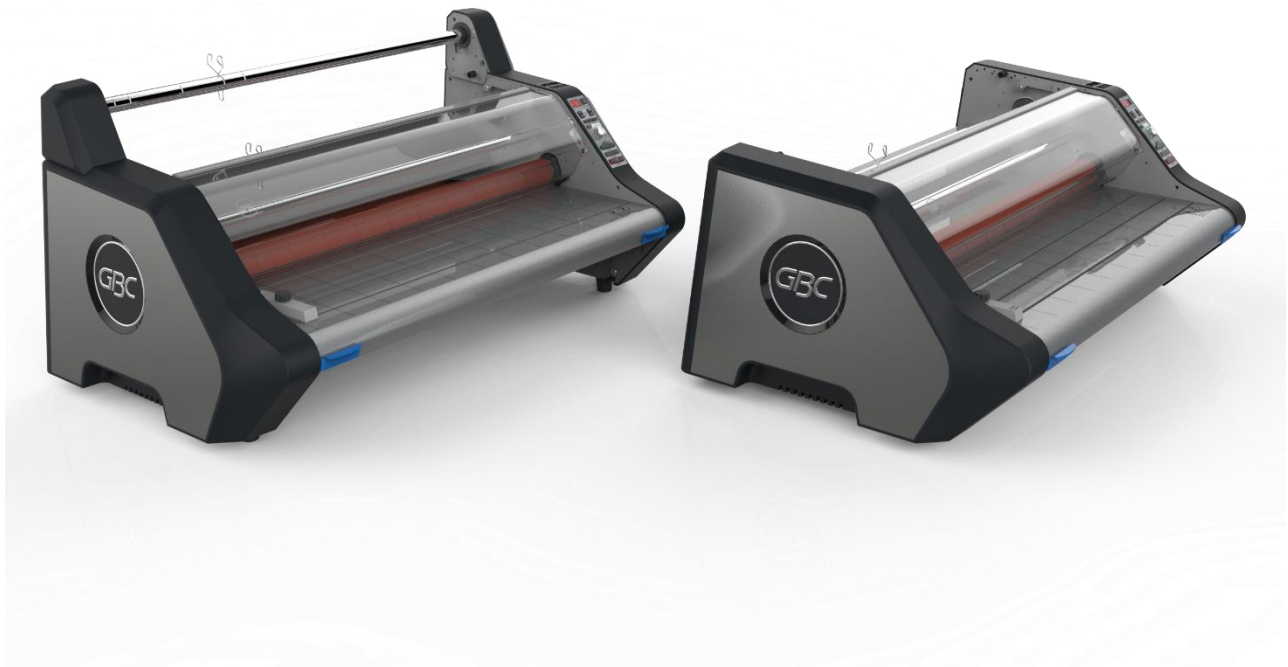

Catena 35/65 Laminator

INSTALLATION & OPERATION MANUAL

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1. Safety

YOUR SAFETY, AS WELL AS THE SAFETY OF OTHERS IS IMPORTANT TO GBC. IN THIS INSTRUCTION MANUAL AND ON THE PRODUCT ARE IMPORTANT SAFETY MESSAGES. BEFORE YOU INSTALL OR USE THE MACHINE, READ AND FOLLOW ALL THE SAFETY NOTICES CAREFULLY IN THIS CHAPTER.

Observe all the safety information provided. Observe all safety warnings. Never remove safety warnings or other information from the equipment.

Read all of the instructions and save these instructions for further use.

 The safety alert symbol precedes each safety notice in this manual. The symbol indicates a potential personal safety hazard to you or others, as well as cause product damage or property damage.

 This safety alert symbol indicates a potential electrical shock. It warns you not to open the paper cutter and expose yourself to hazardous voltage.

THE FOLLOWING WARNINGS ARE FOUND ON THE CATENA 35/65 LAMINATOR.



This means you can be seriously hurt or killed if you open the product and expose yourself to hazardous voltage.

Do not open. No user servicable parts insides. Refer servicing to qualified service personal.





This safety message means that you could be burned and your fingers or hands could be trapped and crushed in the hot rollers. Clothing, jewelry long hair

could be caught in the rollers and pull you into them.



This safety notice means you can cut yourself if not careful operating the trimmer.

 **WARNING:** Do not attempt to service or repair the laminator.

 **WARNING:** do not connect the laminator to an electrical supply or attempt to operate the laminator until you have completely read these instructions. Maintain these instructions in a convenient location for future reference.

