

JetMounter™ JM63 Fuzion XD



The JM63 Fuzion XD is a heavy-duty, wide-format roller laminator with a heat assist top roller. Excellent for laminating vehicle wraps, creating window decals and mounting graphics to substrates, it is ideal for shops wanting to add roll-to-roll laminating capabilities at a lower price point. Standard features include heavy-duty metal construction, large diameter non-stick silicone rollers, variable speed control, fold down front table, built-in flip open storage compartments, top and bottom auto-grip supply shafts with brake tension control on operator side, top auto-grip take-up shafts with adjustable clutch speed, single mechanical height/pressure adjustment, interchangeable 110V or 220V electrical configuration, and photocell safety protection.

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Overview

Thank you for purchasing a Drytac® JetMounter™ JM63 Fuzion XD. The information contained in this Operator's Manual will explain the basic methods of mounting and laminating with this easy-to-use roller laminator.

JM63 FUZION XD Technical Specifications	
Max Laminating Width	63" (1600mm)
Roller Diameter	4.7" (120mm)
Roller Construction	Steel with High-Release Silicone Covering
Width	81.5" (2070mm)
Depth	28" (711mm)
Height	50.5" (1282mm)
Weight	752 lbs (341 kg)
Max Board Thickness	1" (25mm)
Max Material Roll Diameter	10" (254mm)
Electrical Requirements	Dual Voltage: 110V, 8A or Single Phase: 220V, 13A, 50/60Hz***
Speed Range	1 - 20 fpm (0.5 - 6 mpm)
Roll Core Size	3" (76mm)
Packaged for Shipment	
Width	85" (2159mm)
Depth	34" (864mm)
Height	56" (1422mm)
Weight	875 lbs (397 kg)

The Infeed/Outfeed Table height of the JM63 Fuzion XD is 35.25" (895mm).

*** A power cord is provided for a standard 110V circuit. If a 220V circuit is needed, the customer is responsible for providing the proper power cord and outlet to meet electrical requirements.

Warranty

Every Drytac machine is designed and manufactured to provide years of dependable service. To achieve the best results, the machine should be set up and operated in accordance with the instructions provided in its corresponding Operator's Manual.

Our equipment warranty covers parts for twelve (12) months and labor for three (3) months from the date of purchase. During the first three months of the warranty period, Drytac or its dealer will arrange for the machine to be repaired, replaced or refunded at Drytac's discretion (excluding shipping and travel costs). **Rollers are guaranteed against manufacturing defects for three (3) months.**

Return your warranty card to Drytac as soon as possible. By doing so, we will be able to more efficiently address your concerns in the unlikely event that you encounter an issue. You will find a section in the Operator's Manual for recording this important information and for noting any future parts or service requests.

Normal wear and tear, damage to the rollers, and damage due to abuse, improper operation or installation is not covered by this warranty. Conditions that will void the warranty include, but are not limited to:

- Failure to follow the instructions contained in the Operator's Manual
- Unauthorized changes or modifications to the equipment or the stand
- Misuse of the equipment for purposes other than specified in the Operator's Manual

Drytac will not be held responsible for any damage or consequential damage caused by the equipment. After the warranty period has expired, Drytac will provide all reasonable product assistance and support to resolve any problems that may arise.

Before calling the Drytac Technical Services department, note the Registration Information for your machine and have it available for reference.

Registration Information

JetMounter™ JM63 Fuzion XD Registration Information

COMPANY NAME: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

SERIAL #: _____

PURCHASE DATE: _____

WARRANTY CARD RETURN DATE: _____

BY: _____

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Important Safety Information

Before operating the JetMounter™ JM63 Fuzion XD for the first time, read and understand the following safety-related information. Failure to follow these procedures may result in serious personal injury and/or damage to the equipment and materials being used.

Safety Symbols

Danger and/or warning symbols indicate imminently and/or potentially hazardous situations that, if not avoided, may result in serious injury or death.



Important Safety Information



The JetMounter™ JM63 Fuzion XD performs mounting and laminating applications by using two rollers to apply uniform pressure to mounting adhesives and overlaminating films. The point where the rollers touch these materials is called the "Nip". This area creates a potential pinch hazard for fingers or other objects. **TO AVOID INJURY, ALWAYS KEEP YOUR FINGERS AWAY FROM THE NIP AREA.**

When using a large supply roll, be aware that a pinch hazard may exist between the top roller and the supply shaft. When working from the rear of the machine, be aware of the pinch point (Nip) of the contacting rollers and exercise extreme caution to avoid injury.



Exercise caution when lifting rolls of adhesive or laminate due to their weight. Obtain assistance to avoid personal injury or damage to the equipment and materials.

No persons under the age of 16 should be allowed to operate the equipment.

DO NOT operate the equipment while under the influence of alcohol, prescription drugs or any other substance that could impair your judgment or reaction time.

Remove any jewelry such as rings, bracelets and necklaces prior to operating the equipment. Keep loose clothing, neckties, artificial fingernails, long hair, and anything else that might easily be drawn into the rollers away from the machine.

Always work at a slow speed until you become familiar with the equipment.

Power "Off" the machine when loading rolls of adhesive or laminate, cleaning the rollers, or performing other activities that require close proximity of fingers to the Nip area. Doing so will prevent the machine's rollers from inadvertently turning. During machine operation, keep fingers away from the Nip area.



Always disconnect the equipment from the power supply before removing any panels for service.

