

METALMASTER



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Date: (05/24)

Instruction Manual

DEBURRING MACHINE Debur1380

Order Code: (P7870)

MACHINE DETAILS

| | |
|----------------------|--------------------------|
| MACHINE | DEBURRING MACHINE |
| MODEL NO. | Deburr1380 |
| SERIAL NO. | |
| DATE OF MANF. | |

Imported by

Australia



www.machineryhouse.com.au

New Zealand



www.machineryhouse.co.nz

NOTE:

This manual is only 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



Indicates a potentially hazardous situation causing injury or death



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)

Fig.1

PRODUCT SPECIFICATIONS

Model: Deburr1380

Capacity: 1300 x 800mm Voltage: 415V/50Hz

Nett Weight: 340kg Motors: 0.75&2.2kW

MFG Date: FLC:6.9A

Serial No:

Imported by Made in Taiwan

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Metalmaster Deburr1380

Manual Deburring Machine

OVERVIEW

The Metalmaster Deburr1380 manual deburring machine is the ultimate cost-saving solution for deburring, grinding, edge rounding and finishing of metal parts.

The machine is equipped with multiple stations and allows for the integrated execution of different processes. With the right tools, the processes of slag removal, pre-grinding, deburring, edge-rounding, oxide removal up to finish grinding can be achieved.

The 1300 x 800 table features a vacuum area to keep small parts in place and the table trim can be lowered to accommodate larger workpieces.

FEATURES

- Faster and efficient solution to manual deburring
- 1300 x 800mm table with vacuum area to secure small parts in place
- Table trim can be lowered to accommodate workpieces larger than the worktable
- Easy-to-use swinging arm and weight compensation allows the operator to adjust the pressure exerted on the material as required
- Grinding head rotates 180° ensuring a quick and easy switch between processing steps
- Variable speed allows for easy speed adjustment to suit the tool and process
- Dust extraction outlet fitted to rear of cabinet allows for connection of dust extraction machine
- Storage cupboard with shelf to store accessories
- A range of different types of pads and brushes for deburring, edge rounding, finishing, laser oxide removal and heavy slag removal are available for processing of steel, stainless steel, aluminium and plastic



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.

1.1 SPECIFICATION

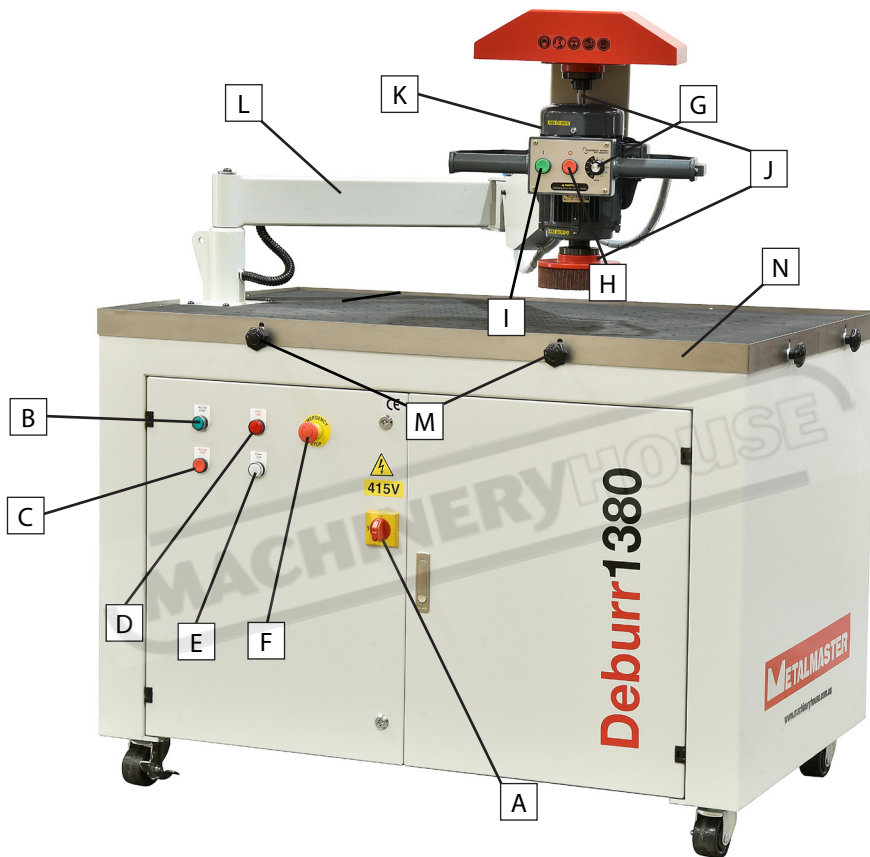
| | |
|------------------------------|-------------------------------|
| Order Code | P7870 |
| MODEL | Deburr1380 |
| Table Size | 1300 x 800mm |
| Vacuum Area | 350 x 250mm |
| Minimum workpiece dimensions | Approx. 80 x 50mm |
| Maximum workpiece height | 150mm |
| Table work height | 920mm |
| Work table load capacity | 110kg |
| Tilting Head (Left ~ Right) | 180° |
| Motor | 0.75kw / 1HP |
| Speed | Variable Speed 240 - 1500 rpm |
| Vacuum motor | 2.2kW / 3HP |
| Voltage / Amp | 415V / 10amp |
| Total power | 3kW / 4HP |
| Floor Space | 1310 x 810 x 1450mm |
| Shipping Dimensions | 1530 x 1080 x 1510mm |
| Nett Weight | 340kg |
| Gross Weight | 420kg |

1.2 ACCESSORIES INCLUDED

1. One set Abrasive Sanding Discs - 150mm
2. One set Hook and Loop Backing Disc - 150mm
3. One set Standard Deburring Disc - 150mm (80 Grit Aluminum Oxide)

1.3 IDENTIFICATION

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



| | | | |
|----------|----------------------|----------|-----------------------------|
| A | Main power switch | H | Sanding stop button |
| B | Vacuum start button | I | Sanding start button |
| C | Vacuum stop button | J | Dual Spindle |
| D | Alarm light | K | Motor |
| E | Power light | L | Movable cantilever |
| F | Emergency button | M | Fixture knob for table trim |
| G | Speed adjusting dial | N | Table Trim |

2.1 GENERAL METALWORKING MACHINE SAFETY

1. As with all machines there is a certain amount of hazard involved with the use of this machine. Use the machine with the respect and caution demanded where safety precautions are concerned. When normal safety precautions are overlooked or ignored, personal injury to the operator can result.
2. **LIMITED WARRANTY** This warranty does not apply to personal injury and defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and tear, repair or alterations outside our facilities, or to a lack of maintenance.
3. **IF YOU ARE NOT** thoroughly familiar with the operation of this machine, obtain advice from your supervisor, instructor or other qualified person. Or, please contact the company who sold the machine to you, and request for the correct instruction of operating. When you are not sure what the correction operation is, please do not use this machine.
4. **IF AT ANY TIME YOU ARE EXPERIENCING DIFFICULTIES** performing the intended operation, stop using the machine, then contact the distributor's service department or ask a qualified expert how the operation should be performed.
5. **NEVER ALLOW UNSUPERVISED OR UNTRAINED PERSONNEL TO OPERATE THE MACHINE** make sure any instructions you give in regards to machine operation are approved, correct, safe, and clearly understood.
6. **NEVER OPERATE A MACHINE WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Full mental alertness is required at all times when running a machine.
7. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. DO NOT** leave tool until it comes to a complete stop.
8. **MAKE SURE** wiring codes are recommended electrical connection instructions are followed, and that the machine is properly grounded.
9. **MAKE** all adjustments with the power "OFF".
10. **DISCONNECT** machine from power source when making repairs.
11. **KEEP** knives sharp and free of all rust.
12. **DO NOT** operate this machine when the guard is removed.
13. **KEEP** fingers and hands away from the cutting area.
14. **NEVER** start the machine with the workpiece in contact with the sanding head.
15. **CHECK MATERIAL** for loose knots and other defects before operating.
16. **MAKE SURE** the workpiece is free from nails and other foreign objects which could cause injury or damage to the knives.

2.1 GENERAL METALWORKING MACHINE SAFETY CONT.

17. **MAKE SURE** the knives are properly secured to the machine, as explained in the instruction manual, before turning on power.
18. **REMOVE SHAVINGS** only with the power "OFF".
19. **KEEP HANDS** away from the top surface of the board near the feed rollers.
20. **BEFORE LEAVING** the machine, make sure the work area is clean.
21. **SHOULD** any part of your machine be missing, damaged or fail in any way, or any electrical component fail to perform properly, shut off switch and remove plug from power supply outlet. Replace missing, damaged or failed parts before resuming operation.
22. **ATTENTION!!** Before installation & operation, please make sure the worker have been trained and understands the operation of the machine.



