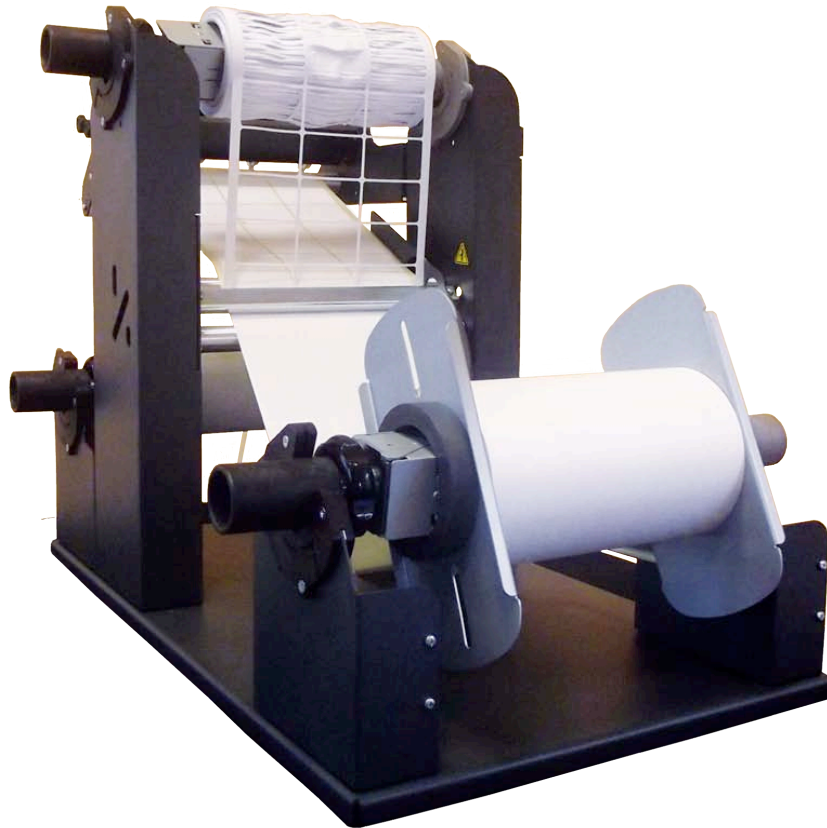


MX-12e

MATRIX REMOVAL SYSTEM



Operator's Guide

PRIMERA

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511326-041112

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Printing History

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FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Users in the United States: This product is intended to be supplied by AC/DC Power Supply delivered with the machine as for the UL regulation tested and certificated together. 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. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures. 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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:

- Re-orient 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.

Use of shielded cables is required to comply with the Class A limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

For Users in Canada: This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the Radio Interference Regulations of the Canadian Department of Communications. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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Section 1: Warnings



Thank you for purchasing the MX-12e Matrix Removal System. Please read the following Warnings.

Warnings

- The main plug of the AC/DC power supply can be used to disconnect power from the equipment.
- Do not operate the MX-12e while wearing loose fitting clothing or neck ties. Serious injury may result. If clothing or fingers are caught in the rollers, immediately disconnect the D.C. connector.
- Keep your hands away from the MX-12e at all times while the unit is running.
- When replacing slitter blades work from the back blade housing to the front. This will minimize the chance of injury since you will not be working over already installed blades.
- When transporting the unit or any time the unit is not in use always lower the slitter station into the down/cut position. This will prevent accidental contact with the slitter blades. The two rollers below the slitter station act as a guard when the slitter station is in the down position.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture. Operate the unit with only proper electrical specifications as labeled on the unit and the AC adapter.

WARNING
HAZARDOUS MOVING PARTS
KEEP FINGERS AND OTHER BODY PARTS AWAY

Avertissements

- La prise de l'alimentateur AC/DC est considéré comme partie qui deconnecte l'appareil.
- ne fonctionnent pas à la MX-12e tout en portant des vêtements lâches ou liens du cou. Peuvent entraîner des blessures graves. Si les vêtements ou les doigts sont pris dans les rouleaux, appuyez immédiatement deconnectez le connecteur D.C.
- Gardez vos mains loin de la MX-12e en tout temps pendant l'exécution de l'unité.
- Lorsque le remplacement des lames de coupeuse travaillent à partir du logement de la lame arrière vers l'avant. Cela réduira les risques de blessures puisque vous travaillerez pas au-dessus des lames déjà installés.
- Lors du transport de l'unité ou toute fois l'unité n'est pas dans l'utilisation toujours plus faible la station coupeuse en position down/coupe. Cela empêchera le contact accidentel avec les lames de coupeuse. Les deux rouleaux sous la station de coupeuse agissent comme un garde lorsque la station de la coupeuse est dans la position vers le bas.
- Pour prévenir les risques d'incendie ou de choc, n'exposez pas l'unité de la pluie ou l'humidité. Faire fonctionner l'unité avec les spécifications électriques que comme marqué sur l'unité et l'adaptateur ca