Important Safety Information

Safety Features

The following safety features are designed to offer a reasonable measure of protection against injury while maintaining an operator-friendly machine. Please do not attempt to disable or alter their functionality in any way. **Any modifications will void the warranty and may pose a serious risk to the operator. If any malfunction occurs, stop using the machine immediately and contact the Drytac Technical Services department.**

The JM63 Fuzion XD has electric eyes or photocells installed in front of the Nip area for safety. When interrupted, they will stop the rollers immediately, a photocell status LED on the Control Panel will light up, and a buzzer will sound as a warning to indicate that an object is breaking the photocell circuit. Be particularly cautious when operating the equipment with the Foot Pedal as the rollers WILL NOT STOP when the photocells are interrupted. An audible alarm will sound, but the rollers will continue to turn at a reduced speed.

Prior to operating the equipment, always check that the photocells and buzzer are working properly. Use a piece of cardboard to block the photocells to confirm that the alarm sounds and the rollers stop.

The JM63 Fuzion XD is also equipped with two red Emergency Stop Buttons, located on the top of both the left and right end cases. The Emergency Stop Buttons will stop the machine immediately, shutting off power to the Control Panel. The machine can also be stopped by lifting your foot off the Foot Pedal, turning the Speed Control Knob to zero (0), turning off the Power Button on the Control Panel, or turning off the main Power Switch on the back of the left end case. If there is a "No Power" condition, check to see if the Emergency Stop Buttons are depressed before further troubleshooting.



Setup Procedures

Installation and Training Service

Installation and training is available for the JetMounter™ JM63 Fuzion XD. This service ensures that the machine is set up properly and the individual operating it is trained on the various applications the machine can perform. If you have operational questions, contact the dealer you purchased the machine from or the Drytac Technical Services department for installation/training details or to schedule this service.

Unpacking and Installation

Upon receipt of your new JM63 Fuzion XD, inspect the shipping crate carefully for signs of physical damage or mishandling. Before signing for the shipment, there are two rough handling indicators that should be inspected. If either of these devices is "tripped", note it on the receiving paperwork. Report any damage to the shipping company immediately and contact the Drytac Customer Service department if replacement parts are needed. If there is no apparent damage, proceed with unpacking.



It is recommended that two people unpack the equipment to avoid personal injury or damage to the equipment. Handle with care. Follow the steps described in the uncrating instructions (which are attached to the shipping crate) to safely remove the equipment from its packaging. If the uncrating instructions are missing, contact the Drytac Technical Services department before attempting to unpack or install the equipment.

The JM63 Fuzion XD is fully assembled on a stand for easy positioning. When moving the machine, there should be one person on either side to help guide it. To eliminate the possibility of it tipping over onto either person, push the machine from the ends only. **Do not push the machine from the front or back.**

Select a clean, well-lighted work area that allows access to both the front and back of the machine. To ensure adequate accessibility and safety, position the machine so that there is at least 3' (0.9m) of space from the front and back beyond the largest piece of material to be used.

For example, if using a 4' x 8' (1.2m x 2.4m) foam board, a minimum of 11' (3.4m) of space in front and 11' (3.4m) of space in back of the machine would be needed. Always consider this rule prior to starting an application.

Power Supply

The JM63 Fuzion XD can operate on either a 110 or 220 volt power supply. **Set the proper voltage BEFORE plugging the machine in for the first time.** On the back of the left end case, there is a switch under a clear plastic cover that can be adjusted to the specific voltage required. If you have questions regarding the machine's electrical requirements, contact a qualified electrician prior to powering "On" the machine. Confirm that the voltage supplied at the outlet corresponds with the voltage marked on the plate attached to the machine. **Do not rely on the power cord or outlet configuration to determine the correct power supply voltage.** It takes 10-15 minutes (at 220 volts) and 30-40 minutes (at 110 volts) for the top roller to reach approximately 110°F (43°C). **After processing is completed each day, turn the main Power Switch located on the back of the left end case near the power cord entry to the "Off" position.**

Setup Procedures

Parts Identification



Equipment Parts					
Take-ups & Unwinds		Rollers & Idlers		Operator Controls	
A	Top Front Take-up	F	Top Heat Assist Roller	J	Control Panel
B	Top Rear Unwind/Supply	G	Bottom Cold Roller (behind table)	K	Print Guide
C	Bottom Front Unwind/Supply	H	Top Idler	L	Infeed Table
D	Bottom Rear Take-up	I	Bottom Idler	M	Outfeed Table (behind rollers)
				N	Height Wheel
				O	Foot Pedal
				P	Brakes
				Q	Emergency Stop Button

On/Off Switch: A rocker switch located on the back of the left end case of the machine near the power cord entry. Used to power the machine on and off. The switch should be in the "Off" position when loading/unloading adhesive or laminate, cleaning the rollers, or performing other activities that require close proximity of your fingers to the Nip area. The switch should also be turned to the "Off" position after processing is completed each day.

Setup Procedures

Parts Identification cont.

Control Panel: A panel located on the upper angled surface of the right end case used to control and monitor various functions of the machine.

Power Button: A button located in the lower left corner of the Control Panel that when pressed activates power to the machine. When an Emergency Stop Button is pressed and the reason for it being activated is corrected, the Emergency Stop Button must be reactivated and the Power Button pressed to proceed. If the machine's shutdown is caused by a thermal overload condition, allow the circuit breaker on the back of the machine to cool for approximately 20-30 seconds. Then, reset the breaker and power up the machine by pressing the Power Button.

Roller Button: A button located on the Control Panel above the F/R Button. Used to activate the motor that turns the bottom roller. An ON/OFF status LED to the right of the button will light to show when power is supplied to the motor. When the photocell circuit is interrupted due to an obstruction, the Roller Button must be reactivated before resuming operation. The photocell (PC) status LED to the right of the Power Button will light when this interruption occurs.



