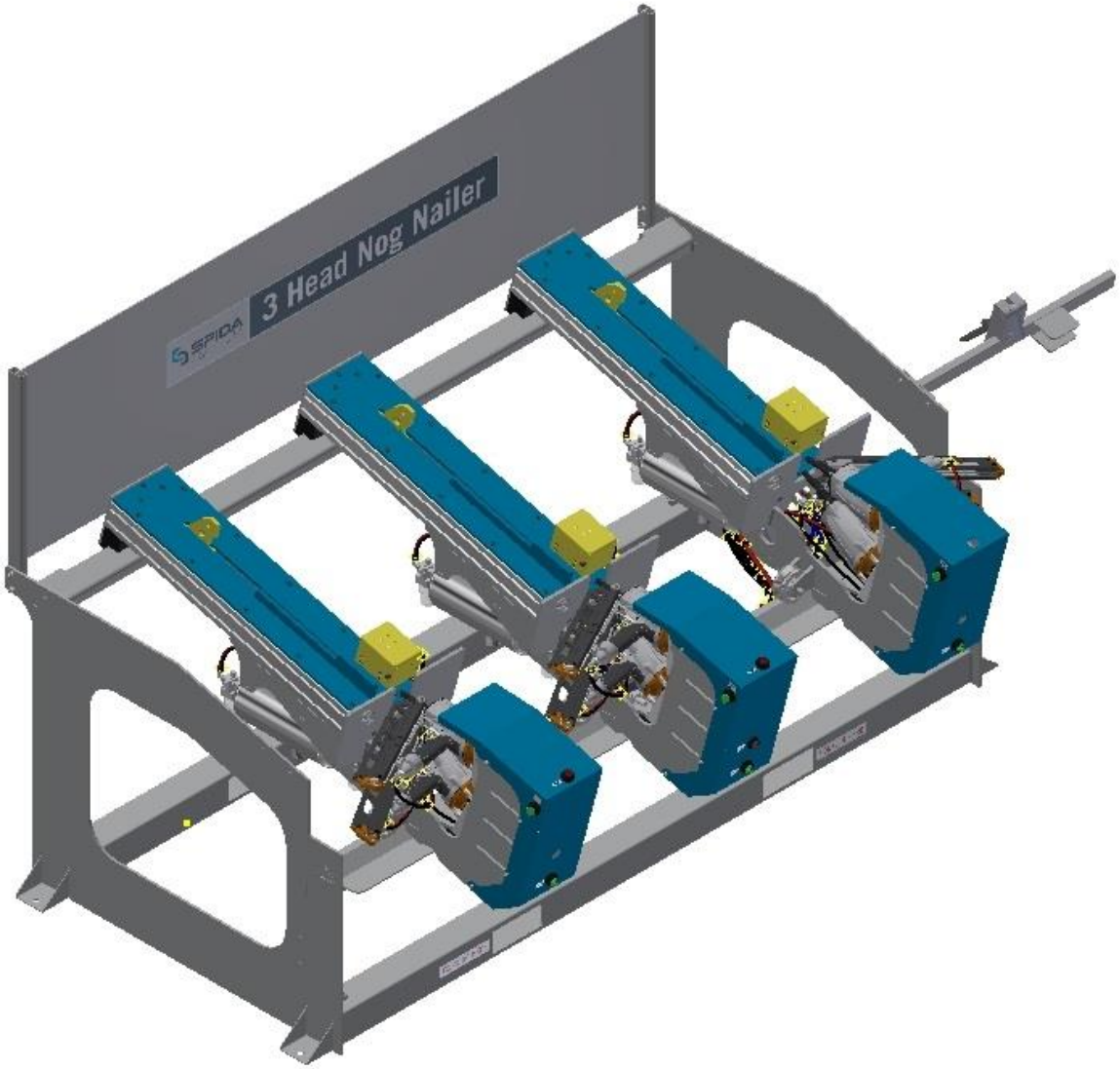
SPIDA MACHINERY
A MULTINAIL COMPANY

3 Head Nog Nailer



OPERATION & MAINTENACE MANUAL

WARNING

This machine ***must only*** be used by personnel who have been properly instructed in all aspects of the machine's safe operation.

Operators ***must*** also wear the recommended personal protective clothing and have thoroughly read and understood this manual.

Serial Plates

All enquiries should be directed to:
SPIDA Machinery Ltd

Australia free phone 1800 146 110

America free phone 1888 262 9476

NZ free phone 0800 SPIDAS or +64 7 343 7915

Below is a copy of the serial plate displayed on the back of the machine

1 Contents

Tables

Figures

2 Overview

The Spida Nog Nailer is designed to accurately nail timber together before frame assembly.

The Nog Nailer must be used per the standard operating procedures set out in this manual. Any actions carried out which are not contained in this manual are not endorsed by Spida Machinery (SM2012 Ltd) and cannot be warranted.

All operators should read and then sign the register of this manual before operating the Nog Nailer to ensure they are thoroughly familiar with the machine capabilities, limitations and to ensure correct operating procedures are adhered too.

Only those operators that have received training on the correct operation of the Nog Nailer are deemed competent and qualifies to operate the machine.

The Nog Nailer test procedures must be performed at installation and after any maintenance, adjustment, repair or modification of the machine. The test procedure is available on request.

The competent operator must also regularly perform (at least every three months but more often if used continuously) the recommended maintenance procedures and checks detailed in this manual.

Al pneumatic lines must be set as to not allow its movement through the nailing area of adjacent machinery.

This manual offers many safety tips, but its purpose is not to provide instruction in all the skills and techniques required to manufacture timber frames safety and efficiently.

Due to improvements in design and performance during production, in some cases there may be minor discrepancies between the actual machine and the illustrations and text in this manual.

3 Specifications

Table 1, Nog Nailer Specifications

Overall Width	1570mm
Overall Height	1185mm
Overall Length	3065mm
Working Width	788mm
Weight	510 kg
Operational Noise	92.8 dB
Timber Feed	Left or Right
Air Supply	7-8 Bar
Nail Gun Capacity	273.8 l/min (60 cycles) each

Specifications may change without notice

4 Installation

4.1 Handling & Transport

- Box all additional parts and secure with the machine
- Using a single fork truck, lift the machine package underneath using the forklift spaces provided
- Once on the truck, tightly strap the machine.
- Do Not place any loads on top of the machine
- The machine should be kept free from road grime and rain, and should be covered at all times while being transported

The Spida Nog Nailer will be delivered in large component form and will require assembly on site by trained personnel. Due care and attention should be made whilst unpacking of the components from their packaging materials. Any damage caused whilst in transit should be noted immediately and Spida Machinery (SM2012) informed. Refer to section 3 specifications for weights of individual components for selection of Manual Handling Equipment prior to positioning them on the selected site.

4.2 Installation

- It is advisable to forklift the machine package as close to the final assembly point as possible to reduce manual lifting
- The final operating position of the machine must be free from any rubbish or impediments
- There must be good lighting in the installation area to allow proper positioning of the machine
- The ground on which the machine rests must not vary by more than 30mm over a 12m x 2m area
- Nailer should be leveled using jacking bolds on steel jacking plates. Once level, machine should be bolted to the floor through holes provided.
- Electrical commissioning to be to local standards and be performed by a qualified electrician

The site selected for the Spida Nog Nailer will depend on the ground. The ground chosen should be a clean and free of water or possible flooding. The area on which the framework sits must be as even and horizontal as possible. This can be achieved by adjusting the length of the feet. There should be no twist to the framework when the feet have been adjusted to take the ground into account.