General Safeguards

- Use this laminator only for its intended purposes as according to the specifications outlined in the operating instructions.
- Keep hands, long hair, loose clothing and articles such as necklaces or ties away from the front of the rollers to avoid entanglement and entrapment.
- Avoid contact with the rollers during operation or shortly after the laminator has been turned off. The rollers can reach temperatures in excess of 300°F.
- Keep hands and fingers away from the path of the sharp film cutter blade located at the film exit.
- Do not place the laminator on an unstable cart, stand or table. An unstable surface may cause the laminator to fall resulting in serious bodily injury. Avoid quick stops, excessive force and uneven floor surfaces when moving the laminator on a cart or stand.
- Do not defeat or remove electrical and mechanical safety equipment such as interlocks, shields and guards.

- Do not insert objects unsuitable for lamination.
- Do not expose laminator to liquids.


Electrical Safeguards

This laminator must be connected to a supply voltage corresponding to the electrical rating as indicated on the serial plate located on the rear of the machine. Unplug the laminator before moving it, or when it is not in use for an extended period of time.

Do not operate the laminator with a damaged power supply cord or plug.

Do not overload electrical outlets as this can result in fire or shock.

Do not alter the attachment plug. This plug is configured for the appropriate electrical supply. The unit is intended for indoor use only.

 **CAUTION:** The receptacle must be located near the equipment and easily accessible. Do not use an extension cord.

Disconnect the attachment plug from the receptacle to which it is connected and keep the power supply cord in your possession while moving the laminator.

Do not operate the laminator with a damaged power supply cord or attachment plug, upon occurrence of a malfunction, or after laminator has been damaged. Contact an authorized GBC service representative for assistance.

GBC Technical Service

To order replacement accessories, service, parts, or an Equipment Maintenance Agreement, please contact GBC Technical Service and Support at:

United States

ACCO Brands GBC Technical Service and Support

4 Corporate Drive Lake Zurich, IL 60047-8997

www.gbconnect.com

1-800-723-4000

Canada

Ontario and Quebec – 1-800-268-3310

All other Provinces – 1-800-268-3447

Local 905-595-3100

Callcentre@GBCCanada.com

Mexico

(55) 1500 5778

Lada SIN costo: 01 800 759 6825

serviciotecnico@acco.com.mx

2. Warranty

Limited 90 Day Labor Warranty; USA, Mexico, and Canada

ACCO Brands USA LLC, ACCO Brands, 4 Corporate Drive, Lake Zurich, IL 60047 (in Mexico, ACCO Brands Mexicana, Neptuno 43, Fraccionamiento Nueva Industrial Vallejo México 07700 D.F. México), (in Canada, ACCO Brands Canada Inc., 7381 Bramalea Road, Mississauga ON L5S1C4) (each, respectively, "ACCO Brands") warrants to the original purchaser that this ACCO Brands product is free from defects in workmanship and material under normal use and service for a period of: ninety (90) days for parts and labor after purchase.

ACCO Brands' obligation under this warranty is limited to replacement or repair, at ACCO Brands' option, of any warranted part found defective by ACCO Brands without charge for material or labor. Any replacement, at ACCO Brands' option, may be the same product or a substantially similar product that may contain remanufactured or refurbished parts. This warranty shall be void in the following circumstances:

- (i) if the product has been improperly installed or misused,
- (ii) if the product has been damaged by negligence or accident, or
- (iii) if the product has been altered by anyone other than ACCO Brands or ACCO Brands' authorized agents.

Without limiting the generality of the previous paragraph, ACCO Brands' obligation under this limited warranty does not include:

- (iiii) damage caused to the rollers by knives, razors, or other sharp tools; by any foreign objects falling into the working area of the laminator; or by cleaning the laminator with solutions or materials that harm its surfaces;

For warranty execution, please contact ACCO Brands at: 800-723-4000 or www.gbconnect.com in the USA 800-263-1063 or www.gbcanada.com in Canada (55) 1500 5578 or www.accomexico.mx in Mexico

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. REPRESENTATIONS OR PROMISES INCONSISTENT WITH OR IN ADDITION TO THIS WARRANTY ARE UNAUTHORIZED AND SHALL NOT BE BINDING ON ACCO BRANDS. TO THE EXTENT PERMITTED BY APPLICABLE LAWS, ANY IMPLIED WARRANTIES (IF APPLICABLE) ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. SOME STATES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL ACCO BRANDS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL OR SIMILAR DAMAGES, WHETHER OR NOT FORESEEABLE. SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INCIDENTAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, OR SIMILAR DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU.

FOR CONSUMERS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS IN THEIR JURISDICTION OF PURCHASE OR, IF DIFFERENT, IN THEIR JURISDICTION OF RESIDENCE, THE BENEFITS CONFERRED BY THIS WARRANTY ARE IN ADDITION TO ALL RIGHTS AND REMEDIES CONVEYED BY SUCH CONSUMER PROTECTION LAWS AND REGULATIONS.