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.



CAUTION.

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

2.2 OPERATIONAL SAFETY

1. **Before installing**, testing, or starting up the machine, read and memorise these safety rules. Follow available safety instructions and safety rules carefully.
2. **Ensure work area is in order.** Don't position the machine in humid surroundings.
3. **Keep work area** properly illuminated, clean, safe, and well ventilated.
4. **Whenever possible** use a dust collector with dust chute hood to minimize health hazards.
5. **All visitors** should be kept at a safe distance from the running machine.
6. **Operation**, maintenance and repairs must be carried out by trained and authorized personnel.
7. **Proper apparel** should be worn: Don't wear loose clothing, neckties, bracelets, which may get caught in the moving parts of the machine. Wear protective hair covering to contain long hair. Gloves should not be worn when operating the machine. Gloves should only be worn when handling the workpiece.
8. **Before starting** up machinery which has moving parts, make sure that all protection devices such as table trim, fixed and moving guards are in good working order and are fitted in position.
9. **Never carry out any work** on moving parts: before carrying out work on such parts, make sure they are stopped or in the rest position and the power supply is switched off.
10. **Do not work** on live electrical components: before carrying out work on such components, make sure that the machine is disconnected from the power and the main switch on the electrical enclosure is switched off.
11. **Do not force** the machine, it will do the job better and be safer at a rate for which it was designed.
12. **Before restarting** the machine after a stoppage, ensure there is no person in the danger zone.
13. **Never leave** the machine running whilst unattended.




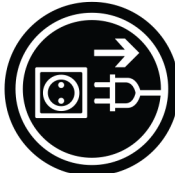

DUST EXPLOSION SAFETY

ALL DUSTS ARE POTENTIALLY EXPLOSIVE. Light metal dusts (aluminum, magnesium, etc.) have high explosion pressures and must be considered dangerous. A spark from any source can ignite these dusts. OSHA has documented several cases where aluminum dust explosions have resulted in catastrophic fires and fatalities. Therefore, take care to minimize the possibility of sparking in light metal applications, or a **FIRE** or **EXPLOSION** may result.

If your machine has been used for sanding a light metal, **DO NOT** sand sparking material (steel). The residual light metal dusts could be ignited by sparks. An explosion could result. **DO NOT** sand mixed materials in your sander. The sander, ductwork and collector must be thoroughly cleaned before switching material.

- Proper dust collection is essential for the safe operation of your sander. **DO NOT** run without dust collection.
- Dry metal sanders/grinders must have proper dust collection.

WARNING LABELS

| | | |
|---|------------------------------|---|
|  | RESPIRATORY PROTECTION | Exposure to the dust created by grinding, may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. |
|  | INJURY PROTECTION | Keep hands away from the cutting head and all moving parts. Contact with the cutting head could result in serious injury or amputation |
|  | EYE & EAR PROTECTION | ALWAYS wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Wear ear protection |
|  | DISCONNECT POWER | DISCONNECT THE MACHINE FROM POWER when making adjustments or servicing. |
|  | READ & UNDERSTAND THE MANUAL | 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. |

3. POWER SUPPLY

3.1 ELECTRICAL REQUIREMENTS

Place the machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure there is access to a means of disconnecting the power source. The electrical circuit must meet the requirements for 415V. To minimize the risk of electrocution, fire, or equipment damage, these machines should be hard wired with installation work and electrical wiring done by a qualified electrician.

NOTE : The use of an extension cord is not recommended as it may decrease the life of electrical components on your machine.

ELECTRICAL REQUIREMENTS

| | |
|---------------------------|-------------|
| Nominal Voltage..... | 415V |
| Cycle..... | 50 Hz |
| Phase..... | Three Phase |
| Power Supply Circuit..... | 10 Amps |
| Full Load Current..... | 6.9 Amps |

(Full load current rating is also on the specification plate on the motor.)

3.2 FULL-LOAD CURRENT RATING

The full-load current rating is the amperage a machine draws when running at 100% of the output power. Where machines have more than one motor, the full load current is the amperage drawn by the largest motor or a total of all the motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating for these machine at 415V is 6.9 Amps

It should be noted that the full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating and if the machine is overloaded for a long period of time, damage, overheating, or fire may be caused to the motor and circuitry.

This is especially true if connected to an undersized circuit or a long extension lead. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements.



4 SETUP

4.1 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 your distributor.

4.2 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.

4.3 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.

4.4 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.

4.5 CONNECTING DUST CHUTE

There is one dust chute located on the rear of the machine. Metalmaster recommend connecting to a metal dust collector, before starting machine. (Model DCM-202)

Use DCH-100F flexible flame retardent hose with a diameter of 100mm,.

5. OPERATION INSTRUCTION

5.1 SPINDLE ROTATION

Before operating this machine it is important that the operator understands the importance of the direction of the spindle rotation when selecting the deburring disc.

The motor has been fitted with stickers to show the direction of the spindle. The information below covers the spindle direction and the attaching screws.



Side A: rotates clockwise and the screw that attaches the Deburring Disc has a right hand thread



Side B: rotates anti-clockwise and the screw that attaches the Deburring Disc has a left hand thread

NOTE: The flanges that hold the accessories are balanced and have been fitted to the correct rotation of the spindle. It is recommended that they not be removed and cannot be swapped due to the direction of the material retaining thread.



WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labelled with.

5.2 TEST RUN

Once assembly is complete, test run the machine to ensure it is properly connected to the power and safety components are functioning correctly.

TO TEST RUN THE MACHINE:

- Check nothing is left on the table.
- Adjust the table trim up to prevent work pieces fly off the table while working, and make sure the table trim is secured.
- Make sure the position pin is locked and the sanding head can not be turned.
- Check that the direction of the motor is correct and make sure that the machine rotates in the correct direction. If the direction is incorrect, isolate the machine and have the electrician make changes to the wiring.
- Connect the machine to the power supply. and turn the machine ON.

- Connect the machine to the power supply. and turn the machine ON.
- Make sure that the machine is traveling in the correct direction.
- Listen to and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.
- Any strange or unusual noises should be investigated and corrected before operating the machine again. Always disconnect the machine from power supply when investigating or correcting potential problems. The troubleshooting chart in the maintenance section may be helpful in rectifying a problem.

TESTING THE EMERGENCY STOP BUTTON

Make sure that the emergency button is working correctly

1. Twist the top of the Emergency Stop button to ensure that it is in the raised position.
2. Start the machine and then press the emergency stop button. The machine should stop and the power should be cut off. If the machine cannot be started, then the emergency stop is working correctly. To reset the Emergency Stop twist the red top until it pops up.
3. The machine should now work again.



5.3 HEAD CONTROLS

Before operating the machine it is important to know and understand the controls. The head is spring loaded and direction and pressure are controlled by the operator.

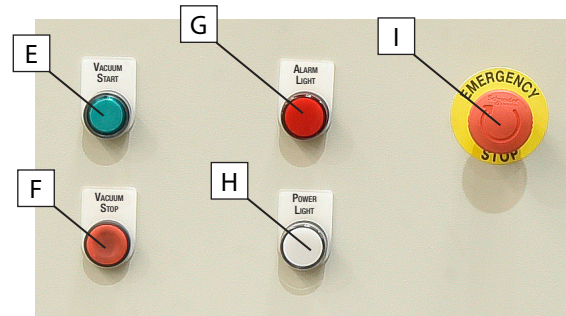
- A. ON Switch:** When the Button is pressed, starts the motor.
- B. OFF Switch:** When the Button is pressed, stops the motor.
- C. Speed Control:** When rotated it increases or decreases the speed of the motor.
- D. Head Handles:** Controls the head direction.



5.4 VACUUM SYSTEM

The Deburr1380 has a powerful vacuum system that efficiently sucks the work pieces to the table, when the process of sanding is in operation.

- E. Vacuum Start:** When pressed activates the vacuum pump.
- F. Vacuum Stop:** When pressed stops the vacuum pump.
- G. Alarm Light:** Is illuminated if the vacuum pump fails or the spindle stops while grinding.
- H. Power Light:** Is illuminated when the master power switch is ON.
- I. Emergency Stop:** When pressed cuts the power to all operations. To reset the switch the top is rotated clockwise until the red top pops up.



