

# **HAFCO**

# **METALMASTER**



Edition : 1.0  
Date: (08/24)

## **Instruction Manual**

# **MANUAL PANBRAKE**

# **PB-420**

Order Code: (S255)

**MACHINE DETAILS**

<b>MACHINE</b>	PANBRAKE
<b>MODEL NO.</b>	PB-420
<b>SERIAL NO.</b>	
<b>DATE OF MANF.</b>	

IMPORTED BY

AUSTRALIA



[www.machineryhouse.com.au](http://www.machineryhouse.com.au)

NEW ZEALAND



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**NOTE:**

*This manual is for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the HAFCO METALMASTER machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating any electric machine.*

**SAFETY SYMBOLS**

*The purpose of safety symbols is to attract your attention to possible hazardous conditions*

**WARNING** Indicates a potentially hazardous situation causing injury or death

**CAUTION** Indicates an alert against unsafe practices.

*Note:* Used to alert the user to useful information



**NOTE:**

*In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)*

<b>HAFCO</b> <b>METALMASTER</b>	
<b>PRODUCT SPECIFICATIONS</b>	
Model: PB-420	
Capacity: 1250 x 2mm	MFG Date:
Serial No: <input style="width: 100%;" type="text"/>	
Imported by <a href="http://www.machineryhouse.com.au">www.machineryhouse.com.au</a>	Made in China <a href="http://www.machineryhouse.co.nz">www.machineryhouse.co.nz</a>

Fig.1

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### **WARNING!**

*Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, the machine until the information is understood.*



### **CAUTION**

*It is impossible to cover all possible hazards Every workshop environment is different. These are designed as a guide to be used to compliment training and as a reminder to users prior to equipment use. Always consider safety first, as it applies to the individual working conditions.*

## 1.1 SPECIFICATION

Order Code	S255
<b>MODEL</b>	<b>PB-420</b>
(mm) Bending Capacity	2
(mm) Material Length Capacity	1250
(gauge) Material Thickness	14
(Deg.) Bending Angle	0 - 135
(mm) Opening Height	101.6
(mm) Dimension	1250 x 77 x 110
(kg) Weight	580



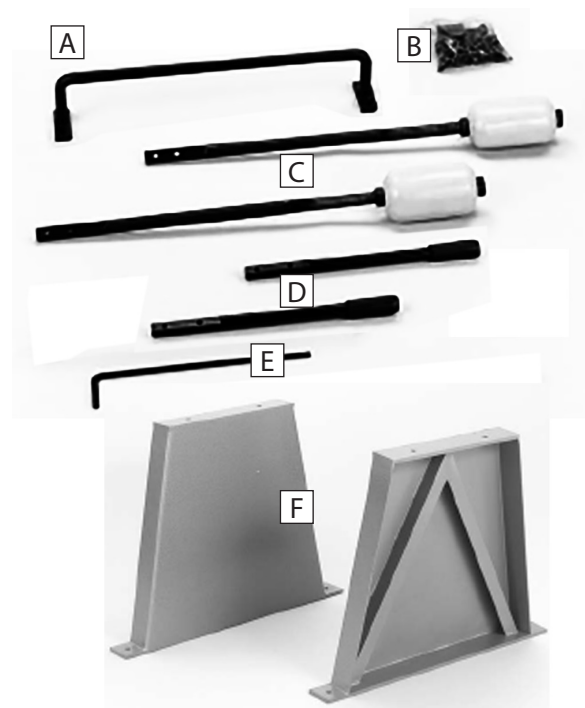
### WARNING

*Always check the capacity of the machine. Exceeding the capacity of the machine may result in sudden breakage that ejects dangerous metal debris at the operator or bystanders*

## 1.2 PACKING LIST

Check the packaging for the parts contents:

- A. Handle
- B. Hardware
- C. Counterweights
- D. Operating Handles
- E. Stop Rod
- F. Leg Supports



### 1.3 IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



<b>1</b>	Bending Leaf	<b>5</b>	Clamp Block
<b>2</b>	Clamping Beam	<b>6</b>	Bending Leaf
<b>3</b>	Counter Weight	<b>7</b>	Operating Handles
<b>4</b>	Clamping Handles	<b>8</b>	Finger Blocks

## 2.1 GENERAL METALWORKING MACHINE SAFETY

DO NOT use this machine unless you have read this manual or have been instructed in the safe use and operation of this machine.



# WARNING

This manual provides safety instructions on the proper setup, operation, maintenance, and service of this machine. Save this manual, refer to it often, and use it to instruct other operators. Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine is solely responsible for its safe use. This responsibility includes, but is not limited to proper installation in a safe environment, personnel training and authorization to use, proper inspection and maintenance, manual availability and comprehension, of the application of the safety devices, integrity, and the use of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



- ✓ Always wear safety glasses or goggles.
- ✓ Wear appropriate safety footwear.
- ✓ Wear respiratory protection where required.
- ✓ Gloves should never be worn while operating the machine, and only worn when handling the work-piece.
- ✓ Wear hearing protection in areas > 85 dBA. If you have trouble hearing someone speak from one metre (three feet) away, the noise level from the machine may be hazardous.
- ✓ DISCONNECT THE MACHINE FROM POWER when making adjustments or servicing.
- ✓ Check and adjust all safety devices before each job.
- ✓ Ensure that guards are in position and in good working condition before operating.
- ✓ Ensure that all stationary equipment is anchored securely to the floor.
- ✓ Ensure all machines have a start/stop button within easy reach of the operator.
- ✓ Each machine should have only one operator at a time. However, everyone should know how to stop the machine in an emergency.