ATTENTION
PIECES DANGEREUSES EN MOUVEMENT
N'APPROCHEZ PAS LES DOIGTS ET AUTRES PARTIES DU CORPS

Section 2: Getting Started

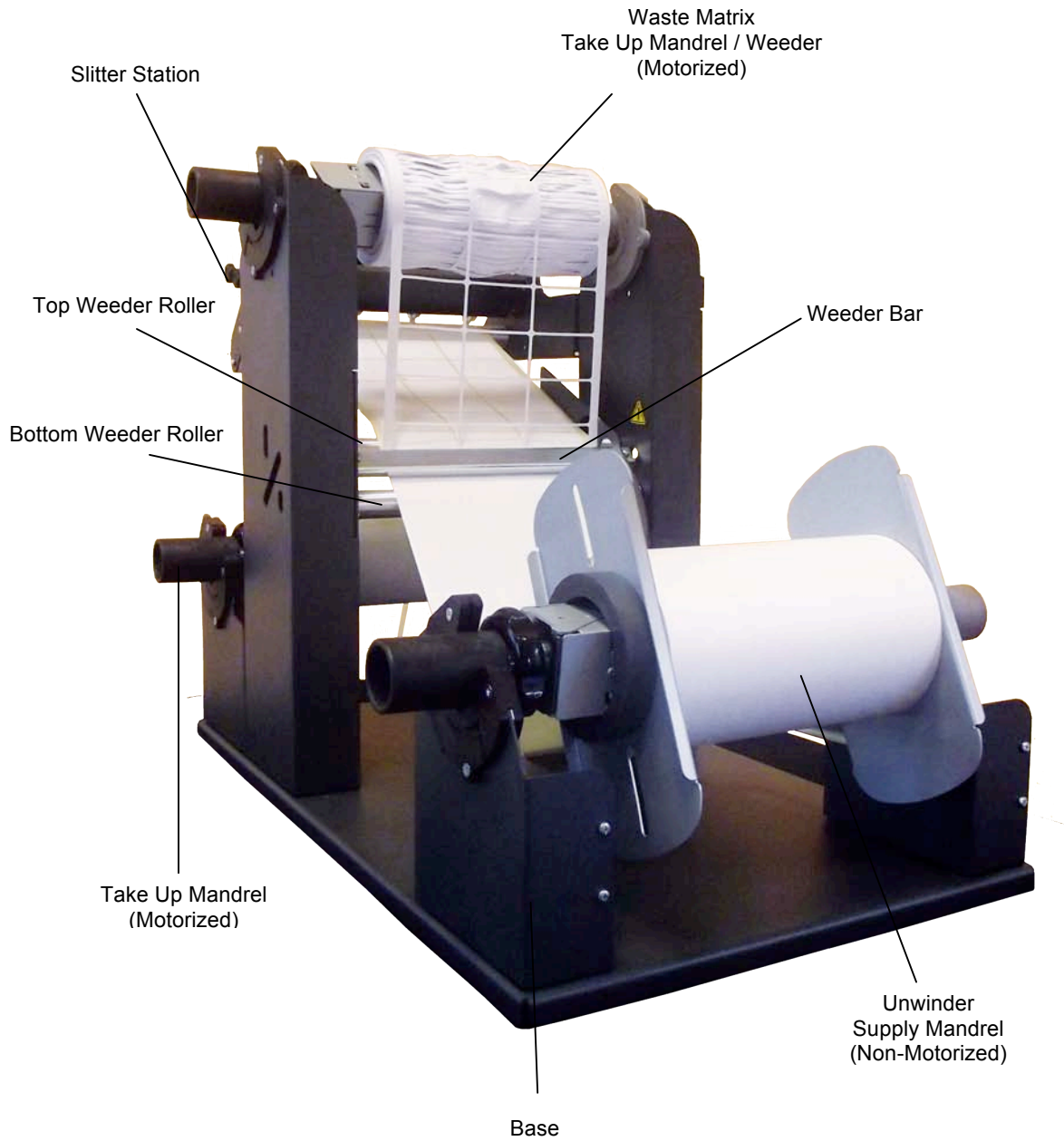
Section 2.1: What is Included

The MX-12e includes everything you need to begin weeding and slitting labels immediately. The following items are included:

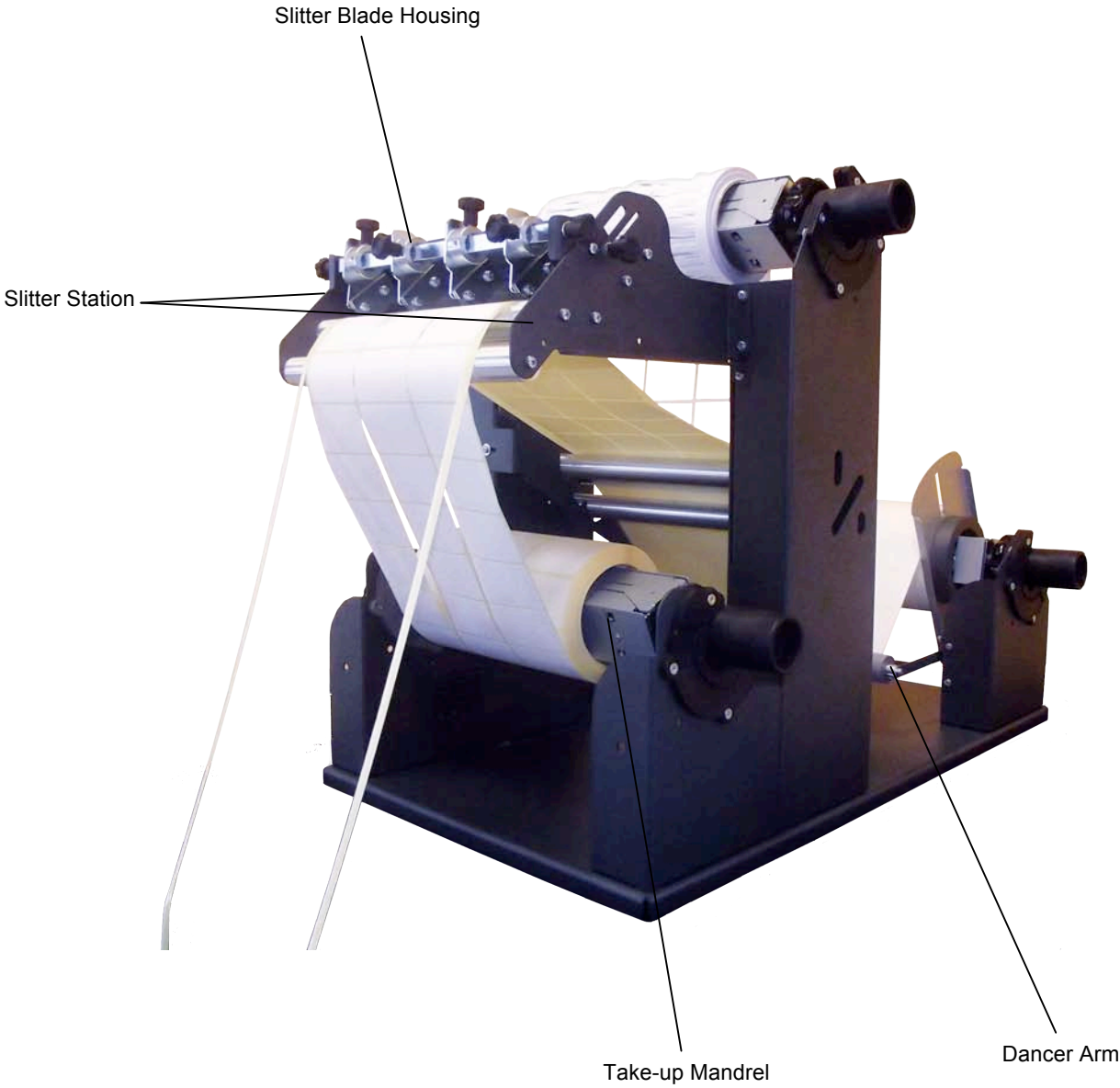
- MX-12e Matrix Removal System
- 3 Slitter Blades Housings. (These are preinstalled on the unit.)
- 10 extra slitter blades
- Assortment of Cardboard Cores. (Located in the media box.)
- 2 Removable mandrels with integrated motors. (Take-up and Weeder Mandrels.)
- 1 Removable resistance mandrel. (Supply Mandrel.)
- This Operators Guide and other documentation.

Section 2.2: Identifying the Parts

MX-12e Right Front View



MX-12e Left Front View



Section 3: Run a Job

Section 3.1: Load Roll

Warning: Before starting a new job, always make sure the waste matrix from the previous job has been removed. Do not attach the matrix from a different size label to an existing roll. This will cause an uneven wrap which will cause the material to walk.