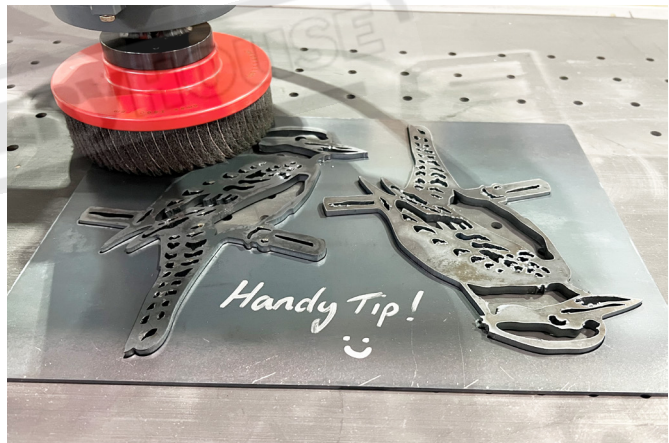
5.5 BASIC OPERATION

HANDY TIP:

If your workpiece is perforated the vacuum system may not be sufficient to hold the work piece and it is recommend using a template to help secure the workpiece.

Template should made from thinner material than the work piece being deburred and the more the vacuum area is covered the better the system performs.

Example: The template is a mirror image to allow for both sides to be finished.

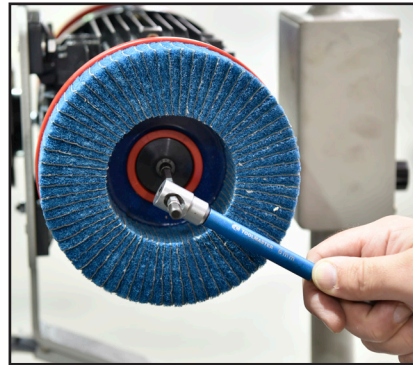
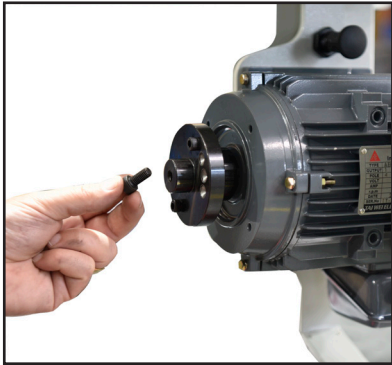


- Turn the main power switch ON and check the power light is illuminated.
- Place the work piece or the sanding area in the center of the working table.
- Turn ON the vacuum system and make sure the work piece can stay firmly on the working table.
- Mount the correct deburring disc onto the spindle with the correct rotating direction and secure.
- Turn ON the sanding head and adjust the speed to match the abrasive.
- Using both hands, hold the handle and move the sanding head toward the work piece or sanding area.
- After the sanding head is started and running, two hands must be used to hold the handle while sanding the work pieces.
- When the sanding work is finished or suspended, to comply with safety practices, turn OFF the sanding head immediately.

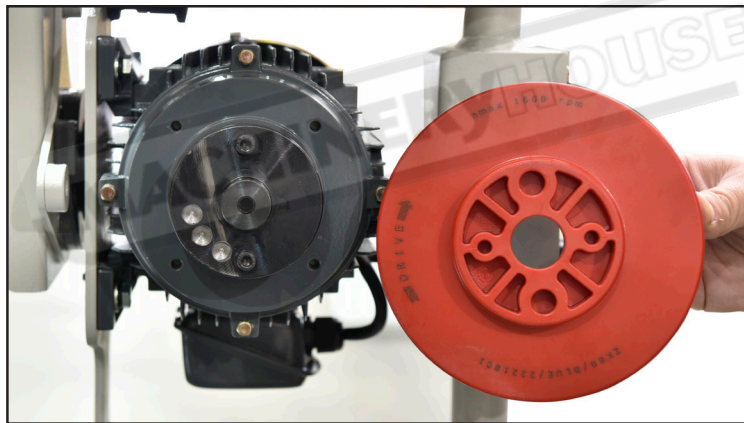
5.6 REPLACING DEBURRING DISC

BRUSH TYPE.

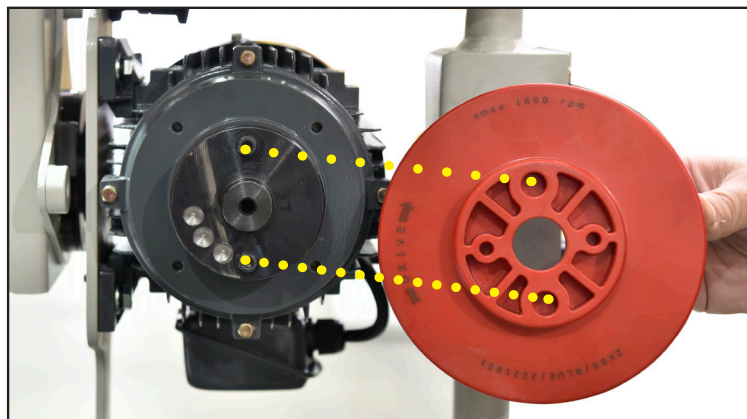
1. DISCONNECT THE MACHINE FROM POWER
2. Hold brush tightly and use an Allen key to turn the bolt anti-clockwise to remove the screw.



3. Remove the worn brush pieces from the disc and replace with new brush pieces



4. When installing the new brush, make sure the 2 driving holes on the brush are located onto the driving pins on the spindle. (please refer to the image below). Once located, then hold the brush tightly and use an Allen key to turn the bolt clockwise to fasten the brush on the spindle.



5.6 REPLACING DEBURRING DISC CONT.

VELCRO TYPE

1. DISCONNECT THE MACHINE FROM POWER
2. To change the worn abrasive directly tear off the worn abrasive and attach a new one in the same position.
3. Change the abrasive holder: Hold the abrasive holder tightly and use Allen key and turn the key clockwise to remove the screw and take off the abrasive holder. Install the new abrasive holder and secure with the Allen key, turning anti-clockwise to fasten the screw. Make sure the two drive pins on the spindle and Velcro holder are aligned.



5.7 ADJUSTING THE TABLE TRIM

Before operating the Metalmaster Deburr1380, the table trim protective fence needs to be adjusted to prevent the workpiece from being ejected from the table.

The table trim has vertical adjustment of 0~9mm.

TO ADJUST THE TABLE TRIM

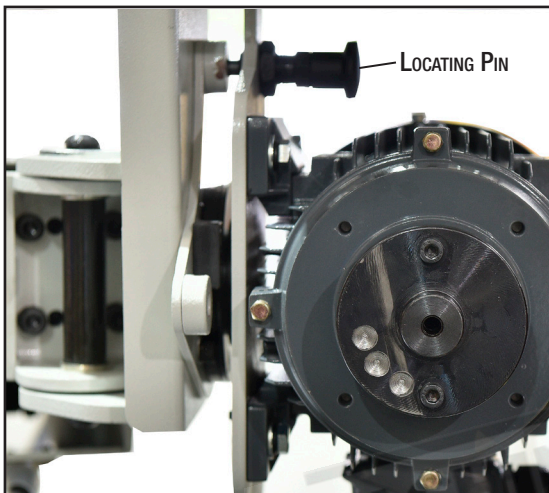
1. Loosen the fixture knobs (Shown as A below) for table trim protective fence.
2. Adjust the table trim (Shown as B to side) to required height. (The table trim should be set high enough to retain the workpiece, yet below the height of the workpiece so as to not foul the grinding wheel.)
3. Fasten the fixture knob to secure the table trim protective fence.



5.8 ROTATING THE HEAD

The double sided disc type sanding head allows abrasives to be installed on the top and bottom each. The head can then be turned 180 degree to quickly switch the top and bottom abrasives for operations that require two different sanding processes. The head can be set up for the two processes, one at each end of the spindle. The head can rotate to access both of the abrasives.

The head is held in place with a spring loaded pin for quick and easy rotation.



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.

5.9 DEBURRING DISC SELECTION

SLAG REMOVAL

DESLAGGING BRUSH 150MM

The removal of burrs and molten slag residue in plasma or oxyfuel cut sheetmetal parts can be a daunting task. Instead of chipping it away using a hammer and chisel or grinding it with an angle grinder let the Metalmaster slag hammer brush do the heavy lifting for you.

Made up of multiple flexible mounted pins this brush removes stubborn slag residue in no time.



Order Code: P7873

Speed Rating: 700rpm Max.

Rotation: Clockwise



SPEED WARNING.

Always ensure the deburring disc does not exceed the maximum rpm listed in this manual and marked on the disc



WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labelled with.

PRE-GRINDING & DEBURRING

BACKING DISC – HOOK & LOOP – 150MM

Hook & Loop backing disc is suitable for securing felt back abrasive & non-woven abrasive discs.



Order Code: P7875

Speed Rating: 2200rpm Max

Rotation: Bi-directional

ABRASIVE SANDING DISC – 150MM

Aluminium oxide abrasive discs for pre-grinding of sheet metal components and light deburring as well as finish grinding are available in various grits.