## 2.1 GENERAL METALWORKING MACHINE SAFETY Cont.

- ✓ Ensure that keys and adjusting wrenches have been removed from the machine before turning on the power. Appropriate storage for tooling should be provided.
- ✓ Ensure that all cutting tools and blades are clean and sharp. They should be able to cut freely without being forced.
- ✓ Stop the machine before measuring, cleaning or making any adjustments.
- ✓ Wait until the machine has stopped running to clear cuttings with a vacuum, brush or rake.
- ✓ Keep hands away from the cutting head and all moving parts.
- ✓ Avoid awkward operations and hand positions. A sudden slip could cause the hand to move into the cutting tool or blade.
- ✓ Return all portable tooling to their proper storage place after use.
- ✓ Clean all tools after use.
- ✓ Keep work area clean. Floors should be level and have a non-slip surface.
- ✓ Use good lighting so that the work piece, cutting blades, and machine controls can be seen clearly. Position any shade lighting sources so that they do not cause any glare or reflections.
- ✓ Ensure there is enough room around the machine to do the job safely.
- ✓ Obtain first aid immediately for all injuries.
- ✓ Understand that the health and fire hazards can vary from material to material. Make sure all appropriate precautions are taken.
- ✓ Clean machines and the surrounding area when the operation is finished.
- ✓ Use proper lock out procedures when servicing or cleaning the machines or power tools.

### DO NOT

- ✗ Do not distract an operator. Horseplay can lead to injuries and should be strictly prohibited.
- ✗ Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewellery that can become entangled in moving parts. Confine long hair.
- ✗ Do not handle cuttings by hand because they are very sharp. Do not free a stalled cutter without turning the power off first. Do not clean hands with cutting fluids.
- ✗ Do not use rags or wear gloves near moving parts of machines.
- ✗ Do not use compressed air to blow debris from machines or to clean dirt from clothes.
- ✗ Do not force the machine. It will do the job safer and better at the rate for which it was designed.



### CAUTION.

*It must be determined by the operator that the materials being processed through the machine are NOT a potentially hazardous to operator or personnel working nearby.*



### WARNING.

*Before operating any machine, take time to read and understand all safety signs and symbols. If not understood seek explanation from your supervisor.*

## 2.1 GENERAL METALWORKING MACHINE SAFETY Cont.

**HAZARDS ASSOCIATED WITH MACHINES** include, but are not limited to:

- Being struck by ejected parts of the machinery
- Being struck by material ejected from the machinery
- Contact or entanglement with the machinery
- Contact or entanglement with any material in motion

**HEALTH HAZARDS** (other than physical injury caused by moving parts)

- Chemicals hazards that can irritate, burn, or pass through the skin
- Airborne items that can be inhaled, such as oil mist, metal fumes, solvents, and dust
- Heat, noise, and vibration
- Ionizing or non-ionizing radiation (X-ray, lasers, etc.)
- Biological contamination and waste
- Soft tissue injuries (for example, to the hands, arms, shoulders, back, or neck) resulting from repetitive motion, awkward posture, extended lifting, and pressure grip)

### OTHER HAZARDS

- Slips and falls from and around machinery during maintenance
- Unstable equipment that is not secured against falling over
- Safe access to/from machines (access, egress)
- Fire or explosion
- Pressure injection injuries from the release of fluids and gases under high pressure
- Electrical Hazards, such as electrocution from faulty or ungrounded electrical components
- Environment in which the machine is used (in a machine shop, or on a work site)



## **WARNING**

*The machine is the sole responsibility of the owner for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training, proper inspection and maintenance, manual availability and comprehension. The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.*



## **WARNING!**

*Machines are safeguarded to protect the operator from injury or death with the placement of guards. Machines must not be operated with the guards removed or damaged.*

## 2.2 SAFETY SPECIFIC TO PANBRAKES

**DO NOT use this machine unless you have been instructed in its safe use and operation or have read and understood this manual.**

### PERSONAL PROTECTIVE EQUIPMENT



*Safety glasses must be worn at all times in work areas*



*Long and loose hair must be contained.*



*Gloves should be worn when handling material with sharp edges.*



*Sturdy footwear must be worn at all times in work areas*



*Close fitting/protective clothing must be worn*



*Rings and jewellery must not be worn.*

### PRE-OPERATIONAL SAFETY CHECKS

- ✓ Locate and ensure you are familiar with all machine operations and controls.
- ✓ Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- ✓ Ensure working parts are well lubricated and the jaws and fingers free of rust and dirt.
- ✓ Check workspaces and walkways to ensure no slip/trip hazards are present
- ✓ Be aware of other people in the area. Ensure the area is clear before using equipment.

### OPERATIONAL SAFETY CHECKS

- ✓ Remove the pan brake fingers that are in the way. Use only the pan brake fingers required to make the bend.
- ✓ Ensure the pan brake fingers that are not removed for an operation are securely seated and firmly tightened before the machine is used.
- ✓ Ensure your fingers and limbs are clear before operating the pan brake.
- ✓ Lower finger clamps to work. Do not drop.
- ✓ Check workpiece is secure.
- ✓ Keep clear of moving counterweight (where fitted).

### ENDING OPERATIONS AND CLEANING UP

- ✓ Lower finger clamps to a safe position.
- ✓ Return all accessories to storage racks.
- ✓ Leave the work area in a safe, clean and tidy state.

### DON'T

- ✗ Do not use faulty equipment. Immediately report suspect machinery.
- ✗ Do not use a pan brake for bending metal that is beyond its capacity for thickness, shape or type.
- ✗ Do not attempt to bend rod, wire, strap or spring steel sheets.

### POTENTIAL HAZARDS AND INJURIES

- ✓ Sharp edges and burrs.
- ✓ Squash/crush and pinch points.
- ✓ Impact from counterweight.

### 3 SET-UP

#### 3.1 UNPACKING

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. If items are damaged, please contact your distributor.