Important Note: The MX-12e contains two motorized mandrels labeled inside the mandrel handle with “51”. These motorized mandrels are interchangeable between the **weeder location** and the **take-up location**. They also have copper contacts on the gray handle. The supply mandrel is not motorized. It is labeled inside the mandrel handle with a “100”. It has no copper contacts. It also has a roll guide attached.

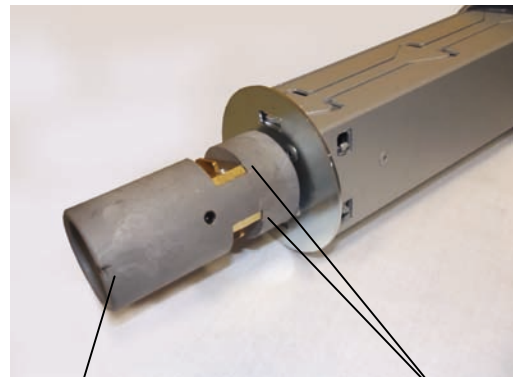
**Non-Motorized Mandrel
Supply**



“100” Label

“Roll Guide

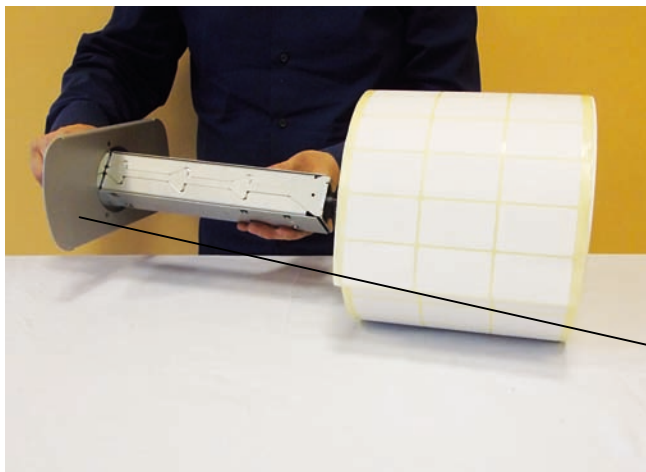
**Motorized Mandrel
Weeder/Take-up**



“51” Label

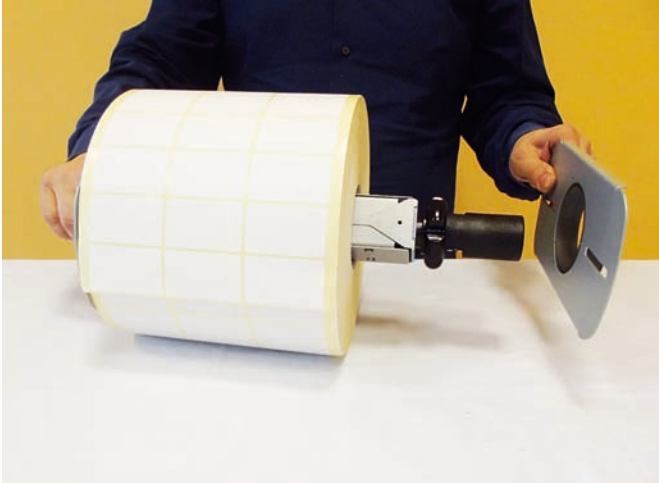
Copper Contacts

1. Locate the supply mandrel. It has with a “100” inside the gray mandrel handle and a roll guide attached.
2. Load the printed and die cut roll on the supply mandrel. Push until it touches roll guide.



Roll Guide

3. Locate the moveable roll guide and place it on the supply mandrel.



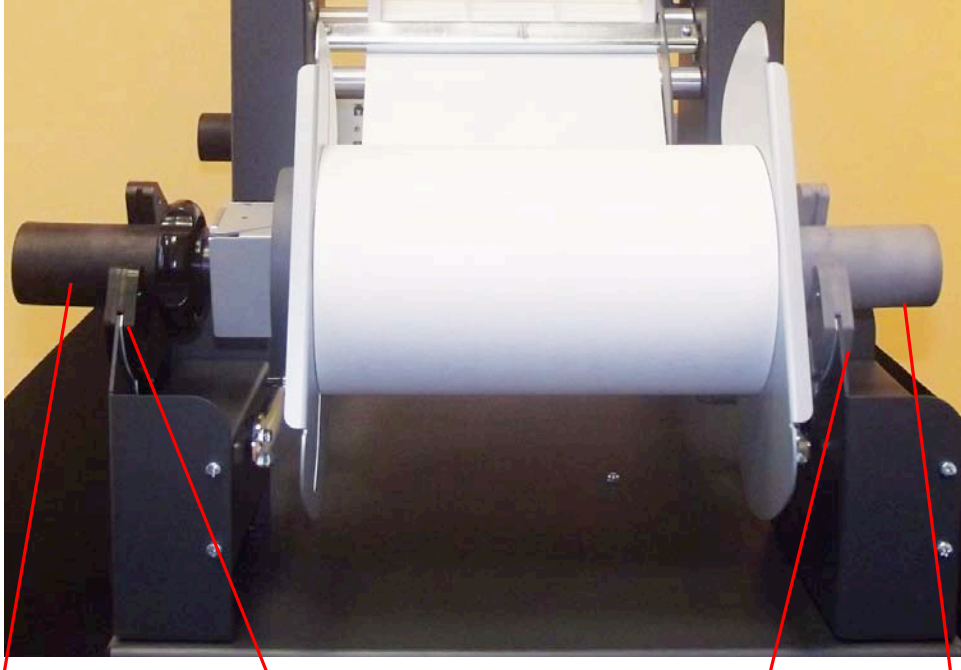
4. Tighten the roll and the guide in place by turning the tension knob.



5. Set the supply mandrel in the supply location. Match the gray handle to the gray holder.



Important Note: The supply mandrel can only be attached in one way. Match the gray handle to the gray holder and the black handle to the black holder. Also, the notches in the handle are angled so that it fits in only one direction. Insert the handle with the narrower side with the set screw hole down.