F/R Button: A button located on the Control Panel above the Power Button. Used to select the direction of the bottom roller. Press the button to change directions. A FWD/REV status LED to the right of the button will light to show which direction (forward or reverse) has been selected. Ensure the roller has stopped before changing direction. To activate the roller in reverse, depress the Foot Pedal. An audible alarm will sound, but the roller will continue to turn at a reduced speed. When operating in reverse, the machine's photocells will not be active.

Heat Button: A button located on the Control Panel above the Roller Button. Used to activate the heat assist function. When the button is pressed, a temperature status display to the right of the up/down arrows will indicate the temperature of the top roller. The heating rod begins to heat the roller to the designated temperature setting of 110°F (43°C). A temperature scale LED to the right of the temperature status display indicates which temperature scale is used. To change the temperature from Fahrenheit to Celsius, simultaneously press the up/down arrows and hold for 10 seconds. The temperature setting of 110°F (43°C) cannot be adjusted, but the readout may be higher since the sensor reads actual roller temperature (which can be affected by numerous factors). When processing begins, heat is absorbed into both the bottom roller and materials which causes the temperature to drop. The machine's components are designed to account for these variables, so readouts slightly above the set temperature should not cause concern. The machine will not overheat. If the roller reaches 131°F (55°C), the heating system will shut down.

NOTE:

When the heating system is on, rollers should make contact and be moving with at least 20-40% pressure applied to allow for maximum heat transfer and minimize roller distortion.

Setup Procedures

Parts Identification cont.

Pressure & Height Display: A display located on the Control Panel above the Heat Button. The height of the Nip, or space between the top and bottom rollers, is indicated from 0 to 25 millimeters on the display. Directly above the height indicator are a series of LED lights, labeled in increments of 20 from 0 to 100, that indicate the percentage of pressure applied to material in the Nip. The 0 LED remains illuminated at all times. When the top roller is lowered to rest on the bottom roller (commonly referred to as the "Sweet Spot"), the 20 LED will light to indicate 20% pressure has been exerted. Slowly rotate the Height Wheel clockwise to apply more pressure. As pressure is applied, the LED lights will successively illuminate to show the percentage of pressure applied. For best results, set the pressure to 20% or 40%. Drytac's unique lift mechanism design allows for evenly controlled pressure over the entire contact area. To prevent excessive pressure, premature failure of the machine, or damage to materials during processing, maximum spring compression is restricted. To properly adjust pressure, refer to *Setting Roller Pressure* on page 11.

Speed Control Knob: A knob located on the Control Panel to the right of the Roller Button and F/R Button. Used to control the speed of the motor-driven bottom roller. Rotate the knob to the right to increase the speed of the roller, and rotate the knob to the left to decrease the speed. Speed control will not affect reverse speed or the speed of the roller when the photocells are interrupted during Foot Pedal operation. The roller will move at a slow, steady speed (jog mode) until the Foot Pedal is released. When the photocell obstruction is clear, the set speed will resume by pressing the Roller Button.

Supply Shaft: A shaft used to support and feed a roll of material. Rubber cords lock the inside of the core and keep the roll in place.

Take-up Shaft: A shaft used to remove and wind up the release liner from the roll of material being used. Rubber cords lock the inside of the core and keep the roll in place.

When any shaft is installed, the slot end must be properly oriented to fit in the drive mechanism located on the right end case. Consider this before lifting the loaded shaft into position. Once in position, insert keeper pins in the cups to secure the shaft and prevent it from lifting from the cups. All shafts will fit into any position on the machine.

Height Wheel: A wheel located on the front of the right end case. Turn the wheel clockwise to raise the top roller and counter-clockwise to lower it.

Foot Pedal: A foot switch positioned on the floor within easy reach of the operator. Used to activate the bottom roller or bypass the photocells when webbing the machine. Be particularly cautious when operating the equipment with the Foot Pedal as the rollers WILL NOT STOP when the photocells are interrupted. An audible alarm will sound, but the rollers will continue to turn at a reduced speed.

Photocells: Electric eyes located on the left and right sides of the machine in front of the rollers. A safety feature used to protect the operator from the Nip area between the rollers. When an object interrupts the photocells, the rollers will stop turning and an alarm will sound. Once the object is removed from the Nip area and the Roller Button is depressed, the rollers will start turning again at the speed set on the Speed Control Knob. When an object interrupts the photocells

Setup Procedures

Parts Identification cont.

while the Foot Pedal depressed, the rollers will turn at a slower speed and an alarm will sound. Once the object is removed from the Nip area, the alarm will stop and the roller will turn at a reduced speed until the Roller Button is depressed.

Emergency Stop Button: Button located on the top of the left end case and on the top of the right end case. When depressed, it stops the machine immediately and shuts off power to the Control Panel. To reset the Emergency Stop Button, twist a 1/4 turn while simultaneously pulling on the button.

Print Guide: Guide located on the top of the Infeed Table. Keeps the graphic flat during lamination.

Setting Roller Pressure

The Nip is the space between the top and bottom rollers. Both the Nip and pressure are controlled by the Height Wheel, which raises and lowers the top roller. The roller height should be adjusted according to the material being processed. For most applications, the normal operating range is between 20-40% pressure.

NOTE:

Applying too much pressure can create wrinkles and may damage the machine or the material being used. When the machine is not in use, separate the rollers to prevent flat spots from developing.

Overlamination and Encapsulation

When processing thin graphics, the Nip should be closed and the pressure set to 40%.

Mounting

When mounting to substrates, the Nip should be set to the thickness of the substrate by turning the Height Wheel. The leading edge of the substrate should be inserted and the pressure set according to the density of the substrate. Hard substrates, such as Masonite® or Sintra®, should be set to 40-60% pressure. Soft substrates, such as foam board, should be set to 20% pressure to avoid compression.