To the extent permitted by law, this warranty is not transferable and will automatically terminate if the original product purchaser sells or otherwise disposes of the product.

This warranty gives you specific legal rights. Other rights, which vary from jurisdiction to jurisdiction, may exist. In addition some jurisdictions do not allow (i) the exclusion of certain warranties, (ii) limitations on how long an implied warranty lasts and/or (iii) the exclusion or limitation of certain types of costs and/ or damages, so the above limitations may not apply.

3. Specifications

Model	Catena 35	Catena 65
Operating Speed	Variable	Variable
Speed 1 - 10	1 ~ 8.5ft./min.	1 ~ 8.5 ft./min.
Warm-up Time	< 10 Minutes	< 10 Minutes
Maximum Film Width	12"	27"
Maximum Film Roll Diameter	5"	5"
Film Supplies Supported: 1. Film Thickness	Nap I; Nap II; PET/LDPE; PET/EVA <ul style="list-style-type: none"> 1.5mil / 3mil / 5mil / 10mil Cold films with rewind accessory 	Nap I; Nap II; PET/LDPE; PET/EVA <ul style="list-style-type: none"> 1.5mil / 3mil / 5mil / 10mil Cold films with rewind accessory
Optional Accessories:	<ul style="list-style-type: none"> 2.25" Shaft Rewind kit 	<ul style="list-style-type: none"> 2.25" Shaft Rewind kit
Dimensions: 2. Width 3. Height 4. Depth 5. Weight	<u>Machine:</u> 23" (58.4cm) 14" (35.6cm) 21" (53.3cm) 81lbs (36.7 kg)	<u>Shipping:</u> 28" (71.1cm) 18" (45.7cm) 26" (66.1cm) 86 lbs (39.0 kg)
Electrical Requirements <ul style="list-style-type: none"> Voltage Receptacle 	Electrical Requirements <ul style="list-style-type: none"> 120V, 60Hz NEMA 5-15R 	Electrical Requirements <ul style="list-style-type: none"> 120V, 60Hz NEMA 5-15R

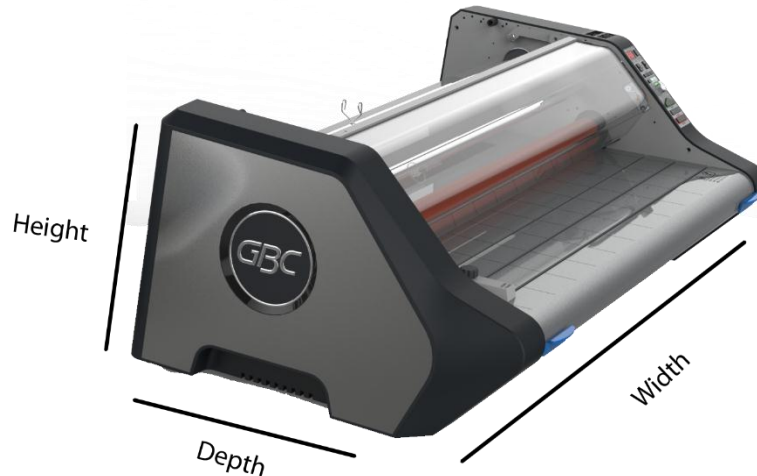


Figure 1. Catena 35/65 Dimensions

FCC Class B Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the 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:

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

Canada Class B Notice - Avis

Canada, Class B

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Modifications

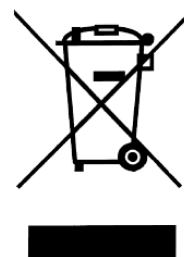
Any modifications made to this device that are not approved by ACCO Brands may void the authority granted to the user by the FCC and/or by Industry Canada to operate this equipment.

Toutes modifications apportées à ce dispositif et non approuvées par ACCO Brands annuleront le droit accordé à l'utilisateur par le FCC et/ou par Industrie Canada de faire fonctionner cet équipement.

Disposal

At the end of its useful life, your product is considered to be Waste Electrical and Electronic Equipment (WEEE). As such, it is important to note that:

- WEEE is not to be disposed of as unsorted municipal waste. It is to be collected separately such that it can be disassembled so its components and materials can be recycled, re-used, and recovered (burned for energy content in electricity production).
- Public collection points have been set up by municipalities for the collection of WEEE, free of charge to you.
- Please return your WEEE to the collection facility nearest your home or office.
- If you have difficulty locating a collection facility, the retailer that sold you the product should accept your WEEE.
- If you are no longer in contact with your retailer, please contact ACCO for assistance with this matter.
- Recycling of WEEE is geared toward protecting the environment, protecting human health, preserving raw materials, improving sustainable development, and ensuring a better supply of commodities in the European Union. This will be achieved by retrieving valuable secondary raw materials and reducing the disposal of waste. You can contribute to the success of these goals by returning your WEEE to a collection facility.
- Your product is marked with the WEEE symbol (wheelie bin with an X through it). This symbol is to inform you that WEEE is not to be disposed of as unsorted municipal waste.



