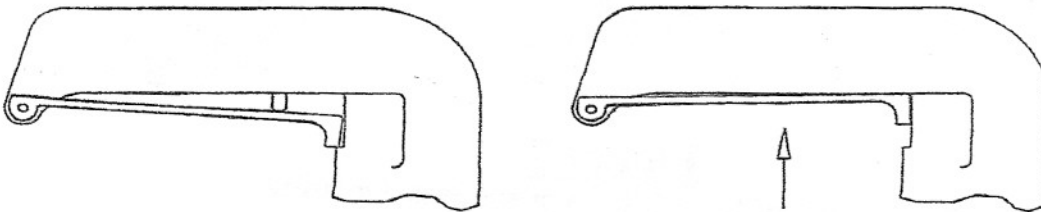


## Loading the Tool

Insert nails into the nail track and pull back the Pusher Bracket (Ref. No. 19 Pg. 17) to provide pressure against the nails. **IMPORTANT!** For proper operation, never use the PORTAMATIC® Nailer with less than a 2 inch stack of nails remaining in the nail track.

## Operation

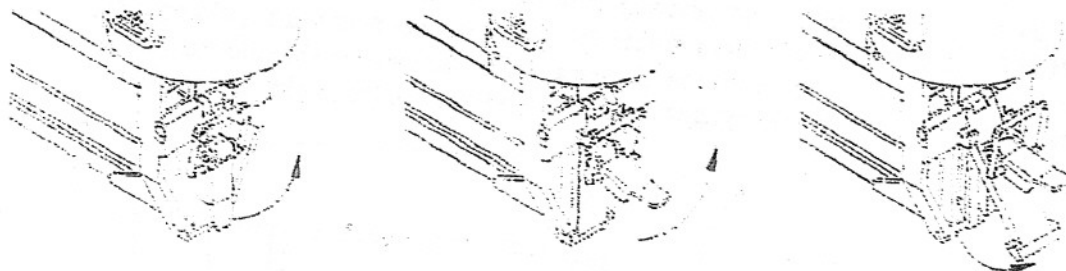
1. After connection with power source is made, check to be sure that the airline Regulator pressure is 90-95 PSI. Note: Some materials may require a higher pressure of 95-100 PSI in order to countersink the nail.
2. Ensure that tool is in proper working order and that there is no leaking of air. If there is an air leak, **Disconnect Immediately!** Refer to the Repair and Maintenance section of Owner's Manual.
3. After being sure tool is operable, place tool in position to be used. Always place the tool in proper position against the Flooring to be nailed before striking the Ram.
4. The PORTAMATIC® Nailer has a Safety that prevents accidental firing if Ram Cap is hit while connected to power source. Squeeze Safety Lever to enable the Nailer. Releasing the Safety Lever re-engages the Safety and renders the Nailer in operable.



5. To operate tool, depress Safety Trigger while tool is in position of use, and strike the Ram Cap (Ref. No. 47 Pg. 17).
6. If on the first initial operation a nail does not eject into the Flooring, repeat Hammer blow. This will ensure that the Driver Blade/Piston is properly reset to allow the Driver Blade/Piston (Ref. No. 36 Pg. 17) to be in the correct position to drive the nail.
7. **DO NOT OVERPOWER THE NAILER** – A minimal stroke of the hammer will fire the Nailer. If the Flooring is warped or bowed, the Ram can be hit firmly to tighten the Flooring. Try to avoid this constant wear, as abusive blows by the hammer could damage tool.
8. Note: The PORTAMATIC® Nailer will not drive a nail if the Ram Cap is struck by Hammer and the Safety Trigger is not depressed.
9. The PORTAMATIC® Nailer is user-friendly and following these simple instructions, will insure a very high quality Hardwood Flooring installation.
10. If the nail is not properly seated, increase pressure incrementally until nail is seated. **DO NOT EXCEED 110 PSI!**

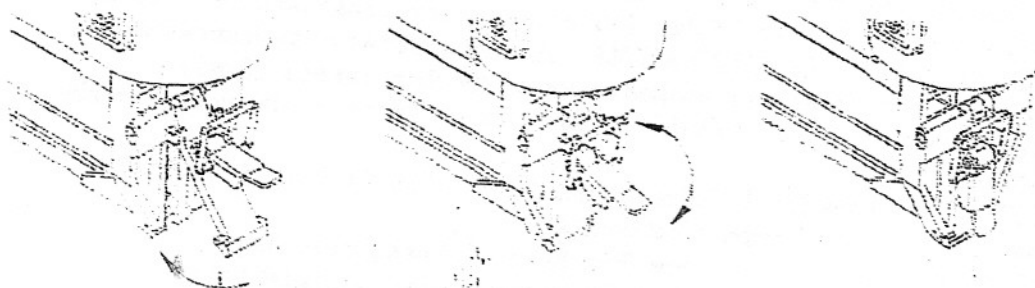
## Clearing A Jam

1. In the event of a jam, the Gate (Ref. No. 22 Pg. 17) can be opened by pulling the gate clip upward. (See Figures 7 and 8) (The Shoe does not have to be removed to open and close the Gate.)
2. **IMMEDIATELY DISCONNECT** from power source until jam is cleared!
3. Once Gate is open, clear jam.
4. Inspect to be sure no damage has been done to the Driver Blade, Guide, Gate, Magazine or Pusher Finger. (If damage has occurred, repair immediately before connecting to the power source and continuing.)
5. Close Gate by placing the Gate Clip Wire over the two hooks of the Guide as shown and press down to seat and lock the Gate in place. Make sure the Gate is properly reseated.
6. **DO NOT OPERATE WITH GATE OPEN!**