Narrow Graphics

Typically, less pressure is needed to correctly apply the graphic or laminate.

Checking Roller Parallelism

The roller alignment and pressure setting on the JM63 Fuzion XD is carefully set prior to shipping. A digital instrument is used to calibrate the pressure from side to side within 0.2mm through various pressure ranges. A limiter mechanism prevents the Height Wheel from turning when maximum pressure is achieved. Paper travel is a good indicator to determine whether the setting has deviated and should be corrected. Paper travel greater than 0.12" (3mm) per 16' (5m) of paper (within the 20-60% pressure range) requires adjustment in order to correct the deviance. Contact the Drytac Technical Services department for assistance before attempting to make any adjustments.

Setup Procedures

Adjusting Supply and Take-up Shaft Tensions

The JM63 Fuzion XD is equipped with a Take-up Shaft on the front of the machine that winds up the release liner from the roll of adhesive or laminate during processing. Both the Take-up Shaft and Supply Shafts are equipped with Brakes, which are important to adjust so that there is even tension on the adhesive or laminate during processing. Apply enough resistance on the material to keep it firm and flat against the roller, but not so much that it stretches or distorts. Additionally, it is critical to maintain even tension settings on both sides of the film to prevent curling. Turn the Brakes clockwise to increase tension and counter-clockwise to reduce tension.

Supply Shaft Tension

When feeding adhesive or laminate into the rollers, it is important to maintain the feed at the same rate that the rollers pull the material through the Nip. Slight resistance is usually all that is needed. Overtightening the Brakes is rarely the solution to a tracking issue. When applying resistance to the material, "less is better".

Take-up Shaft Tension

The release liner should be pulled away from the material at a steady rate that allows it to "lift" at a point just before the material enters the Nip area. Keeping the correct tension will allow the release liner to be pulled away at the right moment without excessive exposure of the material to dust and debris.

Mounting Applications

Selecting Mounting Board and Adhesive

Selecting the proper mounting board/substrate is very important. Common materials that can be used are:

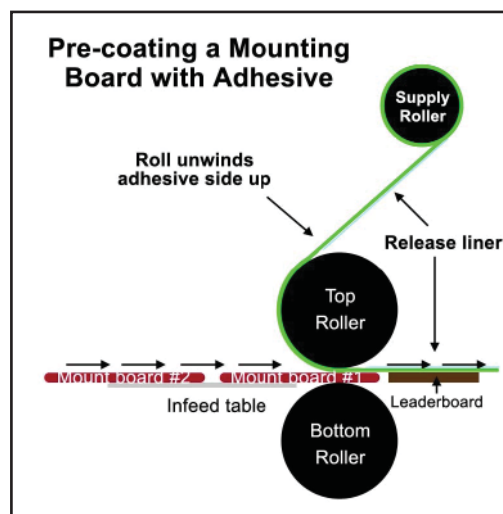
- Foam board - FomeCor®, GatorBoard®, HartBoard®, etc.
- Illustration board
- Rag board
- Medium Density Fiberboard (MDF)
- Corrugated plastic board - CoroPlast®
- Rigid plastic board - Sintra®, Styrene, etc.
- Tempered hardboard - Masonite®

Once the mounting board has been selected, determine whether to pre-coat it with adhesive or purchase pre-cut and pre-coated boards. While the use of pre-cut, pre-coated boards will save time, coating your own mounting board is more economical and allows for maximum flexibility in terms of sizing and substrate selection.

Pre-Coating Mounting Board

Pre-coating the mounting board means applying a mounting adhesive to one side of the board so that a graphic image can be mounted to the board later. The use of a Leader Board is recommended for this process. For instructions, refer to page 19.

1. Adjust the roller to the height of the substrate.
2. Load the roll of pressure sensitive adhesive (PSA) onto the Supply Shaft so that the material can be pulled toward the operator from the underside of the roll with the adhesive side facing up (the release liner side should be in contact with the roller as shown in the illustration below).
3. Pull the adhesive off of the roll so that about 4" (102mm) lies flat on the work table and is draped in front of the rollers.

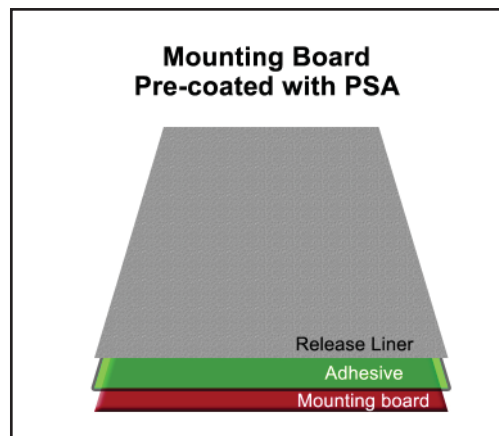


Mounting Applications

Pre-Coating Mounting Board cont.

4. Lay the Leader Board on top of the exposed adhesive on the work table. Push the Leader Board and adhesive into the Nip area (where the rollers make contact). When pushing the Leader Board into the adhesive, make sure it is parallel to the rollers.
5. Position the first mounting board behind and against the Leader Board. Check for proper alignment and feed through the rollers. Feed one board after another, as needed. Position the Leader Board behind the last board to be coated so the adhesive can be cut from the roll. Trim the excess adhesive off of the board.
6. The mounting boards are now pre-coated with PSA, which is still protected by the release liner. The pre-coated boards can be used for immediate mounting or stored for future use.