The final operating position of the machine should be free of all rubbish or impediments with general access to all areas of the Nog Nailer for the ease of loading and unloading nogs of varying sizes.

With the machine in position, a qualified engineer should be used to connect the pneumatic components to the machine and adjust the air pressure to the required setting. (refer to 3 Specifications for pressure settings)

Check all pneumatic hoses and connectors to ensure that the fittings haven't worked loose during transportation of the machine. Re-tighten all fittings that appear to be leaking. If leaking persists undo the fittings, apply a sealing compound to the joints in question. Re-tighten the fitting. (any serious leaking problems during the warranty period should be reported to Spida Machinery 2012 Ltd). Check the air pressure in the system is sufficient to operate the machine. (refer to 3 Specifications for pressure settings).

To check the air pressure, turn the compressor on and allow the pressure to build up. When the controls are activated, normal pressure should read 7-8 bar or 700- 800 kPa. All maximum pressures are factory set and should not be changed.

Check that all safety equipment is functioning properly.

5 Safety

This Spida Nog Nailer is built for providing an accurate and efficient means of nailing timber nogs to studs. The Spida Nog Nailer must only be used for the purpose specified above and must be set up, maintained and operated in accordance with the instructions contained in this manual and the best standards of industrial machinery practice.

This Spida Nog Nailer will perform better and have a longer life if it is operated with care and given regular maintenance and inspections.

PROTECTIVE SAFETY CLOTHING AND EQUIPMENT MUST BE WORN; INCLUDING:

Eyewear

Hearing protection

Respirator or Dust mask

Protective Clothing

The Spida Nog Nailer must only be operated by personnel who have been properly instructed in all aspects of the Spida Nog Nailer safe operation.

Each member of the factory personnel shall be instructed in the safe use of the Spida Nog Nailer using this manual as a guideline and shall sign a copy of this manual to indicate that he or she has been instructed in the safe operation of the Spida Nog Nailer and have thoroughly read and understood this Manual and any other additional information that has been supplied.

A copy of this manual will be placed in the personnel file of each employee that receives instruction on the Spida Nog Nailer.

A second copy will be made available to each employee for his or her reference.

This manual is intended as a guide for safe operation of the Spida Nog Nailer by the operator. The operator should not consider this manual as all-inclusive.

Should you have any questions on the Spida Nog Nailer contact SPIDA Machinery (SM2012 Ltd).

- Protective clothing is to be worn at all times whilst operating this machine. The machine has several moving components which may snag any loose ill-fitting clothing resulting in possible injury. Keep hands away from all moving parts.
- Stay alert at all times of any human movement around the machine. Know where your co-workers are when you are operating the machine!
- Use the correct operating procedure to switch the machine off when it is not in use
- Before the commencement of work:
    - Carry out a general inspection of the machine for loos fittings, fasteners and damage to the pneumatic air lines.
    - Check all safety systems and equipment are work properly
    - Ensure that the machine is not vibrating or making unusual noises
- When shutting the machine down after each shift remove any foreign objects such as tools, discarded nails etc.
- Long hair should not be worn around the machinery. Wear appropriate hat or hair net, which will cover loose hair in accordance with OHS regulations.

- All maintenance should be carried out (where possible) with the compressed air supply isolated.
- The operator shall be suitably trained in accordance with this manual[1].
- Any person under the influence of alcohol or any drugs which would impair the operator's normal functions shall **not** operate the machine[2].
- It is the responsibility of the competent operator to prevent any other person from coming into the operators work area whilst the machine is in use.
- Observe and obey all warning decals and labels.

When initially locating the machine in the factory production area, due care and attention should be given to a clear working area around the machine and the movement of timber into and away from the working area. Operation of the machine should be confined to competent trained personnel only, (Ensure they sign the Operation/Maintenance Manual) who are responsible for routine inspection of components and ensuring that the machine is not in an unsafe condition.

Notes:

1 It is recommended that the employers maintain training records demonstrating the competencies of each employee

2 Consult a doctor or a pharmacist if you are on or taking any medication that you are unsure about.

WARNING! Do not operate the Spida Nog Nailer without having received the proper instruction in operation and safety from this manual.

6 Operating Controls

Before attempting to operate the Spida Nog Nailer, familiarise yourself with the location and function of each control.

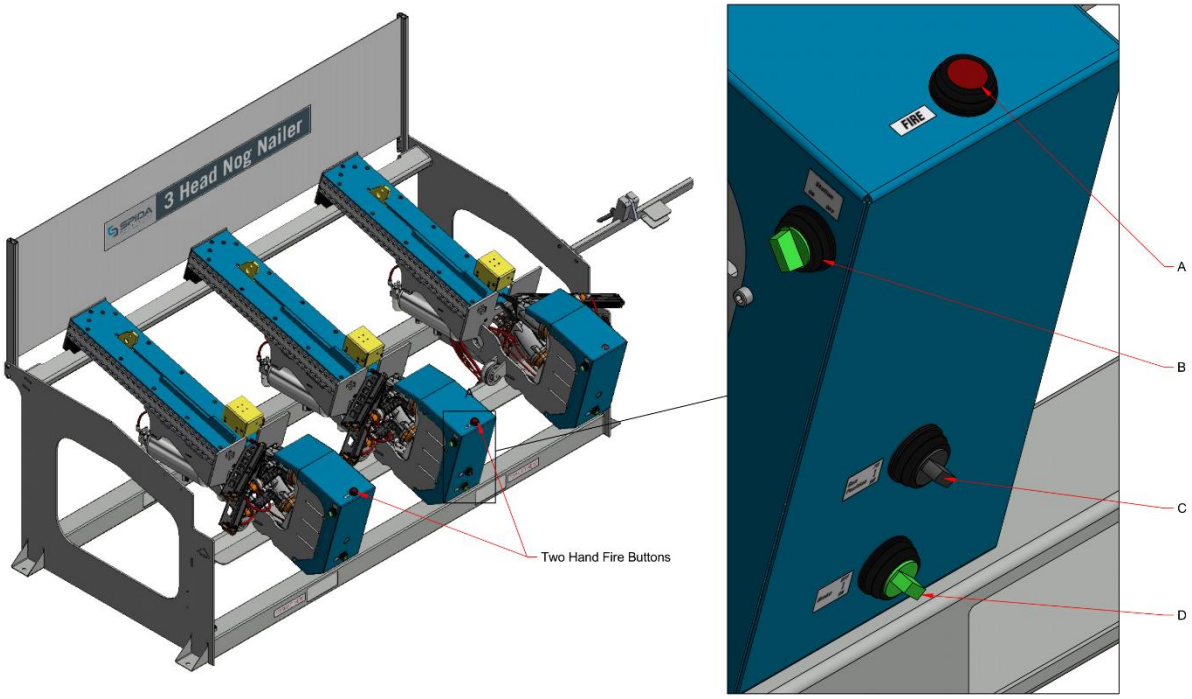


Figure 1, Nog Nailer controls

Table 2, Control functions see Figure 1

Control	Function
A	Fire button
B	Station on/off
C	Guns up/down
D	Station Brake

WARNING! Do not operate Nog Nailer without the correct knowledge and function of each of the controls.