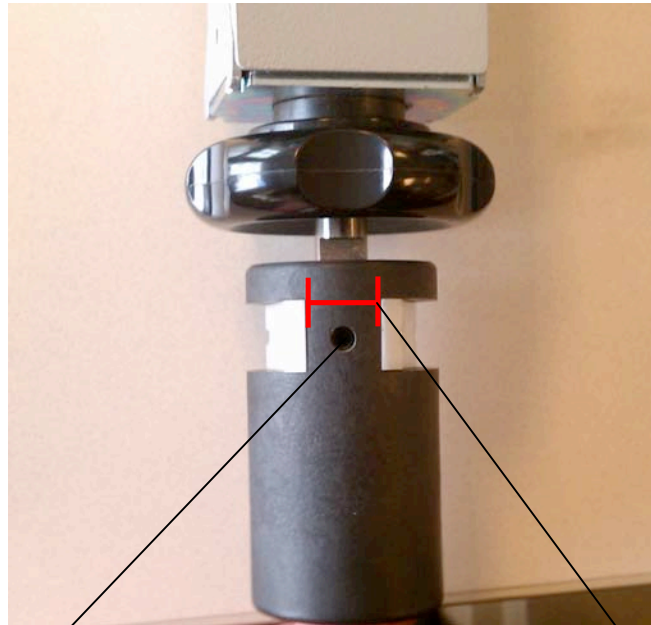


Black Handle

Black Holder

Gray Holder

Gray Handle



Set Screw Hole Facing Down

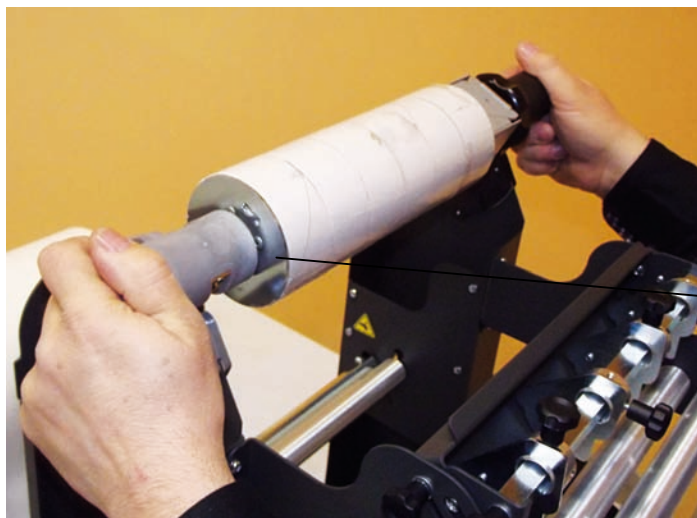
Narrow Side Facing Down

Section 3.2: Set Up the Weeder

1. Locate the weeder mandrel. It has with a “51” inside the gray mandrel handle and copper contacts inside the notches in the gray handle. It is interchangeable with the take-up mandrel.

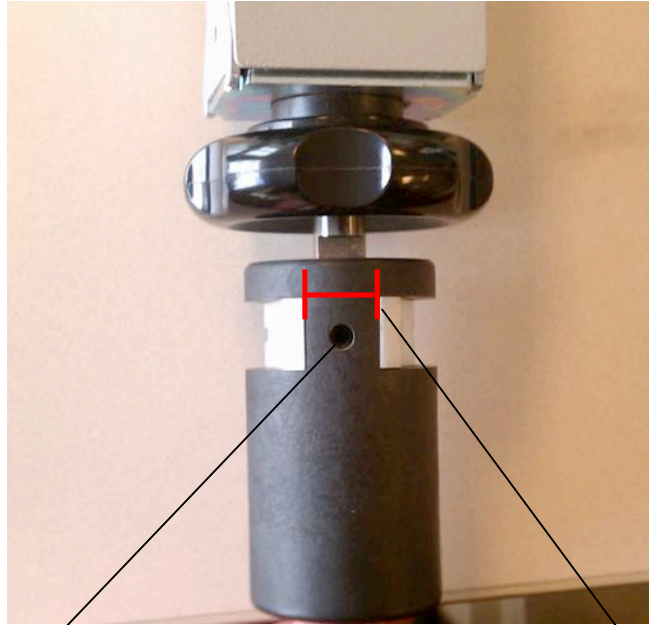


2. Place an empty 8.5” (21.6 cm) wide core on the mandrel. Push the core until it touches the core stop. Tighten using the tension knob.
3. Set the weeder mandrel in the weeder location on the top of the MX-12e.



Core Stop

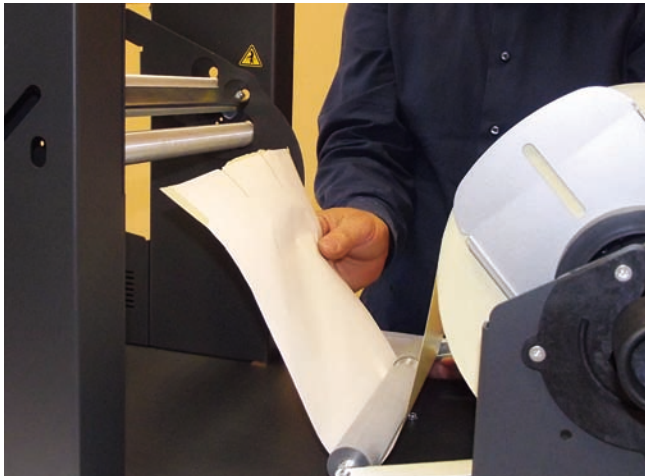
4. The weeder mandrel can only be attached in one way. Match the gray handle to the gray holder and the black handle to the black holder. Also the notches in the handle are angled so that it fits in only one direction. Insert the handle with the narrower side with the set screw hole down.