TIP:
 When a graphic image is going to be laminated with a gloss overlaminating film, the use of very smooth substrates with glossy surfaces (such as Masonite®) is preferred. This will minimize the effect of board imperfections (i.e., "orange peel") in the finished product.

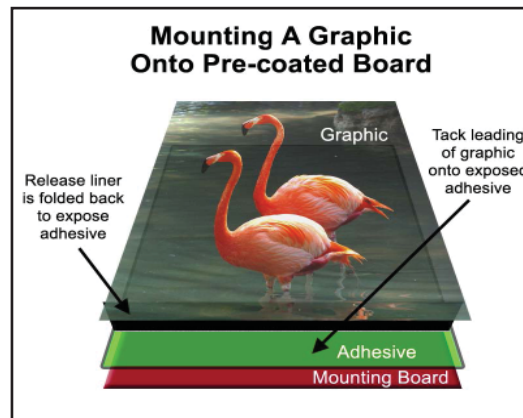


Mounting Graphics to Pre-Coated Boards

1. Adjust the roller to the height of the substrate.
2. Expose the adhesive on the board by folding back approximately 1" (25mm) of the release liner.
3. Using the folded-back release liner as a temporary support bridge, align the graphic image onto the board and proceed to "tack" (stick or press down) the leading edge of the graphic onto the exposed adhesive.
4. Run a Leader Board of the same thickness as the mounting board through the rollers so that the back edge of the Leader Board is at the Nip area of the machine.

Mounting Applications

Mounting Graphics to Pre-Coated Boards cont.



5. Square the mounting board with the tacked graphic against the edge of the Leader Board and drape the graphic over the top roller.
6. Run the mounting board/adhesive/graphic image through the rollers while simultaneously pulling the release liner away from and off of the board.

Laminating Applications

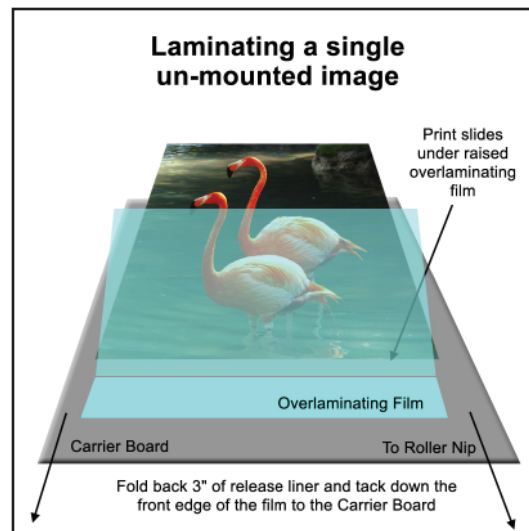
Selecting Pressure Sensitive Overlaminating Film

Select an appropriate pressure sensitive overlaminating film for the surface of the graphic image based on aesthetics and the conditions under which it will be displayed. Drytac offers a wide variety of films to match your specific output and application. Consult the Drytac Product Reference Guide for descriptions of available overlaminating films or visit www.drytac.com.

To prevent adhesives from sticking to the rollers and to provide a reusable, standard working surface during lamination, the use of a silicone-coated board (also known as a "Carrier Board") is highly recommended. For instructions, refer to page 19.

Laminating Single Unmounted Image

Before processing, make sure that the graphic image is clean and free of dust or specks of lint. An anti-static cloth or anti-static wisk is recommended for cleaning the graphic prior to lamination.



1. Raise the top roller and insert the Carrier Board. Set roller pressure as previously described.
2. Pre-cut a sheet of overlaminating film from the roll. The sheet should be larger than the graphic image by approximately 1" (25mm) on the bottom and each side and 2" (50mm) on the top.
3. Peel and fold back approximately 2" (50mm) of release liner from the top edge of the overlaminating film. Tack the film on the Carrier Board by pressing the exposed section of film onto the leading edge of the board.
4. Advance the Carrier Board into the machine using the Foot Pedal. Stop before the edge of the overlaminating film reaches the rollers.

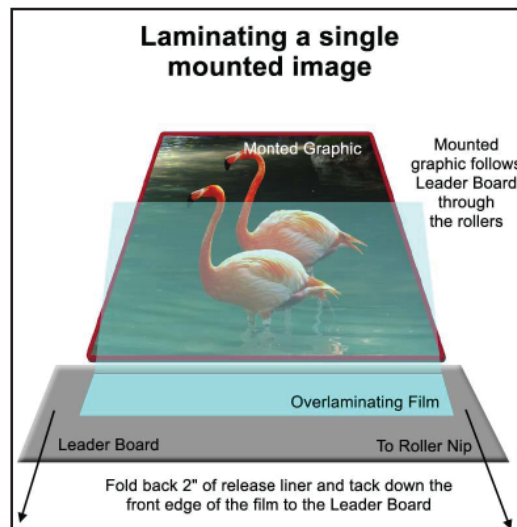
Laminating Applications

Laminating Single Unmounted Image cont.

5. Lift up the remainder of the overlaminating film (which is still protected by the release liner) and slide the graphic image face underneath it. Stop before it makes contact with the exposed part of the adhesive. It is important to keep the film adhesive away from the graphic until the whole assembly is under pressure and traveling through the machine.
6. Lay the overlaminating film over the top of the upper roller. While holding up the edge of the peeled back release liner with one hand, start the rollers and apply the overlaminating film to the surface of the graphic. Pull up and away on the release liner as your graphic travels through the machine. Ensure that the release liner does not reach the point where the graphic makes contact with the top roller. Complete this step with a consistent motion and do not stop until the entire graphic has passed through the rollers.
7. The laminated graphic can now be easily removed from the silicone-coated Carrier Board for trimming and mounting.