**NOTE: Save all the packaging materials until you are completely satisfied with the machine and have resolved any issues with the distributor, or the shipping agent.**

When unpacking, check the packing list to make sure that all parts shown are included. If any parts are missing or broken, please contact the your distributor.

#### 3.2 CLEAN - UP

The unpainted surfaces of the machine have been coated with a waxy oil to protect them from corrosion during shipment. Remove the protective coating with a solvent cleaner or a citrus based degreaser.

Optimum performance from your machine will be achieved when you clean all moving parts or sliding contact surfaces that are coated with rust prevented products.

It is advised to avoid chlorine based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces and strip metal should they come in contact.

Always follow the manufacturer's instructions when using any type of cleaning product.

#### 3.3 SITE PREPARATION

When selecting the site for the machine, consider the largest size of workpiece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment.

Leave enough space around the machine to open or remove doors/covers as required for the maintenance and service as described in this manual.

It is recommended that the machine is anchored to the floor to prevent tipping or shifting. It also reduces vibration that may occur during operation.

#### 3.4 LIFTING INSTRUCTIONS



**WARNING** *This machine is extremely heavy. Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the machine from the crate.*



On the day that the machine arrives, make sure that a forklift or lifting device, with sufficient capacity is available to unload the machine from the vehicle.

Ensure access to the chosen site is clear and that doors and ceilings are sufficiently high and wide enough to receive the machine.

### 3.5 ANCHORING TO THE FLOOR

The machine is best mounted on a concrete slab. Masonry anchors with bolts are the best way to anchor machinery, because the anchors sit flush with the floor surface, making it easy to unbolt and move the machine later, if needed. (Fig. 3.1)

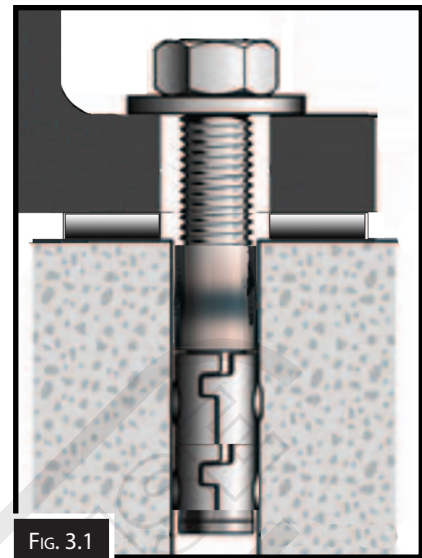


FIG. 3.1

### 3.6 MACHINE LEVELLING

To set your machine up so that it operates to optimum performance, apply the following procedure.

After your machine has been anchored to a concrete slab floor, it then needs to be levelled. Loosen the hold down bolts and place a level on the surface of the working table. Metal shims need to be placed under corner of the base of the machine until level. Once level then tighten the hold down bolts. (Fig. 3.2)

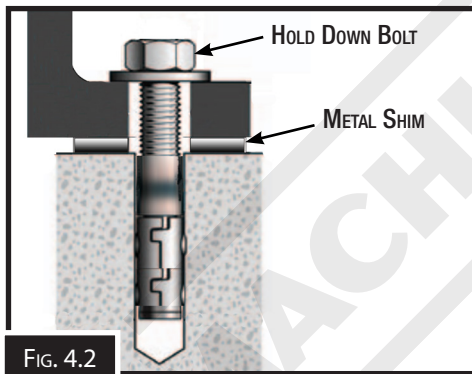


FIG. 4.2



#### CAUTION

*The machine must not rest on supports other than those defined in Fig. 3.2*



#### WARNING

##### PINCH POINTS



*This machine has many places that are pinch points and could cause injury to the operator or any person around this type of equipment*



#### WARNING

##### SAFETY FIRST



*The safety instructions given in this manual can not be complete. The environment in every shop is different. Always consider your safety first as it applies to your individual working conditions.*

### 3.7 ASSEMBLY

The machine must be fully assembled before it can be operated. First clean any parts that are coated in rust preventative to ensure the assembly process can proceed smoothly.

1. Remove the box cover and carefully lift the main frame with webbed slings off the pallet. (Fig. 3.3)



FIG. 3.3

3. Attach the counter weights using two M12 x 40 Sct Hd. set screws and M12 washer on both sides to the main frame. (Fig. 3.5)

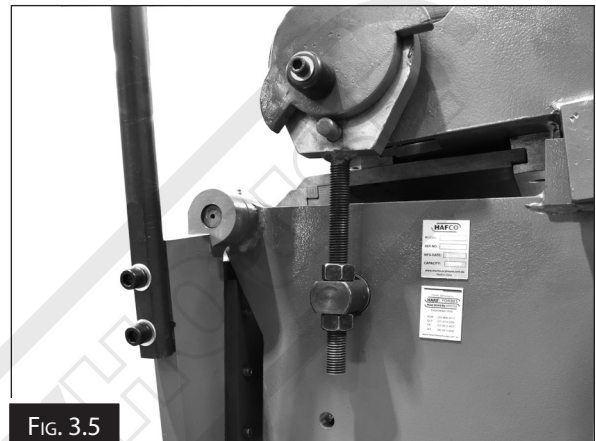


FIG. 3.5

2. With the main frame suspended attach the two side support legs with M10 x 40mm, M10 lock washer and M10 nut. (Fig. 3.4)

