# **ARCTIC TITAN 165 OPERATION**

# & MAINTENANCE MANUAL

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## **Important Safety Instructions**

YOUR SAFETY AS WELL AS THE SAFETY OF OTHERS IS IMPORTANT TO GBC. IN THIS INSTRUCTION MANUAL AND ON THE PRODUCT, YOU WILL FIND IMPORTANT SAFETY MESSAGES REGARDING THE PRODUCT. READ THESE MESSAGES CAREFULLY. READ ALL OF THE INSTRUCTIONS AND SAVE THESE INSTRUCTIONS FOR LATER USE.

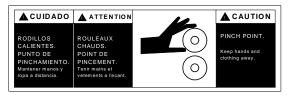


THE SAFETY ALERT SYMBOL PRECEDES EACH SAFETY MESSAGE IN THIS INSTRUCTION MANUAL. THE SYMBOL INDICATES A POTENTIAL PERSONAL SAFETY HAZARD TO YOU OR OTHERS, AS WELL AS PRODUCT OR PROPERTY DAMAGE.

THE FOLLOWING WARNINGS ARE FOUND UPON THE ARCTIC TITAN 165:



THIS SAFETY MESSAGE MEANS THAT YOU COULD BE SERIOUSLY HURT OR KILLED IF YOU OPEN THE PRODUCT AND EXPOSE YOURSELF TO HAZARDOUS VOLTAGE.



THIS SAFETY MESSAGE MEANS THAT HANDS COULD BE TRAPPED AND CRUSHED IN THE ROLLERS. CLOTHING, JEWELRY AND LONG HAIR COULD BE CAUGHT IN THE ROLLERS AND PULL YOU INTO THEM.



THIS SAFETY MESSAGE MEANS THAT YOU COULD CUT YOURSELF IF YOU ARE NOT CAREFUL.



**WARNING** DO NOT ATTEMPT TO SERVICE OR REPAIR THE ARCTIC TITAN LAMINATOR.



WARNING DO NOT CONNECT THE ARCTIC TITAN 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.



**WARNING** TO GUARD AGAINST INJURY, THE FOLLOWING SAFETY PRECAUTIONS MUST BE OBSERVED IN THE INSTALLATION AND USE OF THE LAMINATOR.



# **Important Safeguards**

## General

Keep hands, long hair, loose clothing, and articles such as necklaces or ties away from the front rollers to avoid entanglement and entrapment.

Do not use the laminator for other than its intended purpose.

Do not place the laminator on an unstable car, 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 or expose the equipment to liquids.

## **Electrical**

The laminator should be connected only to a source of power as indicated in these instructions and on the serial plate located on the rear of the laminator. Contact an electrician should the attachment plug provided with the laminator not match the receptacles at your location.



**CAUTION:** The receptacle must be located near the equipment and easily accessible.

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 the laminator has been damaged. Contact GBC's Technical Service Department or your dealer/distributor for assistance.

### **Service**

Perform only the routine maintenance procedures referred to in these instructions.



**WARNING:** Do not attempt to service or repair the laminator. Disconnect the plug from the receptacle and contact GBC's Technical Department or your dealer/distributor 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**

- 1. Shipping damage should be brought to the immediate attention of the delivering carrier.
- 2. The Arctic Titan 165 comes fully assembled on a stand. If another stand is preferred, it must be able to support 285 pounds.
- **3.** Avoid locating the laminator near sources of heat or cold. Avoid locating the laminator in the direct path of forced, heated or cooled air.
- 4. Connect the attachment plug provided with the laminator to a suitably grounded outlet only. Avoid connecting other equipment to the same branch circuit to which the laminator is connected, as this may result in nuisance tripping of circuit breakers or blowing fuses.