Laminating Single Mounted Image

Before processing, make sure that the graphic image is clean and free of dust or specks of lint. An anti-static cloth or anti-static wisk is recommended for cleaning the graphic prior to lamination.



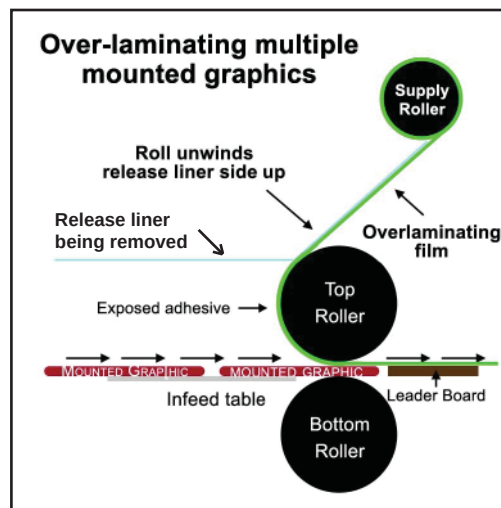
1. Raise the top roller and insert the mounted graphic image into the roller Nip area. Adjust the roller pressure.
2. Pre-cut a sheet of overlaminating film from the roll. The sheet should be larger than the graphic image by approximately 0.25" (6mm) on the bottom and each side and 3" (75mm) longer on the top.
3. Peel and fold back approximately 2" (50mm) of release liner, exposing the adhesive of the overlaminating film.
4. Tack approximately 1.5" (38mm) of the film to the Leader Board but not over the mounted graphic.

Laminating Applications

Laminating Single Mounted Image cont.

5. Insert the Leader Board with the overlaminating film tacked to it into the Nip area. Advance the Leader Board and the film through the Nip area until the upper roller securely pinches the film. The trailing edge of the Leader Board should be at the pinch point of the rollers.
6. Lay the overlaminating film over the top of the upper roller. Ensure that the folded release liner is easily accessible.
7. Slide the mounted graphic image into the Nip area and allow its edge to make contact with the edge of the Leader Board.
8. While holding up the folded edge of the peeled back release liner with one hand, start the rollers and apply the overlaminating film to the surface of the graphic image. Pull up and away on the release liner as the graphic advances to ensure that the liner does not reach the Nip area. Use a consistent motion and do not stop until the entire graphic has passed through the rollers. The laminated graphic can now be easily removed from the silicone-coated Carrier Board for trimming and mounting.
9. Trim excess overlaminating film from the edges of the graphic.

Laminating Multiple Mounted Images



1. For higher volume jobs, select a roll of overlaminating film slightly wider than the mounted graphic images to be laminated.
2. Install the overlaminating film on the Supply Shaft so that the material can be pulled toward the operator from the bottom of the roll with the release liner side facing up.
3. Adjust the rollers for proper pressure.
4. Pull several inches of the overlaminating film off of the roll. Separate approximately 3-4" (76-102mm) of the overlaminating film from its release liner and drape it onto the Infeed Table in front of the rollers. Attach the release liner to the core on the Take-up Shaft.

Laminating Applications

Laminating Multiple Mounted Images cont.

5. Position the first mounted graphic image to be laminated against the back of the Leader Board. Check for proper alignment and feed through the rollers of the machine. Feed one graphic image in after another, as needed.
6. Carefully separate graphics with a razor blade or utility knife. Trim off the excess film.

Using a Leader Board

A Leader Board is recommended when mounting and laminating with the JetMounter™ JM63 Fuzion XD because it helps set proper pressure prior to the application. It is first fed into the roller Nip, then followed by the actual mounting/laminating material to be processed. The Leader Board should be the same width and thickness as the production mounting board and about 6-8" (152-203mm) long.

Make a Tail Board to be used behind the last production board. The Tail Board is recommended for use when mounting to foam board.

Carrier Boards and Preparing Mounting Board

When processing unmounted graphic images, it is recommended that a silicone-coated board be used to prevent adhesives from sticking to the rollers. This board is known as a Carrier Board and provides a reusable, standard working surface. The Carrier Board can be used when laminating a graphic image prior to it being mounted to a mounting board/substrate. To accommodate various artwork formats, it is common practice for finishing professionals to stock Carrier Boards in several sizes.

Making a Carrier Board is similar to pre-coating a mounting board. When the mounting board is coated with adhesive, the silicone-coated release liner provides a slick, non-stick surface on which to laminate graphic images. Be sure to use a "self-wound" adhesive with a silicone-treated liner for this purpose. Once the most appropriate adhesive/mounting board combination has been selected for the application, the board must be properly prepared before coating. Although often overlooked, this can be the most important step when mounting a graphic image for display.

- *Foam board* (e.g., FomeCor®, GatorBoard®, HartBoard®, etc.) - These substrates have porous surfaces and often contain particles that can spoil an otherwise perfect mount. Clay-coated surfaces such as FomeCor® or Foam-X® should be wiped with a TacCloth™ to remove dust particles.
- *Mat board/Mill board* - To prepare these boards for mounting, use an anti-static wisk to remove dust particles and other debris.
- *Hardboard* (e.g., Medium Density Fiberboard (MDF), Masonite®, etc.) - To prepare these substrates for mounting, wipe the surface with a TacCloth™. If the surface contains irregularities, use sandpaper to remove them and then wipe the surface with a TacCloth™.

NOTE:

Due to the highly absorbent nature of these substrates, DO NOT wipe down their surfaces with a moist rag.

Care & Maintenance

CAUTION:

Unplug the equipment before performing any service or maintenance.