**Figure 7**

Pull the tab of Gate Clip to open Gate. Opening the Gate allows access to the Nail Chamber.



**Figure 8**

To Close Gate, reset the Gate tab ends under the ears of the Guide. Reset the Gate Clip Wire over the two hooks of the Guide and pivot Gate Clip down until seated.

Ensure Gate is secure before continuing operation.

**421 PORTAMATIC®  
TROUBLE SHOOTING**

<b>PROBLEM OR QUESTION</b>	<b>CAUSE</b>	<b>CORRECTIVE ACTION</b>
<b>Nailer is Jamming</b>	More than one Nail trying to get into chamber.	Check Rail (Ref. #26) for wear on the end. If worn, turn rail around to use other end in Guide or replace the rail. Make sure pusher provides positive pushing force on the nail clip to prevent nails from turning.
<b>Nailer is not always firing a nail</b>	Obstruction keeping the nail clip from advancing.	Clear obstruction, trash, bent or twisted nails, etc. Make sure Pusher provides positive pushing force on the Nail clip to prevent Nails from turning
<b>Air is escaping</b>	Damaged or worn seal.	Determine location of air escaping. Replace appropriate seal.
	Oil has been used causing O-Rings to swell which can restrict movement of piston or other component that must seal.	Clean internal components. Check for damaged seals or O-Rings. Replace damaged seal or O-Ring. Grease as specified in Owner's Manual.
<b>Nailer is shooting two nails.</b>	End of Rail is worn	Turn Rail (Ref. #26) around to use other end in Guide if this has not been previously done. If Rail has already been turned previously, replace Rail.
	Screws holding Magazine (Ref. #28) may be loose preventing Rail (Ref. #26) from being held properly in place.	Tighten Screws (Ref. #49, #29) that secure the Magazine (Ref. #28) to the Guide (Ref. #21) and the back Magazine Retainer Bracket (Ref. #27).
<b>Nails are not being counter sunk into wood and are left sticking out of wood.</b>	Not driving Nails into the tongue area	Always drive Nails into the tongue area, not the groove.
	Tip of Driver Blade (Ref. #36) broken	Check Driver Blade (Ref. #36) and replace if tip is broken.
	Air pressure too low	Set air pressure to 90-95 PSI
	Using air compressor that is too small	Follow recommendations in the Owner's Manual relative to size and volume of air compressor
	Using an air line that is too small	Always use 3/8" ID air line.
	The Piston Cushion (Ref. #10) could be damaged preventing the Piston (Ref. #36) from completing full stroke.	Check Piston Cushion (Ref. #10) and replace if needed.
<b>Nailer does not fire when trigger is pulled.</b>	This is a safety feature	The Nailer is not supposed to fire when the Trigger is pulled. In order to fire the Nailer, the Trigger must be pulled and the Ram Head (Ref. #47) struck with the hammer, in that order.

<b>Ram is stuck in down position</b>	Driver Blade (Ref. #36) could be bent	Check and replace if needed.
	Oil could have been used in the tool	Clean, replace O-Rings and grease as recommended in the Owner's Manual
	Cylinder Cushion Ring (Ref. #5) could be loose or damaged	Check Cylinder Cushion Ring (Ref. #5) and replace if loose or damaged
<b>Tool partially fires when air hose is connected</b>	Main Valve (Ref. #41) is not seating in Valve Housing (Ref. #46).	Check the Return Spring (Ref. #8) under the Main Valve (Ref. #41) to make sure it is not damaged and that the Return Spring Washers (Ref. #3) are not damaged. Replace if needed. Check for smoothness and free movement of the Main Valve (Ref. #41) in the Valve Housing (Ref. #46). If too tight, replace the O-Rings on the Main Valve.
	O-Rings on the Discharge Valve (Ref. #11) may be damaged.	Check and replace if needed.
	Discharge Valve Springs (Ref. #9) not aligned	Check and re-align if needed.
	Cylinder Exhaust Valve Screw (Ref. #50) may be loose.	Check and tighten if needed. Use LOCTITE® 242 (Blue) on screw.
<b>Nailer partially fires when trigger is pulled and before Ram is struck</b>	Main Valve Lip Seal (Ref. #41) is not sealing	Check Lip Seal. If damaged, replace Main Valve (Ref. #41).