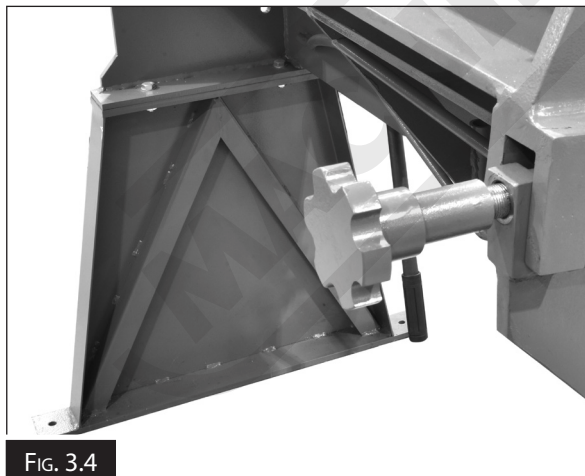


FIG. 3.4

4. Attach the handle and the operating handles. (Fig. 3.6)



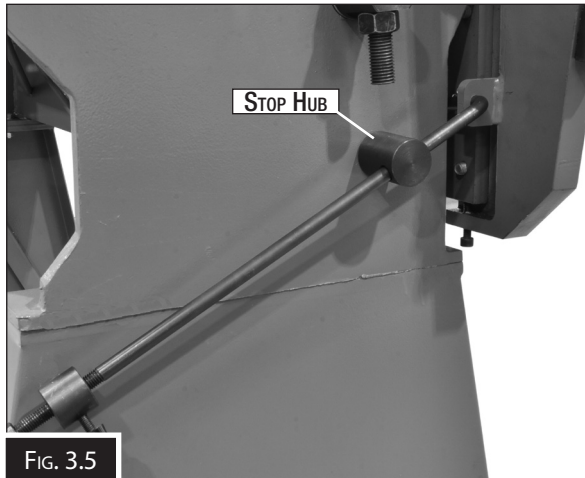
FIG. 3.6



#### **WARNING**

***DO NOT operate any machine before it is fully assembled and all guards have been fitted and secured. Failure to do so may cause death or injury.***

5. Mount the stop hub then insert the rod through the bending leaf, and through the stop hub. (Fig. 3.5)



6. Secure the stop rod through the bending leaf, with the split pin. (Fig. 3.6)



## 4. OPERATION

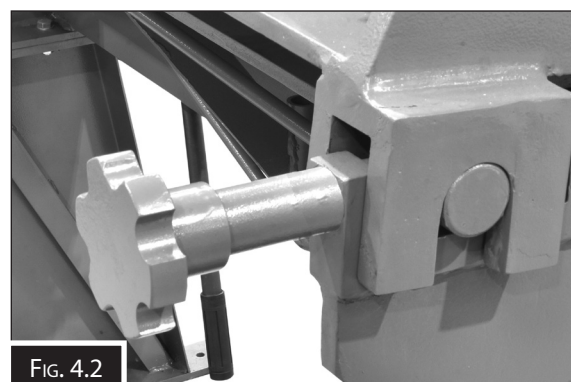
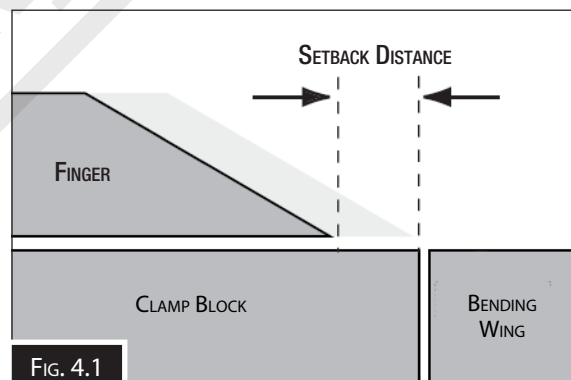
### 4.1 ADJUSTING THE SETBACK

Set back is the distance from the forward edge of the fingers to the edge of the bending leaf.

The set back on the PB-420 is set to achieve either sharp or round bends depending on the sheet metal gauge. Normally the setback is adjusted at least 1.5 to 2 times the thickness of the work-piece. (Fig. 4.1)

#### TO ADJUST THE SET BACK:

1. Raise the clamping leaf about 25mm. Loosen the lock screw.
2. Rotate the setback adjusting wheels (#35) at the back of the machine on either side. Turning the wheels one way will cause the clamping wing to move forward. Turning it the other way will cause the clamping wing to move backward. (Fig. 4.2)



## 4.2 ALIGNING THE FINGERS

It is important to align the fingers properly to achieve accurate results.

### TO ALIGN A FINGER:

1. Lower the clamping leaf with the two clamping handles until the fingers appear to touch the clamping block as evenly as possible.
2. Look at the edge of each finger and determine if any of the fingers are out of alignment.
3. Loosen the three cap screws on the misaligned finger and adjust it so that it is aligned. (Fig. 4.3)
4. Tighten the cap screws to secure the finger in position.



FIG. 4.3

## 4.3 SPACING FINGERS

The fingers can be spaced apart for clearance when making pans or boxes. This requires removing one or more of the fingers, so that you can space the others to match the width of your pan or box.

### TO SPACE THE FINGERS:

1. Loosen the cap screws from each of the fingers you decide to remove.
2. Align the remaining fingers and secure them by tightening the cap screws. (Fig. 4.4)

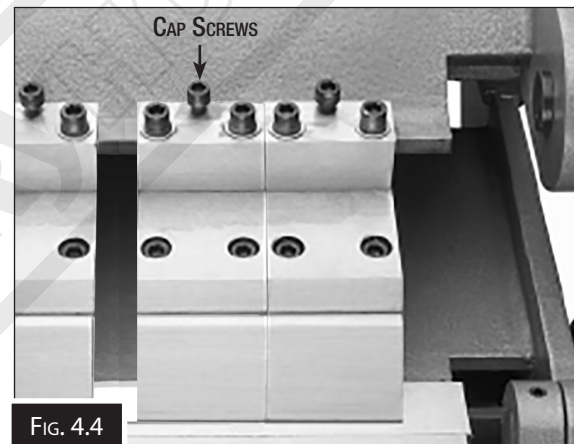


FIG. 4.4

## 4.4 ADJUSTING CLAMP PRESSURE

The clamping pressure is adjusted for different work-piece thicknesses. When the clamping pressure is adjusted properly, it will have medium resistance at the clamp handles and will lock the work-piece into position easily.