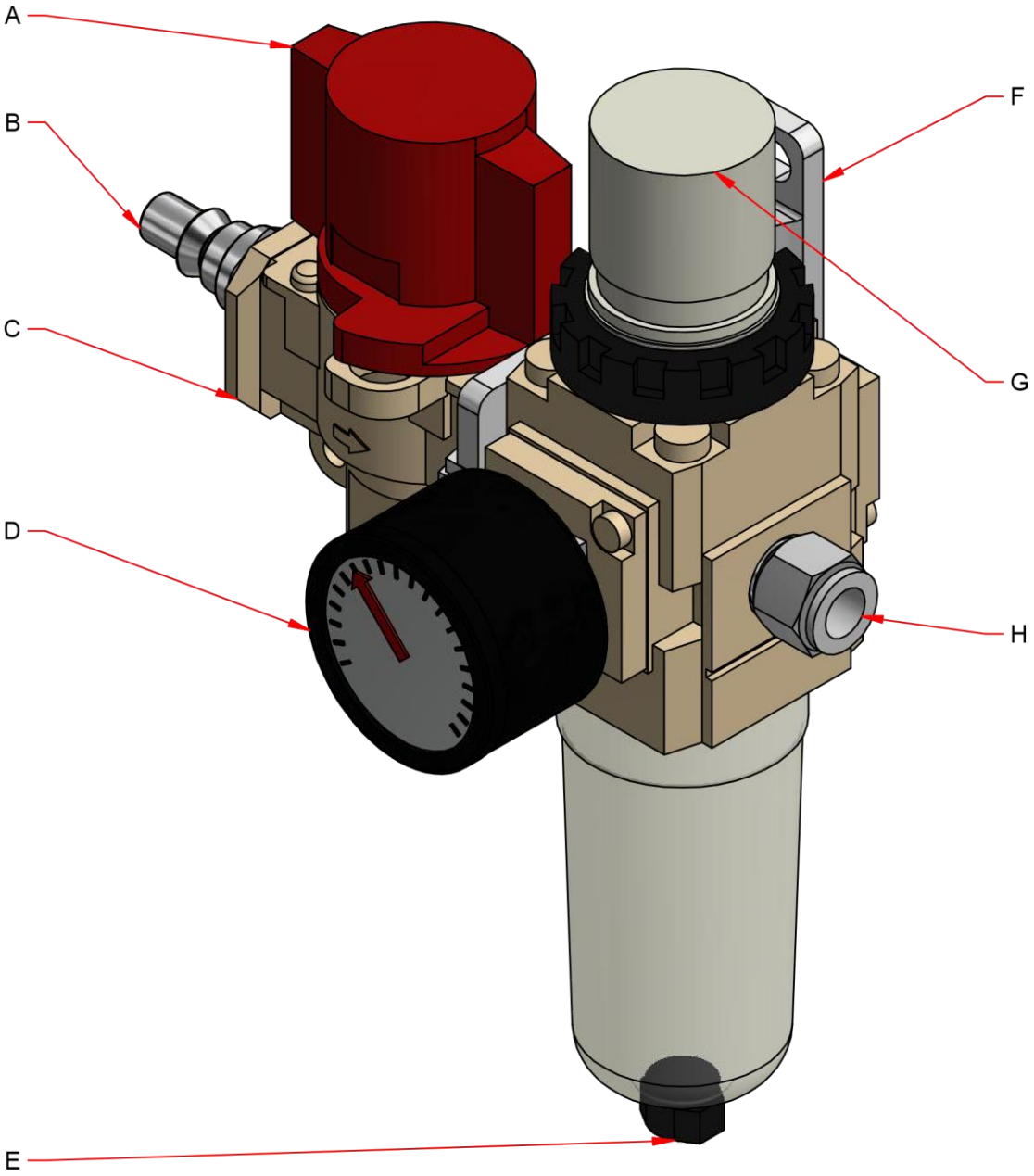


Figure 2, Valve/Filter/Regulator assembly

Table 3, Valve/Filter/Regulator parts

Control	Function
A	Valve on/off/dump
B	Air in
C	Pressure relief valve
D	Pressure gauge
E	Moisture release
F	Mounting bracket
G	Regulator adjustment
H	Air to nailer

7 Operation

NOTE: The Spida Nog Nailer is to be operated in accordance with this manual. Deviation from this specified operation may result in incorrect nailing or injury.

7.1 Station On/Off

If only one nog is required, it is possible to isolate the nailing units individually using the isolator switch located as shown in Figure 1.

7.2 Guns Up/Down

The upper nail gun has two positions but is fixed in relation to the lower nail gun. The upper nail gun can be set to suit either 70mm or 90mm timber and can be offset by 20mm above the lower nail gun. This is achieved by individually raising or lowering the nail gun using the pneumatic toggle switch located at the rear of the of the base frame as shown in Figure 1.**Caution:** When processing 70mm wide timber the nail gun is set to the Down Position.

7.3 Station Brake

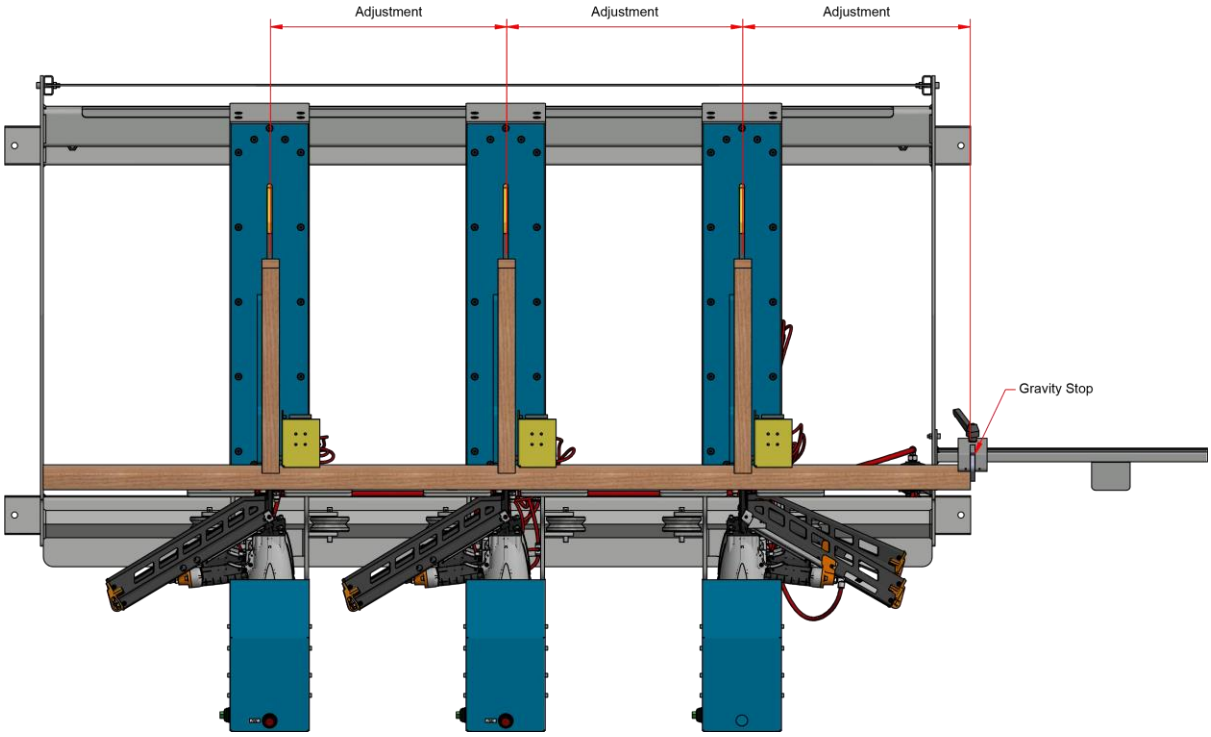


Figure 3, Nog centres adjustment

The position of the Nailing Units can be adjusted horizontally as in Figure 3 to achieve different nog centres. Use the pneumatic brake shown in Figure 1 to horizontally lock the nailing units before attempting to fire the guns.