4. Installation

Service



WARNING: Do not attempt to service or repair the laminator. Failure to observe this warning could result in severe personal injury or death.

Disconnect the plug from the receptacle and contact GBC Technical Service when one or more of the following has occurred.

- The power supply cord or attachment plug is damaged.
- Liquid has been spilled into the laminator.
- The laminator is malfunctioning after being mishandled.
- The laminator does not operate as described in these instructions.

Installation

- Shipping damage should be brought to the immediate attention of the delivering carrier.
- Place the laminator on a stable flat surface capable of supporting 150 lbs.
- The surface should be at least 30" high to assure comfortable positioning during operation. All four rubber feet should be on the supporting surface.
- Connect power cord to an appropriate power source. Avoid connecting other equipment to the same branch circuit to which the laminator is connected as this may cause nuisance tripping of the circuit breaker or blown fuses.
- The laminator should be positioned to allow exiting film to drop freely to the floor. Accumulation of laminate as it exits the laminator may cause film to wrap around the rollers, causing a jammed condition.
- Avoid placing laminator near sources of heat or cold. Avoid locating the laminator in the direct path of forced, heated or cooled air.

Caring for Catena 35/65

The only maintenance required by the operator is to periodically clean the rollers. Keeping the rollers clean ensures that your finished items will not be damaged by dirt and adhesive build-ups.



CAUTION: the following procedure is performed while the laminator is hot. Use extreme caution.



WARNING: Do not apply cleaning fluids or solvents to the rollers.



WARNING: Do not attempt to laminate adhesives marked 'Flammable'.



WARNING: Do not expose laminator to liquids.

- Remove the film from the laminator following the procedure outlined in the section FILM LOADING AND THREADING.
- Clean the top and bottom rollers with a clean, damp lint-free cloth. If there are any adhesive build-ups, you may use isopropyl alcohol instead of water.
- To remove difficult debris Preheat the laminator until the READY LAMP (✓) illuminates.
- Push and hold the SLOW Backward button to rotate the upper and lower rollers with the safety shield open.
- Follow the procedure in section FILM LOADING AND THREADING, Method Using Film Threading Card to reload the laminator.

Note: Do not use metal scouring pads to clean the heat rollers!

Note: Covering machine when not in use will reduce dust build-up on the rollers and film which can lead to poor lamination quality.



WARNING: Do not laminate glitter and/or metallic items. Damage to the rollers may result.

The side covers and feed table can be cleaned with a lint-free cloth and a mild detergent.

5. Feature Guide

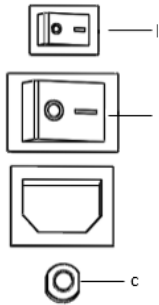


Figure 2

1. **POWER:** Applies power to the laminator and fan. The 'ON' position is indicated by the 'I' symbol. The 'OFF' position marked 'O' symbol (figure 2).
 - a. **MAIN POWER SWITCH** – Located at the back of the machine, applies power to the laminator.
 - b. **FAN POWER SWITCH** – Located at the back of the machine, applies power to the fan.
 - c. **CIRCUIT BREAKER** – Protects machine from power surges. To reset push the circuit breaker



Figure 3

2. CONTROL PANEL:

- a. **TEMPERATURE DISPLAY** – Shows the set point temperature that the machine will maintain during operation.
- b. **ON/OFF BUTTON** –Used to put the machine in Standby mode or wake the machine up from Standby mode. Status indicators (b2) tell you the status of the machine.

