

## OPERATION & MAINTENANCE 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

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



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## 2 Overview

The Spida Snip Saw 500 is a pop up blade saw designed to accurately cut timber components, or other material. The saw will clamp then cut the timber upon which clamps release and cut timber can be removed.

The Spida Snip Saw 500 test procedures must be performed at installation and after any maintenance, adjustment, repair, or modification to the machine. The test procedure is available on request.

Only qualified personnel must install and test the Spida Snip Saw 500.

Do not perform any tests or repairs other than those outlined in the manual.

The Operator must also regularly perform (at least every three months but more often if used continuously) the recommended maintenance procedures.

All Operators should read this manual before operating the Spida Snip Saw 500 to ensure they are thoroughly familiar with the proper operation of the Spida Snip Saw 500 controls, features, capabilities and limitations.

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

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, Snip Saw 500 Specifications

<b>Overall Width</b>	788mm
<b>Overall Height</b>	1240mm
<b>Working Width</b>	788mm
<b>Fence Height<sup>1</sup></b>	90mm – 115mm
<b>Length of Cut</b>	300mm (max)
<b>Depth of Cut</b>	100mm (max)
<b>Saw Blade</b>	500mm Dia. 35mm bore 128 teeth
<b>Saw Arbor</b>	35mm Dia.
<b>Arbor Motor</b>	4kW (5.5hp), 9.2 A at full load, 2890 rpm, 3PH/415V/50Hz 4kW (5.5hp), 16 A at full load, 3100 rpm, 3Ph/240/60Hz
<b>Weight</b>	280kg (saw only)
<b>Operational Noise</b>	92.8 dB or 98.1 dB working
<b>Timber Feed<sup>2</sup></b>	Left or Right
<b>Power Requirement</b>	16 A @ 415 V or 25 A @ 240 V
<b>Clamping<sup>3</sup></b>	292mm/45mm (max/min)

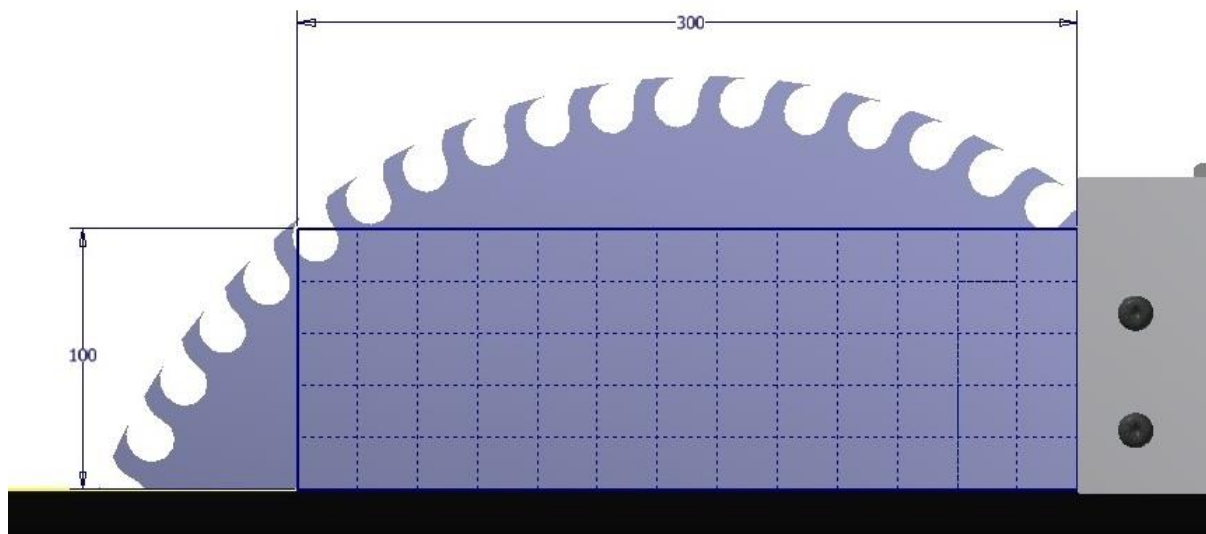


Figure 1, Cutting Capacity

#### Notes:

- 1 Fence height can change from 90mm to 115mm if an automated stop or pusher is used
- 2 Saw can be assembled in left or right configurations
- 3 Maximum clamping size can be changed by removing clamp spacers (part no. 3403205) see Figure 6, Item 5. This changes max/min clamping sizes to 308mm/61mm.

## 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, but not over Lid assembly.
- 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 when being transported

### 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
- Saw should be level for bench top using jacking bolts 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

## 5 Safety

This Spida Snip Saw 500 is built for the purpose of providing an accurate method of cutting timber components.

The Spida Snip Saw 500 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 Snip Saw 500 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 Snip Saw 500 must only be operated by personnel who have been properly instructed in all aspects of the Spida Snip Saw 500 safe operation.

Each member of the factory personnel shall be instructed in the safe use of the Spida Snip Saw 500 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 Snip Saw 500 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 Snip Saw 500.

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 Snip Saw 500 by the operator. The operator should not consider this manual as all-inclusive.

Should you have any questions on the Spida Snip Saw 500 contact SPIDA Machinery (SM2012 Ltd).



**WARNING!** Do not operate the Spida Snip Saw 500 without having received the proper instruction in operation and safety from this manual.



## 6 Operating Controls

Before attempting to operate the SPIDA Snip Saw 500, familiarise yourself with the location and function of each control.

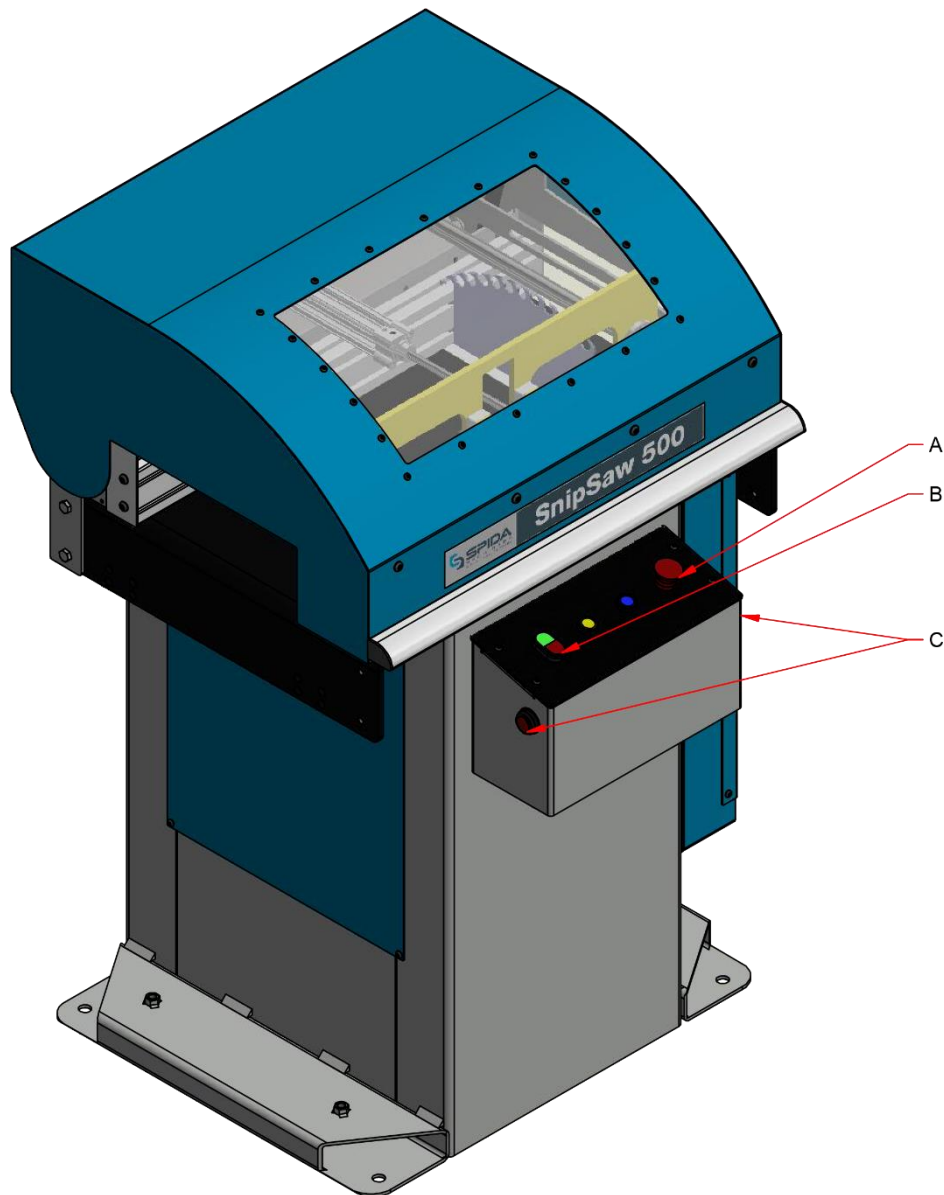


Figure 2, Snip Saw 500 control locations

Table 2, Control functions see Figure 2

Control	Function
A	Emergency stop button
B	Saw on/off button
C	Two hand no tie down buttons



