



**ALLY<sup>®</sup> ARMOUR  
G164-HA LAMINATOR  
OPERATING MANUAL**



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## ALLY ARMOUR G164-HA LAMINATOR

### INTRODUCTION:

#### A TRUSTED PARTNER FOR BUILDING YOUR BUSINESS.

Welcome to the **Ally Armour G164-HA Laminator**—your new go-to solution for high-efficiency lamination in signage and graphics production. Designed with real shop needs in mind, this fully automatic, heat-assist laminator is packed with smart features that save time, reduce waste, and help deliver consistently professional results.

At Grimco, **we're more than just a supplier—we're your partner in success**—and it all starts with the right equipment. Grimco's Newest Exclusive brand, Ally, provides a foundation you can build on with the Armour G164-HA Laminator, helping you expand your capabilities, take on more projects, and deliver superior results to your customers.

#### MANUAL DESCRIPTION:

This manual is intended for the user/operator of the Ally Armour G164-HA Laminator. Please read this manual carefully before uncrating the machine. This manual contains important information for the correct installation, operation and maintenance of the machine, including safety features to be aware of on the machine. If you have any questions or need further details on specific aspects related to this machine, please do not hesitate to reach out to a Grimco Equipment Specialist through our Live Chat or Equipment & Software ticketing system.

#### Have a Technical Support Request?

Scan the QR code below to start a ticket with our Equipment & Software support team.



## 1. PRODUCT OVERVIEW

### 1.1 MACHINE DESCRIPTION:

Your business depends on equipment that is **reliable, efficient, and built to last**—and that's exactly what the **Ally Armour G164-HA Laminator** delivers.

This **fully automatic heat-assist laminator** is engineered for daily use in busy print shops. From **efficient edge trimming** to **quick setup and smart system controls**, this industrial-grade machine simplifies your lamination process so you can stay focused on getting more jobs out the door.

Built for **precision and productivity**, the Armour G164-HA features a **pneumatic up-and-down roller** and reaches speeds of up to **40 feet per minute**, keeping up with your shop's demands. With an **adjustable vertical cutting system**, the G164-HA trims excess material as you laminate, saving time and ensuring clean, professional results. Its **smart entry system** allows for easy monitoring of speed, temperature, and lamination history, with an additional **rear panel control** for quick speed adjustments, giving you complete control over every job.

Durability is at the core of every Ally product. This laminator features **heavy-duty, glue-free silicon rollers** for smooth, long-term performance, an **anti-static string** to minimize static buildup, and **upgraded shaft caps and holders** for fast, hassle-free media loading.



## 1.2 SPECIFICATIONS:

SPECS	ARMOUR G164-HA
Setup	Some Assembly Required
Heat/Cold	Top Heat Assist
Heating Element	Install Required
Max Lam Width	64 in
Max Lam Thickness	1.1 in
Max Lam Speed	40 fpm
Max Temp	140°F
Control Panels	Front and Back
Entry Level Smart System	Temp, Speed, Lam Records
Speed Control	Variable controlled from Front and Back
Up and Down	Pneumatic <i>*Air compressor included</i>
Roller Diameter	128 mm (5.04 in) Silicon
Roll Shafts	4
Tension Adjustment	Double Knobs
Foot Pedal	Single Foot Pedal Attachment
Trimmer Holder	2 Single (Left/Right), 1 Double Central Blade
Power	1600 W
Net Weight	330 lbs
Shipping Dimensions (W x D x H)	2260 x 800 x 750 mm (89 x 31.5 x 29.5 in)
Warranty Parts	1 Year
Warranty Labor	1 Year