- i. **READY** – Machine is ready to use when machine beeps and the ✓ Icon LED turns GREEN.
 - ii. **WARM-UP** – Machine is warming up when the ⚡ Icon LED is AMBER.
 - iii. **STANDBY** – When ⏻ icon is illuminated AMBER, machine is in Standby mode. Press the ON/OFF button to wake the machine and warm-up to operational temperature.
- c. **TEMPERATURE ADJUST** – Toggle the temperature up and down. If pressed and held temperature will increment by 10 instead of 1 once it reaches a 10's number (i.e. 238, 239, 240, 250, etc.)
 - d. **TEMPERATURE READING** – press to display current machine temperature.
 - e. **HOT/COLD OPERATION** – Toggles between Cold and Hot mode. Hot mode default is 230 F (110 C) while cold mode default is 70 F (21 C).
 - f. **PRESETS (1-3)** –Select desired temperature and film thickness settings. Push preset button for 5 seconds to save values.
 - g. **FILM SELECTION** –Press the film selection button to toggle between films less than 3 mil (75mic), between 3-5 mil (75-125mic), and greater than 5 mil (125mic)
 - h. **SPEED CONTROL** – Controls the speed of the laminator when the run button is pushed.
 - i. **AUTOSPEED** – Machine runs at optimum speed for the film type selected. PUSH the speed dial to turn this feature ON/OFF. **GREEN** LED will illuminate when ON.
 - ii. **MANUAL SETTINGS 1 THRU 10** – Operator can manually select the speed 1 – 10. The speed will increase as you adjust from 1 to 10. **AUTOSPEED** must be turned OFF to manually adjust speeds.
 - i. **RUN** – Push the RUN button to run the laminator in the forward direction.
 - j. **SLOW FORWARD/REVERSE** – Press and Hold to run the machine slowly in Forward or Reverse. Using SLOW Speed will allow the machine to run even when Heat Shield is open.
 - k. **STOP** – Used to Stop the laminator. There are two stop buttons one on front panel and one on back of the machine.

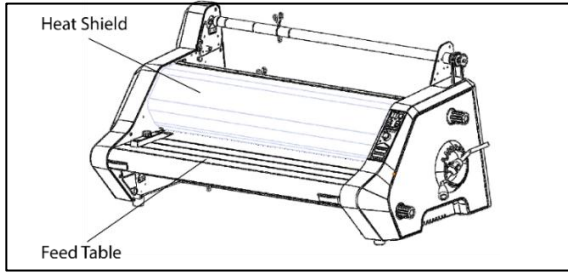


Figure 4

3. **HEAT SHIELD:** (figure 4) Prevents inadvertent contact with the heat rollers. The HEAT SHIELD must be lowered for the RUN operation to work.
4. **FEED TABLE:** (figure 4) The Feed Table is used to position items for lamination. Feed table must be closed and latched for laminator to operate.

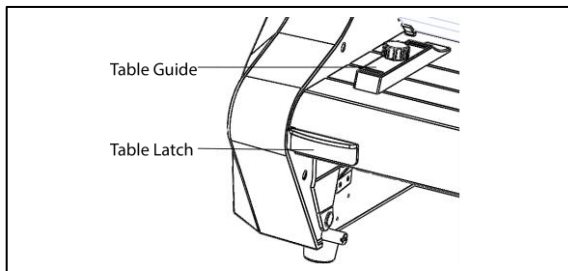


Figure 5

5. **FEED TABLE LATCHES:** (figure 5) Used to unlock and lock the FEED TABLE.
6. **FEED TABLE GUIDE:** (figure 5) Aligns items as they are fed into the laminator. Helpful on longer items to reduce skew. The guide can be moved by loosening the knob and sliding the guide to the desired position and then tightening the knob.

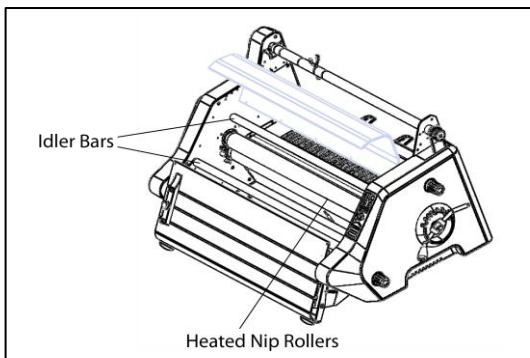


Figure 6

7. **HEATED NIP ROLLERS:** (figure 6) Heats the film to activate the adhesive and provides pressure to ensure film adheres to the media.
8. **IDLER BARS:** (figure 6) The Idler Bars, located near each supply roll, are used to direct the film to the NIP ROLLERS. The lower Idler Bar is attached to the Feed Table to facilitate easy film loading.

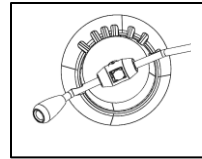


Figure 7a

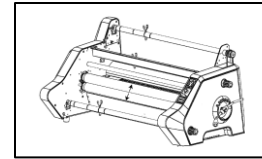


Figure 7b

9. **GAPPING:** Gaps the heated nip rollers and pull rollers allowing mounting boards to be fed for mounting applications. To adjust pull and rotate handle to desired position (Figure 7b).
10. **PULL ROLLERS:** The Pull Rollers are located at the back of the laminator. They simultaneously pull the film through the laminator and provide tension as the film cools to ensure quality lamination.