7.4 Gravity Stop

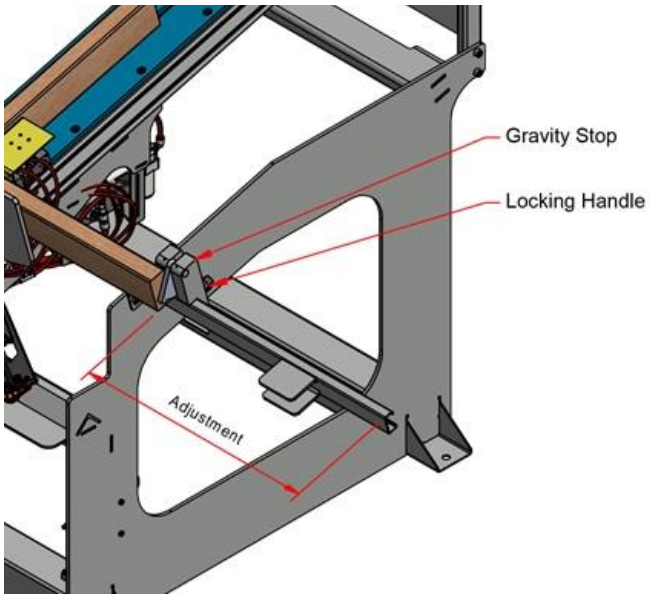


Figure 4, Gravity Stop

The stud length may be adjusted using the gravity stop as shown in Figure 4. Use the toggle clamp to tighten or loosen and slide the gravity stop along the rail to required length.

7.5 Loading

When the required stud length and nog widths have been set, apply the pneumatic brakes and load wood to be nailed. The nogs should now be perpendicular to the stud and the wood faces hard up against guide fences to ensure nailing is square.

Note: Operator must ensure they are familiar with their companies individual loading/unloading procedures before nailing is commenced.

7.6 Firing Operation

The firing operation uses a Two Hand No Tie Down (THNTD) pneumatic initiating system which ensures both hands of the operator are clear of the guns firing operation. When the wood is correctly in place and pneumatic brakes have been applied the clamping, and firing sequence can begin. This is initiated by simultaneously holding both RED firing buttons shown in Figure 1 down until the sequence is complete. If at any time during the clamping and firing sequence either of the RED firing buttons are released, the sequence will stop and air pressure will be expelled from the exhaust. The sequence will reset and the operation will commence when both buttons are depressed again.

Note: It is the responsibility of the operator to ensure the firing area is clear of obstructions that may hinder safe firing operation! This includes but is not limited to other personnel working in the immediate area!
Never attempt to fire Nail Guns if the timber is not correctly in place or if there is no timber in the Machine.
Always keep hands clear of Clamping

7.7 Air Dump

In an emergency the air must be dumped form the system or when disconnecting the air supply or performing any maintenance, dump any air in the system using the dump valve see Figure 2, item A.

8 Parts Identification

8.1 Top Level Assembly

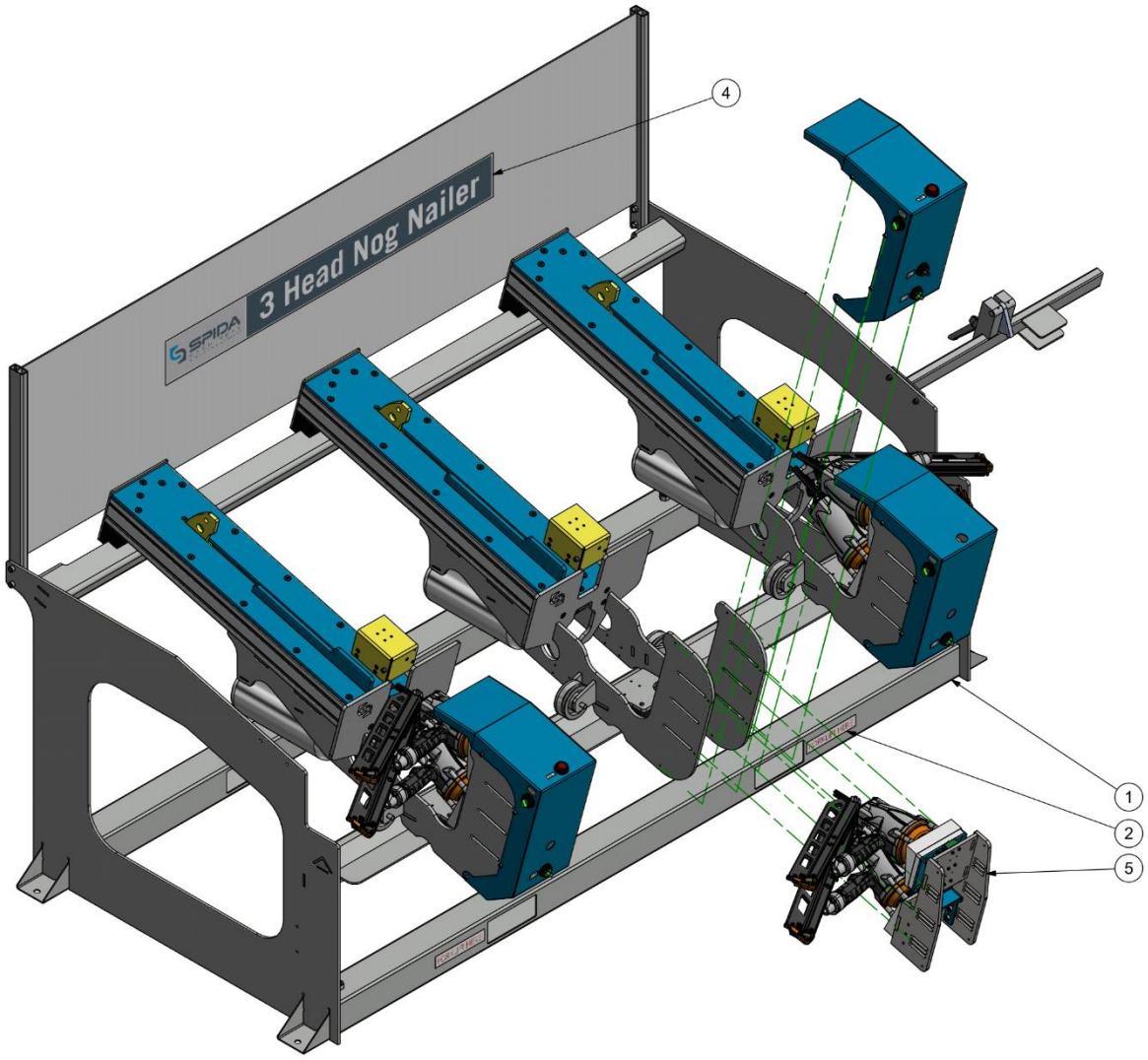


Figure 5, 3 Head Nog Nailer with guns.

