

**WARNING
PORTA-NAILER**

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. If any safety devices or warnings have been removed, defeated, defaced or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

SAFETY RULES FOR PORTA-NAILER

WEAR SAFETY GLASSES and safety shoes for protection against foreign objects.

NEVER sit the Porta-Nailer in your hand or on your knee or any part of your Body.

NEVER use a Hammer with a loose head or splintered handle.

USE ONLY nails from Porta-Nails, Inc.

REPLACE worn or damaged parts immediately.

1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its applications and limitations as well as the potential hazards specific to this tool.

2. THE OPERATOR AND ALL OTHER PERSONNEL MUST WEAR PROPER EYE AND EAR PROTECTION IN THE WORK AREA.

Wear safety goggles at all times. (Must comply with ANSI Z87.1). Everyday eyeglasses have impact resistant lenses only. They are NOT safety glasses. Also, wear ear protectors (plugs or muffs) during extended periods of operation

3. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to sawdust.

4. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

5. WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties or jewelry (rings, wristwatches) that could get caught in moving parts. Wear non-slip footwear. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

6. SECURE WORK

Be sure the tongue and groove of the flooring strips are properly interlocked and secured in place before nailing.

7. STAY ALERT

Watch what you are doing. Use common sense. Do not operate tool when you are tired or while under the influence of medication alcohol or drugs.

8. ALWAYS INSPECT TOOL BEFORE OPERATING.

Tool must be inspected prior to use to insure proper use of power supply. Tool must be inspected to insure proper working order. An improperly functioning tool must not be used.

9. KEEP HANDS, FEET AND OTHER BODY PARTS AWAY FROM NAIL EJECTION AREA.

Serious injury could occur if body parts are not kept away from nail ejection area.

10. ALWAYS ASSUME THE TOOL CONTAINS FASTENERS.

Do not activate the tool unless the tool is placed firmly against the work piece.

11. NO HORSEPLAY.

Do not point the tool toward yourself or anyone whether it contains fasteners or not.

12. NEVER DESENGAGE OR RENDER THE SAFETY INOPERABLE.

13. NEVER TRANSPORT TOOL WHILE DEPRESSING THE TRIGGER.

14. DISCONNECT TOOL FROM AIR SUPPLY WHEN:

Moving the tool to a new location, performing any maintenance or repair, clearing a jam or tool is unattended.

15. NEVER SERVICE WHILE ATTACHED TO AIR SUPPLY.

Always disconnect the tool from the power source when servicing, or replacing parts.

16. DO NOT USE TOOL IF OPERATING CONTROLS ARE INOPERABLE.

Do not remove, tamper with, or otherwise cause the tool operating controls or safety controls to become inoperable.

17. DO NOT OPERATE TOOL IF SAFETY FEATURES NOT WORKING PROPERLY.

Disconnect tool from power source if safety trigger or operating controls are not working properly.

18. USE ONLY PORTA-NAIL FASTENERS.

Only use fasteners recommended by the manufacturer. Use of other fasteners may cause serious injury, jamming of tool or improper operation.

19. USE ONLY PRESSURE REGULATED POWER SOURCE.

Use only a pressure regulated power source set at 115 PSI maximum supplied to the tool. The power source must have a safety relief valve set at 135 PSI maximum.

Always follow the Manufacturer's recommendations.

20. THE TOOL SHOULD NOT BE OPERATED AT THE MAXIMUM AIR PRESSURE.

The tool airline should be connected to the power source through an airline pressure Regulator and an airline Filter. The airline Regulator should never be set higher than 115 PSI as marked on the tool. Lower pressures may be used as recommended by the manufacturer.

21. HAZARDOUS POWER SOURCES SHALL NOT BE USED.

Hazardous power sources including, but not limited to, Oxygen, Combustible gases, sources whose pressure can exceed 200 PSI if the pressure Regulator fails, bottled gases, including air should never be used.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **If** there is any doubt as to the operation or safety of the equipment.

DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!!

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH

The following steps are provided as a simple guideline for proper nailing technique. Should you encounter a situation not covered here or have additional questions regarding the

PORTAMATIC® and its use please contact us at 800-634-9281. Should you require detailed information regarding wood flooring installation we suggest you contact:



WARNING: This product can expose you to chemicals including naphthalene and benzene from petroleum products which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov

Operating Instructions

Safety Requirements

1. **WEAR SAFETY GLASSES** and safety shoes for protection against foreign objects.
2. **NEVER** use a Hammer with a loose head or splintered handle.
3. **USE ONLY** nails from Porta-Nails, Inc.
4. Air supply hoses should have a minimum working pressure rating of 150 PSI or 150 percent of the maximum pressure produced in the power source, whichever is higher.
5. Check all hoses before connecting to ensure that they are free from dirt, grit, or particles that could alter the performance of the tool.
6. An airline Filter and In-Line Air Regulator adjustable to 120 PSI Max. are required. (See Illustration)
7. The **PORTAMATIC®** pneumatic Nailer requires **Clean, Dry Air**. Use In-Line Regulator and Filter. **DO NOT USE INLINE OILERS WITH THE PORTAMATIC®**. Dust, dirt and other particles in the system can cause premature wearing of the major components. Cylinder, piston, and o-rings are especially sensitive to wear caused by dirt or sawdust abrasion.
8. Adjust the In-Line Air Regulator to **90-95 PSI**. Be sure that the tool is not pointed at you or others when it is connected to the air supply source. **NOTE: Some materials may require a higher pressure of 95-115 PSI in order to countersink the nail. DO NOT EXCEED 120 PSI!**
9. **NEVER** use a defective tool. Replace worn or damaged parts immediately. Be sure that the Safety Trigger and operating mechanisms operate correctly and that all screws and seals are securely tightened at all times.

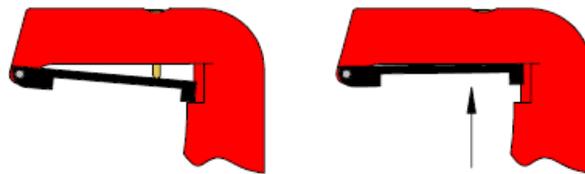
Operation

1. After connection with power source is made, check to be sure that the airline Regulator pressure is **90-115 PSI**. **Note:** Some materials may require a higher pressure in order to countersink the nail. Harder Material Flooring requires more pressure than typical Oak or Maple. Face Nailing requires approximately 5 PSI or more than Angle Nailing.
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 depressing the Trigger and 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 inoperable.
5. To operate tool, depress Safety Trigger while tool is in position of use, and tap the Ram Cap (Ref. No. 47) with a minimal stroke from the Hammer.
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) to be in the correct position to drive the nail.
7. **DO NOT OVERPOWER THE NAILER** – A 90lb static force will fire the Nailer. This is easily achieved by a tap of the Hammer. 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 and / or internal parts. **This Nailer is pneumatically powered and requires only actuation by depressing the Safety Trigger and Tapping the Ram Head.**
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 120 PSI!**

Nailing Tongue And Groove Flooring

Using the PORTAMATIC® Nailer

1. Install the Face Nailing Shoe on the **PORTAMATIC®** Nailer (See **Shoe Changing** Section).
2. After squaring the Floor and allowing for expansion as recommended by the Wood Flooring Industry (NWFA, NOFMA and MFMA), install Felt Vapor Barrier and use chalk line to identify location of Sub-Floor Nails prior to racking wood to be nailed. **This will help prevent hitting Sub-Floor Nails which can cause damage to the Driver Blade and Jamming.** Place the grooved edge of the first row of Flooring towards the wall on the side of the room from which you are starting.
3. Be careful to tap both the Ram Head of the **PORTAMATIC®** Nailer and the Flooring with the Gray Cap on the Hammer. Tapping the Ram Head or tapping the Flooring with the metal end of the Hammer will cause damage to the Nailer or the Flooring.
4. Depress Safety Trigger, and strike Ram Head of the **PORTAMATIC®** Nailer with the Face Nailing Shoe installed.



5. After tapping the Ram Head, the actuating cycle of the **PORTAMATIC®** Nailer drives one nail into the Flooring.
6. When the nail has been completely driven, the **PORTAMATIC®** Nailer will automatically reset, and is ready to be moved to the next position and drive another nail.
7. Be careful not to drive one nail on top of another. Damage to the Nailer might result or injury from sparks or a sliver of metal that might break away if this should occur.
8. If a nail is driven on top of another or a jam occurs, refer to the "Clearing a Jam" section of the manual on page 11.
9. Slide the **PORTAMATIC®** Nailer along the Flooring to the location at which you desire to drive the next nail.
10. Continue until four (4) rows of Flooring have been Face Nailed.
11. Remove the Face Nailing Shoe Accessory from the **PORTAMATIC®** Nailer and install the Tongue and Groove Nailing Shoe (See **Shoe Changing** Section).
12. Place the groove of the fifth row of Flooring over the tongue of the fourth row of Flooring and tighten using the Hammer. Depress the Safety Trigger, and tap Ram Head of the

PORTAMATIC® Nailer with the Tongue and Groove Nailing Shoe installed.