**WARNING!** The Emergency stop button will disable the machine electrically not pneumatically.

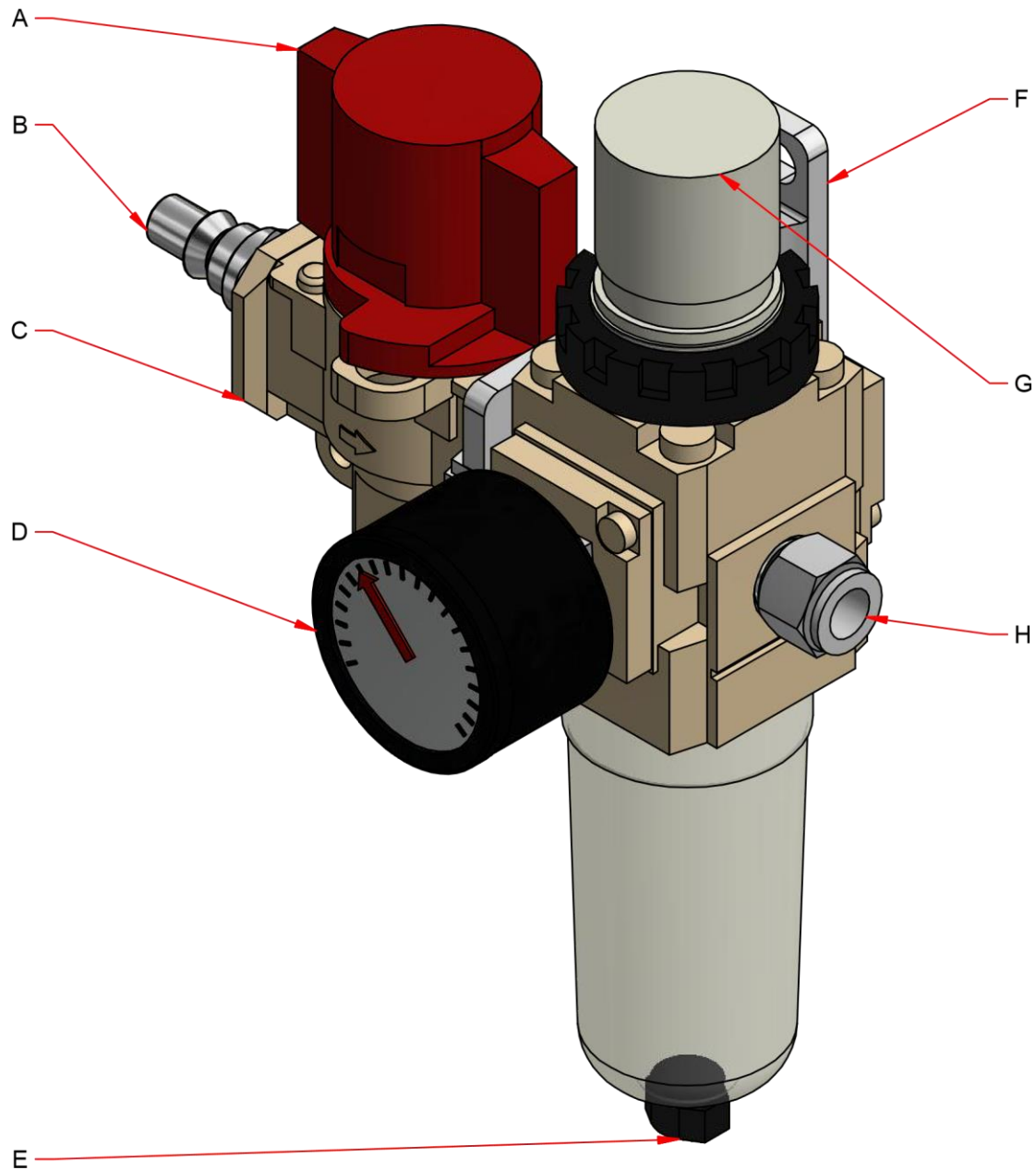


Figure 3, Valve/Filter/Regulator assembly

Table 3, Valve/Filter/Regulator parts

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

## 7 Parts Identification

### 7.1 Top Level Assembly

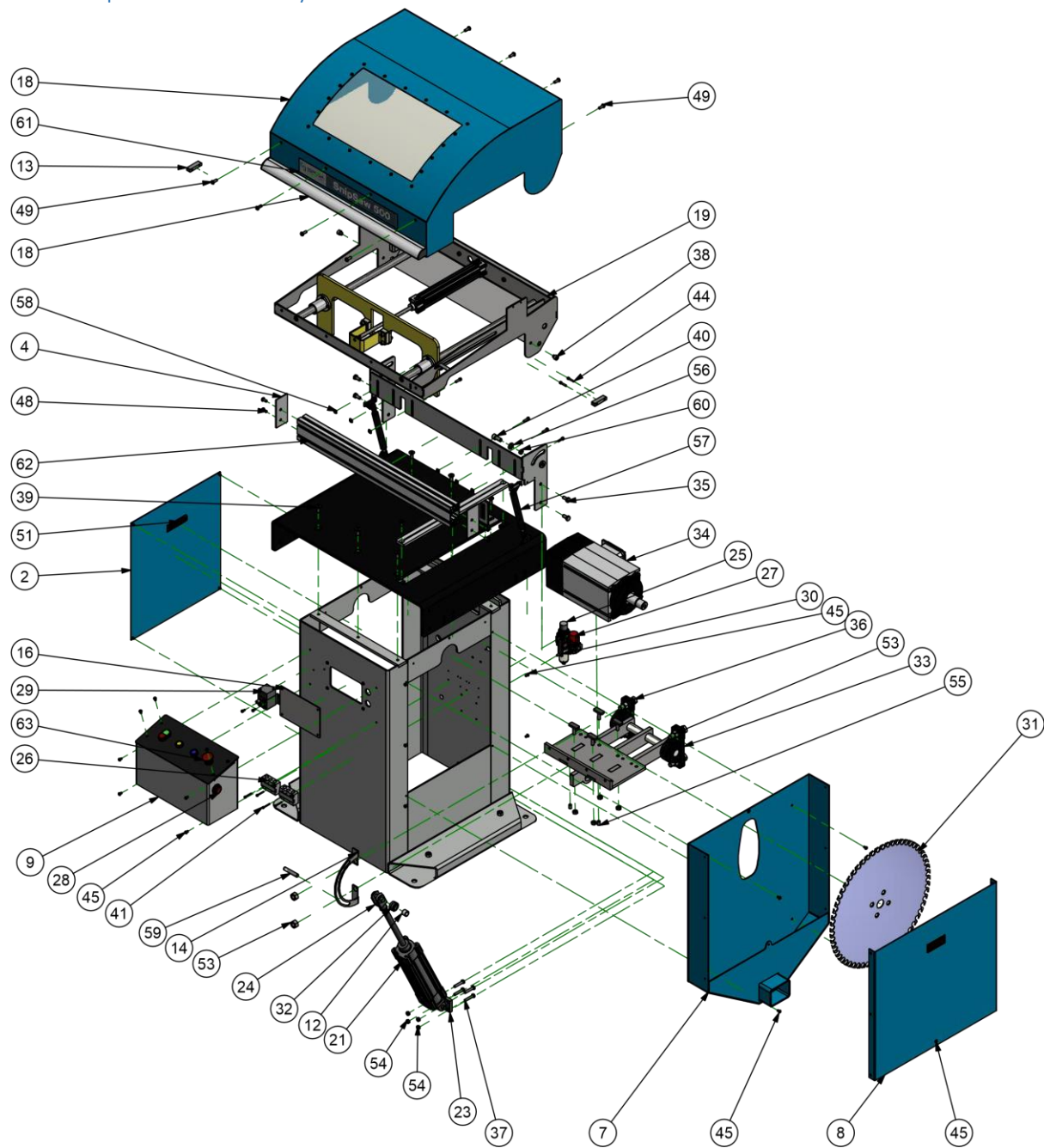


Figure 4, Snp Saw 500 exploded view

Table 4, Item list for Snip Saw 500, see Figure 4

TEM	QTY	PART NUMBER	DESCRIPTION
1	1	3403001	500 Snip saw base
2	1	3403002	Base Hatch Cover
3	1	3403003	Table Top 500mm
4	2	3403004	Guide profile end cap - 500 Snip
5	1	3403005	Motor swing arm assembly
6	1	3403006	Table Insert
7	1	3403007	Dust Chute/Blade Cover
8	1	3403008	Blade hatch cover
9	1	3403009	Control box (side)
10	1	3403010	Control Panel
11	1	3403011	Rear Guard - 500 Snip
12	1	3403012	Ram Bearing Spacer
13	2	3403013	Gas Strut Spacer
14	1	3403014	Prox. sensor mount
15	1	3403015	Fence Bracket
16	2	3403016	Motor Access Cover
17	2	3403017	Gas Strut Spacer (top)
18	1	3403100	Lid/Safety guard - 500 Snip
19	1	3403200	Horizontal clamp - 500 Snip
20	4	8530408	T-bolt M10x32
21	1	ACCP96SDB63-200	CCP96SD-ISO Cylinder Standard
22	1	ACD5063	CP96/C96-D-Female Head End Clevis
23	1	ACE5063	CP96/C96-E-Angled Head End Clevis
24	1	ACGKM16-32	CP96/C96_GKM-Rod Clevis
25	1	AFAW20-02CH-C-B	AW-B-Filter Regulator
26	2	AVSY7000-27-1	1/4 BSP Sub-base
27	1	AVVHS30-03	Pressure Relief 3 Port Valve
28	2	AVVM130-01-33	VM100-2/3 Port Mechanical Valve
29	1	AVVR51C06	VR51-Two Hand Control Valve
30	1	AVY300T-A	Spacer with Bracket
31	1	BL50035128	Blade 500mm 35mm bore
32	2	BRG6804DD	Bearing 37 x 20 x 9
33	2	BRGUCP206D1-30	Pillow block bearing UCP206D1