- Depending on the frequency of machine use, schedule maintenance intervals monthly or semi-annually. It is recommended that maintenance be performed at least every six months.
- For optimum operational efficiency, clean the machine regularly with a soft cloth and a neutral mixture of soap and water.
- Do not use thinner or a metal brush to clean the rollers. To remove heavy dirt and adhesive residue, apply isopropyl alcohol (90%+) to a lint-free cloth to clean the roller surfaces. Adhesive can be removed with an eraser block.
- Always keep the rollers separated when the machine is not in use.
- There are two replaceable fuses on the machine located on the rear panel in the power cord receptacle. The fuses are 5x20mm, 5 Amp. DO NOT use any other fuse as it may endanger the operator and/or machine and void the warranty. Spare fuses can be found inside the schematics envelope located inside the left end case.
- Lubricate the drive and take-up chains located inside the right end case every six months, with a premium brand chain lubricant. Disconnect power before lubricating the chain.

Inspection & Lubrication Points

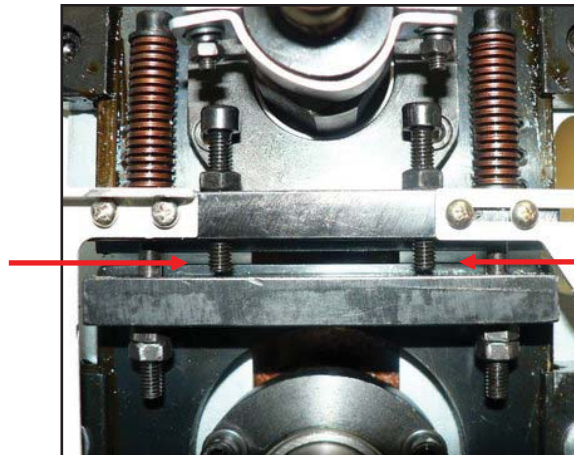
1. Use chain lube or WD-40 on drive chains.
2. Use oil on brake knob threads.
3. Use oil on threads and high quality grease for contact surfaces on lift mechanism components.
4. Check oil level on gear box and add appropriate hydraulic oil, as needed.
5. Lube casters with grease gun.
6. Check/secure all sprocket set screws.
7. Look for any abnormal wear or metal debris.
8. Carefully operate the machine with end cases off to check for noise or irregularities of any kind.
9. Power down and disconnect the machine to inspect and tighten the heating rod power connections.
10. Examine the electrical components for loose connections or any sign of fatigue.
11. Clean and carefully examine the rollers for any cuts, abrasions or irregularities.
12. Spin all shafts and rollers to check bearings.
13. Raise and lower the Infeed Table to check for proper operation.
14. Wipe down all surfaces with a multi-purpose cleaner while inspecting for damage.
15. Note any deep scratches on the Infeed/Outfeed Tables and underside of the Print Guide.
16. Check all safety devices for proper operation.

Roller Alignment Instructions

Prior to shipment, the JM63 Fuzion XD is carefully inspected. Inspection includes making sure the roller alignment is calibrated and tested for paper travel at 20-60% pressure. Paper deviation of less than 0.12" (3mm) for 20' (6m) of travel (maximum standard) is likely to increase above 60% pressure due to roller deflection. For best results with most applications, processing at 40% pressure is recommended. If paper travel or excessive wrinkling occurs, perform the following procedure for roller alignment.

Required Tools: (2) 10mm open end wrenches, (1) set of metric Allen wrenches

1. Ensure the machine is level front to back and side to side, with casters locked to prevent movement.
2. Disconnect the machine from the power supply.
3. Remove both end case panels and set them aside.
4. Raise the top roller slightly until there is a visible gap between it and the bottom roller. Slowly lower the top roller until part of it touches the bottom roller. If the gap between the top and bottom rollers is uneven, an adjustment must be made. Proceed to Step 5. If not, test for paper travel at 20% and 40% pressure before proceeding. A small visual difference in the gap may not necessarily cause poor paper travel or wrinkling, and therefore, may not require roller adjustment.
5. Raise the top roller so that it is not touching the bottom roller. Check the gap between the upper and lower bearing blocks (Figure A). If there is no gap or the gap is uneven, adjust the two leveling bolts next to the spring washer stacks to create a 0.08" (2mm) separation between the upper and lower bearing blocks. Adjust the bolts to ensure the two bearing blocks are parallel with each other.



There must be an even gap between the upper and lower bearing blocks on each side of the machine.

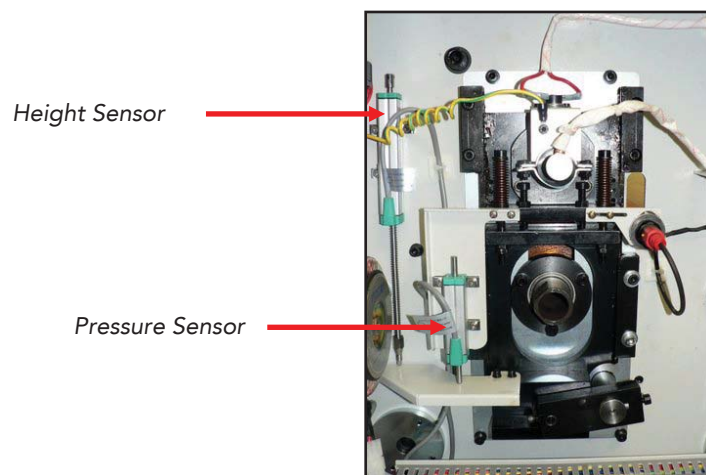
Figure A (left end case)

NOTE:

Because the sensor is located in the left end case, any adjustment made to the bearing block on that side can affect height and pressure readings. Therefore, it is recommended that any adjustment be made to the bearing block in the right end case first.