### TO SPACE THE FINGERS:

1. Position two pieces of metal the same thickness as the work-piece on each end. When the fingers are slightly touching the workpiece, the clamping handles on the end of the machine should be at 2 o'clock position when viewed from that end. (Fig. 4.5)

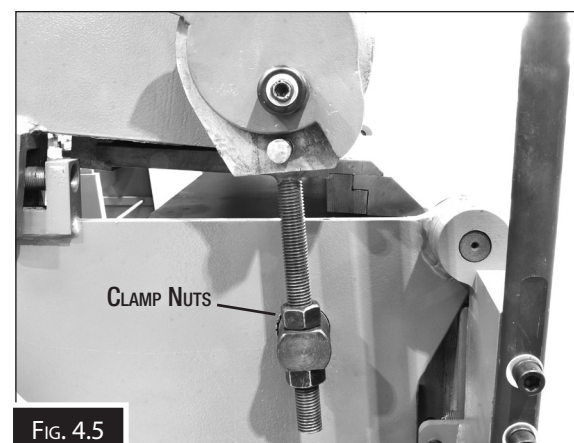


FIG. 4.5

## 4.5 BASIC OPERATION

The maximum capacity of the machine is 14 gauge (2mm) mild steel or equivalent. Below is an equivalency chart for use when working with materials other than mild steel:

MATERIAL	SIZE
Mild Steel	2.0mm
Stainless Steel	1.2mm
SAE 1050 Cold Rolled Steel	1.2mm
Aluminum	3.0mm
Soft Brass	2.2mm
Annealed Phosphorus Brass	2.0mm
Soft Copper	2.2mm
Hard Copper	2.0mm
ABS Plastic	4.0mm

1. Install enough fingers to match the width of the metal to be bent (Fig. 4.6)
2. Lift the hold down lever and insert the sheet metal between the fingers and clamp block.
3. Align the sheet metal bend mark with the clamp block edge, and lightly clamp the sheet metal in place. If the lever is hard to lock in position, adjust both hold-down lock turnbuckles to accept the work-piece thickness.
4. Adjust setback so the finger tips are set back from the bending leaf edge a minimum of 1-1/2 times the metal thickness. (Fig.4.7)



FIG. 4.6

**Note: Damage to the tips of the fingers during bending can occur if not correctly set.**

5. Lower the hold down lever and clamp the sheet metal in place.

**Note: Do not force the hold down lever.**

6. Lift up on the bending leaf operating levers until the sheet metal bend angle is at your desired angle.

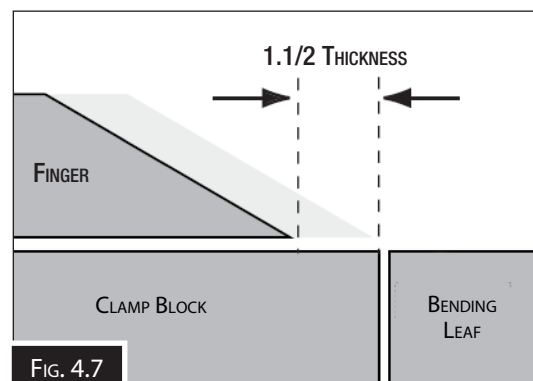


FIG. 4.7

## 5. MAINTENANCE

It is very important that regular maintenance of the equipment is carried out. The operators need to follow the daily maintenance procedures.

For optimum performance from this machine, the maintenance schedule listed below and in this section must be followed.

- Loose mounting bolts or fasteners.
- Check/adjust lubrication.
- Any other unsafe condition.

### 5.1 LUBRICATION

Lubrication is very important to maintain bending accuracy and avoid machine troubles. Be sure to appropriately lubricate the machine according to the Lubrication points.

#### MONTHLY:

Using medium weight, non-detergent oil. The bending leaf pivot joints should be oiled through the oil fittings located on the right and left pivot points. (Fig. 5.1)

Oil the clamping handle bearing surfaces through oil fittings on top of links. Coat all exposed machined surfaces to prevent rusting.

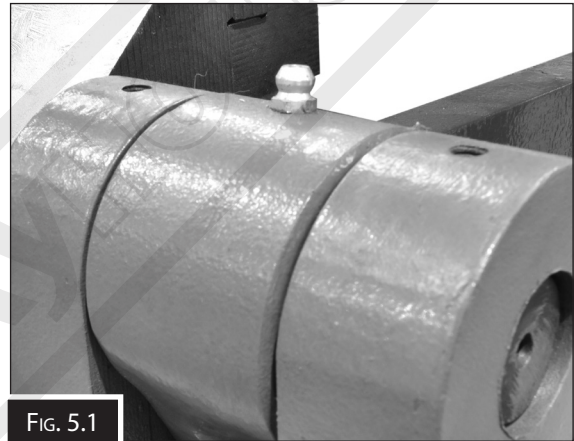


FIG. 5.1

### 5.2 BENDING LEAF ADJUSTMENT

When the bending leaf is at the bottom dead center position, the edge of the bending leaf must be flush with the beam edge. After long time use, this may need to be adjusted.

#### TO ADJUST,

Loosen the three hex. head bolts on both sides of the bending leaf. Adjust the set hd adjusting screws until the bending leaf is flush with the clamp block, then re-tighten the mounting bolts. If the leaf has been adjusted flush on both ends, but is not flush in the center, adjust the nuts located in the center of the beam and bending leaf until center is aligned.