34	1	EM4LMULTI	CEG Motor - EM80S, 4kW, LH Thread
35	4	HWBHM1020	Hex bolt M10x20
36	4	HWBHM1665	Hex bolt M16x65
37	4	HWBHM840	Hex bolt M8x40
38	2	HWCSM1016	Hex Socket Head Cap Screw M10x16
39	6	HWCSM1025CS	Hex Socket CSK Cap Screw M10x25
40	2	HWCSM1225	Hex Socket Cap Screw M12x25
41	4	HWCSM430	Hex Socket Head Cap Screw M4x30
42	2	HWCSM510	Hex Socket Head Cap Screw M5x10
43	4	HWCSM516	Hex Socket Head Cap Screw M5x16
44	4	HWCSM525	Hex Socket Head Cap Screw M5x25
45	31	HWCSM610BH	Button Head Cap Screw M6x10
46	2	HWCSM616	Hex Socket Head Cap Screw M6x16
47	6	HWCSM620	Hex Socket Head Cap Screw M6x20
48	4	HWCSM816BH	Button Head Cap Screw M8x16
49	8	HWCSM820BH	Button Head Screw M8x20
50	2	HWCSM820CS	Hex Socket CSK cap Screw M8x20
51	2	HWFP1875	Snap in flush pull handle
52	4	HWNHM10	Hex nut M10
53	6	HWNHM16	Hex nut M16
54	12	HWNHM8	Hex nut M8
55	4	HWSSM1016	Hex socket set screws M10x16
56	2	HWWFM12	Flat washer M12
57	2	LQL294-75-33-10-459N	Tension Gas Spring
58	6	MT21-1351	Lock-nut
59	1	PSIME1204BPSZCOS	SICK Prox. Sensor
60	12.000 mm	RMBBM1612	Brass tube for bushing 16 ODx12 ID
61	1	SMPDECO25 500x60	Decal - 500 Snip
62	770.000 mm	SMPGP9045	Guide Profile
63	1	SW3dPS-E-Stop_Button	E - Stop Button

## 7.2 Lid/Guard Assembly

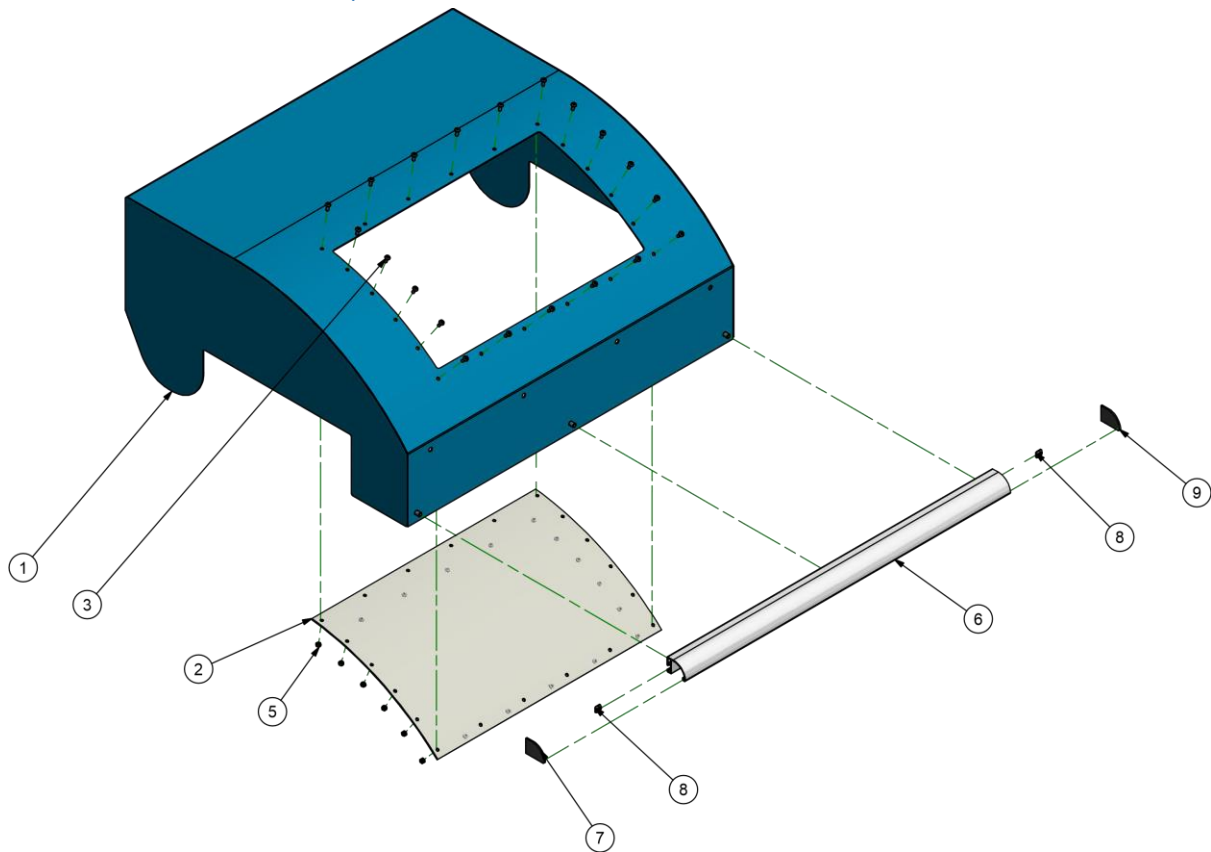


Figure 5, Snip Saw 500 Lid Assembly

Table 5, Item list Snip Saw 500 Lid Assembly

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	3403101	Lid - 500 Snip (welded assembly)
2	1	3403102	Window - 500 Snip
3	20	HWCSM512BH	Button Head Screw M5x12
4	3	HWCSM812BH	Hex Socket BH cap Screw M8x12
5	20	HWNHM5	Hex nut M5
6	784.000 mm	MT20-1045	Profile - Handle - Minitec
7	1	MT20.1054/0	Handle End Cap - RH
8	3	MT21-1351	Lock-nut
9	1	MT22.1055/0	Handle end cap - LH