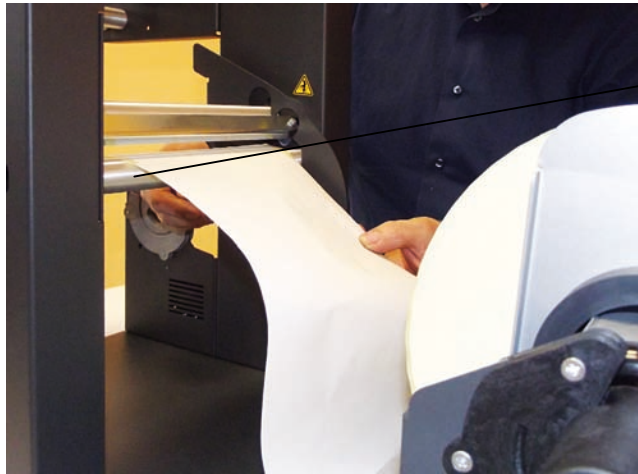
Set Screw Hole Facing Down

Narrow Side Facing Down

5. Feed the printed labels under the dancer arm

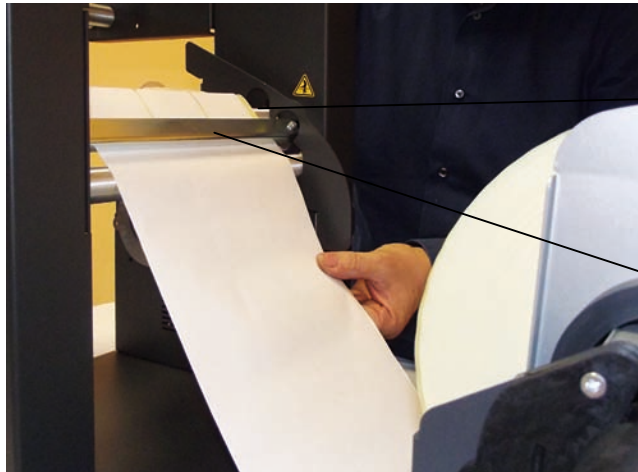


6. Continue feeding the over the lower weeder roller.



Lower Weeder Roller

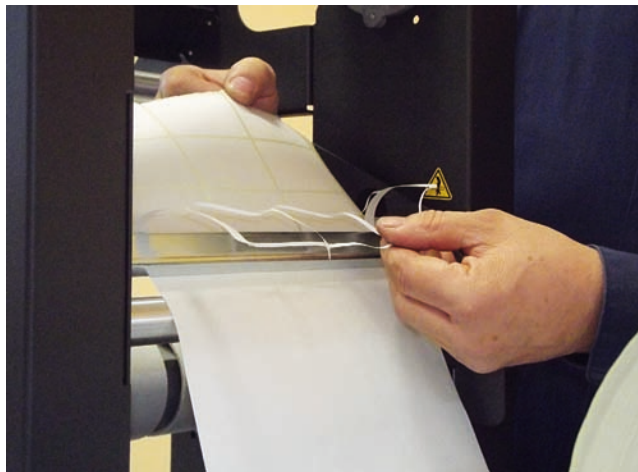
7. Feed the labels under the weeder bar and over the upper weeder roller.



Upper Weeder Roller

Weeder Bar

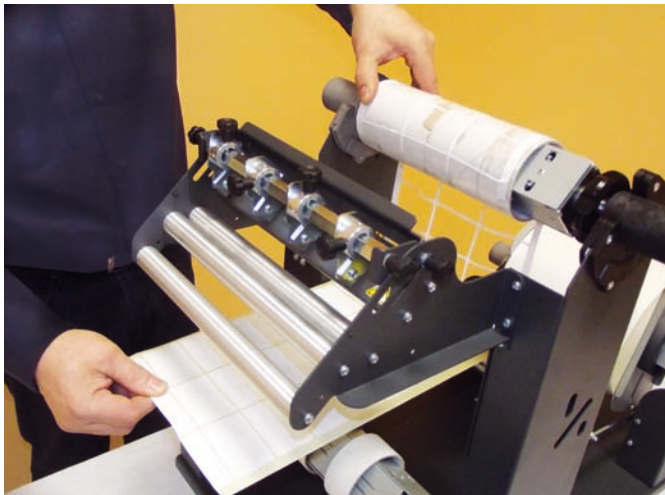
8. Separate the matrix from liner at this point.



9. Attach the matrix to the empty core on the weeder mandrel.



10. Continue pulling the printed labels and manually turning the weeder mandrel so that the matrix is wrapped around the core at least once.



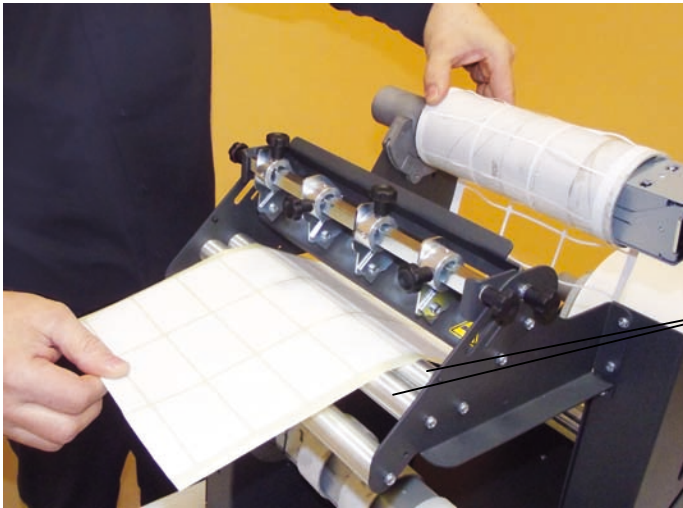
Section 3.3: Set Up the Slitter (Optional)

Three slitter blades housings are included with the unit. Six can be used in the slitting station at one time. Additional blade housing can be purchased from Primera. You will need to decide how you would like to slit your labels. For example, depending on what type of applicator will be used you may need to slit and remove edge waste. Use the following Instructions to set up the slitter.

1. Release the slitter station from its shipping position by loosening the thumb screws on either side. Move it to the farthest “up” position. Re-tighten the thumbscrews.
2. Continue feeding the labels over the slitter rollers and under the edge waste roller.



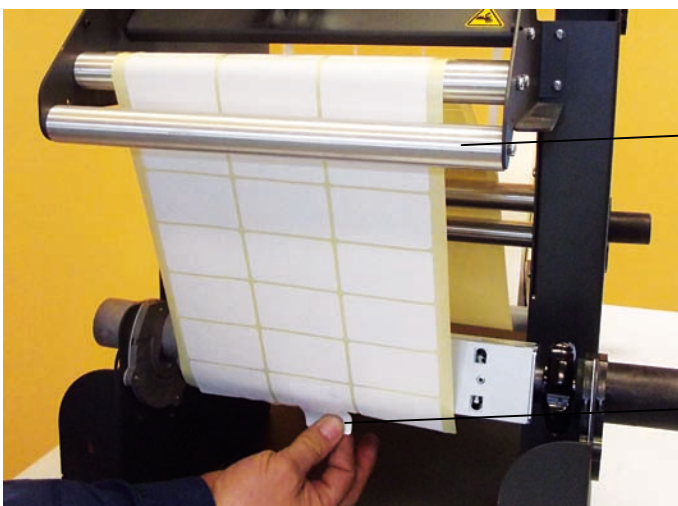
Slitter Thumbscrew



WARNING! The slitter blades are exposed and VERY sharp when the slitter station is in the “up” position. Use extreme caution!

Slitter Rollers

3. Temporarily attach the label directly to the take-up mandrel. This will provide the necessary tension in order start the slitting process.



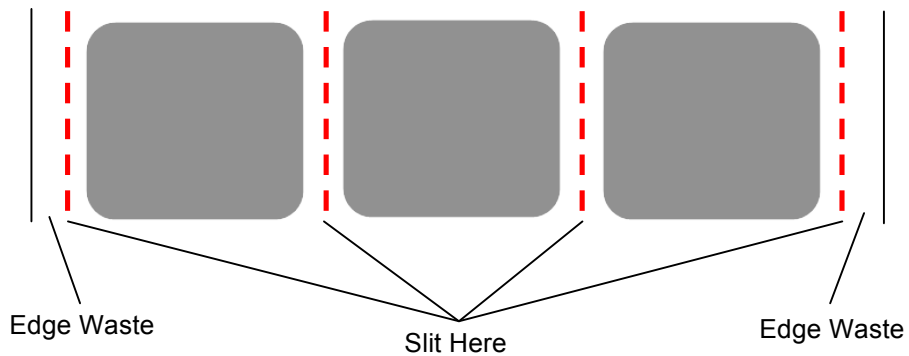
Edge Waste Roller

Tape to Take-up Mandrel

4. Determine how many blades you will need. Use this table as a guide. A maximum of 12 blade holders can be added to the slide bar. Using 12 blades, however, leaves little room for adjustment.