13. Slide the **PORTAMATIC®** Nailer along the tongue of the Flooring to the location at which you desire to place the next nail.
14. Continue until you have completely nailed all but the last five (5) rows of Flooring.
15. Remove the Tongue and Groove Nailing Shoe from the **PORTAMATIC®** Nailer and install the Face Nailing Shoe (See **Shoe Changing** Section).
16. Install and nail in place the remaining five (5) rows of Flooring using the **PORTAMATIC®** Nailer with the Face Nailing Shoe installed.



FIGURE 4
Tongue Nailing 9/16\"
Flooring
 Shoe P/N 50125
 Shoe Base P/N 50184 (Black)
 Shoe Pad P/N 50181 (Black)

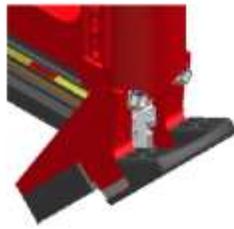


FIGURE 5
Tongue Nailing
15-17mm Flooring
 Shoe Accessory P/N 50230

SHOE CHANGING

CONVERSION TO AND FROM FACE NAILING

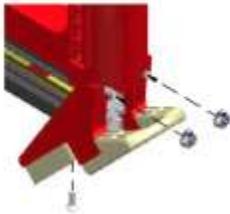


FIGURE 6
Tongue and Groove Flooring Shoe

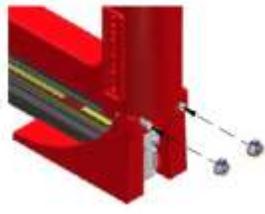
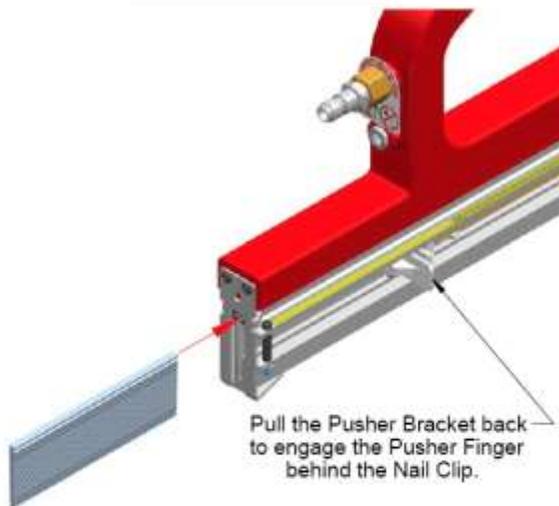


FIGURE 7
Face Nailing Shoe

Loosen or remove Flange Nuts (Ref. No. 33) with Wrench and unscrew the Shoe Screw (Ref. No. 50) to remove and change over from Tongue Nailing to Face Nailing Applications. Change from Face Nailing to Tongue Nailing by loosening or removing Flange Nuts (Ref. No. 33) with Wrench and Face Shoe Screw (Ref. No. 42). Always tighten the Shoe Screw (Ref. No. 50 or 42) before tightening the Flange Nuts (Ref. No. 33).

Loading the Tool



Insert Nails into the Nail Rail as shown. Pull back the Pusher Bracket (Ref. No. 59) to engage and position the Pusher Finger (Ref. No. 49) behind the loaded Nail Clip(s). This will provide pressure against the nails and move them into the proper position for the nailing function of the tool.

IMPORTANT! For best results, maintain at least a 1-2 inch length clip of nails in the Magazine Nail Rail.

RECOMMENDED EQUIPMENT

- **Air Compressor** - 1-1/2 HP, approximately 5 SCFM at 100 PSI. An Airline Pressure Regulator set at 90-115 PSI should control line pressure. The Air Compressor must have an Air Inlet Filter. The Filter Medium must be cleaned after each day's use and replaced as recommended by the Filter Medium Manufacturer. The Air Compressor must have a Condensate Drain at bottom of Accumulator Tank. Drain every 24 hours or after every day's use. Use an Air Compressor that will accommodate adjusting the pressure switch to trip on at 115PSI and to trip off at 135PSI.

Minimum Air Compressor Requirements

4 Gallon Tank, 150 PSI Max. 3.5 SCFM @ 90PSI.

ALWAYS follow the Air Compressor Manufacturers' recommendations for adjustments.

DO NOT USE AN IN-LINE OILER WITH THE PORTAMATIC®.

- ★ There should be an Air-Line Filter between the Pressure Regulator and the Air Compressor to insure clean, dry air. Filter on Air-Line must be drained after use every day.
- **Hose** - 3/8" I.D. is recommended. Air supply hoses should have a minimum working pressure rating of 150 PSI or 150 percent of the maximum pressure produced in the power source, whichever is higher.
- **Fitting** - Any configuration of a quick connect fitting with either a 3/8" NPT thread or a combination of a 1/4 NPT thread fitting and 3/8 - 1/4 NPT reducer.