### 7.3 Clamping Assembly

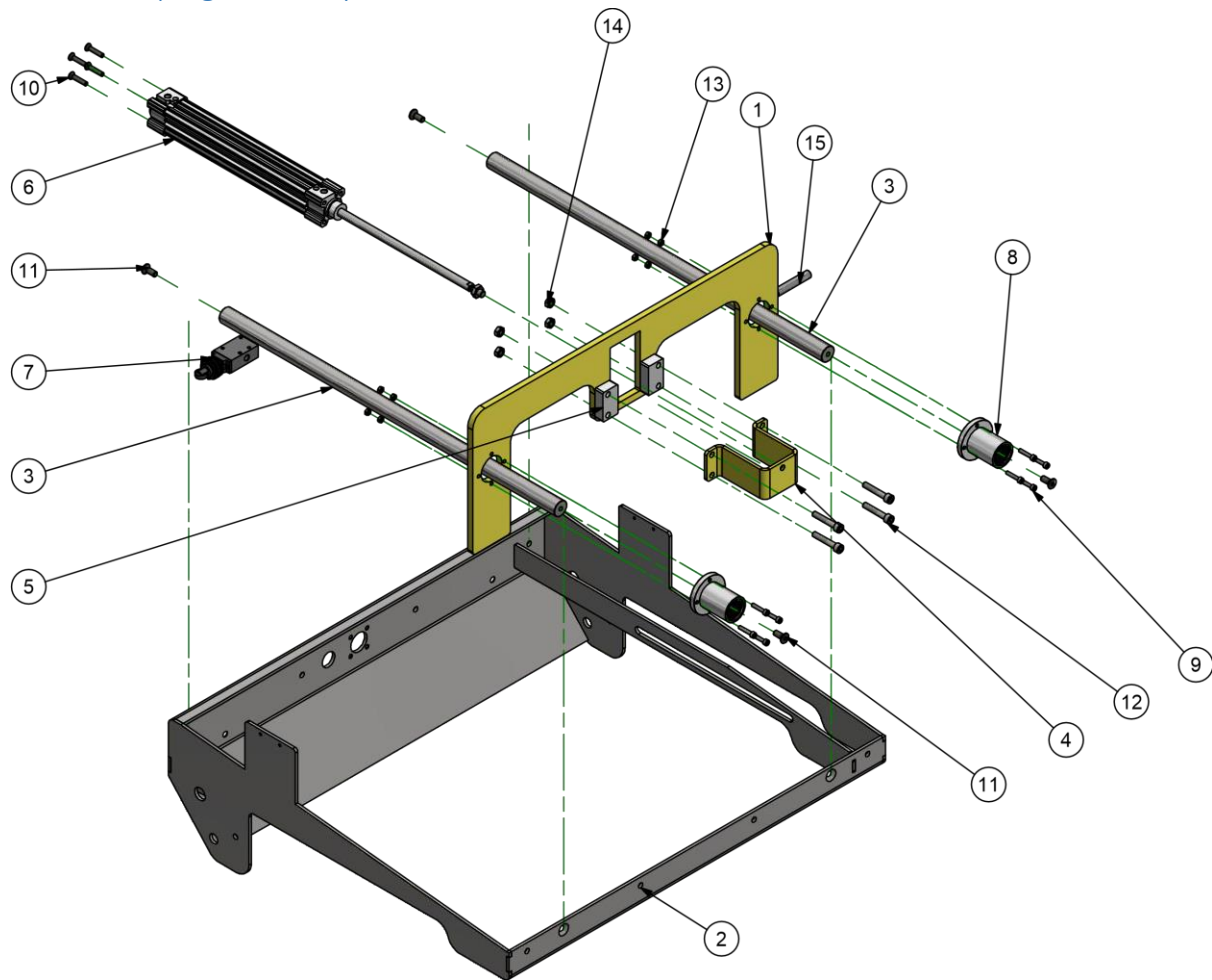


Figure 6, Snip Saw 500 Clamp assembly

Table 6, Snip Saw 500 item list clamping assembly

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	3403201	Clamp profile
2	1	3403202	Clamp Frame - welded assembly
3	2	3403203	Clamp rail
4	1	3403204	Ram Bracket
5	2	3403205	Clamp Spacer
6	1	ACCP96SB32-250	CP96S Cylinder: Standard Double Acting
7	1	AVVM430-01-06S	VM400-3 Port Mechanical Valve
8	2	BRGGSLMF-25	Flange Bearing - LMF 25
9	8	HWCSM525	Hex Socket Head Cap Screw M5x25
10	4	HWCSM630CS	Countersunk Cap Screw M6x30
11	4	HWCSM820CS	Hex Socket CSK cap Screw M8x20
12	4	HWCSM845	Hex Socket Head Cap Screw M8x45
13	8	HWNHM5	Hex nut M5
14	4	HWNHM8	Hex nut M8
15	1	PSIME1204BPSZCOS	SICK Prox. Sensor



## 8 Blade Replacement

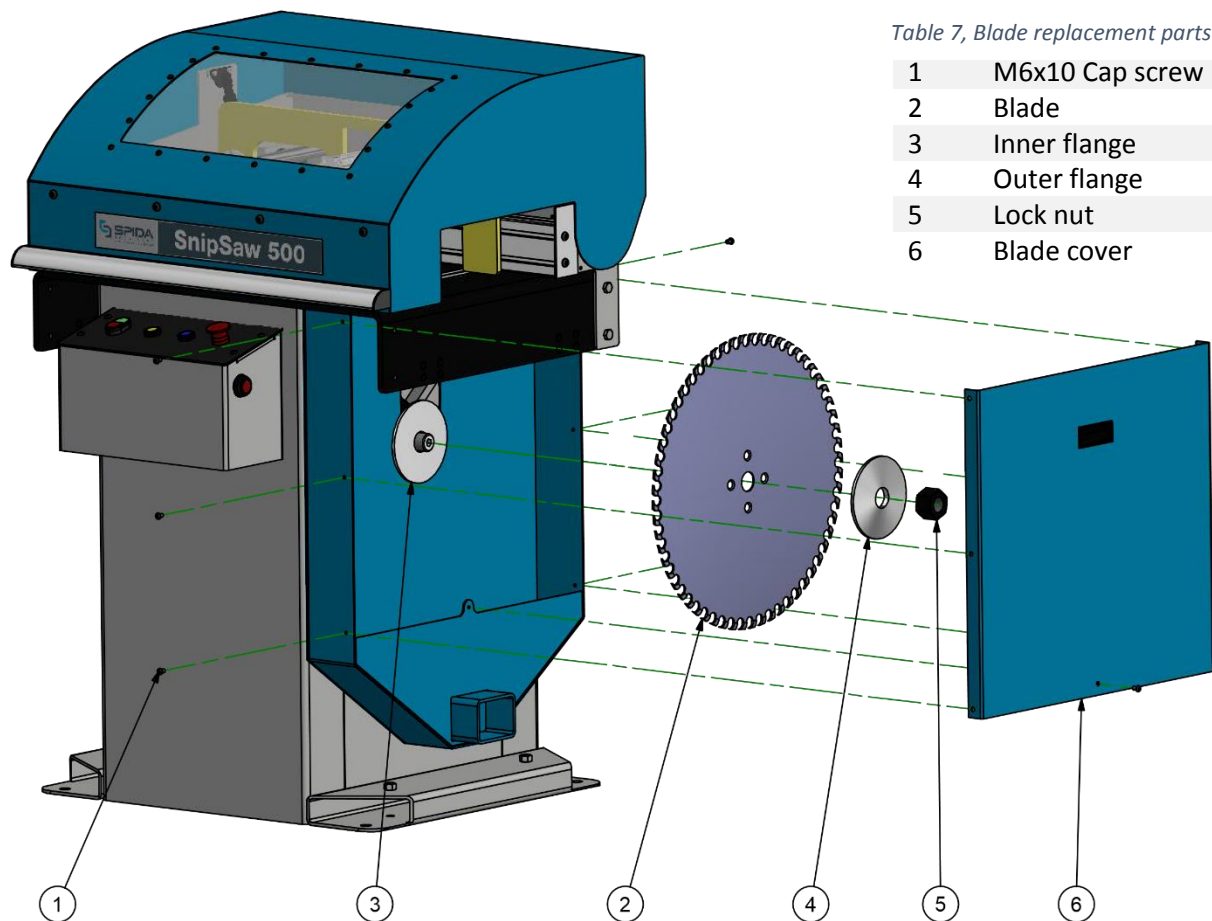


Table 7, Blade replacement parts

1	M6x10 Cap screw
2	Blade
3	Inner flange
4	Outer flange
5	Lock nut
6	Blade cover

Figure 7, Blade removal

Replacement blades, 500mm Dia. 35mm bore 128 teeth Spida part number BL500371282. Contact Spida Machinery for replacement blades.

Before starting make sure machine is isolated electrically and pneumatically.

To replace the blade in saw, remove blade cover by removing M6x10 cap screws then remove the lock nut using a 46mm spanner supplied. Once lock nut is removed the outer flange will slide off motor shaft, enabling the blade to be removed.

The lock nut will be left hand thread for a saw with the blade on the right and right hand thread with blade on left of saw.

When installing a new blade make sure blade is seated flat against inner and outer flanges and flanges are seated straight on motor shaft before tightening lock nut.

## 9 Maintenance

Before attempting any maintenance on the saw, isolate saw from power source and disconnect the air supply.

Table 8, Maintenance intervals

Check	Day	Week	Month	½ Year
Emergency Stops	x			
Motor Brake	x			
Guard (lid) in place	x			
Dust Chute Clear	x			
Clamps Tight	x			
Clean saw 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	
Check motor pivot bearings				x
Floor bolts for tightness				x

### 9.1 Emergency Stops

Check emergency stops are working and stop the saw when activated, this test should be performed before using the machine at least once a day.

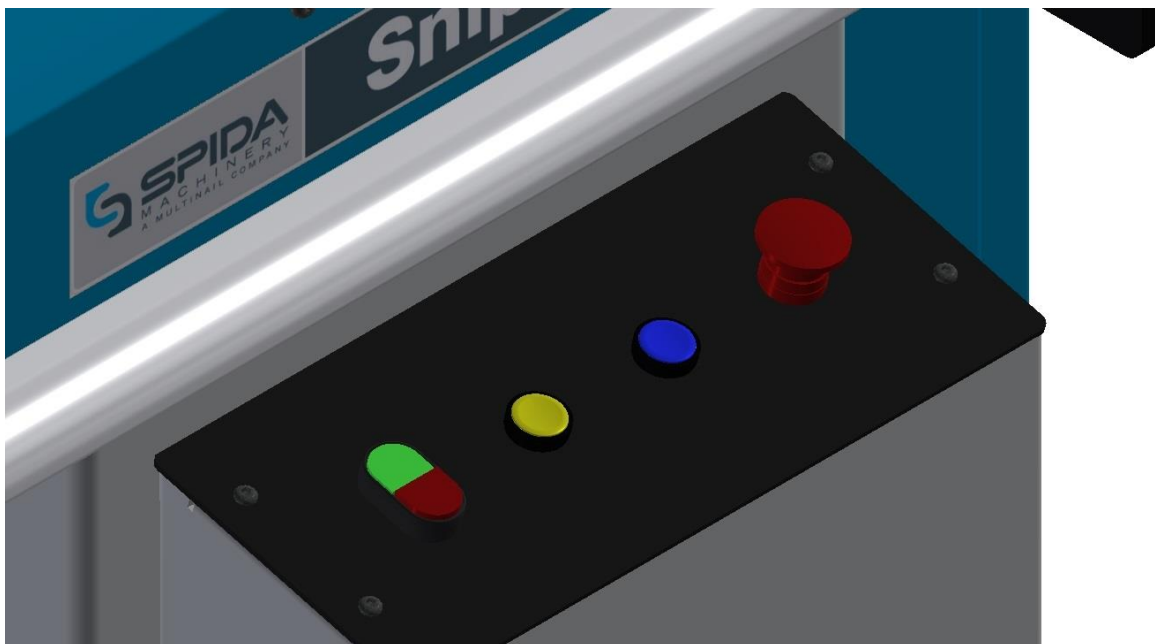


Figure 8, Check emergency stops regularly



## 9.2 Motor Brake

Motor brake should stop blade within 6-8 seconds when saw switched off or emergency stop is applied. If the time for blade too stop is too long, contact supervisor or maintenance engineer.