Columns	Blades Needed	
	<i>Remove Edge Waste</i>	<i>Leave Edge Waste</i>
1	2	0
2	3	1
3	4	2
4	5	3
5	6	4
6	7	5
7	8	6
8	9	7
9	10	8
10	11	9
11	12	10

Typical Slitter Configuration for Three Columns.



To add additional blade holders remove the slide bar thumb screw from both sides. Slide the blade holders on the bar and replace the thumb screws.

Slide Bar Thumb Screw

5. Position the blades in between each column and on either edge if desired. You can alternate the position of the thumb screw from the top to the side to gain easier access.



6. Tighten the thumbscrews on the blade holders.
7. Loosen the slitter station thumb screws and lower the slitter station into the down position. Lower the blades slowly and make sure the blades are exactly where you want them to be. If they are out of position, move the slitter station back up and readjust the blade holders. As the blades are lowered they will cut into the liner. Try to avoid tearing the liner as the blades are lowered for the first time into the liner. Tears will become problems as soon as you start the MX-12e. Using sharp blades will minimize tearing.



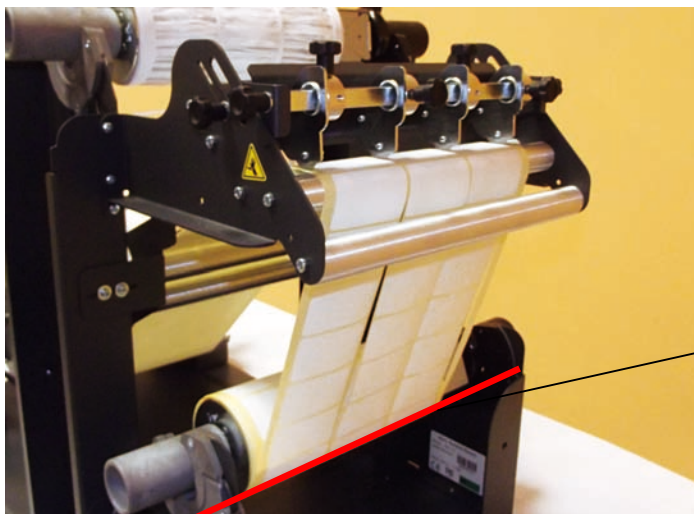
8. Turn on the MX-12e using the power switch on the back. Make sure the speed knob is in the slowest position before you switch on the MX-12e.



9. Slowly turn the speed knob.



10. Run the MX-12e until the slit labels reach the bottom of the take-up mandrel.

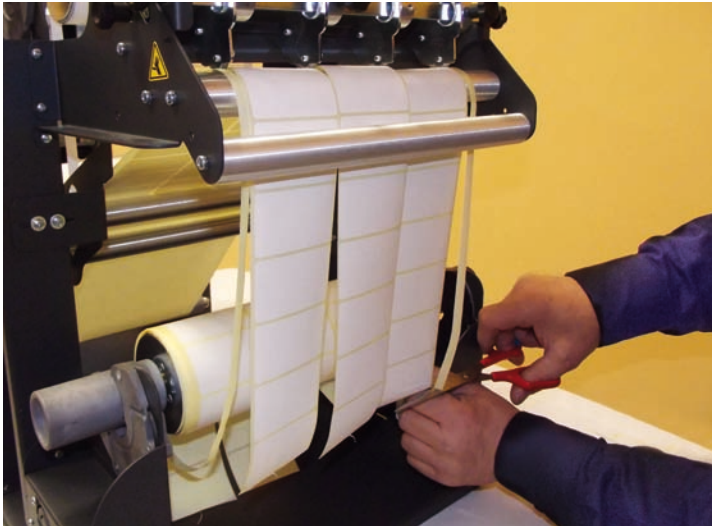


Stop when slit labels reach this point

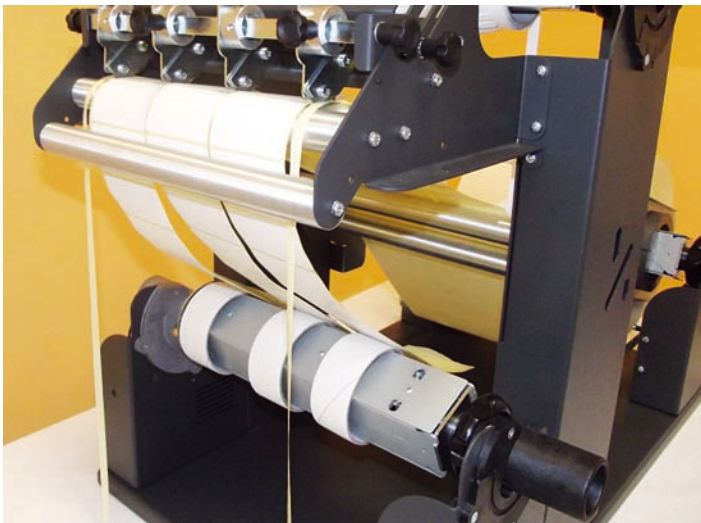
Section 3.4: Attach to the Take Up Mandrel

Before you begin this section you'll want to have cardboard cores that are no wider than the width of the liner of each label column after it has been slit. It is usually acceptable to use cores that are smaller than the liner width. However, this ultimately depends on what type of applicator will be used to apply your labels, if any. Check the requirements of that system to be sure.

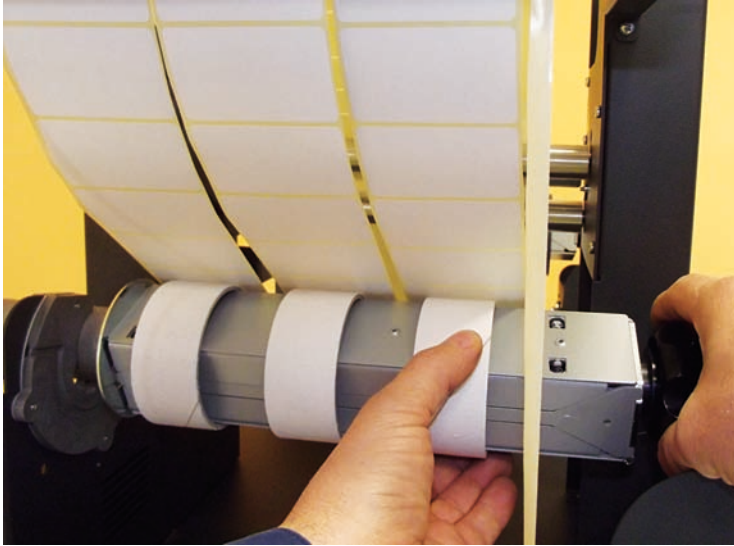
1. Cut the labels and the edge waste as shown. See section 3.3 for instructions on getting to this point.



2. Remove the labels that have wrapped around the take-up mandrel.
3. Remove the take-up mandrel. Place three cores with a width equal to or less than the width of the liner for each Column. Center the cores on each of the columns.