### **Feature Guide**

- **A. Power Switch:** Fig (1). Located in the rear of the machine and applies power to the laminator.
- **B.** Fuse: Fig (1). Electrical safety device, located near on the rear of the machine near the power cord, that can be replaced by the operator if necessary. The Arctic Titan 165 requires a 10A, 250V fuse.



**WARNING:** If the fuse opens a second time after being replaced, contact your local GBC Technical Representative or dealer/distributor for assistance.



Figure 1



Figure 2

C. Control Panel: Fig (2).

**Run:** Activates rollers for normal operation **Stop:** Deactivates rotation of the rollers.

Speed Control: Variable speed control up to 3 ft./min

**D. Top Pressure Plate:** Helps prints remain against the feed table while being fed into the rollers. This plate may be removed for mounting boards.

- **E. Feed Table:** Fig (3). The feed table is has a safety interlock switch. When the table is removed, power to the motors is also removed.
- **F. Front Rollers:** Fig (3). Prints are fed into the roller so that pressure sensitive materials may be applied to prints.
- **G. Idler Bar:** Fig (3). The idler bar located near the supply roll is used to direct the film to the heat rollers and helps to release the liner from pressure sensitive films.
- **H. Film Shafts and Core Adapters:** Fig (3). The core adapters are inserted into the ends of the film cores. The film shaft is inserted through the centers of the core adapters then placed on the laminator. Four 3" and four 2 \( \frac{1}{4} \)" cores are included with the Arctic Titan.
- **I. Rewind Unit:** Fig (3). Located on the top of the unit, the rewind is designed to take up the release liner as the print is being laminated.

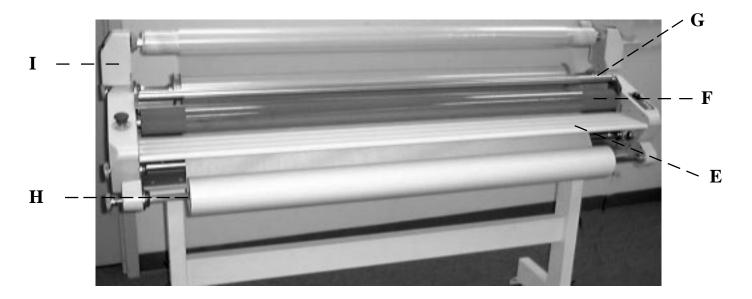


Figure 3

**J. Roller Pressure Handle:** Fig (4). Adjusts the amount of roller pressure needed for various laminating and mounting applications. When the unit is not in use the handle should <u>always</u> be in the Upper "Mounting" position.



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Figure 4

Figure 5

- **K. Brake** (**Tension**) **Adjustment Knob:** Fig (5). Allows the operator to increase or decrease film web tension as needed to reduce curl and wrinkles.
- **L. Film Slitter:** Located on the rear of the machine to slit film as it exits the rear of the machine.
- **M. Rewind Power Switch:** Located on the left side of the rewind unit, it toggles power on and off to the rewind motor.
- **N.** Emergency Stop Switch: Located on the front and the rear of the machine, it cuts power to all motors. The Emergency Stop Switches should only be used in emergency situations.

# **Operating Instructions**

#### Film Loading and Threading

- 1. Turn the main power switch on (1).
- **2.** Remove the Pressure Plate and the Feed Table.
- **3.** If film has already been removed from the laminator then skip to step 7.
- **4.** Carefully cut the film web between both supply rolls and the pressure rollers.



**CAUTION:** Be careful not to cut or scratch the rollers.

- **5.** Move the Roller Pressure Handle to the "Mount" position and pull the film out the front of the laminator.
- **6.** Remove the film shafts by lifting the right side of the shaft out of the cradle and then pull out the left hexagonal side.
- 7. Loosen the thumbscrew on the left core adapter of the film supply shaft. Do not loosen the right core adapter thumbscrew—this will make it easier to line up the film edges.
- **8.** Tap the left end (hex) of the shaft on a table.
- **9.** Pull the shaft partially out of the film tube. Then use the end of the film shaft to force the core adapter out of the film tube.