The magnetic friction brake can be adjusted by setting the correct clearance between the friction plate and the coil using the cap screw located in the center of the brake shaft

**NOTE** for the brake to function efficiently, the gap between the brake pad and plate should be set between 8 - 10 thou, approximately 5/8th of a turn.

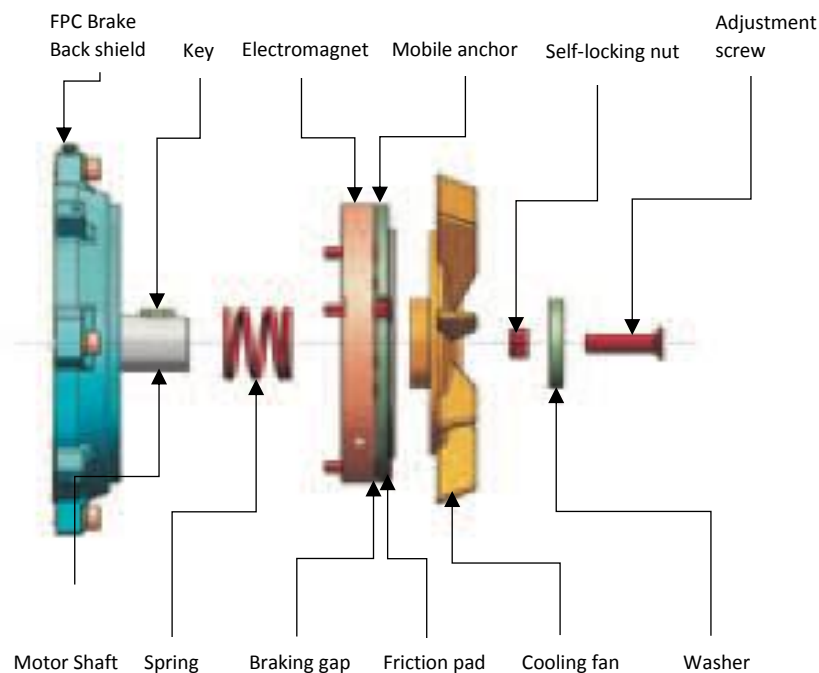


Figure 9, Motor brake assembly

### 9.3 Guards

Check lid is tight with no loose bolts and pivots freely. Make sure the safety valve on lid is fastened securely (see Figure 6 item 7) and lid gas struts firmly secured

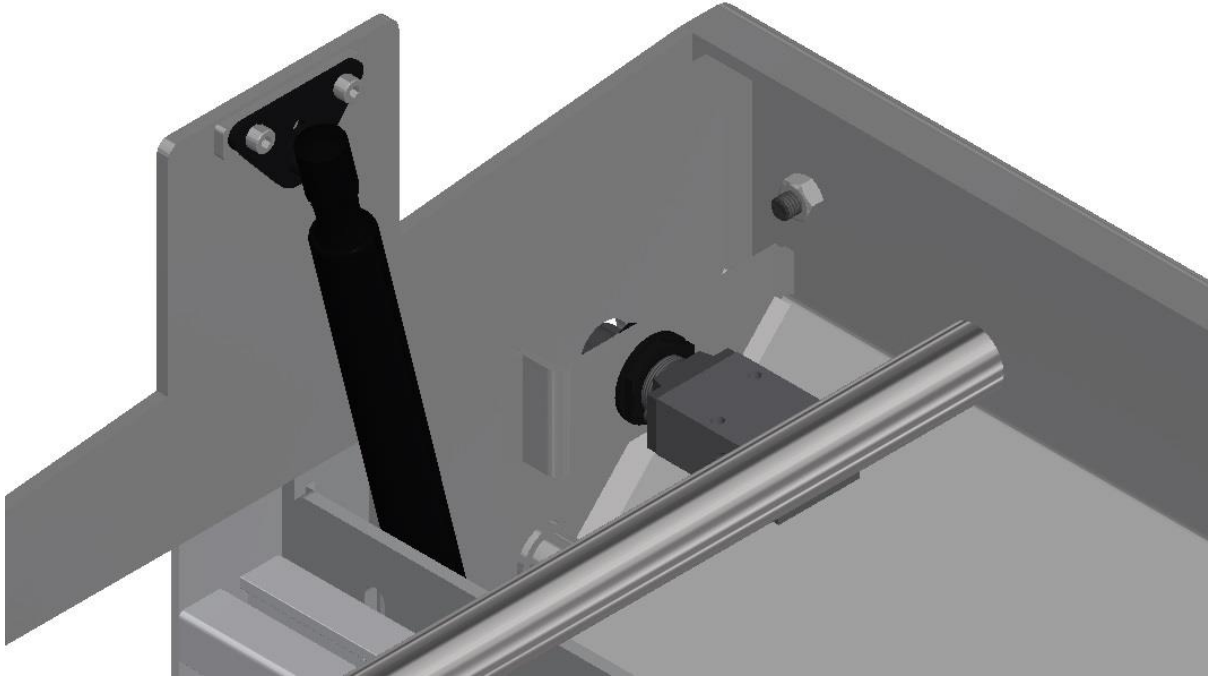


Figure 10, Lid valve and gas strut

### 9.4 Dust Chute

Once a day the dust chute should be checked for any obstructions or build-up of saw dust. If any large obstruction is found isolate power to the saw and remove blade cover.

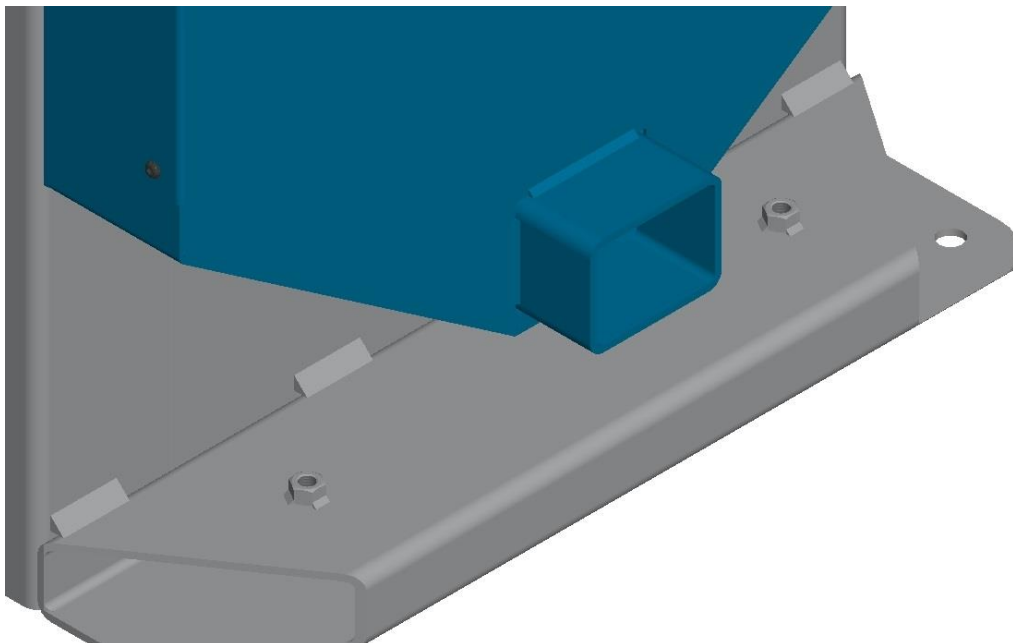


Figure 11, Dust chute

### 9.5 Clamps

Clamps slide freely, clamp evenly and no excessive wear visible on shafts, linear bearings can be lubricated with a Teflon or silicon spray. Check for loose fastenings or damage to the air cylinder.

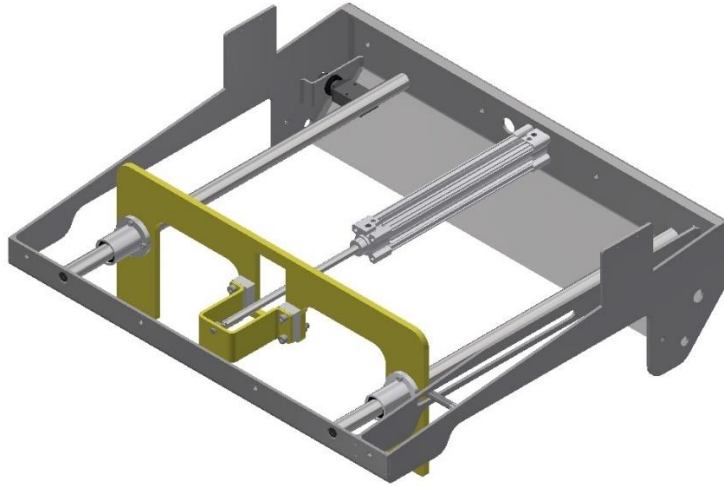


Figure 12, Clamping assembly

### 9.6 Clean saw of any build up

Keep saw free of any build-up of saw dust and shavings, this may involve removing the side panel and cleaning the interior or the saw around the motor and air cylinder.