4. Tighten the take-up mandrel to lock the cores in place.

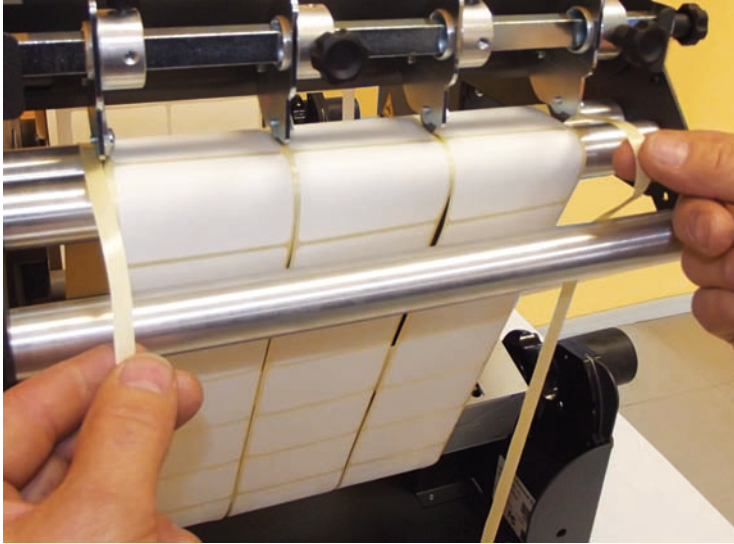


5. Attach the labels to the core using waste label or tape.

Note: Make sure the tension on all rolls is even. If they are not even and you have already attached them to the core you can easily equalize them by slightly loosening the tension knob on the mandrel. Now turn each core on the mandrel until all label rolls are taut. Tighten the knob again.



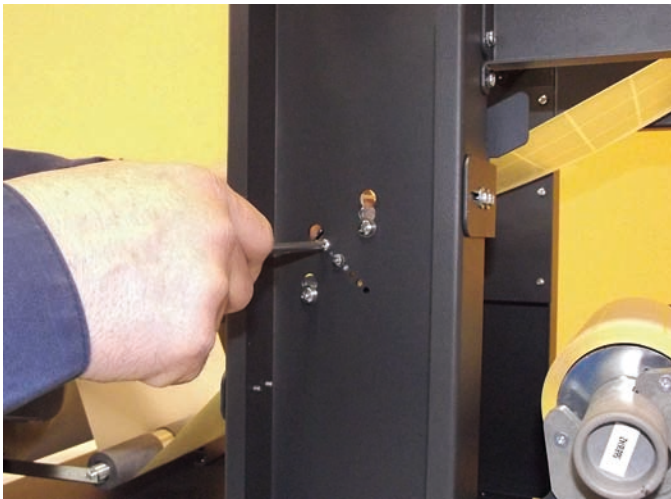
6. Feed the edge waste over the edge waste roller.



7. Remove the waste label core from the lower take up mandrel.
8. Feed the edge trim waste over the new core and into a waste basket.

Section 3.5: Run Job and Evaluate

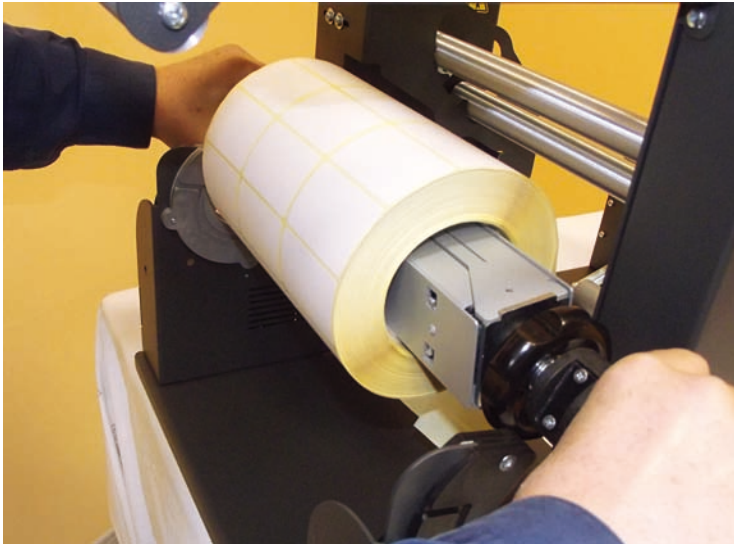
1. Switch on the MX-12e and slowly increase the speed. Evaluate the following areas:
 - a. Matrix Release
 - b. Matrix Mandrel Wrapping
 - c. Slitting
 - d. Finished Cores
2. If there are any problems with the matrix not releasing consistently and causing tears or if labels are getting pulled up with the matrix you can adjust the position of the weeder bar and the top and bottom weeder rollers. Each can be adjusted independently. Adjust them using the screws on either side. There is no one correct position so you may have to adjust the position by experimenting and finding the combination that works best.



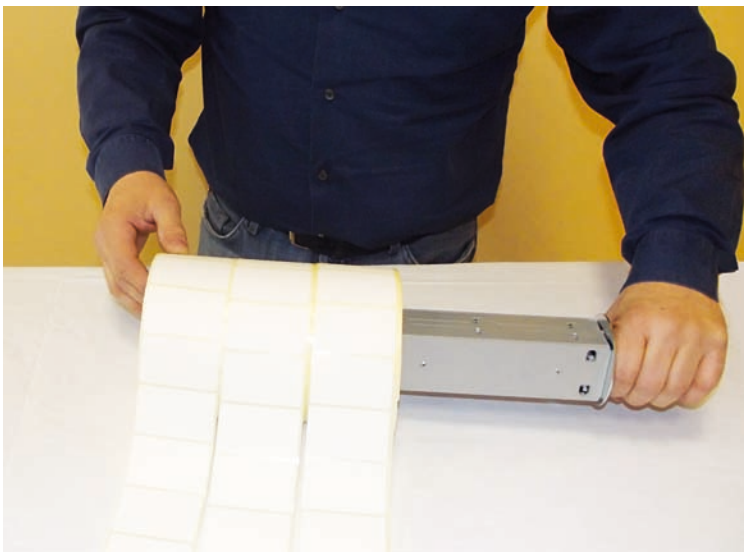
3. You can also adjust the label guides just before the weeder. Sometimes it is better to have no guide touching the labels.