Close-up of Front Panel



Adjustable Vertical Cutting System





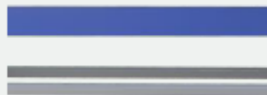





Close-up of Roll Shaft

## 1.3 UNIQUE FEATURES & BENEFITS:

- Smart Entry System (Front & Rear Panels):** Get complete control from the front panel with real-time display of temperature, speed, and lamination stats. Easily monitor job history for up to 30 days with built-in data tracking—ideal for improving workflow and consistency. The front panel also displays date and time and features an “Up and Down” button and a roller direction button to change the direction in which the roller moves. The rear panel offers speed control and has a knob to quickly make adjustments to the speed as needed.
- Upgraded Shaft Caps & Auto-Locking Roll Shafts:** Designed for quick, secure media loading. Interchangeable roll shafts and enhanced holders make switching between jobs faster and more efficient.
- Integrated Vertical Cutting System:** Eliminate time-consuming post-trimming. The built-in safety cutters use two single-edge blades (left and right) and a double central blade to trim as you laminate—saving you time and reducing waste.
- Durable, High-Performance Blades:** Made from tungsten steel and built to last, these blades cut through most common signage media and boast a lifetime exceeding 15,000 meters of use.

## 1.4 WHAT'S INCLUDED IN THE CRATE:

If any items appear missing or damaged, contact your Grimco representative immediately before proceeding with installation.

MACHINE COMPONENTS		
ITEM	DETAILS	QTY
1	Body 	1 unit
2	Stand Legs*  <i>*Note: The left and right stand legs are attached to the sidewall of the crate lid and must be unscrewed before removing.</i>	2 pcs
3	Bars 	2 silver, 1 blue
4	Roll shafts 	4 pcs
5	Compressor 	1 unit
6	Foot Pedal 	1 pc
7	Heating Element (Fragile) 	3 pcs
8	Oil-water Separator 	1 pc

ACCESSORY COMPONENTS		
ITEM	DETAILS	QTY
1	Stand Screws 	1 bag
2	Fuse 	2 pcs
3	Friction Mats/ Graphite 	2 pcs
4	Ceramic Pipe 	6 sets
5	Hex Key Wrench 	1 set
6	Cutter 	1 pc
7	Roll Clips 	1 set

### Prefer to watch and learn?

Scan the QR code to watch our step-by-step How-To videos, featuring one of Grimco's Equipment Technicians walking you through the uncrating, installation, and setup of your Ally Armour G164-HA Laminator.



## 2. UNCRATING YOUR LAMINATOR

Before you begin assembly, follow these steps to safely unpack your Ally Armour G164-HA Laminator.

1. **Detach the top of the wooden shipping crate from the base.** Use a wrench, socket wrench or power drill with wrench attachment to carefully unscrew the top of the crate from the crate base.
2. **With two people, lift the top of the crate off of the base** and flip over to see the inside of the crate top where the stand legs are attached.
3. **Detach the stand legs from the crate top.** The **left and right stand legs** are securely fastened to the sidewall of the crate lid. Unscrew these components to remove them.
4. **Detach the laminator unit from the base of the crate** by removing the hardware holding it in place. Remove any additional protective packing from the machine.
5. **Inspect all parts and packing materials** to ensure everything is included and in good condition before proceeding with installation.



### Not sure where to start?

Scan the QR code below to watch our uncrating walkthrough video, where Grimco Equipment Techs show you how to safely unpack your new Ally Armour G164-HA.





### 3. INSTALLATION INSTRUCTIONS

Simple setup. Built for busy shops. Before operating your new Ally Armour G164-HA Laminator, follow these step-by-step instructions to ensure a safe and successful installation.

#### 3.1 ASSEMBLING THE STAND:

##### Included Stand Components:

- Left stand leg
- Right stand leg
- Two lower support bars
- Blue cross support bar

##### Steps:

1. Attach the lower support bars to the left and right stand legs.
2. Secure the blue cross support bar between the legs for added stability.
3. Tighten all bolts to ensure the stand is firmly assembled before placing the laminator on top.