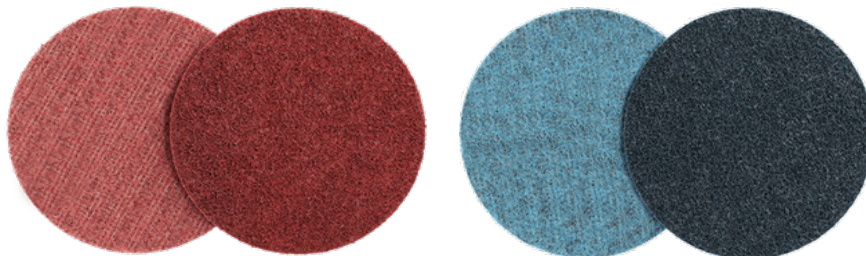
Order Code: A5312 – Aluminium Oxide 60 grit (Pack of 3)

Order Code: A5313 – Aluminium Oxide 80 grit (Pack of 3)

Order Code: A5314 – Aluminium Oxide 100 grit (Pack of 3)

NON-WOVEN ABRASIVE DISC – 150MM

Non-woven Abrasive discs for pre-grinding and finish grinding of surfaces and light deburring of metal and sheet metal are available in fine & coarse.



Order Code: P7876 – Coarse Brown (Sold individually)

Order Code: P7878 – Fine Blue (Sold individually)

DEBURRING & EDGE ROUNDING

STANDARD DEBURRING DISC 150MM – SINGLE ROW

The Standard deburring discs feature a single row of abrasive and are ideal for removing light primary and secondary burrs as well as edge rounding of sheetmetal. The Unique design consists of non-woven abrasive and abrasive segments.

Aluminium Oxide – Brown - suitable for deburring and external edge rounding of mild steel applications.

Order Code: P7890 – Aluminium Oxide 80G
Order Code: P7892 – Aluminium Oxide 120G



Zirconia – Blue - suitable for deburring and strong external edge rounding of mild steel and stainless steel with a larger radius.

Order Code: P7895 – Zirconia 80G
Order Code: P7897 – Zirconia 120G



Silicon Carbide - Grey - best suitable for aluminium and plastic applications and achieves good edge rounding.

Order Code: P7900 – Silicon Carbide 80G
Order Code: P7902 – Silicon Carbide 120G



- 80 or 120 Grit Aluminium Oxide / Zirconia / Silicon Carbide
- Speed Rating: 1600rpm Max
- Rotation: Clockwise



WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labeled with.

DEBURRING & EDGE ROUNDING (CONTINUED)

PROFESSIONAL DEBURRING DISC 150MM – DOUBLE ROW

The Professional deburring discs feature a double row of abrasive which provides greater flexibility. By dividing the facing width this design allows the disc to provide a uniform pressure ratio and provides better results on smaller cut outs with profiles.

Aluminium Oxide – Brown – suitable for deburring as well as internal and external edge rounding on mild steel applications.

Order Code: P7905 – Aluminium Oxide 80G
Order Code: P7907 – Aluminium Oxide 120G



Zirconia – Blue - suitable for deburring and strong internal & external edge rounding of mild steel and stainless steel with a larger radius.

Order Code: P7910 – Zirconia 80G
Order Code: P7912 – Zirconia 120G



Silicon Carbide - Grey - best suitable for aluminium and plastic applications and achieves good edge rounding on internal and external profiles.

Order Code: P7915 – Silicon Carbide 80G
Order Code: P7917 – Silicon Carbide 120G



- 80 or 120 Grit Aluminium Oxide / Zirconia / Silicon Carbide
- Speed Rating: 1600rpm Max
- Rotation: Clockwise



WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labeled with.

OXIDE REMOVAL

OXIDE REMOVAL WIRE BRUSH – 150MM

Components cut with oxygen have oxide layers on the cut edges. These dark layers are removed with the oxide brushes. The oxide brush is characterized by an innovative, multi-row arrangement of a specially developed wire set. The arrangement enables optimum oxide layer removal and ensures metallurgically bright cut edges with a long lifetime at the same time.



Order Code: P7880

- Speed Rating: 700rpm Max
- Rotation: Clockwise

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WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labeled with.

FINISHING

NON-WOVEN ABRASIVE DISC – 150MM

Non-woven abrasive disc is ideal for pre-grinding and finish grinding of surfaces and light deburring of metal and sheet metal.



Order Code: P7885

- Speed Rating: 1600rpm Max
- Rotation: Bi-directional

FELT PAD POLISHING DISC – 150MM

Polishing discs are used for finishing surfaces. In combination with solid or liquid polishing paste, surfaces up to mirror high gloss are possible.



Order Code: P7882

- Speed Rating: 700rpm Max.
- Rotation: Bi-directional



WARNING.

Always ensure the deburring disc is fitted to correct spindle and rotating in the correct direction. Always ensure the deburring disc does not exceed the maximum rpm it is labeled with.

6. MAINTENANCE

6.1 MAINTENANCE PERSONNEL

Ordinary maintenance work must be carried out only by trained and authorized personnel. Before carrying out extraordinary maintenance or replacement of parts, please contact the distributors authorized Service Center.

6.2 WARNINGS FOR MAINTENANCE PERSONNEL

- Start by checking that the power is switched off.
- Carry out all work with the machine stopped.
- Use the individual protection devices and wear appropriate clothing.

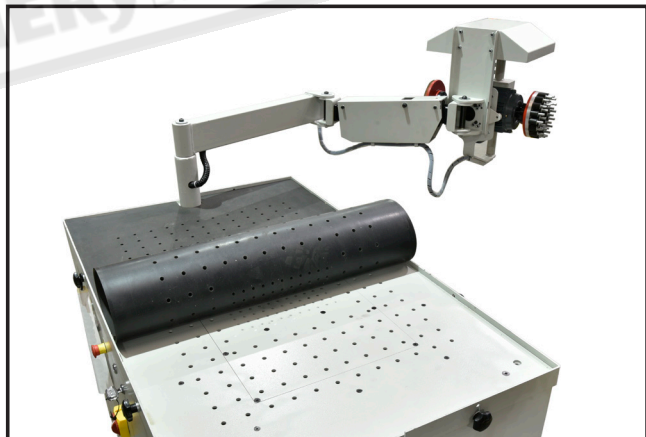
6.3 MAINTENANCE ITEMS

- Table and machine body clean, daily
- Vacuum chamber dust clean, every 3 months
- Wear of abrasive materials check, weekly

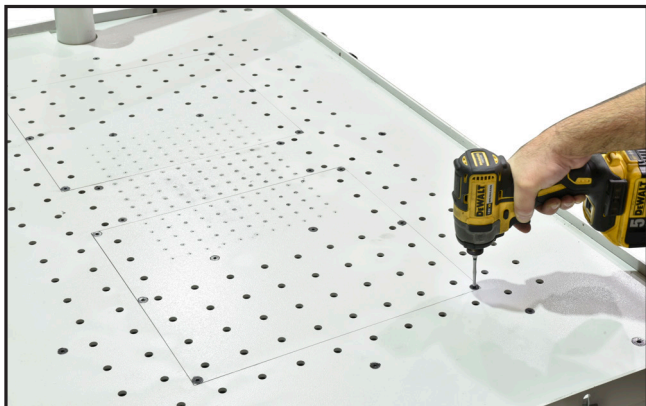
CLEANING THE VACUUM CHAMBER:

Dust particles can be explosive so the cleaning of the vacuum chamber is important.

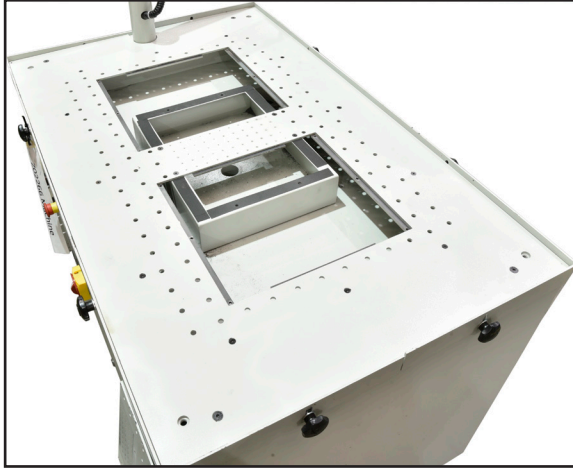
If your machine has been used for sanding a light metal, **DO NOT** sand sparking material (steel). The residual light metal dusts could be ignited by sparks. An explosion could result. **DO NOT** sand mixed materials in your sander. The sander, ductwork and collector must be thoroughly cleaned before switching material.