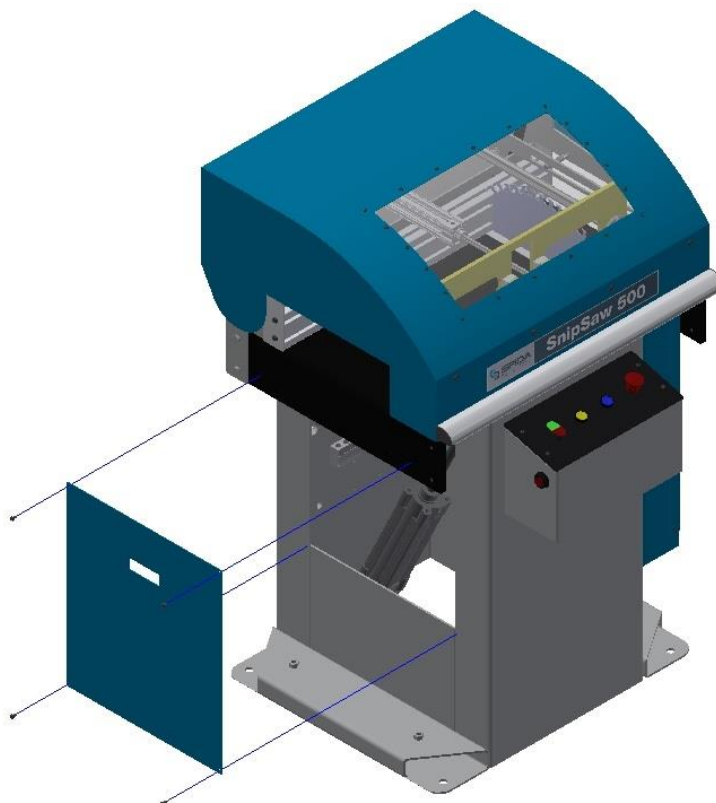


Figure 13, Remove side panel to clean inside of saw

### 9.7 Noise and Vibrations

Take note of any unusual noises or vibrations. If the cause of any vibrations or unusual noises cannot be found do not operate saw and contact supervisor, supplier or maintenance engineer.

### 9.8 Aluminium Extrusion Slots

Keep the slot in aluminium fence clear of saw dust and shavings this is especially important if saw is being used in conjunction with a simple or rapid stop system.

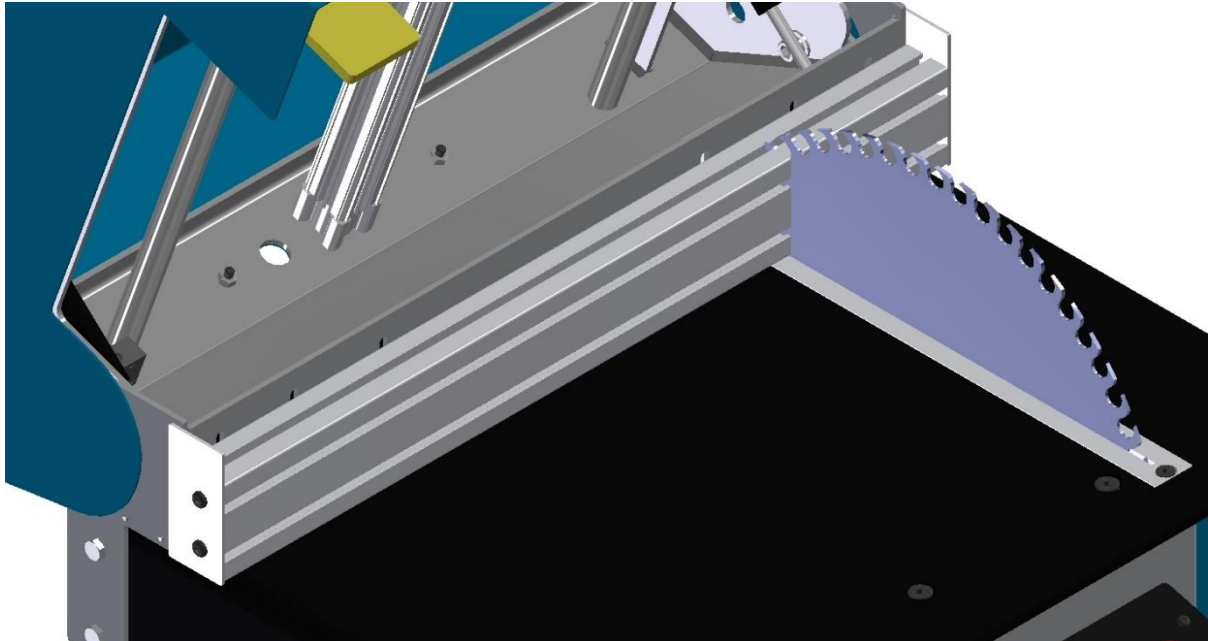


Figure 14, Aluminium extrusion fence

### 9.9 Air Supply

Air pressure should be maintained at 400-600 kPa this can be checked at the filter regulator located on the rear of saw. 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 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.

### 9.10 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 saw. See Figure 3 for regulator parts

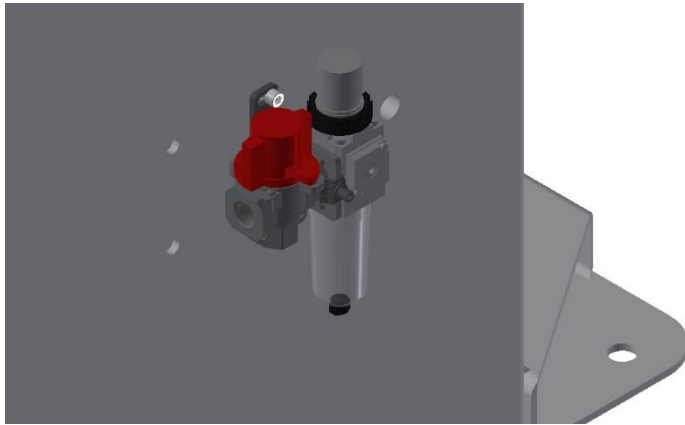


Figure 15, Filter regulator location

### 9.11 Loose Fasteners and Fixings

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

### 9.12 Check Pivot Bearings

Motor arm pivot bearings should be checked 6 monthly for any heat damage or excessive wear and replaced if required.

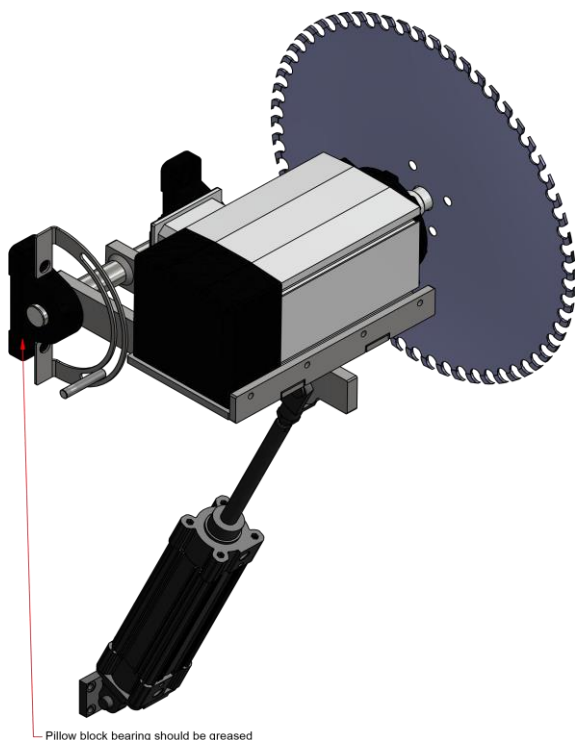


Figure 16, Motor, air cylinder & pivot assembly

## 10 Safe Operation

### 10.1 General

Table 9, 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 Saw, Bench and surrounding areas for obstructions and defects. Remove built-up sawdust from around machine, electrical leads and power points.
Electrical Faults	Inspect electrical leads for damage
Incorrect or Damaged saw blade	Check saw blade for cracks, warping or broken teeth. Do not use cracked or dull blades. Only use saw blades designed for the material being cut. Only use saw blades rated at or above the speed of the saw arbour.
Material Handling	Ensure that timber will not be in contact with saw blade during start up or before commencing cut. Have material handling devices in place.
Inoperable Safety Switches	Check that start stop and emergency stop buttons operate effectively
Incorrect Accessories	Use only the accessories designed for each specific saw and application
Foreign Objects	Check that foreign objects and maintenance tools etc. are removed from the machine before turning on power.