Table 4, Parts List – 3 Head Nog Nailer

ITEM	QTY	PART NUMBER	DISCRIPTION
1	1	1710000 3H	3 Head Nog Nailer
2	2	SMPDEC005	Decal – Forklift here
3	1	SMPDEC026	Decal - 3 Head Nog Nailer Control
4	1	SMPDEC027	Decal - 3 Head Nog Nailer
5	3	SMPGMA02-F350	Gun Mount Assembly with Paslode F350 guns

Depending on requirements the 3 Head Nog Nailer can be supplied with different guns.

8.2 Base & Trolley Assembly

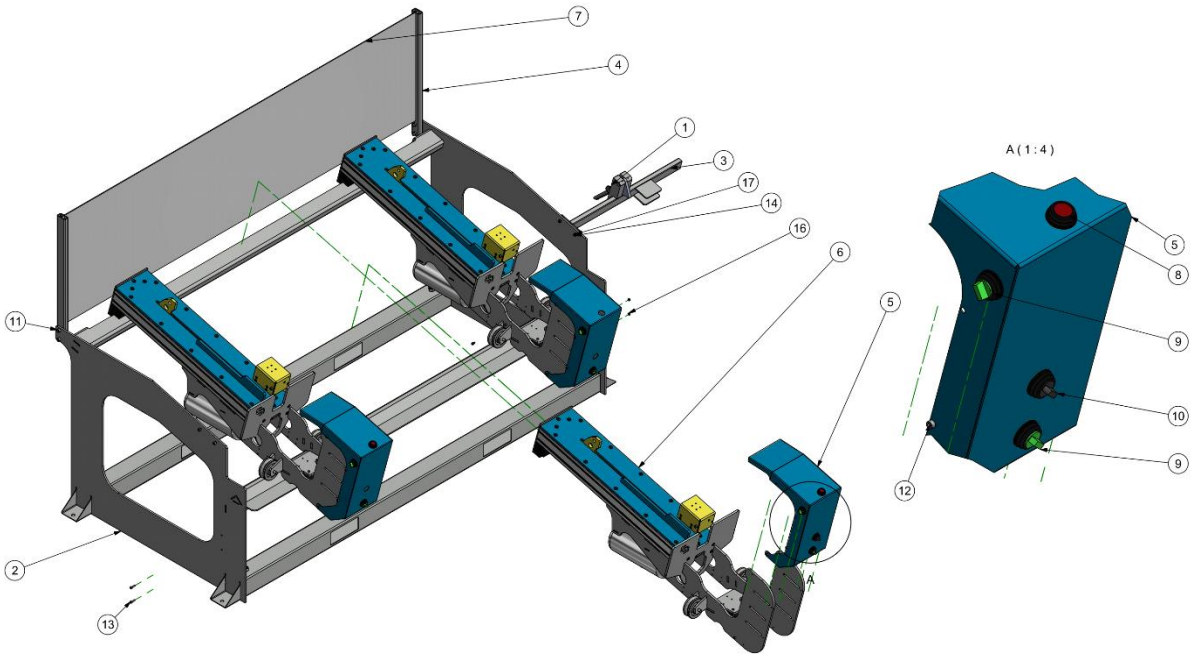


Figure 6, Base and Trolley Assembly

Table 5, Base and Trolley parts list

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	0201100	Gravity Stop
2	1	1710001	Nog Nailer Base
3	2	1710002	Gravity stop - rail
4	2	1710003	Back Board Support
5	3	1710004	Trolley Cover (top)
6	3	1710100	Nailing Trolley Assembly
7	1	ACM - 2290x600x17	ACM 2290x600x17
8	2	AVVM130-01-33	VM100A-2/3 Port Mechanical Valve
9	6	AVVM130-01-34G	VM100A-2/3 Port Mechanical Valve
10	1	AVVZM550-01-34B	VZM500-5 Port Mechanical Valve
11	4	HWCSM1050	Hex Socket Head Cap Screw M10x50
12	24	HWCSM610	Hex Socket Head Cap Screw M6x10
13	2	HWCSM620	Hex Socket Head Cap Screw M6x20
14	4	HWCSM825	Hex Socket Head Cap Screw M8x25
15	4	HWNHM10	Hex nut M10
16	2	HWNHM6	Hex nut M6
17	4	HWNHM8	Hex nut M8
18	1	NAMEPLATE	Serial Number Plate