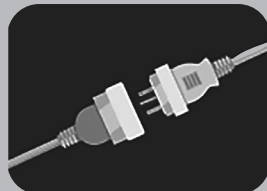
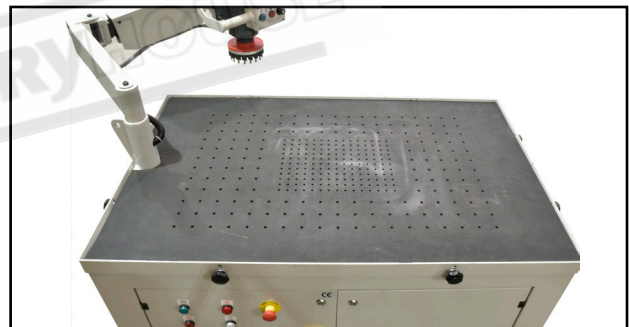
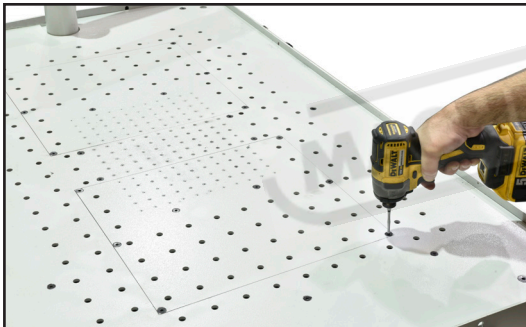
1. Carefully roll up the black rubber mat and remove it from the table.
2. Unscrew the screws around the edges of the vacuum chamber and remove the covers, there are 2 covers. One on each side of the table.



3. Once the covers have been removed, clean the vacuum chamber.



4. Replace the covers and fasten with the screws. Lay the rubber mat on the table after the cleaning work is finished



WARNING

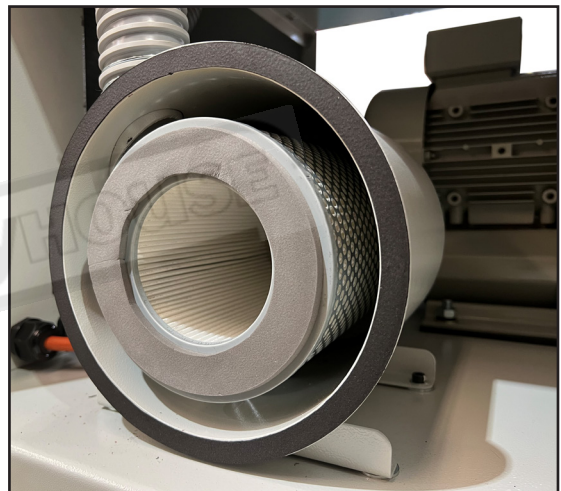
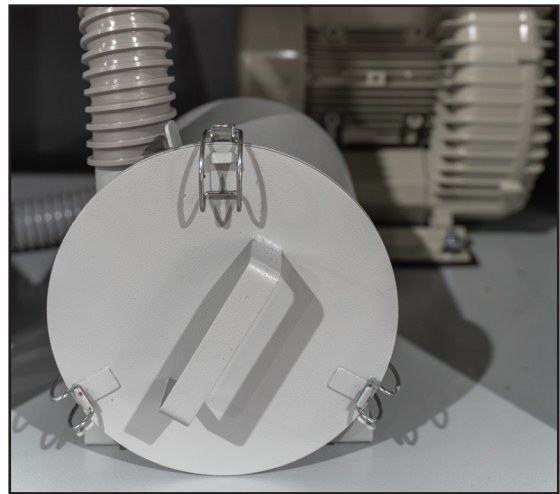
Always disconnect the power to the machine before servicing or carrying out maintenance to the machine.

6.4 CLEANING THE FILTER

The Metalmaster Deburr1380 is fitted with a filter between the vacuum pump and the inlet. This ensures that large dust particles are captured before they enter the pump, thus extending the life of the pump.

To clean the filter

1. DISCONNECT THE MACHINE FROM THE POWER.
2. Open the access door on the right hand side of the machine.
3. Release the three clips on the cover and remove the cover.
4. Remove the filter from the filter housing.
5. Take the filter outside or find a place that has good ventilation and clean filter with compressed air.
6. When clean replace the filter back into the filter housing and replace the cover.



Order Code 1DB0001
Replacement Filter



WARNING.

Compressed Air is Dangerous and can cause Death or Injury if misused. Always bleed off the airline before disconnecting from the compressor or machine. DO NOT use compressed air to blow dust from clothes



WARNING.

When cleaning the filter, wear a respirator and safety goggles. Failure to comply can cause serious personal respiratory injury.

DEBURRING MACHINE

Deburr1380

Order Code: (P7870)

Edition : 2.0
Date: (05/24)

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 anytime 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 and fill out the inquiry form attaching a copy of scanned parts list.



WARNING!

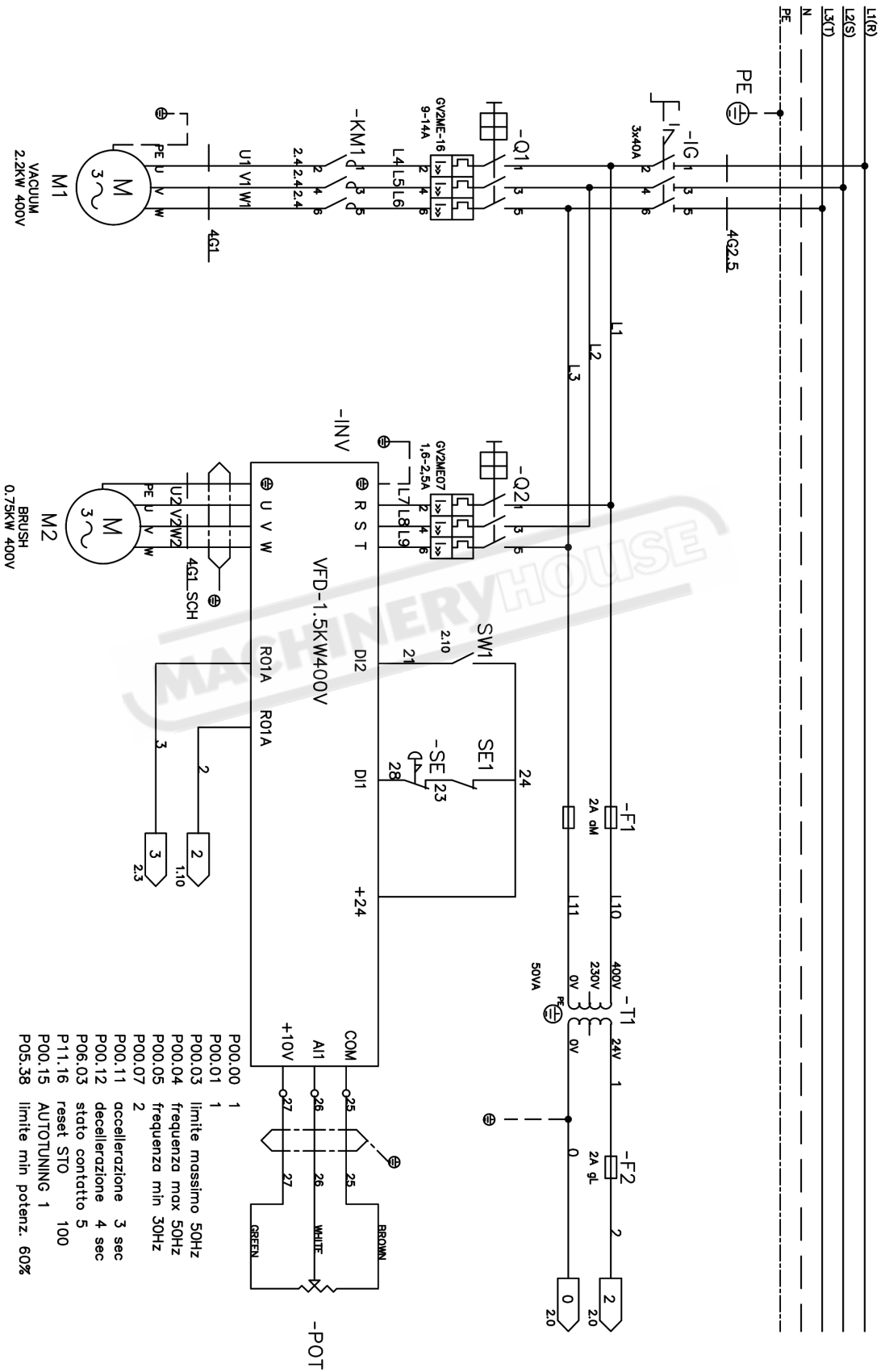
*Electricity is dangerous and could cause death
All electrical work must be carried out by a qualified electrician.*