**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.

## 10.2 Operation

Table 10, 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 cutting line of the blade. 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, cutting blades 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
Manual Handling Injuries	Do not remove sawdust or cuttings from the cutting head by hand while a machine is running. Use a stick or brush when the machine has stopped moving. Operators should use correct lifting techniques (lift with legs not back) at all times to avoid manual handling injuries.
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 saw table until the blade has been returned to its home position (below the table).
Hit by projectiles	Saw must be electrically and 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.

## 10.3 Maintenance

Table 11, Maintenance Hazards

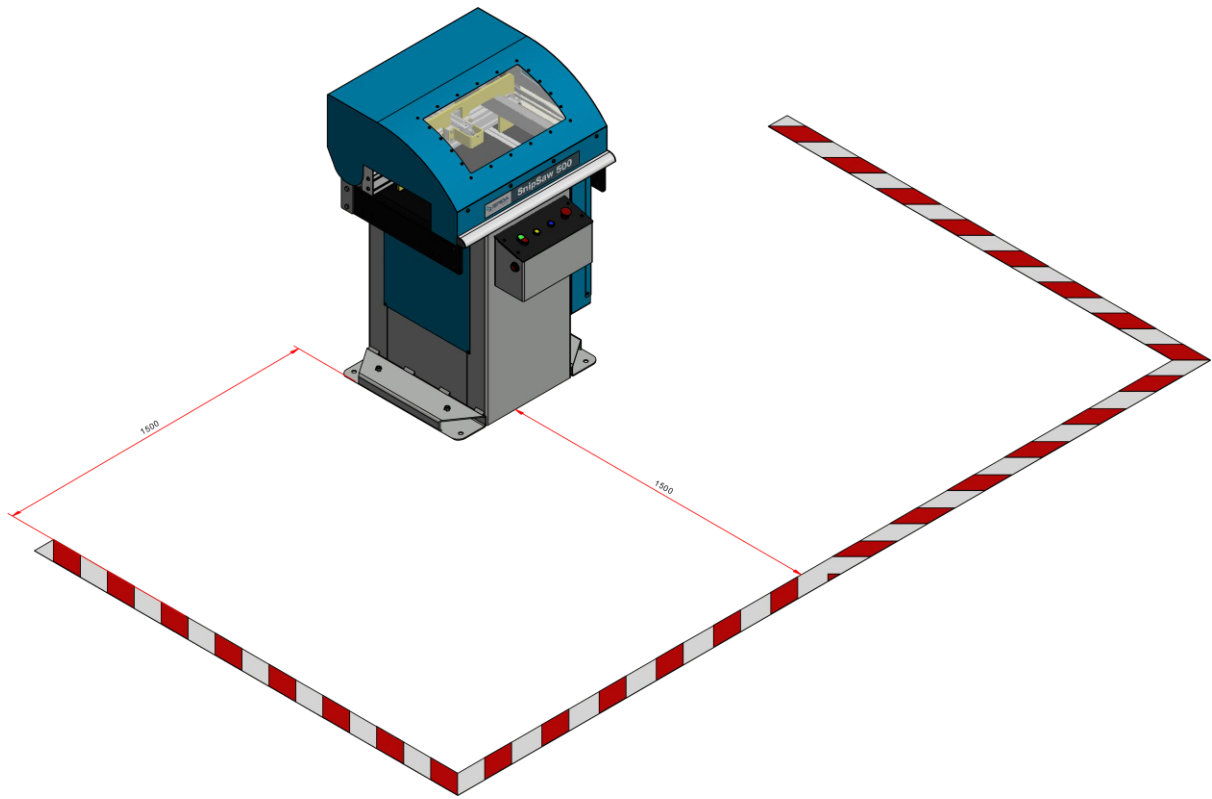
POTENTIAL HAZARDS	SAFE WORK PROCEEDURE
Cleaning and maintenance preparation	Turn the power off on the main isolator and use the hole in the switch to lock the switch off before discussing, inspecting, changing, cleaning, adjusting or repairing a blade or a machine. Also turn the power off when discussing the work. 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.
Saw Blades	Ensure all cutting blades are clean, sharp and in good working order so they will cut freely. Ensure that any new blade is the correct size (diameter, number of teeth, arbour size), fitted correctly and rotating the right direction. Inspect new saw blades for damage before use. Always wear gloves when handling blades to avoid cuts.
Incorrect electrical isolation of machine	Machine must be switched off and locked out (electrically isolated) before maintenance, cleaning or blade changes. Blade must be stationary.
Incorrect tools	Use Correct tools for the job to minimise personal injury and damage to the machine
Stalled blade	Isolate power and air before attempting to free a stalled blade
Blade not returning home	The air cylinder and motor arm must be clear of any obstruction that could prevent the bade returning fully.
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.



## 10.4 Exclusion Zone



*Figure 17, Saw exclusion zone*

An exclusion zone of 1.5m must be clearly labelled on the floor around the machine. While the machine is in operation only one trained operator should be inside this exclusion zone.

## 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 12, Common misuse issues

MISUSE	SYMPTOM	RECTIFICATION REQUIRED
Lack of cleaning	Motor tripping out, saw not returning home, clamps not retracting	Clean saw, 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 13, Trouble shooting

Trouble	Probable Causes	Correction
<b>Saw blade starting failed</b>	Factory power abnormal Start button damaged Power wire damaged Overload thermal pin kick out	Check power supply Replace damaged button Replace damaged wires Reset motor
<b>Poor cutting quality</b>	Sawblade dulled Inaccurate fence alignment	Sharpen blade Re-align fence
<b>Workpiece burnt</b>	Sawblade dulled Blade damaged	Sharpen blade Replace blade
<b>Sawblade slows down during cutting</b>	Sawblade dulled Air cylinder feed too fast Blade damaged	Sharpen blade Reduce air flow to cylinder Replace blade
<b>Motor does not run at full speed</b>	Power voltage too low	Test voltage
<b>Motor overheating</b>	Motor vents blocked Motor is damaged	Clean motor Replace/repair motor
<b>Clamps not coming on</b>	Air supply Damaged linear bearing rails Obstruction	Replace any broken air lines Replace linear rails Clear obstruction
<b>Blade doesn't come up</b>	Air supply Obstruction	Replace any broken air lines 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 Electrical Drawings