8.3 Trolley Assembly

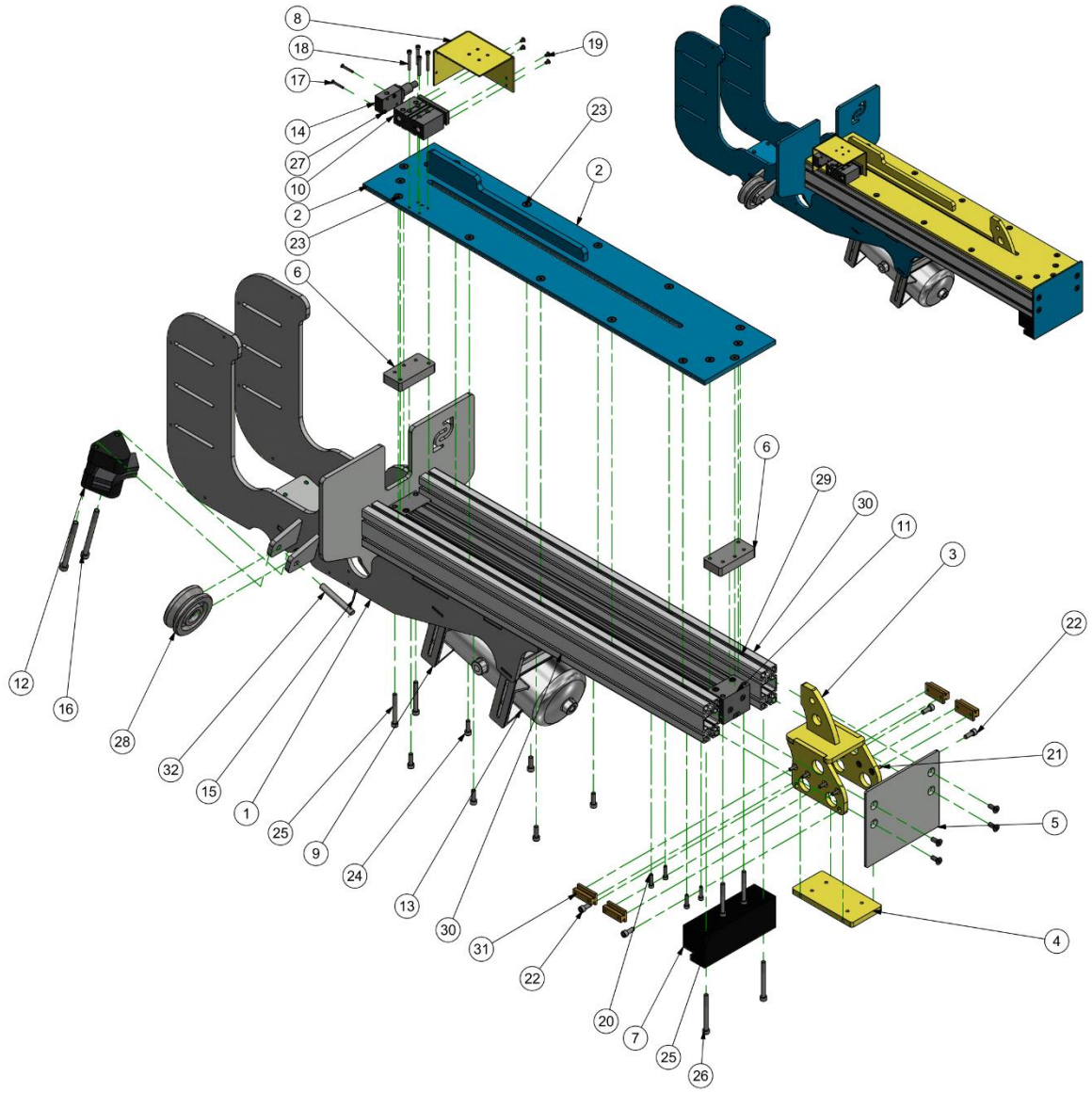


Figure 7, Trolley Assembly

Table 6, Trolley Assembly parts list

ITEM	QTY	LENGTH	PART NUMBER	DESCRIPTION
1	1		1710101	Nailing Trolley (welded assembly)
2	1		1710102 - A	Nailing Trolley - Bench top
3	1		1710103	Nailing Trolley - Clamp bogey
4	1		1710104	Nailing Trolley - Clamp Plate
5	1		1710105 - A	Nailing Trolley - End Profile
6	2		1710106	Nailing Trolley - Cylinder Plate
7	1		1710108	Nailing Trolley - Front support block
8	1		1710109	Nailing Trolley - Clamp cover
9	2		1710110	Air Tank Bracket
10	1		ACMGPM20-20Z	MGP-Z-Compact Guide Cylinder
11	1		ACMY1B40G-600	MY1B-Z-Rodless Cylinder/Basic Type
12	1		AFBC	Brake Calliper - Nexen 8350
13	1		AT350-138	Air Tank 350 long 138 Dia.
14	1		AVVM430-01-05	VM430-01-05, 3 Port Mechanical Valve
15	2		HWCPM3225	Split Pin M3.2x25
16	2		HWCSM10125	Hex Socket Head Cap Screw M10x125
17	2		HWCSM430CS	Hex Socket CSK Cap Screw M4x30
18	4		HWCSM540	Hex Socket Head Cap Screw M5x40
19	4		HWCSM58CS	Hex Socket CSK Head Screw M5x8
20	4		HWCSM625	Hex Socket Head Cap Screw M6x25
21	8		HWCSM625CS	Hex Socket CSK Head Screw M6x25
22	4		HWCSM820	Hex Socket Head Cap Screw M8x20
23	24		HWCSM820CS	Hex Socket CSK cap Screw M8x20
24	6		HWCSM825	Hex Socket Head Cap Screw M8x25
25	4		HWCSM870	Hex Socket Head Cap Screw M8x70
26	2		HWCSM885	Hex Socket Head Cap Screw M8x85
27	2		HWNHM4	Hex nut M4
28	2		HWRTWV100	Cast Iron V Grooved Wheel
29	18		MT21-1351	Lock-nut
30	2	960.000 mm	SMPGP4590	Guide Profile
31	4		SMPGPS01	Slider for PM
32	2		SMPSH01	Wheel Pin

9 Maintenance

Before attempting any maintenance on the Nog Nailer, isolate from air supply.

Table 7, Maintenance intervals

Check	Day	Week	Month	½ Year
Guards in place	x			
Check oil level in lubricators	x			
Check that work area is clear	x			
Clamps Tight	x			
Check clamp sensor	x			
Clean nailer of any build up	x			
Noises or Vibrations	x			
Clean aluminium extrusion slots	x			
Air supply pressure		x		
Pneumatic Filter		x		
Check for lose bolts			x	
Floor bolts for tightness				x
Check the brake material in callipers isn't worn excessively				x

9.1 Air Line Lubrication

To enable the Nail guns to operate effectively and accurately they require compressed and lubricated air between 700-800 kPa. The machine is fitted with an automatic lubricator with a Filter and Pressure Regulator. The Competent Operator is required to check the level of the oil prior to commencement of work and top up with the air tool oil. Pneumatic control valves and cylinders do not require lubricated air.

9.2 Dry Air Supply

For best results, clean dry air is essential. A drain valve is provided on the air reservoir and this should be opened weekly to drain any condensation. Or when a moisture is seen in the reservoir prior to commencing work.

9.3 Nail Guns

Nail guns have been fitted to the SPIDA Nog Nailer to provide accurate and reliable nailing. All maintenance/servicing that is required should be carried out as specified by the gun supplier's handbook.

9.4 Clamp Sensor

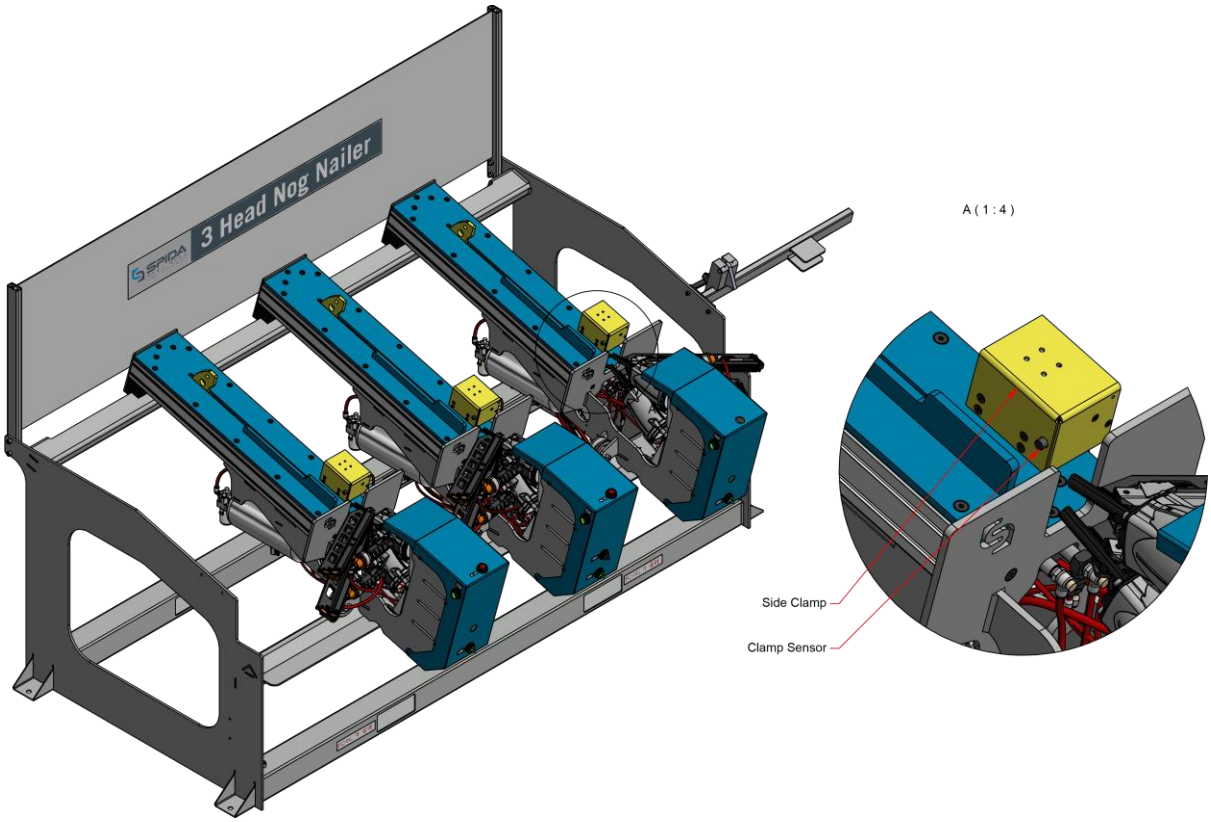


Figure 8, Sensor location

Check clamp sensor (see Figure 8) is free and clear of any build-up of dust and securely fastened, sensor malfunctions will prevent the guns from firing.