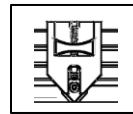


Figure 8

11. **REAR SLITTER:** (figure 8) Used to cut the film when it exits the rear of the laminator.
12. **AUTO SHUT-OFF:** After two hours of inactivity the laminator will enter Standby mode reducing temperature and conserving energy. After three hours of inactivity the machine will shut down. To activate the laminator, ensure the Main Power button is in the ON position ('I') and press the ON/OFF button on the front of the machine.

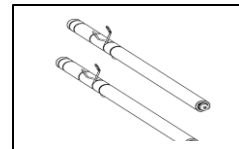


Figure 9

13. **AUTOGRIP SHAFTS:** The Catena 35/65 use two autogrip shafts (figure 9) to hold laminating film.

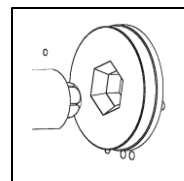


Figure 10a

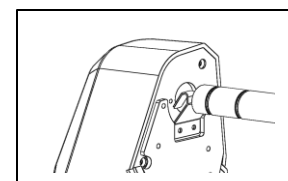
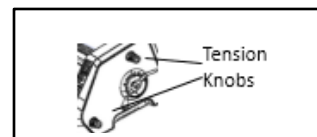


Figure 10b

14. **FILM BRACKET AND HOLDER:** Film supply is loaded into the holder (figure 10a) and bracket (figure 10b).



15. **BRAKE TENSION KNOBS:** Adjust tension on the film. Turning clockwise "+" indicator will increase tension, while turning counter clockwise "-" will decrease tension.

7. Operation

FILM LOADING



Figure 11



Figure 12

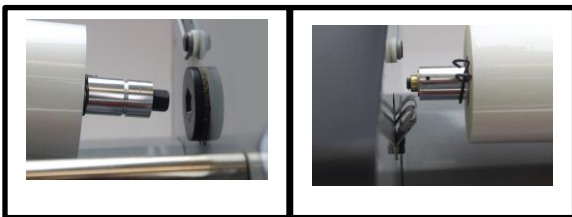


Figure 13



Figure 14

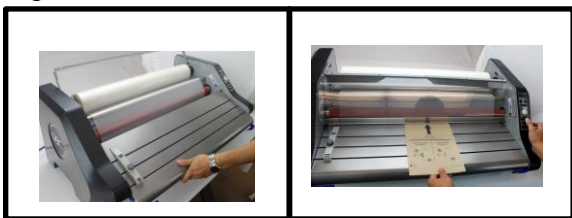


Figure 15

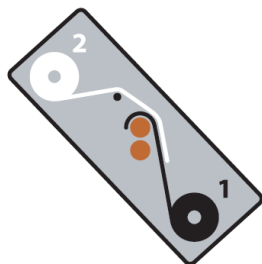


Figure 16

CAUTION: the following procedure is performed while the laminator is hot. Use extreme caution.

TIP: Film loading is easiest when machine is in a Ready State or while warming up.

Step 1: Lift Safety Shield and lower feed table by pushing down on table latches (Fig. 11)

Step 2: If reloading film, cut the remaining top and bottom film webs between the supply rolls and the idler bars (Fig 11). Skip this step if no film currently on the machine.

Step 3: Remove old rolls of film (Fig. 12)

- Remove autogrip shafts from machine by lifting up from the film bracket and lightly pulling out of film holder
- Remove spring clip from one end and slide empty film roll off the shaft.

Step 4: Install new film rolls (Fig 13)

- With the feed table in the open position, rest the new roll of film on the idler bar and edge of the feed table.
- Ensure one spring clip is set in the proper groove based on film width.
- Slide the roll of film on the shaft, ensuring film is in proper orientation. Reference Figure 16 for top and bottom roll.
- Replace the second spring clip on the other end of the film and ensure it fits in groove on film shaft to prevent film from shifting.

Step 5: Thread the film (Reference Fig. 14 and 16)

- Unwind top and bottom film rolls allowing enough slack for threading.
- Drape Lower supply roll (Role 1) over the top idler bar allowing enough slack to close the feed table.
- Drape the Upper supply roll (2) over the film from the lower roll.
- Ensure top and bottom film edges are aligned.



Step 6: Close the feed table and the Heat Shield. Turn the top supply roll an extra $\frac{1}{4}$ turn to create slack in the film of the top roller. (Fig 15)

Step 7: Using the film threading card included with the film, push the film into the NIP of the Heat Rollers. Continue to push the threading card while the Forward button is hit in step 9 (Fig 15). If reloading and film is left from previous rolls you can adhere the new film to old film and threading card is not needed.

Step 8: Using the Slow Forward button push and hold while watching the film thread through the

Heat & Pull rollers and observe the film exiting the back of the laminator.