Clearing A Jam

In the event of a jam, the Gate (Ref. No. 22 Pg. 26) can be opened by unscrewing the two Gate Screws and releasing the Gate. (See Figures 8 and 9) (The Shoe does not have to be removed to remove and replace the Gate.) Follow instructions below.

1. **IMMEDIATELY DISCONNECT** from power source until jam is cleared!
2. Remove all Nails in the Magazine.
3. **DO NOT PRY OPEN THE GATE.** Unscrew the Gate Screws 1-2 turns. Lift and pull the Gate downward as shown and remove the Gate from over the Screws through the slots in the Gate as shown in Figure 8.
4. Once the Gate is removed, clear the jammed Nail.
5. 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.)
6. Replace the Gate by placing the Gate over the two Screws in the Guide as shown and press down and upward to seat and lock the Gate in place as shown in Figure 9. When properly seated, the Gate should not slide down. Make sure the Gate is properly resealed and tighten the two Screws.
7. **DO NOT OPERATE WITH THE GATE LOOSE OR REMOVED!**



FIGURE 8

421 PORTAMATIC® TROUBLE SHOOTING

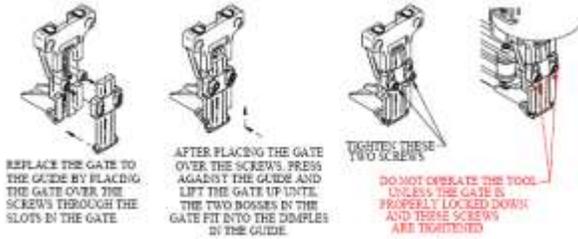


FIGURE 9

CAUTION NEVER pry on the Gate when trying to remove the Gate. Prying could cause breakage. ENSURE THAT THE GATE IS SECURE BEFORE CONTINUING OPERATION.

Resetting the Piston / Driver Blade

1. Disconnect from the Air source.
2. Unload all of the Nails from the Magazine.
3. Make sure there are no Nails in the Guide/Gate firing chamber.
4. Reconnect the Air source to the Nailer.
5. While squeezing the Safety Lever, push the Ram down and hold for three (3) seconds and release.
6. Load Nails and proceed with the operation of the Nailer.

PROBLEM OR QUESTION	CAUSE	CORRECTIVE ACTION
Nailer is Jamming	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.
	Tip of Driver Blade (Ref. #58) broken	Check Driver Blade (Ref. #58) and replace if tip is broken.
	Access Gate (Ref. #22) may not be closed properly.	Check Access Gate (Ref. #22) to ensure it's properly closed.
	Consistently hitting the Ram too hard.	Only Tap the Ram to fire the Nailer.
	Air pressure too low	Set air pressure to 100-115 PSI
Nailer is not always firing a nail	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
	Air pressure too low	Set air pressure to 100-115 PSI
Air is escaping	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.

PROBLEM OR QUESTION	CAUSE	CORRECTIVE ACTION
Nailer is shooting two nails.	End of Rail (Ref. #26) 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. #29) may be loose preventing Rail (Ref. #26) from being held properly in place.	Tighten Screws (Ref. #43, #29) that secure the Magazine (Ref. #28) to the Guide (Ref. #21) and the back Magazine Retainer Bracket (Ref. #27).
Nails are not being counter sunk into wood and are left sticking out of wood.	Not driving Nails into the tongue area	Always drive Nails into the tongue area, not the groove.
	Tip of Driver Blade (Ref. #58) broken	Check Driver Blade (Ref. #58) and replace if tip is broken.
	Air pressure too low	Set air pressure to 100-115 PSI
	Using air compressor that is too small	Follow recommendations in the Owner's Manual relative to size and volume of air compressor. The ideal air compressor trip on pressure should be 115 PSI or above.
Nailer does not fire when trigger is pulled.	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. #56) from completing full stroke.	Check Piston Cushion (Ref. #10) and replace if needed.

PROBLEM OR QUESTION	CAUSE	CORRECTIVE ACTION
Ram is stuck in down position	Driver Blade (Ref. #58) 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 or has been installed upside down.	Check Cylinder Cushion Ring (Ref. #5) and replace if loose or damaged. Check for proper installation. (See Figure 13)
Tool partially fires when air hose is connected	Air pressure too low.	Set air pressure to 100-115 PSI
	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.
Nailer partially fires when trigger is pulled and before Ram is struck.	Cylinder Exhaust Valve Screw (Ref. #50) may be loose	Check and tighten if needed. Use LOCTITE® 242 (Blue) on screw.
	Main Valve Lip Seal (Ref. #41) is not sealing	Check Lip Seal. If damaged, replace Main Valve (Ref. #41).