9.5 Air Supply

Air pressure should be maintained at 600-800 kPa this can be checked at the filter regulator located on the rear of Nailer (see Figure 2). Take measures to ensure air quality, such as by installing an aftercooler, air dryer, or water separator. Do not use compressed air that contains chemicals, synthetic oils including organic solvents, salt or corrosive gases, etc., as it can cause damage or a malfunction. When synthetic oil is used for the compressor oil, depending on the type of synthetic oil used, or on the conditions of use, there may be adverse effects on the resin of the pneumatic equipment or on the seals if the oil is flowed out to the outlet side, so the mounting of a main line filter is recommended.

9.6 Check Filter/Regulator

Periodically check the filter and regulator for any cracks or damage. If condensation in the drain bowl is not emptied on a regular basis, the bowl will overflow and allow the condensation to enter the compressed air lines. Water can cause malfunction of pneumatic equipment. The filter and regulator is located on the rear of nailer. See Figure 2 for regulator parts

9.7 Loose Fasteners and Fixings

Check for loose bolts especially on guards, cover and floor fixing. Tighten where necessary.

10 Safe Operation

10.1 User Warnings

- All machine and components should be inspected upon delivery and at weekly intervals for looseness, fracture, bends, sharp edges or surfaces.
- Failure to perform the daily and weekly service checks as per the schedule may result in serious machine damage or a severe accident.
- When broken, damaged or loose parts (or any condition that may represent a hazard) are observed, corrective action should be taken immediately. Inadequate attention to maintain the machine can cause the premature failure of these parts.
- Split, broken, warped, twisted or timber with excessive wane should be avoided or used with caution because of the greater possibility of the timber not being held securely during the nailing processes.
- The machine is not to be used for any other purpose than the nailing of timber components.
- Keep hands out of moving parts on the machine. Operators should be instructed not to extend fingers or limbs into the vicinity of the nailing or clamping areas. Be sure the machine is completely free of foreign objects and that all guards are in place before connection to air supply.
- Any guards removed for maintenance or adjustments **must** be replaced before the machine is put back into service.
- Exceeding the capabilities of the machine will void the warranty and could lead to a serious injury.
- All Operators should read and then sign the register of this manual before operating the Nog Nailer to ensure they are thoroughly familiar with the machine capabilities and limitations and to ensure correct operating procedures are adhered too.

10.2 General

Table 8, General Hazards

POTENTIAL HAZARDS	SAFE WORK PROCEEDURE
Safety	Ask questions if you have any doubts about doing the work safely. Check and adjust all safety devices daily.
Poor Guarding	Ensure all guards are fitted correctly and are adequately guarding blade, nip points and moving parts. Make sure guards are in position and in good working order. Do not operate machine without guards.
Poor Housekeeping	Inspect Nailer and surrounding areas for obstructions and defects. Remove built-up sawdust from around machine, electrical leads and power points.
Incorrect Accessories	Use only the accessories designed for each specific application
Foreign Objects	Check that foreign objects and maintenance tools etc. are removed from the machine before using the machine.

WARNING! This machine must only be operated by personnel who have been properly instructed in all aspects of the machine's safe operation. They must also be wearing the recommended protective clothing and have thoroughly read and understood this operation and service manual.

10.3 Operation

Table 9, Operational Hazards

POTENTIAL HAZARDS	SAFE WORK PROCEEDURE
Slip, Trip & Falls	Avoid awkward operations and hand positions where a sudden slip could cause your hand or part of your body to move into the clamping line. Electric power cords should be above head level or in the floor in such a way that they are not trip hazards. Floor areas should be level and non-slip. Clean up any spill immediately
Workplace	Use good lighting so that the work piece and machine controls can be seen clearly. Position or shade light sources so they do not shine in the operators eyes or cause glare and reflections. Ensure that the floor space around the equipment is sufficient to allow the operator to process his work without bumping into other staff or equipment. Keep the work area free of clutter, clean, well swept and well lit.
Housekeeping	Clean built up sawdust from around the machine, electrical leads and power points
Defects	Report all defects to the supervisor
Personal Protection	Wear safety glasses or a face shield. Wear hearing protection that is suitable for the level and frequency of the noise you are exposed to in the work area. Wear dust masks when required. Do not wear gloves when operating this machine. Do not wear loose clothing, work gloves, neckties, rings, bracelets or other jewellery that can become entangled with moving parts
Machine Guarding	Make sure all guards are fastened in position.
Material Defects	Inspect stock for nails or other foreign materials before cutting. Use only material designed for the machine.
Operator Technique	Do not remove stock from the Nail table until the clamp has been returned to its home position.
Hit by projectiles	Nailer must be pneumatically isolated before attempting to clear blockages or timber jams. Any small off cut should be removed using a push stick which has been properly constructed.

WARNING! This machine must only be operated by personnel who have been properly instructed in all aspects of the machine's safe operation. They must also be wearing the recommended protective clothing and have thoroughly read and understood this operation and service manual.

10.4 Maintenance

Table 10, Maintenance Hazards

POTENTIAL HAZARDS	SAFE WORK PROCEEDURE
Cleaning and maintenance preparation	Turn the air off on the main isolator and use the hole in the switch to lock the switch off before discussing, inspecting, changing, cleaning, adjusting or repairing a machine. Do not use compressed air to remove sawdust etc. from machines or clothing.
Stop/Start Buttons	Make sure that Start and Stop buttons are in good working condition and within easy convenient reach of an operator. Start buttons should be protected so that accidental contact will not start the machine.
Incorrect electrical isolation of machine	Machine must be switched off and locked out (pneumatically isolated) before maintenance or cleaning
Incorrect tools	Use Correct tools for the job to minimise personal injury and damage to the machine
Stalled blade	Isolate air before attempting to free a stalled clamp
Guarding	Ensure Guards are fitted correctly, adjusted and in good working order.

WARNING! This machine must only be operated by personnel who have been properly instructed in all aspects of the machine's safe operation. They must also be wearing the recommended protective clothing and have thoroughly read and understood this operation and service manual.

11 Foreseeable Misuse

Through experience, SPIDA's technical staff have listed (in order of occurrence) the most common misuses of the machinery by operators, the symptoms that result and the rectification required to address the misuse and return the machine to optimal working order.

Table 11, Common misuse issues

MISUSE	SYMTOM	RECTIFICATION REQUIRED
Lack of cleaning	Clamps not retracting	Clean nailer, especially extrusion tracks and underneath saw

Any other misuse and resultant damage of the machine is deemed non-foreseeable as its occurrence is not consistent.