OPERATION

1. Move the Main Power switch to the 'ON' () position (figure 1).
2. Ensure the proper film is selected.
3. Manually adjust or select preset for proper temperature setting.
4. When the laminator reaches operating temperature, the green ready indicator (✓) on the control panel will illuminate.
5. Position the item(s) to be laminated on the feed table.
6. Press the RUN button .
7. Slide the item(s) to be laminated into the Heated Nip Rollers.
8. When the laminated item(s) exit the rear of the laminator, hit the Stop Button .
9. Use the Rear Slitter located at the back of the laminator to separate the laminated item(s) from the film web.
10. During use watch the film exit to ensure film is not drawn back into exit to prevent film wraps.

Note: Continuously feeding similar size media in the same location will create a wear spot. Mixing up the feeding location will give heat rollers longer life.

BRAKE TENSION ADJUSTMENT



Allows the operator to independently increase or decrease film web tension as needed to reduce curl and wrinkles. To increase tension "+" rotate clockwise and to decrease tension "-" rotate counterclockwise. Refer to the trouble shooting guide for tips when to adjust tension.

FAN

The Catena 65 includes a fan which can be turn on independently of the machine using the switch on the back. The Fan assist in cooling the film before entering the pull rollers. Recommended when running large jobs, using higher speeds or running at higher temperatures. Refer to the trouble shooting guide for recommendations when to turn the fan on.

CLEARING A JAM

Film jams may occur if the laminator is not positioned to allow exiting film to drop freely to the floor. Accumulation of laminate as it exits the laminator may cause film to wrap around the roller, causing a jammed condition. To clear a jam it is necessary to rotate the rollers in a reverse direction.

1. Immediately stop the laminator by hitting the Stop Button .
2. Open the Heat Shield and the Feed Table
3. Cut the top and bottom film webs by the Idler bars
4. Grasp the loose ends of the web and pull toward the front of the machine while pushing and holding the Slow Reverse button .
5. When the film has cleared the Heat Rollers stop the laminator by letting go of the Slow Reverse Button
6. Re-thread the film following the FILM LOADING instructions earlier

LAMINATION SPEED GUIDE

When using **AutoSpeed** the machine will operate at a recommend speed based on film thickness selected. The speed will adjust automatically based on changes in the roller temperature to ensure quality output.

Turn-off AutoSpeed by pressing the Speed Control dial and manually set the speed based on the recommendations below.

Film Thickness	Temperature & Speed Recommendations	
	Temperature	Speed &
<5MIL (125MIC)	220-230F 105-110C	4
5MIL (125MIC)	220-230F 105-110C	3
>5MIL (125MIC)	195-205F 90-95C	2
Board Mounting	260-270F 125-132	2

Lamination Tips

- Do not attempt to laminate abrasive or metal items such as staples or paper clips as they will damage the heat rollers.
- Do not force items into the nip area of the rollers. An item that is not easily drawn into the laminator is probably too thick to laminate.
- Wrinkles may result if an attempt is made to reposition an item once the rollers have grasped it.
- Do not stop the laminator before an item has completely exited the rear of the laminator. Even a momentary stop will cause a mark (heat line) to appear on the laminated item.
- Adhesive will be deposited on the Heat Rollers if:

- Only one roll of film is used. The top and bottom rolls must be used for problem free lamination.
- One or both rolls of film are allowed to run completely off the core.
- Top and bottom roll film edges are not evenly aligned

Running Boards:

1. Check film for wrinkles by running some through the machine
2. Make sure the gap setting is all the way closed and film is coming out of the back
3. Verify that there are no wrinkles in the film and use the side guide to place the board right before the nip of the heat rollers
 - i. Use a proper gap setting based on the thickness of your board
4. After gapping push the back of the board until it enters the nip
 - i. Keep an eye on film coming out of the back of the machine so that it doesn't bunch up
5. As board gets close to pull rollers begin pushing the back of the board again to prevent a stall or stop that will create a heat mark on image.
6. Check for any problems with film tension and/or marks on images
7. As the board is about to leave the pull rollers, disengage gap handle and start applying manual pressure by pushing the gapping handle toward the Close position. This will help prevent air bubbles.
8. Use the trimmer to cut finished board loose.