**10.** Slide the film shafts into the new rolls of film ensuring that the film will unroll from the bottom for poly-in film. Slide the core adapters onto the shafts. Tap the core adapters into the film rolls and tighten the thumbscrews. See Figure 6.



Figure 6

11. Return the film shafts onto the unit by first inserting hex end of the film shaft into the left hand side of the machine and then inserting the round end into the receptacle on the left side of the machine. See Figure 7.



Figure 7

12. Once the film is on the shaft, pull film from the top roll down to the bottom roll to make certain that the film is aligned properly. If it is not aligned properly, align them by loosening the thumbscrew on the end caps and slide the film into the proper position. If the film is not aligned properly exposed adhesive will adhere to the rollers and cause film jams. See Figure 8.



Figure 8

- 13. Unroll the bottom film roll so that the adhesive side is pointing out (away from the rollers). Allow it to lie against the feed rollers.
- 14. Without removing the film liner unroll the top film and guide it beneath the idler bar. Pull it up and around the idler bar and attach the end to the rewind core with tape. Figure 8
- **15.** Carefully slit the film all the way across. The object is to cut deep enough to split the film away from the rewind liner. Figure 9.





Figure 9

Figure 10

- **13.** Remove the film from the liner and drape it over the exposed adhesive from the bottom roll. See Figure 10.
- **14.** With two heavy boards, guide the top and bottom film into the rollers as far as they will go. Be sure to take up any slack on the rewind core. See Figure 11.



Figure 11

- **15.** Replace the feed table. Try to avoid touching exposed adhesive while replacing the feed table. This may cause feed jams.
- **16.** Move the roller gap adjustment handle to the down position
- **17.** Depress the Run button.
- **18.** When the film exits the rear pull rollers depress the Stop button.
- **19.** Rotate the roller gap adjustment handle to the mount position.
- **20.** Pull on the film exiting the rear pull roller. While pulling the film, rotate the roller gap adjustment handle to the laminate position. See Figure 12.

Figure 12

## **Begin Laminating**



**CAUTION:** Do not attempt to laminate abrasive or metal objects such as staples, paper clips and glitter, as they may damage the rollers.



**CAUTION:** Do not force items into the nip area of the heat rollers. An item that is not easily drawn into the laminator by the rollers is probably too thick to laminate.

Wrinkles may result if an attempt is made to reposition an item once the rollers have grasped it.



**CAUTION:** Do not stop the laminator before an item has completely exited the rollers. Even a momentary stop will cause a mark on the laminated item.

#### You are now ready to begin laminating your documents.

- **1.** Toggle the Rewind Motor Switch to the On (1) position.
- **2.** Depress either the Run Switch or the foot pedal.
- **3.** Carefully feed the image into the rollers, making sure that the print remains flat against the feed table.
- **4.** Allow the print to feed all the way through the laminator.
- 5. Once the print exits the rear of the laminator depress the stop button or release the foot pedal.

## **Mounting**

Before mounting it is recommended that you trim your finished print. Your print should now have an overlaminate film on the front side and mounting film on the reverse. In this process you will be using the adhesive in the mounting film to adhere to a board. The maximum thickness board that you can run on the Arctic Titan is ½", (1.27cm).

- 1. Remove film as in step 1 6 of the Film Loading and Threading section.
- **2.** Place the mounting board on a flat surface.
- **3.** Position the print face down on the board
- **4.** Peel back the leading edge of the liner about 1 or 2", (3 to 5cm) and put a slight crease into the liner.
- **5.** Flip the print over onto the board, allowing the print to rest on the crease that you created.
- **6.** Line up the print to where you want to mount it on the board.
- 7. Place your hands about 4 to 5", (10 to 134cm) from the leading edge of the print and tack the center of the adhesive to the board.
- **8.** Run your fingers along the edge from the center out. The print is now positioned on the board.
- **9.** Remove the pressure plate from the Arctic Titan.
- 10. Place the board in the center of the feed tray against the nip rollers.