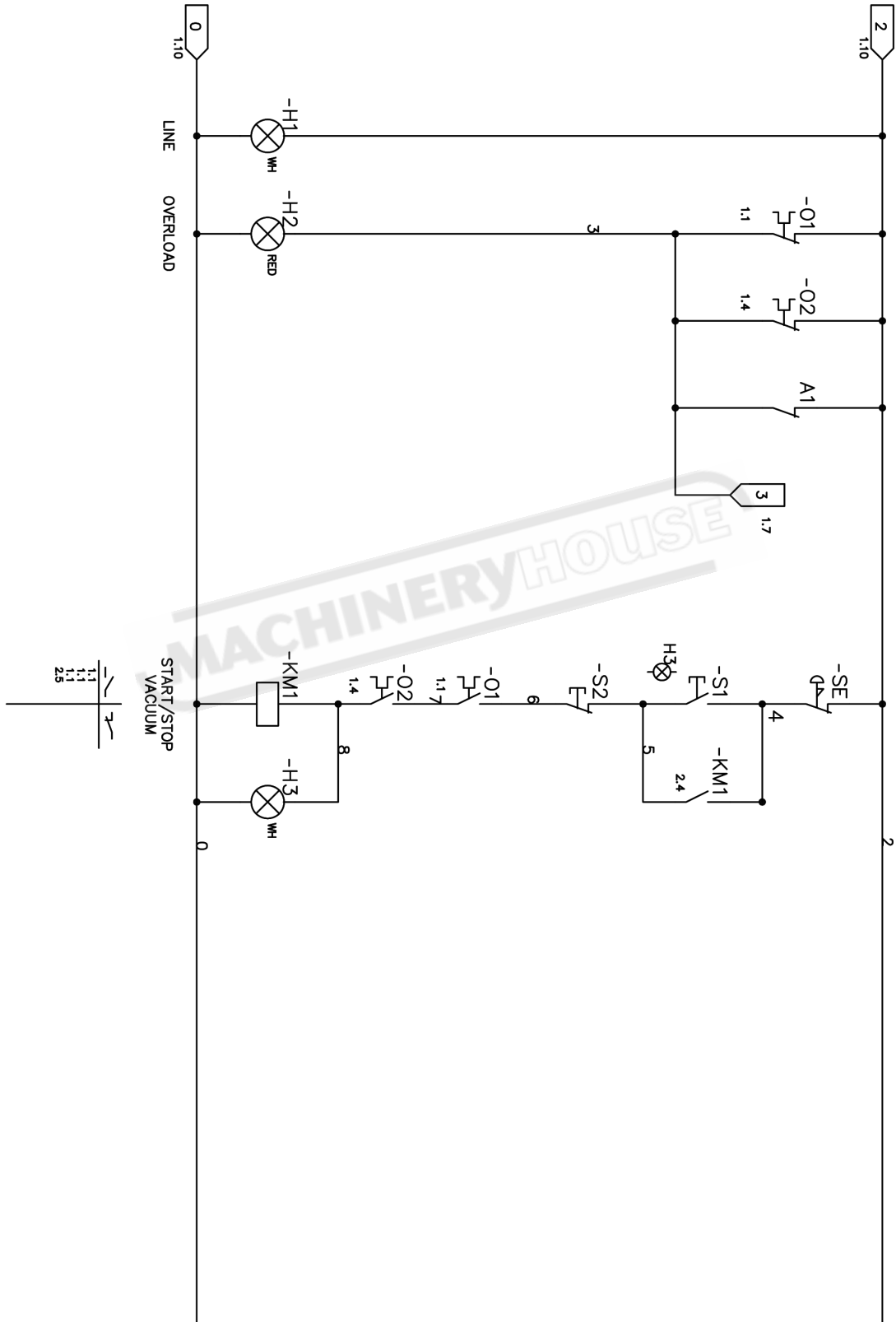
CAUTION

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.