TROUBLE SHOOTING		
SYMPTON	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine will not turn ON	<p>The Main Power switch on the back is not in the 'ON' (I) position.</p> <p>Laminator is not connected to power source</p> <p>The Fuse has been blown</p> <p>Machine is in full sleep mode</p>	<p>Move the main power switch to the 'ON' (I) position</p> <p>Insert plug into appropriate receptacle</p> <p>Reset the circuit breaker</p> <p>User can put the machine in normal operational mode by pressing the on/off button or recycle power to the machine</p>
Machine is ON but will not run	Heat Shield or Feed Table are not fully closed to activate safety switch	Ensure the Heat Shield and Feed table are fully closed.
Machine rollers stop/stall while laminating	<p>Media is too thick</p> <p>Look for film wrap around rollers</p> <p>Too much pressure</p> <p>Excessive film tension</p>	<p>If possible use thinner media.</p> <p>If film is wrapped around roller use procedure outlined in Clearing a Jam.</p> <p>Check gap setting</p> <p>Make film tension looser</p>
Film doesn't reach pull roller or wraps around pull roller	<p>Threading card is too short or flimsy</p> <p>Down curl</p> <p>Up curl</p>	<p>Use a different threading card</p> <p>Adjust pressure, loosen the bottom roller by hand for threading card</p> <p>Use a finger deflector to help guide film into pull rollers. Loosen top roller by hand.</p>
Film doesn't stick to media	<p>Machine not hot enough</p> <p>Running too fast</p> <p>Wrong Film Setting</p> <p>Adhesives will not stick to select Inks/Toners/Toner Oils/Coatings</p> <p>Not enough pressure</p>	<p>Ensure ready light is on. Ensure that temperature set point is correct for the film being used. Increase set temperature if needed.</p> <p>Try slower speed setting</p> <p>Confirm proper film thickness selected</p> <p>If possible print document on another printer</p> <p>Check gap setting</p>
Film or Media appears cloudy, milky or silvering (very small dots typically seen in dark areas)	<p>Machine not hot enough</p> <p>Running too fast</p> <p>Wrong Film Setting</p> <p>Adhesives will not stick to select Inks/Toners/Toner Oils/Coatings</p> <p>Machine can also be too hot</p>	<p>Ensure ready light is on. Ensure that temperature set point is correct for the film being used. Increase set temperature if needed.</p> <p>Try slower speed setting</p> <p>Confirm proper film thickness selected</p> <p>If possible print document on another printer</p> <p>If above does not resolve try letting the machine cool and use a lower set point.</p>

Long Ripples appear on the Film and/or Media	Film is too hot when exiting the pull rollers on the back of the machine.	Slow down the laminator Common on longer lamination runs. Turn the fan on, or try shorter runs. Stop to let cool if problem will not go away.
Waves on one side of the film or media	The film is walking during lamination due to uneven tension	Try swapping the top and bottom film rolls
Waves appear outward from the trailing edge of media (Boat Waking)	Will occur on thicker media Loss of tension on the edges of the film in the pull rollers	Use thinner media when possible Slowing down will reduce amount of boat waking
Appearance of small dimples on media and film (Orange Peel)	Machine is too hot	Ensure Ready light is on Lower the set point Turn on fans Confirm proper film thickness selected Allow machine to cool / Run some film without media to extract heat from rollers
Media and film have little square patterns on the output (Checker boarding)	Film is too hot when exiting the pull rollers on the back of the machine.	Slow down the laminator Common on longer lamination runs. Turn the fan on, or try shorter runs. Stop to let cool if problem will not go away.
Gap/Air Pocket between the edge of the media and the film (Tenting)	Typically found when thicker media is used	Try running slower Ensure ready light is on and proper temperature set point. Use smaller gap setting is possible When possible use thinner media
Film has bubbles	Uneven tension across the width of the film Debris in film and/or on the media or roller Cut or divot in the heat roller silicone No tension on film	Swap the top and bottom rolls Wipe them down with a lint-free cloth Use caution when slitting film for roll changes or jams to prevents cuts into the rollers. Damaged rollers should be replaced by trained service technician. Increase tension on the film
Film curls opposite directions on the edges as it exits the back.	Film supplies not properly matched during manufacturing process	Swap the top and bottom rolls or try different rolls of film.
Media has curl when lamination complete	Film rolls have too much tension or drag on them.	Adjust tension setting with the Brake Knob. Reduce tension on the film roll that the output curls towards (if the output curls up, reduce tension on the upper roll). In general, tension should be even

	Film Rolls have different amounts of tension	<p>between the top and bottom for flat output.</p> <p>Try swapping top and bottom rolls to change the tension.</p> <p>Operator should use rolls of film that are approximately the same diameter.</p>
Wrinkles in film as the film enters the Heat Rollers	Not enough tension on film rolls	Increase tension with the brake tension knobs.
Excessive Adhesive build up on the Heat Roller edges	The Top and Bottom roller are not aligned.	<p>User should verify that top and bottom rolls are aligned before and during use.</p> <p>Ensure spring clips for top and bottom rollers in same groove and film is flush against the spring clips.</p>