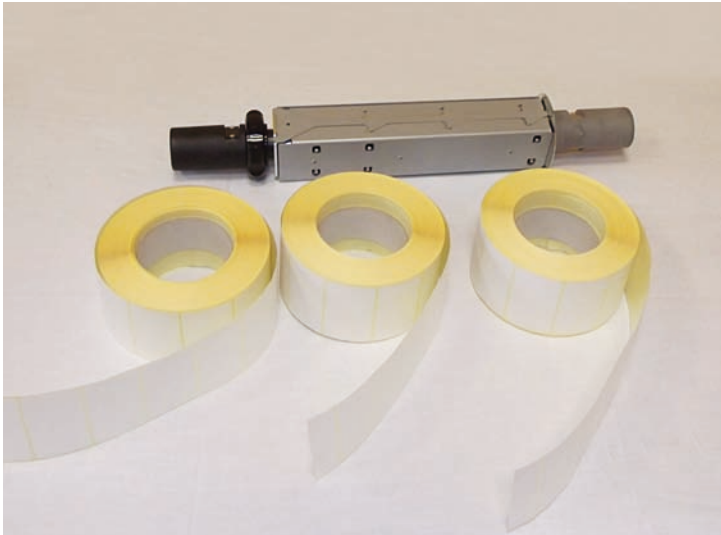
4. Finally, for some media / label sizes it may not be possible to run the MX-12e at top speed. If you find that higher speeds cause problems and lower speeds work, the solution may simply be that you need to run at a slower speed.
5. When the roll is finish the unit will automatically stop when the contact on the dancer arm touches the screw on the base. You will also hear an audible tone.
6. Remove the finished rolls from the take up location.



7. Remove the rolls from the take-up mandrel.



8. Separate the finished rolls. Some interleaving may occur. This is normal.



9. Finally, remove the waste matrix mandrel and discard the matrix and the core. We do not recommend reusing the same core with matrix from a previous job still attached.



Note on Media Environment: 50% humidity and 72 degrees Fahrenheit (~ 22 °C) is the optimal conditions for both storage and use of label stock. Store label stock in protective plastic wrappings. Rewrap partially used stock. Do not store stock directly on concrete floors.

Label stock should be conditioned in this environment for 72 hours prior to use.

Failure to store media in these conditions may result in media tension problems. Too much humidity will cause labels to curl on the edges.

Section 4: Maintenance and Troubleshooting

Section 4.1: Replacing Slitter Blades

1. To replace dull slitter blades remove the slide bar thumb screw from both sides. Note the position of the washers. You will need to replace them in the same order. Remove the entire bar with blade holders attached.



Slide Bar Thumb Screw

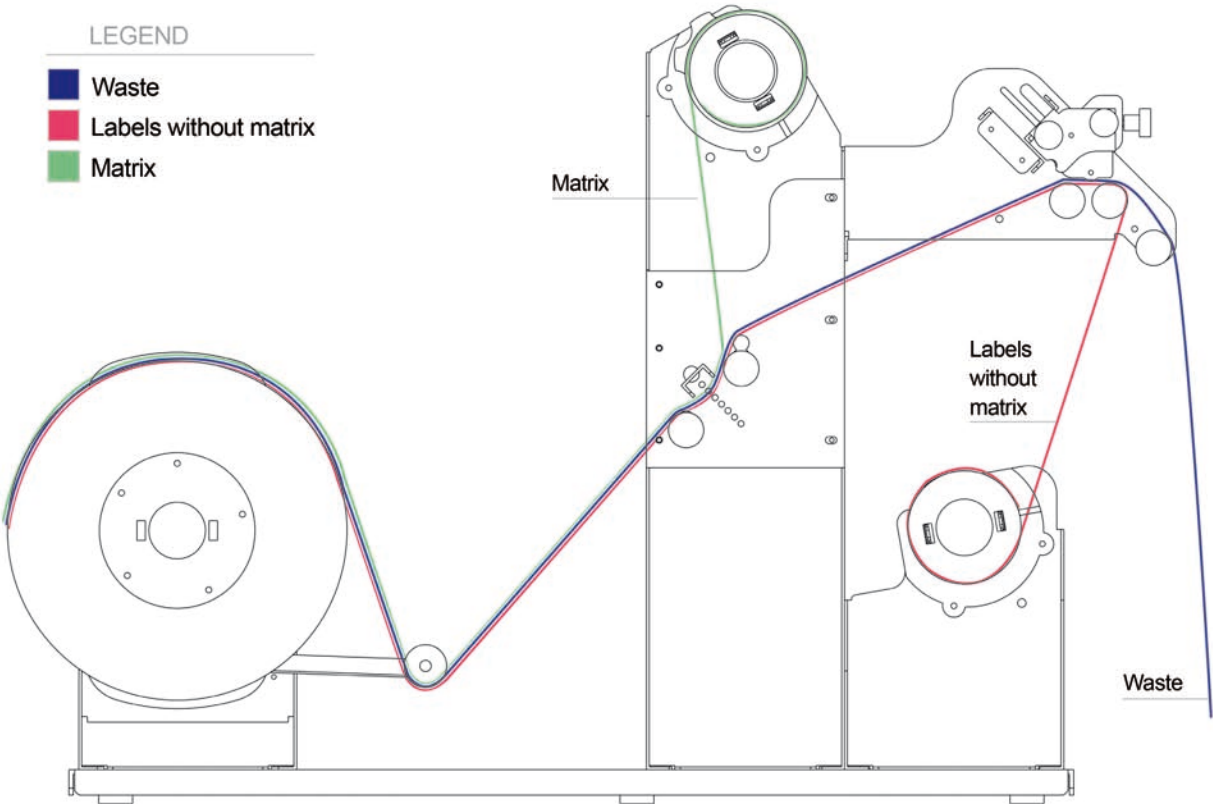
2. Loosen the blade holder thumb screws. Slide the blade holders with dull blades off the bar.
3. Remove two Phillips screws holding the blade in place. Replace the blade.



WARNING! SLITTER BLADES ARE VERY SHARP!

Section 4.2: Paper Path

- LEGEND
- Waste
 - Labels without matrix
 - Matrix



Section 4.3: Cleaning and Maintenance

Basic periodic cleaning and maintenance is required to keep the MX-12e running smoothly.

Clean all rollers

Various rollers are located throughout the machine. Adhesive from the edges of media can build up on these rollers. Over time this will cause feed resistance of the nip points which can cause the web to slip.

Clean the rollers with isopropyl alcohol. Clean each area and then rotate the roller as you clean it.

Clean the inside of the Guide

Over time adhesive can build up here. Clean the collars with isopropyl alcohol.

Label Cut Dust

As the matrix is removed label cut dust can accumulate. Clean dust as needed with a vacuum. Some material such as paper will have more dust than synthetic material

Section 5: Specifications

Input roll max. diameter:	305mm (10")
Output roll max. diameter:	305mm (10")
Minimum web width:	106mm (4")
Maximum web width:	216mm (8.5")
Throughput speed:	30 m per minute
Controls:	Variable Speed Control
Dimensions:	86.36cm W x 48.26cm D x 56.51cm H (34"W x 19"D x 22.25"H)
Weight (estimated):	31.3 kg (69 lbs.)
Power requirements:	AC-DC Power Supply 1,8 A 100-240 V 50-60 Hz Matrix Remover 24 Vdc – 2.5 A
Agency certifications:	CE, FCC, CCL