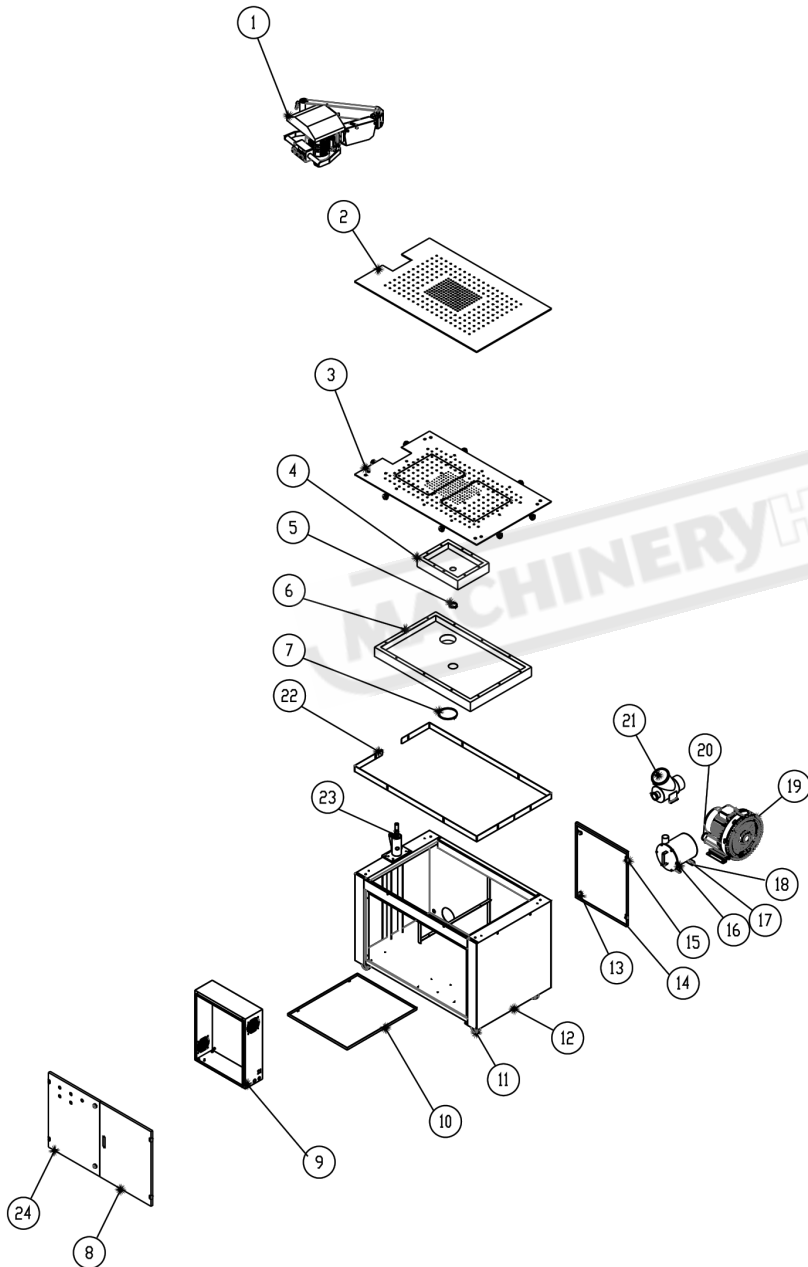
WIRING DIAGRAM



WIRING DIAGRAM



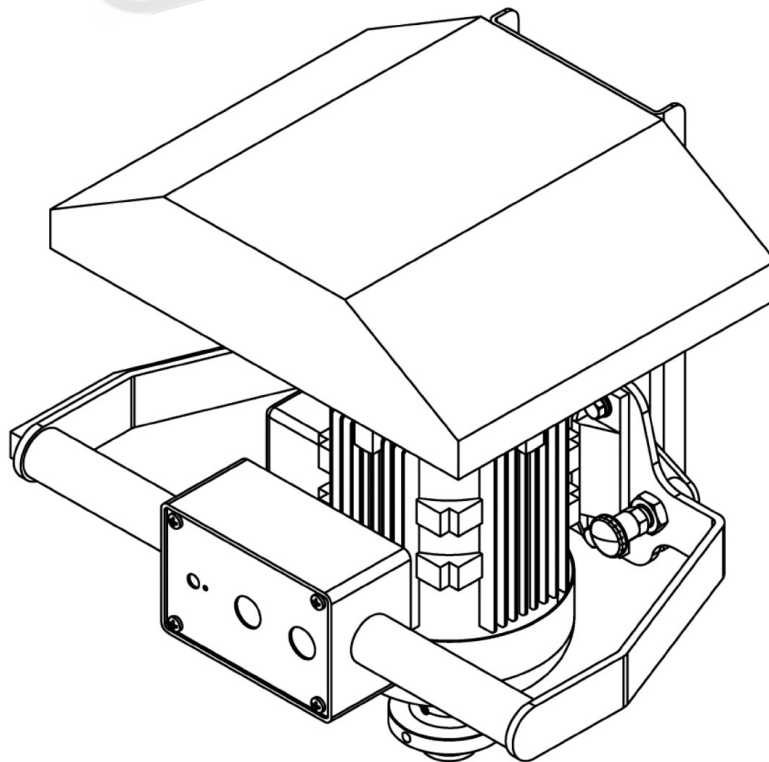
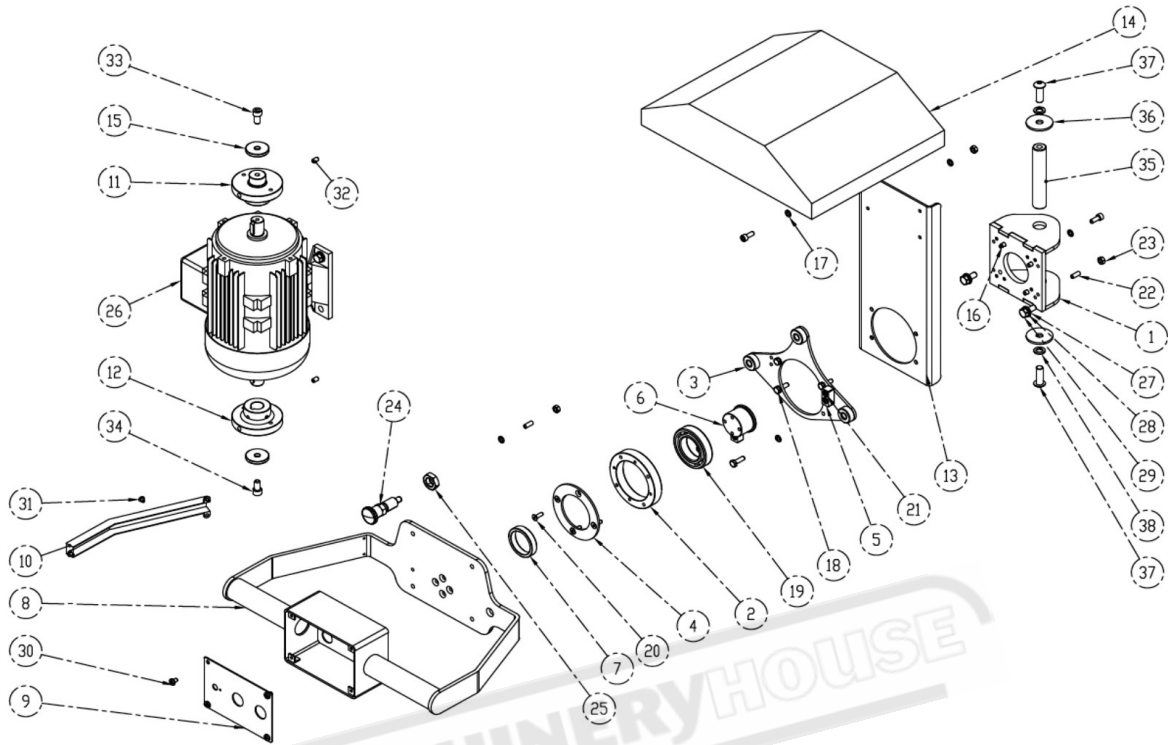
MAIN BODY PARTS



| Item No. | Part No. | Description | Qty. |
|----------|------------|------------------------------------|------|
| 1 | C0020004 | Vertical sanding system | 1 |
| 2 | E0340009 | Rubber table mat | 1 |
| 3 | D0170002 | Vacuum table assembly | 1 |
| 4 | E0510003 | Vacuum chamber | 1 |
| 5 | M0730001 | 2.5 Inch hose clamp | 1 |
| 6 | E0510004 | Pneumatic chamber | 1 |
| 7 | M0730002 | 5 Inch hose clamp | 1 |
| 8 | E0020117 | Electrical enclosure door | 1 |
| 9 | D0060006 | Electric control box assembly | 1 |
| 10 | E0020112 | Cabinet shelf | 1 |
| 11 | J0130002 | Swivel caster | 4 |
| 12 | E0010023 | Machine Cabinet | 1 |
| 13 | J0110003 | Key door latch | 4 |
| 14 | E0020029 | Rear cabinet door | 1 |
| 15 | J0110001 | Door hinge | 6 |
| 16 | D0160001 | Vacuum filtration | 1 |
| 17 | M0200612 | Hex socket head cap screw | 12 |
| 18 | M0510060 | Flat washer | 12 |
| 19 | J1060001 | Air blower vacuum pump | 1 |
| 20 | M0730002 | 5 Inch hose clamp | 1 |
| 21 | E0510017 | Exhaust three-way pipe | 1 |
| 22 | E0330079 | Table Fence | 2 |
| 23 | E0090039ES | Cantilever axle seat | 1 |
| 24 | E0020028 | Electrical enclosure control panel | 1 |