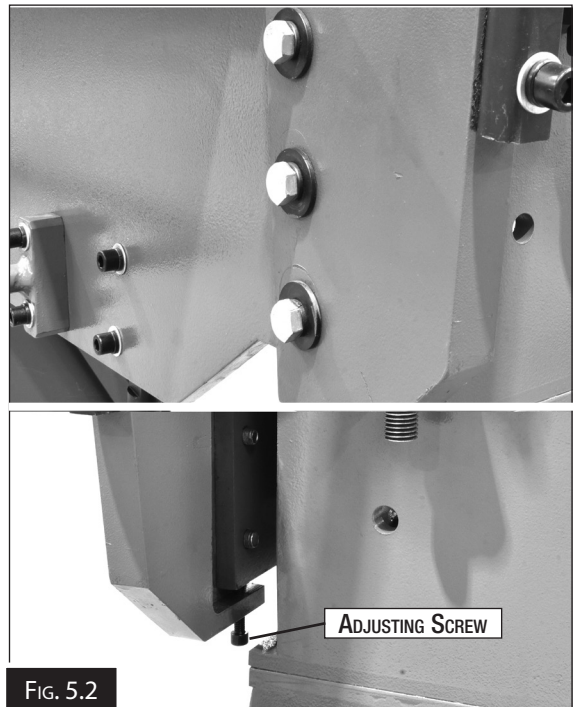


FIG. 5.2

# SPARE PARTS SECTION

# PB-420

## Manual Panbrake

## Owners Manual

Order Code S255  
08/2024

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at any time without notification.

### HOW TO ORDER SPARE PARTS

1. Have your machines **model number, serial number & date of manufacture** on hand, these can be found on the specification plate mounted on the machine
2. A scanned copy of your parts list/diagram with required spare part/s identified.

**NOTE: SOME PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY**

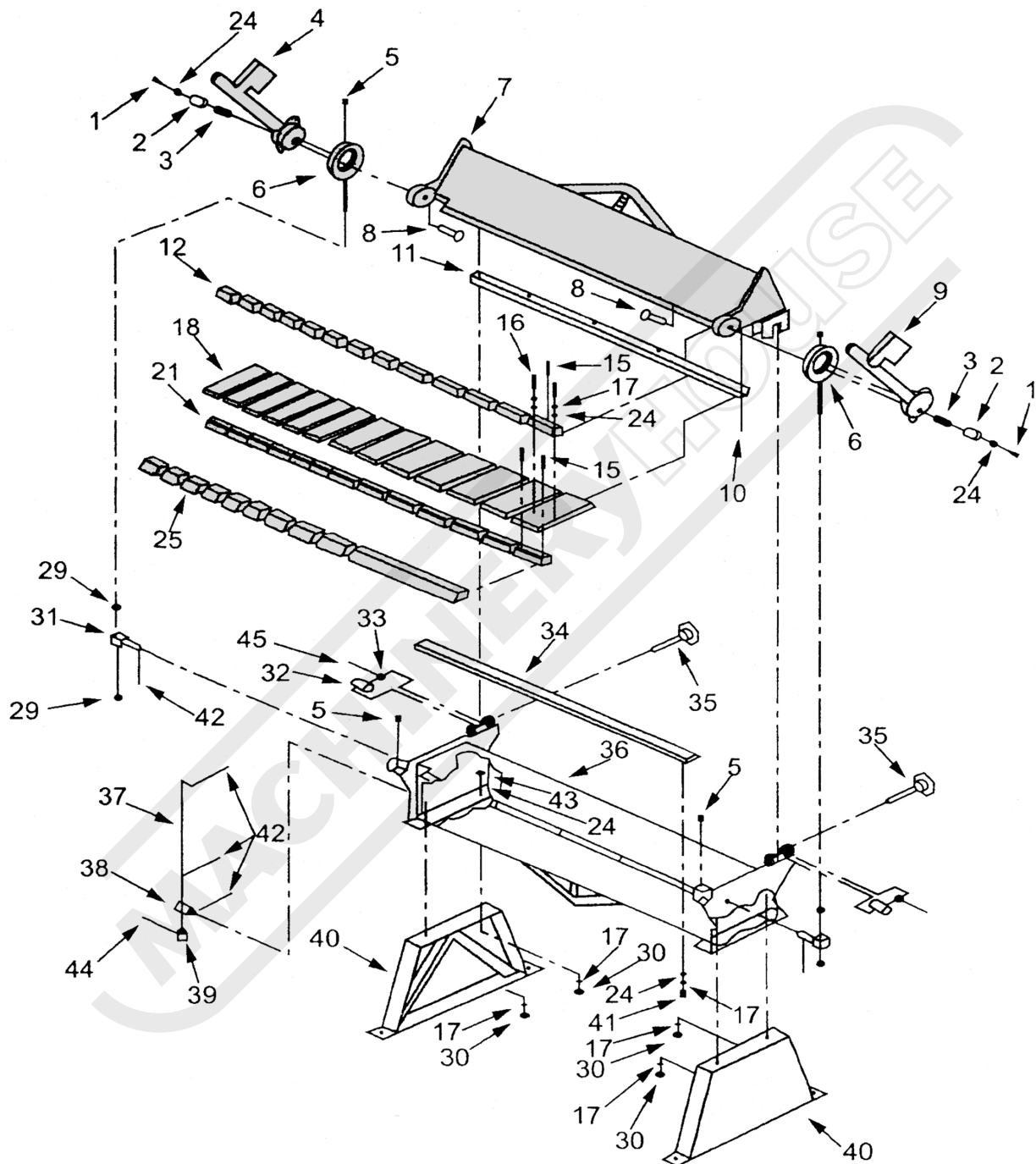
3. Go to [www.machineryhouse.com.au/contactus](http://www.machineryhouse.com.au/contactus) and fill out the inquiry form attaching a copy of scanned parts list.