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- 11. Adjust the pressure of the rollers as necessary, using the roller adjustment handle.
- 12. Lift the print and grab hold of the release liner. Do not allow the print to flop back against your arm.
- **13.** Depress either the run switch or the foot pedal.
- 14. As the print and board feed, pull back slowly on the release liner making sure that it does not get pulled into the rollers. The release liner should pull away from the print approximately 1-2", (3 to 5cm) from the rollers.
- 15. Slowly pull the release liner until the entire board enters the rollers. Pulling the release liner too quickly could cause the print to prematurely adhere to the board.

## Clearing a Film Jam

Film jams (wrap-ups) may occur if the film is loaded backwards or it if the area at which film exits the equipment is blocked. The film, when jammed, wraps around the rollers. To clear a jam it is necessary to rotate the rollers in the reverse direction. When pressed, the **REVERSE** button on the control panel will cause the rollers to reverse.

#### To clear a jam:

- **1.** Immediately stop the laminator by pressing **STOP**.
- 2. Cut the film web between the supply roll and the rollers.
- 3. Grasp the loose ends of the web, pull straight, and install the feed tray so the web is on top of the tray. Replace the safety shield. Press and hold down the **RUN** and **REVERSE** buttons together; guide the film out of the rollers from the front side.
- **4.** Once the jam has cleared the heat rollers, press the **STOP** button.
- 5. Thread the film per section **FILM LOADING AND THREADING**.

## **Caring for the Arctic Titan**

GBC offers Cleaning kits as well as Extended Maintenance Agreements. Contact your local GBC Service Representative or your dealer/distributor for additional information.

The only maintenance required by the operator is to periodically clean the rollers. The following procedure will help keep the heat rollers free of adhesive that has been deposited along the edge of the laminating film. Proper alignment of the rolls of film will reduce the amount of adhesive that is deposited on the rollers.



**CAUTION:** Do not attempt to laminate adhesives marked "Flammable"



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

# **Cleaning the Rollers**



**WARNING:** Do not apply any cleaning fluids or solvents to the rollers. Some solvents and fluids may damage the rollers.



WARNING: Never clean rollers with sharp or pointed objects



**CAUTION:** Hardened adhesive deposits on the rollers can cause damage to the rollers. Rotate the rollers at the lowest speed setting on the control panel.

- 1. Remove the film from the laminator following the procedure outlined in steps 1 through 7 of the section FILM LOADING AND THREADING, Using a Film Threading Card.
- 2. Rub the top and bottom rollers with a 3M<sup>TM</sup> Scotchbrite<sup>TM</sup> pad.



WARNING: DO NOT USE METAL SCOURING PADS!

- **3.** Install the feed table safety shield.
- **4.** Press **RUN** to rotate the rollers to an unclean portion. Press **STOP**. Continue this process until the complete surfaces of both rollers are clean.
- **5.** Follow the procedure in section FILM LOADING AND THREAD, Method Using Film Threading Card to reload the laminator.

# **Specifications**

**Operating Speed:** Up to 3 fpm (.9 m/min)

#### **Dimensions:**

Width: 72.25" (177 cm)
Height: 48" (65 cm)
Depth: 26.5" (118 cm)

**Weight:** 285 lbs. (42.8 kg)

**Electrical Ratings:**Refer to the serial plate located on the rear of the laminator for the specific electrical rating applicable to the unit.

#### **Electrical Requirements, US:**

**Voltage:** 120 V, 60 Hz

Current: 3 A Power: 360 W

U.S Receptacle: NEMA 5-15R

#### **Requirement:**

## **Electrical Requirements, Europe:**

**Voltage:** 220 V, 50 Hz

**Current:** 1.5 A **Power:** 330 W

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