#### 3.2 PLACING THE LAMINATOR:

**IMPORTANT:** We highly recommend using **4 people** to lift and move the laminator onto the stand.

Once the stand is fully assembled and **the wheels are locked:**

1. **With four people, carefully lift the laminator** off the crate base and onto the laminator stand, lining up the rubber pads into the holes at the top of the legs.
2. Ensure it is centered and securely seated before proceeding to attach it with the supplied hardware.



### 3.3 INSTALLING THE HEATING ELEMENT:

(found in the plastic tube)

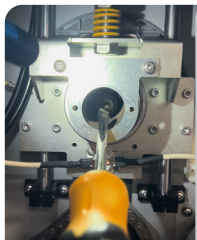
**IMPORTANT:** Always shut off power before installation or maintenance.

#### Tools needed:

- A #2 tip Phillips head screwdriver
- A pair of pliers
- A flathead screwdriver
- A pair of gloves
- A pair of snips

#### Steps:

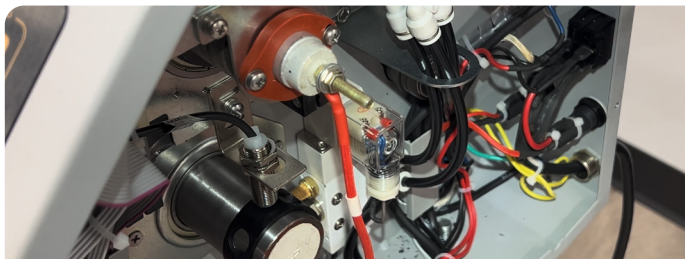
1. Using the #2 tip Phillips head screwdriver, open the access panels on both the left and right sides and remove the rubber mats (keep these for Step #4).
2. Using the snips, cut the zip tie that is holding your wiring in place.
3. While wearing gloves, remove the heating element from the plastic tubing and insert the heating element into the roller. *Note: There will be a metal lip that you will have to lift the heating element over on the opposite side of where you inserted the heating element into the roller. Use the flathead screwdriver to help lift it over the metal lip.*



Check out our **How-To video** to see important steps on installing the heating element by scanning the QR code.



4. Secure heating element in place by reinstalling the rubber gaskets.
5. Connect the wiring securely to the heating element:
  - A. Identify ceramic pipe and cap, hex nut, flat washers, and lead wire (for both sides).
  - B. Tighten all connections as shown in the diagram (on both sides).
    - I. Flat washer
    - II. Lead wire
    - III. Flat washer
    - IV. Hex nut (secure with pliers)
    - V. Ceramic pipe and cap



6. Once the heating element is fully installed, reattach the access covers using the #2 tip Phillips head screwdriver.

### 3.4 SETTING UP THE AIR COMPRESSOR AND CONNECTING TO THE LAMINATOR:

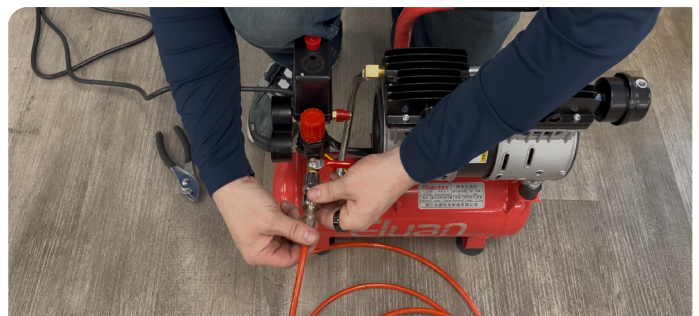
**IMPORTANT:** Always shut off power before installation or maintenance.