Roller Alignment Instructions

6. Ensure the spring washer stacks are loose. With the rollers apart, push up on the spring washer bolts to verify there is 0.04-0.08" (1-2mm) of free play in the spring stacks at the top of the bolts. If not, loosen the two 10mm nuts at the bottom of each bolt and adjust using a 5mm Allen wrench. Lock the nuts by turning the top nut counter-clockwise and the bottom nut clockwise.
7. Slowly lower the top roller until part of it touches the bottom roller. Compare the gap between the rollers on the left and right side of the machine. If the gap is uneven and the rollers are not parallel, adjust the two leveling bolts using the process described in Step 5. After making the necessary adjustment, re-check the gap between the rollers to ensure they are parallel.
8. Repeat Step 6.
9. Test for paper travel at 20-60% pressure by using a roll of Kraft paper that is held to the Infeed Table. Carefully square it up to the roller. If the paper travels to one side, square up the roll with the roller again and re-check the travel. If travel is confirmed in one direction, that is the side that has stronger pressure. Adjust the spring washer stacks in the right end case to avoid altering the sensor settings in the left end case. Adjust each stack on the same end so they are as equal as possible. Depending on the paper travel results, first loosen the lock nut and then tighten or loosen the adjustment nut. Tightening the adjustment nut will increase the pressure. Repeat the paper test until travel is less than 0.12" (3mm) for 20' (6m) of travel.
10. Check the height and pressure sensors to ensure proper operation. The height display should read "00" at the "Sweet Spot" and increase to "01" when the rollers are slightly open. The 0 LED on the pressure display should be illuminated at all times. When the top roller is lowered to rest on the bottom roller, the 20 LED will light to indicate 20% pressure has been exerted. If neither condition occurs, the sensor and/or Control Panel parameters may need adjustment. If the 0 LED is not illuminated when the Nip area is open, the sensor must be physically adjusted. Proceed to Step 11. If operation is normal, proceed to Step 13.



11. To allow for movement of the pressure sensor, loosen the four bolts that secure the sensor to the support bracket. Carefully raise the body of the sensor and temporarily secure it with one or two bolts. Check the display. If only the 0 LED is illuminated, secure the remaining bolts and test functionality. Re-adjust as needed.
12. To adjust the Control Panel parameters, refer to the Control Panel Parameter Procedure. Do not make physical adjustments to the sensor without first consulting this document.
13. Verify that all bolts are securely tightened before replacing the end case panels and knobs.

JetMounter™ JM63 Fuzion XD Operation Sequence

Mode	Photocell Clear and No Switches Activated	Photocell Blocked	Table Switch Activated	Emergency Stop Button Pressed
To operate in Standard Mode	1. Turn the On/Off Switch on the back of the left end case to "On". 2. Press the Power Button on the Control Panel. 3. Select the roller direction by pressing the F/R Button on the Control Panel. Press twice to change direction. 4. Check rollers to confirm they are clear of any obstruction. Rotate the Speed Control Knob to set processing speed. 5. Press the Roller Button on the Control Panel to activate the roller. The roller will rotate at the set speed.	When the photocell is blocked, the roller stops and the photocell (PC) status LED illuminates. The obstruction must be cleared before the roller can be re-activated. To re-activate the roller, press the Roller Button on the Control Panel.	When the table is lowered, a safety switch is activated that prevents the roller from turning unless the Foot Pedal is depressed. To reset, raise the table and securely seat the pin. Press the Roller Button to re-activate the roller. When the table switch is activated, the table (T) status LED illuminates. Note: Table switch activation stops the motor only. Power to the Control Panel stays on.	When the Emergency Stop Button is pressed during processing, the motor stops and power to the heater and Control Panel turns off. When the Emergency Stop Button is reset (by turning it clockwise and lifting it), the following happens: a. Power to the Control Panel is available when the Power Button is pressed. b. The roller does not rotate unless the Roller Button on the Control Panel is pressed.
To operate with the Foot Pedal	When the Foot Pedal is depressed, the bottom roller rotates at the set speed. When the Foot Pedal is released, the rollers stop rotating unless the operator presses the Roller Button and the machine runs at the set speed.	When the Foot Pedal is depressed and the photocell is blocked, the bottom roller DOES NOT stop rotating. Speed slows to 2 fpm (0.61 mpm). The machine operates at a slow speed, and an alarm sounds until the photocell is cleared. Once the photocell is cleared, press the Roller Button and release the Foot Pedal. The rollers will then rotate at the set speed.	When the Foot Pedal is depressed and the table is lowered, the bottom roller will rotate at a speed of 2 fpm (0.61 mpm). When the Foot Pedal is released, the rollers stop rotating.	The Foot Pedal does not override the Emergency Stop Button when it is depressed.
To operate in Reverse Note: The bottom roller must not be turning when the F/R Button is pressed.	When the REV status LED illuminates and the Foot Pedal is depressed, the rollers rotate in reverse at 2 fpm (0.61 mpm) and an alarm sounds. When the Foot Pedal is released, the rollers stop rotating.	When the REV status LED illuminates and the Foot Pedal is depressed, the rollers rotate in reverse at 2 fpm (0.61 mpm) and an alarm sounds. When the Foot Pedal is released, the rollers stop rotating.	When the REV status LED illuminates and the Foot Pedal is depressed, the rollers rotate in reverse at 2 fpm (0.61 mpm) and an alarm sounds. When the Foot Pedal is released, the rollers stop rotating.	The Foot Pedal does not override the Emergency Stop Button when it is depressed.

JetMounter™ JM63 Fuzion XD Schematic