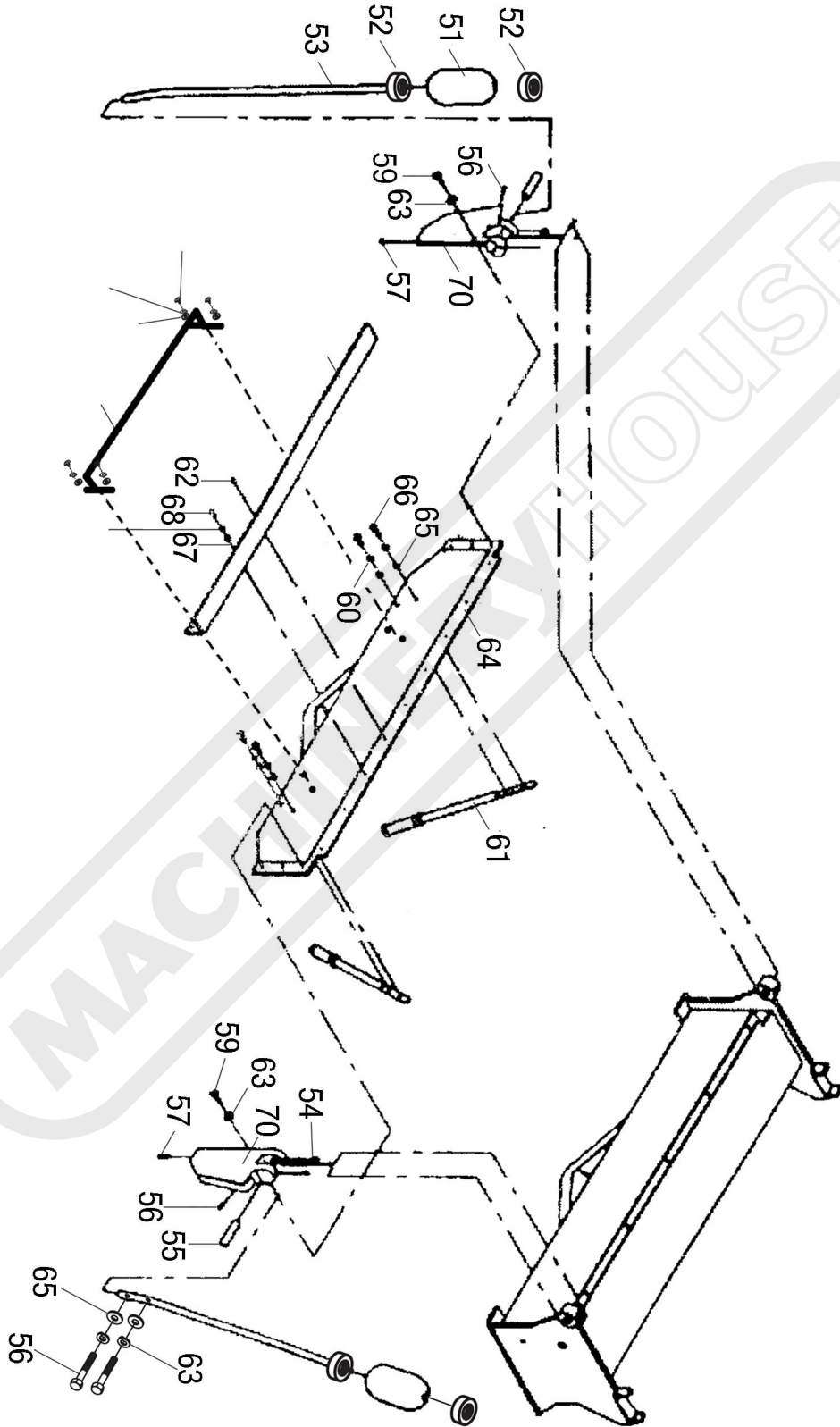
## WARNING

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**SPARE PARTS DIAGRAM**



**SPARE PARTS DIAGRAM**



**SPARE PARTS LIST**

Item	DESCRIPTION	Qty	Item	DESCRIPTION	Qty
1	10-1.5x30mm Hex head bolt	2	36	Beam	1
2	Spacer	2	37	Guide rod	1
3	Spring	2	38	Pivot shaft	1
4	Left clamping handle	1	39	Collar	1
5	Oil fitting	4	40	Support	2
6	Link	2	41	10-1.5x35mm Socket head bolt	5
7	Clamping leaf	1	42	2.5x35mm Cotter pin	5
8	Pin	2	43	10-1.5x40mm Hex head bolt	4
9	Right clamping	1	44	10-1.5x25mm Socket head bolt	1
10	10-1.5x40mm Socket head bolt	5	45	4x4.6x30mm Taper pin	2
11	Support block	1	51	Counterweight	2
12	Jaw clamp bar	1	52	Lock collar M30-3.5	4
15	10-1.5x30mm Socket head bolt		53	Counterweight shaft	2
16	10-1.5x60mm Socket head bolt		54	12-1.5x10mm Set screw	4
17	10mm Lock washer		55	Pivot pin	2
18-1	Jaw	1	56	12-1.75x20mm Set screw	2
21	Nose clamp bar	39	57	12-1.5x40mm Hex head bolt	2
24	10mm Flat washer	50	58	Right hinge	1
25	Nose bar	1	59	12-1.75x40mm Hex head bolt	6
29	18-1.5mm Hex nut	4	60	12mm Lock washer	4
30	10-1.5mm Hex nut	4	61	Operating handle	1
31	Pivot block	2	62	8x30mm Dowel pin	4
32	Adjusting nut	2	63	12mm Lock washer	6
33	Collar	2	64	Bending leaf	1
34	Top bar	1	65	12mm Flat washer	4
35	Hand wheel	2	66	12-1.5x40mm Hex head bolt	4
			67	10mm Lock washer	8
			68	10-1.5x30mm Socket head bolt	8
			69	Angle bar	1
			70	Left hinge	1

**NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY**

# WARNING

## General Machinery Safety Instructions

---

Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Read the entire Manual before starting machinery.** Machinery may cause serious injury if not correctly used.
- 2. Always use correct hearing protection when operating machinery.** Machinery noise may cause permanent hearing damage.
- 3. Machinery must never be used when tired, or under the influence of drugs or alcohol.** When running machinery you must be alert at all times.
- 4. Wear correct Clothing.** At all times remove all loose clothing, necklaces, rings, jewelry, etc. Long hair must be contained in a hair net. Non-slip protective footwear must be worn.
- 5. Always wear correct respirators around fumes or dust when operating machinery.** Machinery fumes & dust can cause serious respiratory illness. Dust extractors must be used where applicable.
- 6. Always wear correct safety glasses.** When machining you must use the correct eye protection to prevent injuring your eyes.
- 7. Keep work clean and make sure you have good lighting.** Cluttered and dark shadows may cause accidents.
- 8. Personnel must be properly trained or well supervised when operating machinery.** Make sure you have clear and safe understanding of the machine you are operating.
- 9. Keep children and visitors away.** Make sure children and visitors are at a safe distance for you work area.
- 10. Keep your workshop childproof.** Use padlocks, Turn off master power switches and remove start switch keys.
- 11. Never leave machine unattended.** Turn power off and wait till machine has come to a complete stop before leaving the machine unattended.
- 12. Make a safe working environment.** Do not use machine in a damp, wet area, or where flammable or noxious fumes may exist.
- 13. Disconnect main power before service machine.** Make sure power switch is in the off position before re-connecting.
- 14. Use correct amperage extension cords.** Undersized extension cords overheat and lose power. Replace extension cords if they become damaged.
- 15. Keep machine well maintained.** Keep blades sharp and clean for best and safest performance. Follow instructions when lubricating and changing accessories.
- 16. Keep machine well guarded.** Make sure guards on machine are in place and are all working correctly.
- 17. Do not overreach.** Keep proper footing and balance at all times.
- 18. Secure workpiece.** Use clamps or a vice to hold the workpiece where practical. Keeping the workpiece secure will free up your hand to operate the machine and will protect hand from injury.
- 19. Check machine over before operating.** Check machine for damaged parts, loose bolts, Keys and wrenches left on machine and any other conditions that may effect the machines operation. Repair and replace damaged parts.
- 20. Use recommended accessories.** Refer to instruction manual or ask correct service officer when using accessories. The use of improper accessories may cause the risk of injury.
- 21. Do not force machinery.** Work at the speed and capacity at which the machine or accessory was designed.
- 22. Use correct lifting practice.** Always use the correct lifting methods when using machinery. Incorrect lifting methods can cause serious injury.
- 23. Lock mobile bases.** Make sure any mobile bases are locked before using machine.
- 24. Allergic reactions.** Certain metal shavings and cutting fluids may cause an allergic reaction in people and animals, especially when cutting as the fumes can be inhaled. Make sure you know what type of metal and cutting fluid you will be exposed to and how to avoid contamination.
- 25. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

# WARNING

## Manual Panbrake Safety Instructions

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Machinery House  
requires you to read this entire Manual before using this machine.

- 1. Maintenance.** Make sure all moving parts are locked down before any inspection, adjustment or maintenance is carried out. Place a block of timber between the Top Tooling and bed to help save hand or fingers from being crushed.
- 2. Panbrake Condition.** Panbrake must be maintained for a proper working condition. Never operate a Panbrake that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis.
- 3. Tooling Condition.** Never operate a Panbrake with damaged or badly worn tooling. Replace if required.
- 4. Hand Hazard.** Do not insert or extend your hands in between bending tools, under any circumstances, while the machine is in operation mode. Serious injury can occur.
- 5. Gloves & Glasses.** Always wear leather gloves and approved safety glasses when using this machine.
- 6. Work area hazards.** Keep the area around the Panbrake clean from oil, tools, objects & chips. Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.
- 7. Guards.** Operate machine only with all protective devices and guarding.
- 8. Material.** Do not over load the machine's capacity by using material which is too thick or hard.
- 9. Warning Labels.** Take note of any warning labels on the machine and do not remove them.
- 10. Support arms.** Do not use support arms for intermediate storage of workpieces.
- 11. Operation.** During the bending process, the workpiece may leap up. Therefore, the material must be handled carefully.
- 12. Secure Panbrake.** Make sure you bolt and the machine down so it is secure when in operation.
- 13. Heating Material.** Heating metal with a torch while the metal is in the panbrake will weaken the fingers.
- 14. Pinching.** Prevent pinching by lowering the panbrake fingers when not in use.
- 15. Call for help.** If at any time you experience difficulties, stop the machine and call your nearest branch service department for help.

# PLANT SAFETY PROGRAM

## NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

### Manual Panbrake

Developed in Co-operation Between A. W.I. S.A and Australia Chamber of Manufactures  
This program is based upon the Safe Work Australia, Code of Practice - Managing Risks of Plant in the Workplace ( WHSA 2011 No10 )

Item No.	Hazard Identification	Hazard Assessment	Risk Control Strategies <small>(Recommended for Purchase / Buyer / User)</small>
B	CRUSHING	LOW	Secure & support work material on table etc. Lower Panbrake fingers when not in use. Keep fingers clear during clamping. Ensure machine is bolted down.
C	CUTTING, STABBING, PUNCTURING	MEDIUM	Wear gloves to prevent cuts from sharp material offcuts.
F	STRIKING	MEDIUM	Ensure the area around the counter weight is kept clear.

Plant Safety Program to be read in conjunction with manufactures instructions



[www.machineryhouse.com.au](http://www.machineryhouse.com.au)



[www.machineryhouse.co.nz](http://www.machineryhouse.co.nz)

Authorised and signed by:

Safety officer:



Manager:



Revised Date: 12th March 2012



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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