#### Tools Needed:

- Air tubing
- A pair of pliers
- Air compressor filter
- Air compressor fittings

#### Steps:

1. Take the air compressor out of the box and check to make sure you have all the components.
2. Screw the air filter into the designated port on the compressor.
3. Install the first air fitting onto the air compressor and use the pliers to ensure a snug fit. Then connect the second air fitting to one end of the air tube. Finally, connect the fittings together.
4. Mount the air regulator to the leg of the laminator using a #2 Phillips head screwdriver and the provided screws.
5. Take the free end of the air tube coming from the laminator, feed it through the hole in the leg, and connect it to the regulator.
6. Plug in the air compressor to the power source and connect the air tube from the air compressor to the input on the air regulator.
7. Power on the air compressor and open the air valve to allow airflow to the laminator.
8. Once the laminator receives air, the roller will lift—at this point, you can remove the shipping brackets.



#### Need a hand with assembly?

Scan the QR code to follow along with our Grimco Equipment Tech as he sets up and installs the air compressor and foot pedal.





## 4. OPERATING GUIDE

Smart controls. Seamless results. Once installed and set up, the Ally Armour G164-HA is ready for production. Use the following guidelines for proper machine operation.

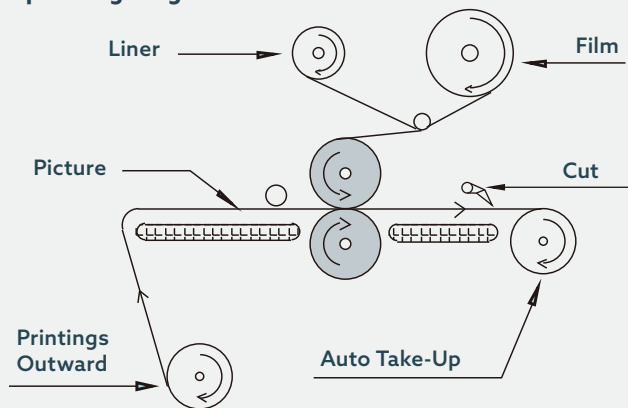
### 4.1 USING THE CONTROL PANEL:

#### Basic Functions:

- **Heat ON/OFF:** Press and hold the Speed knob for 3 seconds, rotate to select ON/OFF, press again to confirm.
- **Temperature Setting:** When heat is ON, press "Set Temp," adjust desired temperature, and press to confirm.
- **Speed Adjustment:** Rotate Speed knob to control laminating speed.
- **Start/Stop:** Use the Foot Pedal or panel button to start and stop rollers.
- **Run via Rear Panel:** Use rear panel button for added speed control during setup.
- **Auto Stop:** If idle for 2+ minutes with speed at "0", the machine will automatically stop.



#### Operating Diagram



### 4.2 LAMINATION PROCESS:

**CAUTION:** Oversized film can stick to rollers at the start of lamination—watch closely when beginning a job.

#### Tips for Success:

- Keep film and prints aligned throughout the job.
- Apply slight tension on both materials to prevent bubbles and wrinkles.

#### Loading Media:

1. Load film and print materials using 3" cores on both the liner and finished roll shafts.

#### Method A – Film First:

1. Peel film and feed between rollers until it sticks to the finished roll.
2. Align and feed print under top roller with tension.
3. Lower the roller and slowly begin lamination using panel or foot pedal.

#### Method B – Film with Liner:

1. Feed film and liner together through rollers.
2. Feed print underneath top roller, keeping alignment.
3. Use a safety knife to peel off the liner and stick to liner roll.
4. Lower roller and start lamination.

### 4.3 BUILT-IN CUTTING SYSTEM:

- Use the vertical trimmers to cut excess edges or separate graphics mid-roll.
- Adjust cutter position as needed.
- Ensure the cutter holder is locked and the cutting bar is lifted when not in use



#### Want to Watch and Learn?

Scan the QR code to watch our step-by-step tutorials, featuring one of Grimco's Equipment Technicians taking you through the processes of loading your material into your Ally Armour G164-HA Laminator.



## 5. TROUBLESHOOTING

Helpful solutions to keep you running.