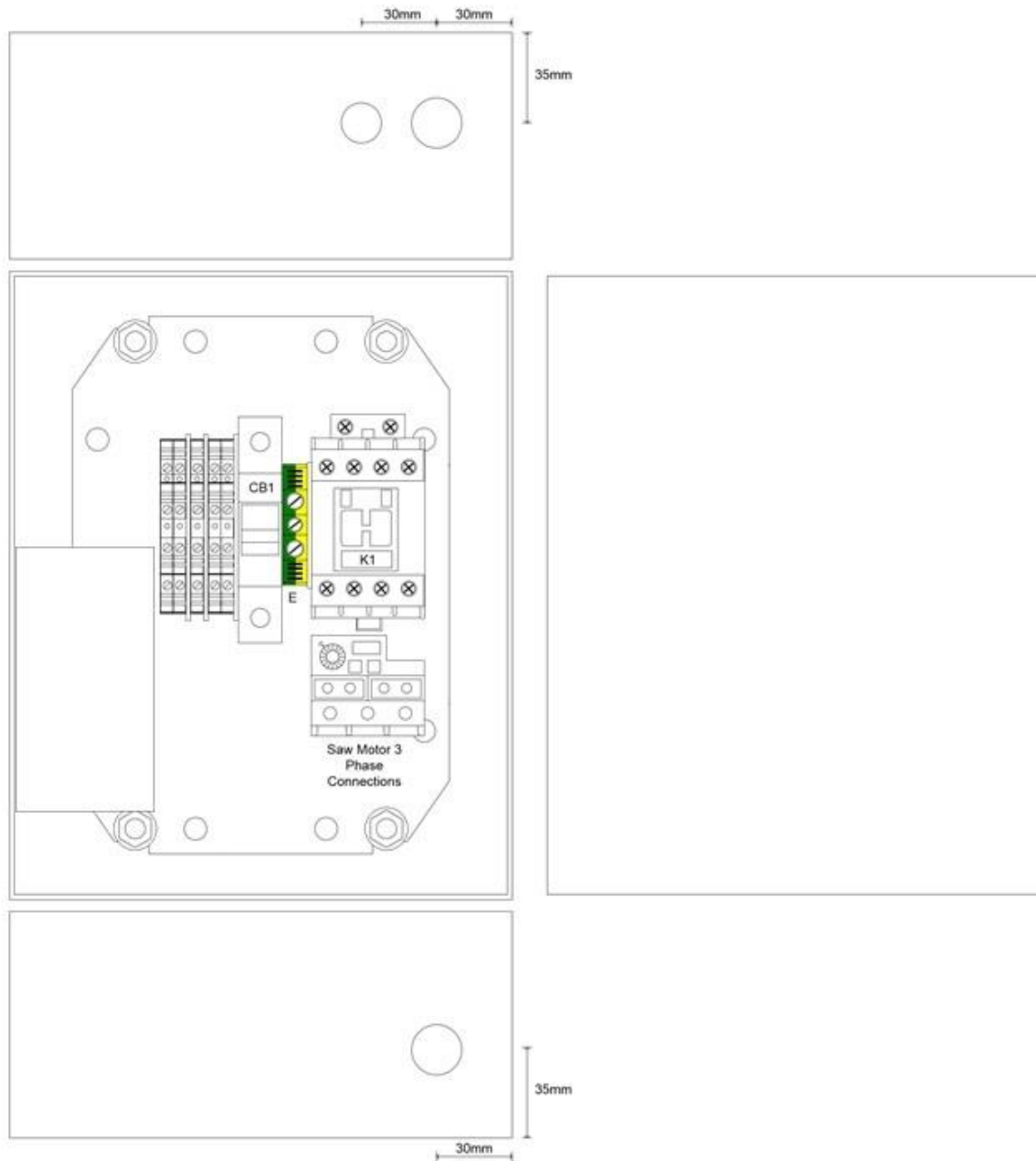


Figure 18, Component layout

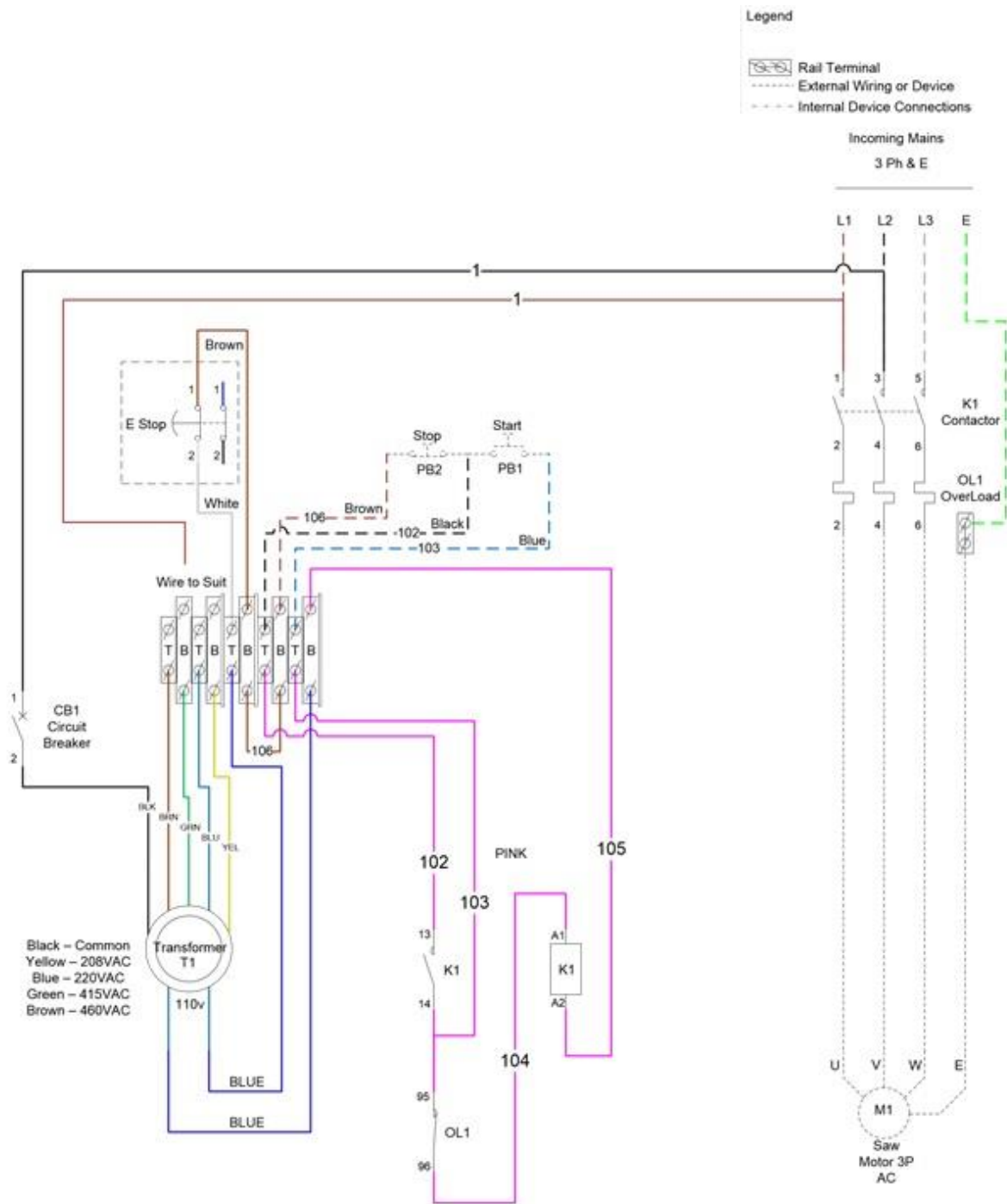
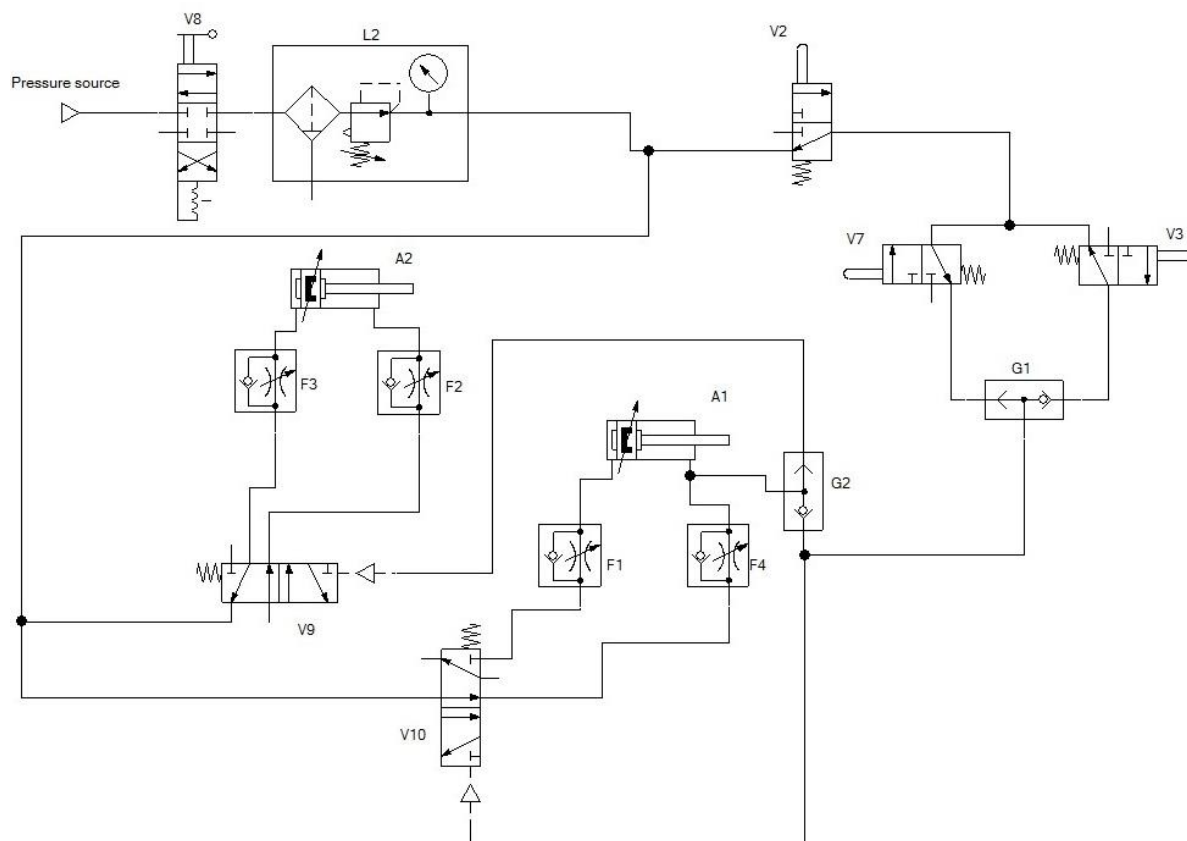


Figure 19, Wiring diagram

## 16 Pneumatic Drawings



Code	Name	Model	Comment
L2	Filter/regulator 3/8 BSP P/Nut 10Bar	AFAW30-03H	
A1	Cylinder, Double acting, Single rod, Air cushion, With built-in magnet	ACCP96SDB32-250	Clamp
A2	Cylinder, Double acting, Single rod, Air cushion, With built-in magnet	ACCP96SDB63-200	Saw
V2	3 way mechanical valve NO/NC 1/8	AVVM430-01-00	Safety valve
V3	3 way mechanical valve long stem 1/8	AVVM130-01-00	Start
G1	Two hand control valve	VR51C06B	
V7	3 way mechanical valve long stem 1/8	AVVM130-01-00	Start
F1	Flow controller M6 x 1/8 Elbow	AFAS2201F-01-06	
F2	Flow controller M8 x 3/8 Elbow	AFAS3201F-03-08SA	
F3	Flow controller M8 x 3/8 Elbow	AFAS3201F-03-08SA	
F4	Flow controller M6 x 1/8 Elbow	AFAS2201F-01-06	
V8	Valve 3/2 3/8 BSP Pressure relief	AVVHS30-03	
V9	Valve 5/2 single air pilot base mount	AVSYA5140	
V10	Valve 5/2 single air pilot base mount	AVSYA5140	
G2	Pneumatic end of stroke sensor	AFPWS-P111	

Figure 20, Pneumatic schematic



## 17 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:** \_\_\_\_\_