SCREW CSK	RFF_OC00410	N/A	2
33	M4 X 6 S/HEAD CAP SCREW	RFF_JZ00406	N/A	2
34	COVER, ELECTRONIC	LB8-0004	A5608	1
35	CIRCUIT BOARD SPACER	LB7-0010	A4912	2
36	PCB ASSEMBLY	LB8-0006	A5606	1
37	CIRCUIT BOARD PEDESTAL	LB7-0008	A4912	2
38	12V BATTERY	LB8-0007	N/A	1
39	SCREW CS SOC HD BL M3 X 16	RFF_LZB00316	N/A	2
40	LABEL ARM SPRING	LB7-0033	A4959	1
41	HEAT SINK	LB7-0030	A5027	1
42	LB8 HANDLE	LB8-0002	A5609	1
43	STOP SENSOR ASSEMBLY	LB8-0014	?	1
44	COVER, DRIVE	LB8-0005	A5607	1
45	POWER LEAD	LB8-0011	A5614	1
46	2 WAY SOCKET HOUSING	RES/L453123	N/A	1

9.0 Exploded View

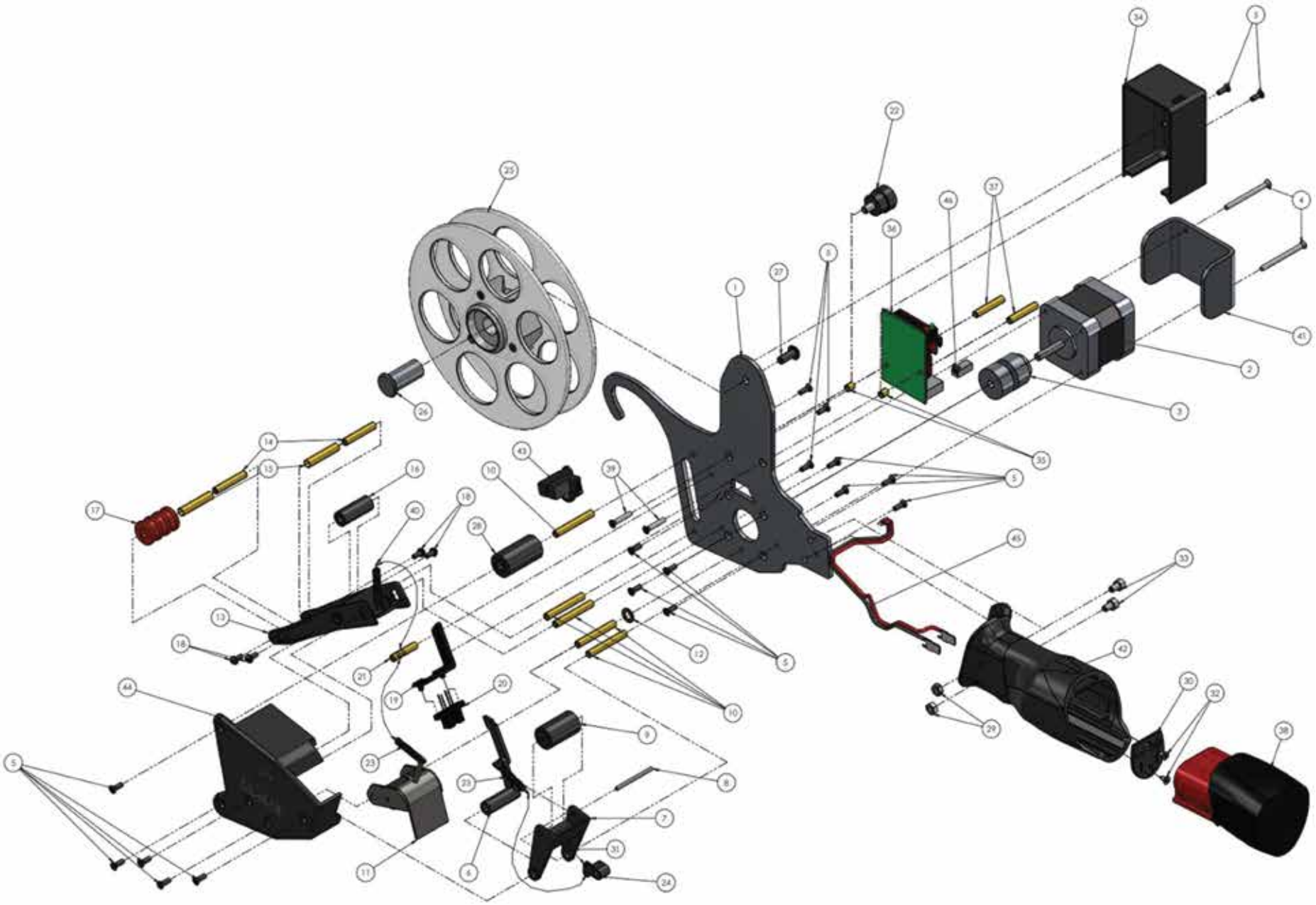


Figure 23: LB8 exploded view.

10.0 Trouble Shooting Guide