### 5.1 ROLLER BALANCE & PRESSURE ADJUSTMENT

If you're seeing uneven pressure or inconsistent results, check the roller balance:

#### To Adjust:

1. Measure the gap between both sides of the roller. There should be an equal 2mm gap.
2. If unbalanced, use a wrench to hold the adjustment bolt and turn the screw until both sides match.
3. To increase pressure, turn the same screw downward after confirming roller balance.



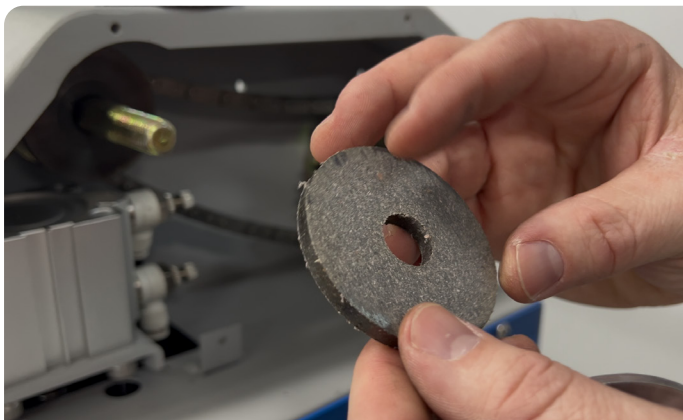
### 5.2 TROUBLESHOOTING CHART

ISSUE	POTENTIAL CAUSES	SOLUTION
<b>Roller won't lift/lower</b>	Air compressor not connected or active	Check compressor, buttons, and emergency stop
<b>Panel not lighting up</b>	Power/fuse issue	Check fuse and press SET for 3 seconds
<b>Inconsistent Speed</b>	Motor or speed controller issue	Inspect fuse, button, laser sensor, motor shaft
<b>Heater not working</b>	Heating element or temp sensor issue	Check relay, fuse, and adjust temp correction
<b>Bubbles in lamination</b>	Roller imbalance, low pressure, high speed, or wet prints	Balance roller, increase pressure, slow speed, dry prints
<b>Folds or wrinkles</b>	Material misalignment or tension issues	Realign prints/film, check tension, ensure prints are dry

## 6. MAINTENANCE REMINDERS

Keep your Armour G164-HA running like new:

- Run machine slowly while heating
- Always lift roller after completing a job
- Wipe down rollers regularly
- Avoid scratching roller surfaces
- Lubricate gears and chains routinely
- Check and replace friction mats as needed



## 7. NEED HELP? WE'VE GOT YOU COVERED

*Support from real people who know your equipment.*

If you've tried the troubleshooting steps in this manual and still need help, Grimco's Equipment Technicians are here to support you—real people, with real answers, ready when you need them.

### 7.1 LIVE CHAT WITH AN EXPERT

For quick questions or immediate support, use our Live Chat feature to connect in real time with a Grimco Equipment Technician. We're ready to help you get back up and running as quickly as possible.

### 7.2 SUBMIT A SUPPORT TICKET

If your issue is more complex or you'd like to include photos or videos (and we always recommend it—a picture is worth a thousand words), fill out an **Equipment & Software Support Ticket**. One of our technicians will reach out directly to help you troubleshoot, resolve the issue, or schedule service if needed.

#### Need more in-depth help?

Scan the QR code to submit an Equipment & Software Support Ticket or use our Live Chat. It's the fastest way to get personalized help from a Grimco Technician.



## 8. WARRANTY INFORMATION

Your Ally Armour G164-HA Laminator is backed by Grimco's commitment to quality and customer care.

### Warranty Coverage:

- **1-Year Parts & Labor Warranty:** This warranty covers defects in parts and labor for one year from the date of purchase. If a part fails or you experience an issue with your laminator, Grimco will provide repair or replacement service at no cost within the warranty period.

**Need to file a warranty claim?** Just submit a support ticket or reach out via Live Chat, and we'll take it from there.