12 Trouble Shooting

Table 12, Trouble shooting

Trouble	Probable Causes	Correction
Guns not firing	Triggers not activating	Pneumatic trigger may be faulty – replace if necessary
	No air to gun	Check air supply to gun
	Trigger jammed	Contact gun supplier
	Sensor not activating	Check sensor clear or replace
Clamps not coming on	Air supply	Replace any broken air lines
	Damaged linear bearing rails	Replace linear rails
	Obstruction	Clear obstruction

13 Distributor & Repairer Contacts

13.1 Agent/Distributor

Company Name: _____

Address: _____

Contact Person: _____

Ph.: _____ Fax: _____

Mobile: _____ Email: _____

13.2 Automation Repairs

Company Name: _____

Address: _____

Contact Person: _____

Ph.: _____ Fax: _____

Mobile: _____ Email: _____

13.3 Mechanical Repairs

Company Name: _____

Address: _____

Contact Person: _____

Ph.: _____ Fax: _____

Mobile: _____ Email: _____

14 Warranty

SM2012 Ltd, SPIDA Machinery, Tauranga, New Zealand, warrants the equipment listed below to the initial purchaser of the equipment only against defective workmanship and materials only, for a period of twelve (12) months from the date of shipment from SPIDA's factory, subject to the following conditions:

1. SPIDA extends the original manufacturer's warranty to SPIDA on buy-in items such as motors, saw blades and air cylinders or other such buy-in items but does not add its warranty herein described to such items.
2. This warranty only applies if:
   a. The attached copy of this warranty is signed by the initial purchaser and returned to SPIDA's address shown above within 14 days of shipment of the goods from SPIDA's factory.
   b. The equipment is installed by SPIDA or its licensed installer.
   c. Regular routine maintenance has been carried out on equipment in accordance with instructions in manual provided by SPIDA and proper housing and shelter provided for the equipment.
   d. The equipment is operated by competent personnel in accordance with the operating instructions set out in the manual provided by SPIDA and not otherwise.
   e. The equipment has not been subjected to alterations or repairs or dismantling without prior written approval of SPIDA. Any parts returned to SPIDA either for repair or consideration of a warranty claim consequent to an authorisation to dismantle must be shipped prepaid.
   f. SPIDA may, at its option, either repair or replace the defective part upon inspection at the site of the equipment where originally installed. The warranty does not cover the cost of freight, Labour or traveling for the removal or replacement of the defective parts,
   g. This warranty does not apply to any deterioration due to average wear and tear or normal use or exposure.
   h. In all warranty matters, including any question of whether this warranty applies to any claim, the decision of SPIDA is final,

This warranty is the only warranty made by SPIDA as the manufacturer and is expressly in lieu of and excludes all other warranties, conditions, representations and terms expressed or implied, statutory or otherwise, except any implied by law and which by law cannot be excluded. Neither SPIDA or its agents or servants will be liable in any way for any consequential loss, damage or injury including any loss of use, profits or contracts.

The law applicable to this warranty shall be the law of New Zealand and the parties hereto submit to the exclusive jurisdiction of the Courts of New Zealand.

Machinery/Equipment

The item bearing the following serial plate:

_____

Date of Shipment: _____

Signed by: _____

Name: _____

Position: _____

Acceptance of Warranty

I acknowledge and accept the contents of this warranty.

Signed by: _____

Name: _____

Company: _____

Position: _____

Date: _____

15 Pneumatic Drawings

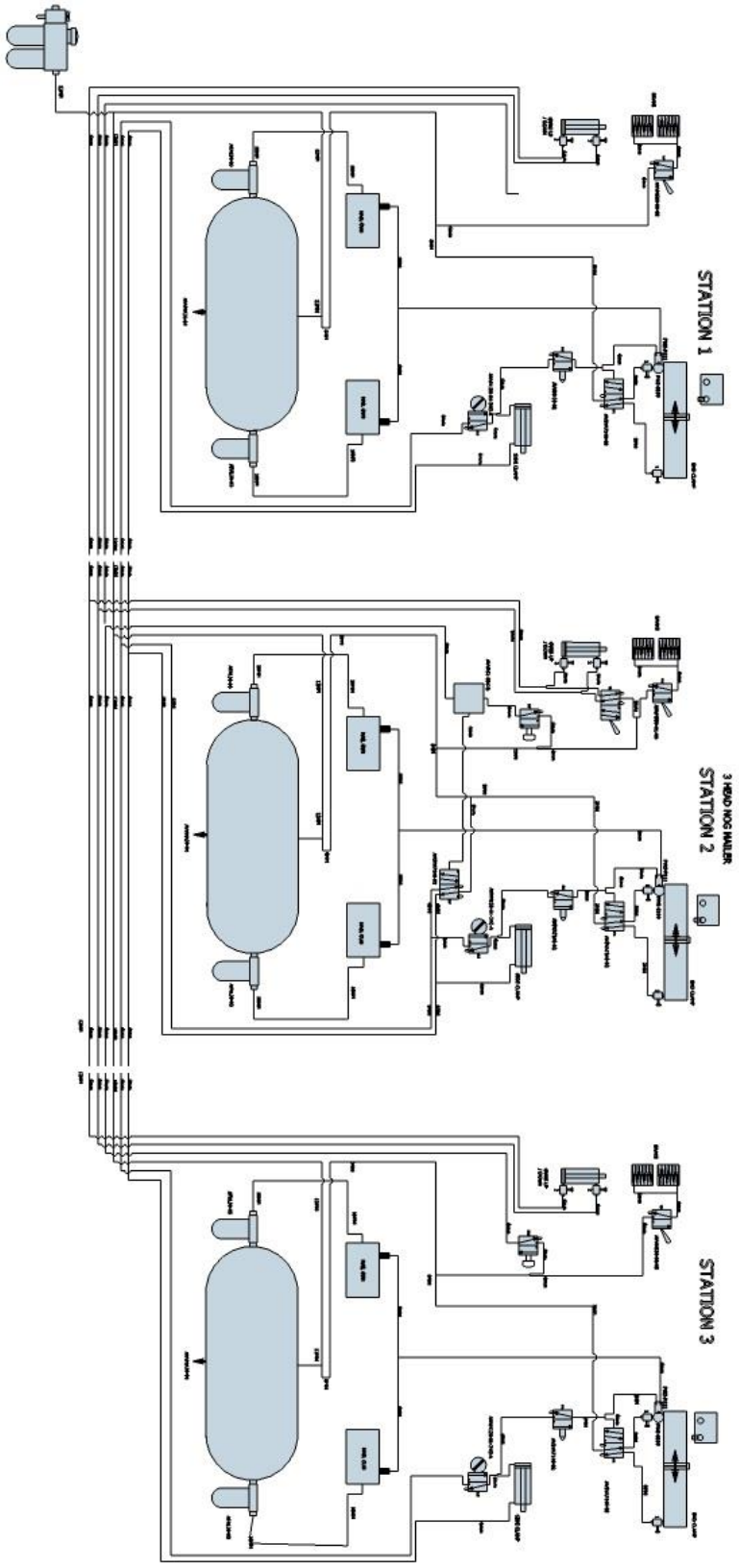


Figure 9, Pneumatic diagram

16 Training Certificate

Instructor: _____

Company: _____

I declare that:

- I have trained the person names below ("the trainee") in the safe operation of the machinery/equipment detailed in the training manual.
- The trainee has demonstrated an understanding of the safe operation of the machinery/equipment.
- The trainee has indicated the he/she has read and understood this training manual.

Signed: _____

Date: _____

Trainee: _____

Company: _____

Position: _____

I declare that:

- I have received instruction from the person named above ("the instructor") for the safe operation of the machinery/equipment detailed in this training manual.
- All information in this training manual was demonstrated and explained by the instructor.
- I have thoroughly read and understood this training manual.

Signed: _____

Date: _____

Witnessed by:

Name: _____

Company: _____

Signed: _____

Date: _____