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

HEAD SPAREPARTS DIAGRAM

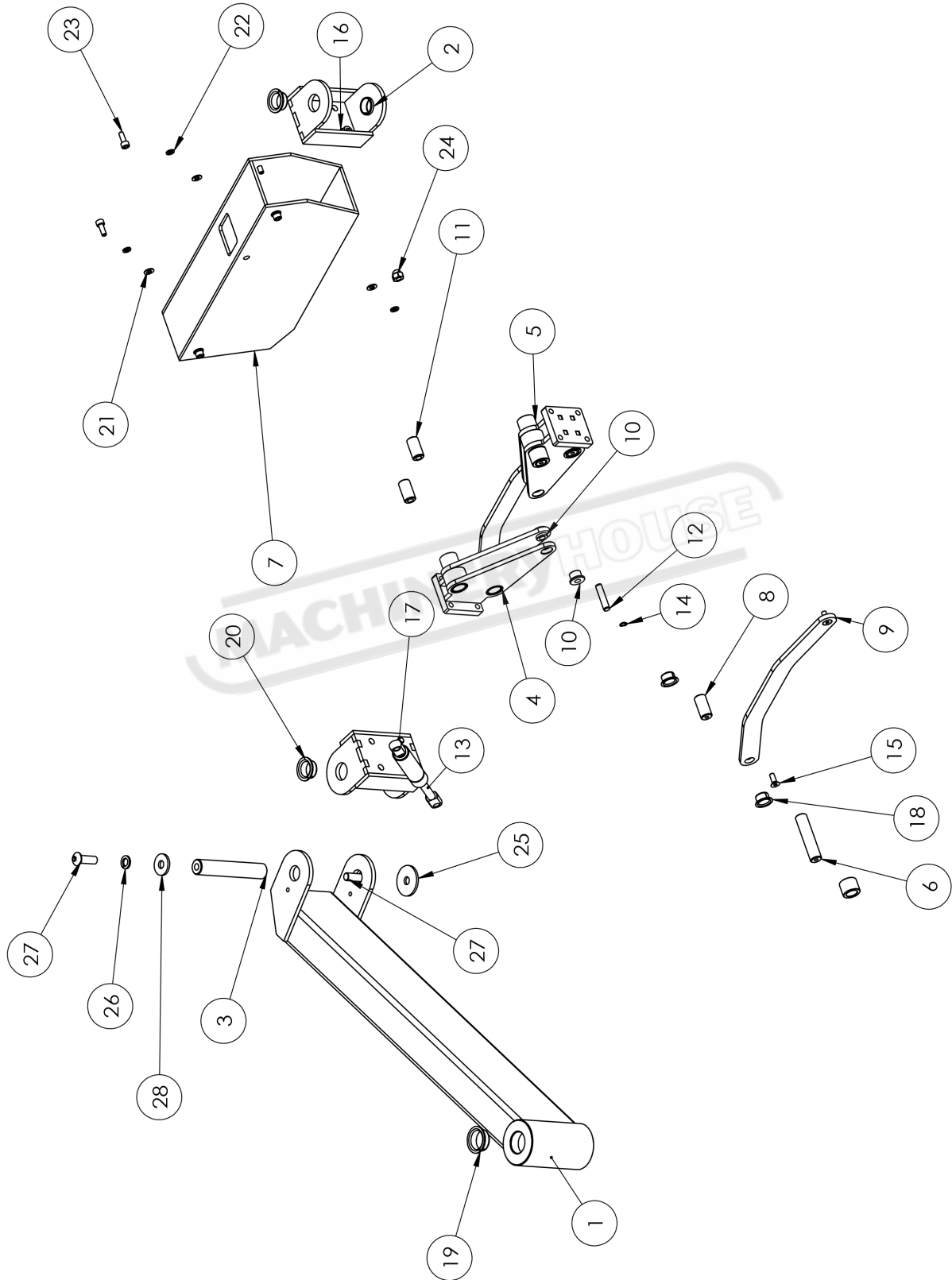


HEAD SPARE PARTS LIST

| No. | FACTORY CODE | DESCRIPTION | Qty. |
|-----|--------------|---|------|
| 1 | E030020 | U-shaped bracket | 1 |
| 2 | E0090007 | Handle connected base | 1 |
| 3 | E0330021 | Abrasive head directional positioning plate | 1 |
| 4 | E0020031 | Cover of handle connected base | 1 |
| 5 | E0520001 | Directional locating block | 2 |
| 6 | E0130006 | Rotational axis | 1 |
| 7 | E0420005 | Spacer | 1 |
| 8 | E0320016 | Control handle | 1 |
| 9 | E0290007 | Switch panel | 1 |
| 10 | E0020032 | Wire conduit cover | 1 |
| 11 | E0090008 | Sanding head adapter-right thread | 1 |
| 12 | E0090009 | Sanding head adapter-left thread | 1 |
| 13 | E0070007 | Sanding head motor plate | 1 |
| 14 | E0020033 | Sanding head cover | 1 |
| 15 | E0150003 | Washer | 2 |
| 16 | M0200616 | Hex socket screw M6*16 | 8 |
| 17 | M0520060 | Spring washer | 17 |
| 18 | M0400620 | Hex socket head cap screw M6*20 | 4 |
| 19 | M0060080 | Deep groove ball bearings- 6008 | 1 |
| 20 | M0200610 | Hex Socket Screw M5*16 | 4 |
| 21 | M0200610 | Hex Socket Screw M6*10 | 4 |
| 22 | M0230616 | Hex socket set screw M6*16 | 9 |
| 23 | M6 | Hex nut | 13 |
| 24 | M0550004 | Locating pin | 1 |
| 25 | M0500161 | Hex nut | 1 |
| 26 | J050004 | Sanding motor-1HP-4P | 1 |
| 27 | M0510081 | Flat washer | 4 |
| 28 | M0520080 | Spring washer | 4 |
| 29 | M0400820 | Hex head bolt M8*20 | 4 |
| 30 | M0240508 | Cross-head screw M5*8 | 4 |
| 31 | M0240406 | Cross-head screw M4*6 | 3 |
| 32 | M0230610 | Hex socket set screw M6*10 | 4 |
| 33 | M0200816 | Hex socket screw M8*16 | 1 |
| 34 | M0200817 | Hex socket screw- left thread M8*16 | 1 |
| 35 | E0130002 | Rotational shaft | 1 |
| 36 | M0510102 | Washer | 2 |
| 37 | M0211030 | Hex socket screw M10*30 | 2 |
| 38 | M0520100 | Spring washer | 2 |

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

CANTILEVER ASSEMBLY SPARE PARTS DIAGRAM

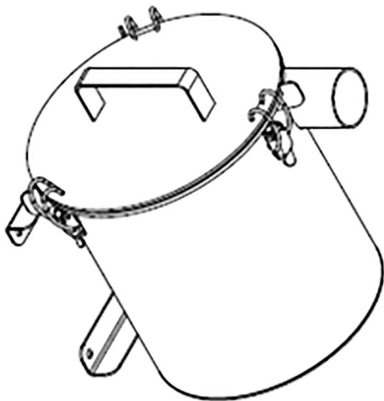
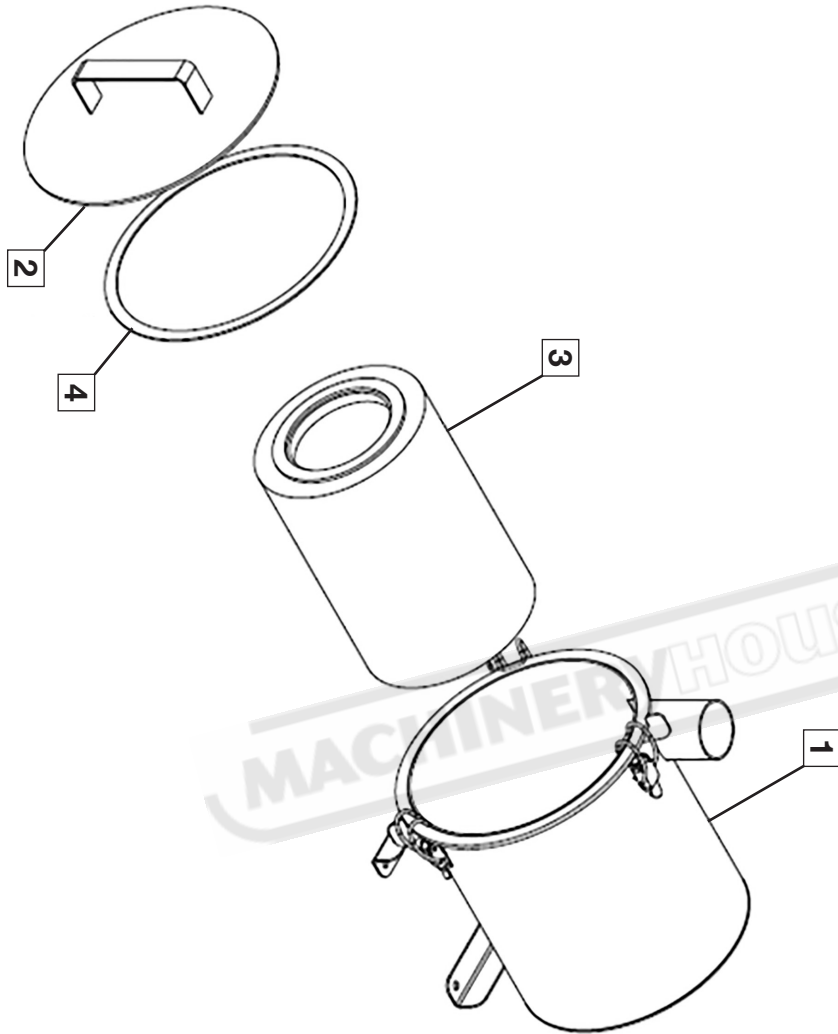


CANTILEVER ASSEMBLY SPARE PARTS LIST

| No. | FACTORY CODE | DESCRIPTION | Qty. |
|-----|--------------|--------------------------|------|
| 1 | E0330017 | Control arm main body | 1 |
| 2 | E0330018 | U-shaped connector | 2 |
| 3 | E0130002 | Rotation center shaft | 1 |
| 4 | E0090006 | Lifting brake block | 2 |
| 5 | E0220002 | Brake shaft bushing | 4 |
| 6 | E0130004 | Brake shaft center | 2 |
| 7 | E0020030 | Cantilever cover | 1 |
| 8 | E0130005 | Shaft | 2 |
| 9 | E0330019 | Bracket | 2 |
| 10 | E0220003 | Bushing | 2 |
| 11 | E0130003 | Shaft bushing | 2 |
| 12 | E0030008 | Fixed shaft | 1 |
| 13 | J0990001 | Nitrogen gas spring rod | 1 |
| 14 | M0080080 | CS008 | 2 |
| 15 | M0220616 | Hex socket screw M6*16 | 4 |
| 16 | M0520080 | Spring washer | 2 |
| 17 | M0200816 | Hex socket screw M8*12 | 2 |
| 18 | M0100003 | Self-lubricating bushing | 8 |
| 19 | M0510060 | Flat washer | 6 |
| 20 | M0520060 | Spring washer | 6 |
| 21 | M0200616 | Hex socket screw M6*16 | 5 |
| 22 | M0490080 | M8 dome nut | 1 |
| 23 | M0100004 | Self-lubricating bearing | 2 |
| 24 | M0100005 | Self-lubricating bushing | 4 |
| 25 | M0510103 | Flat washer | 1 |
| 26 | M0520100 | Spring washer | 2 |
| 27 | M0211030 | Hex socket screw M10*30 | 2 |
| 28 | M0510102 | Flat washer | 1 |

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

FILTER SPARE PARTS



| No. | Part No. | Description | Qty. |
|-----|----------|----------------------|------|
| 1 | E0500001 | Filter tank | 1 |
| 2 | E0500002 | Filter tank cover | 1 |
| 3 | J1040001 | Filter | 1 |
| 4 | J1050001 | Sealing foam padding | 1 |

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

Deburring Machine Safety Instructions

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

- 1. Maintenance.** Make sure the deburring machine is turned off and disconnect from the main power supply and make sure all moving parts have come to a complete stop before any inspection, adjustment or maintenance is carried out.
- 2. Deburring Machine Condition.** Deburring Machine must be maintained for a proper working condition. Never operate a deburring Machine that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis.
- 3. Leaving a Deburring Machine Unattended.** Always turn the deburring Machine off and make sure all moving parts have come to a complete stop before leaving the machine. Do not leave deburring Machine running unattended for any reason.
- 4. Avoiding Entanglement.** Remove loose clothing, belts, or jewelry items. Never wear gloves while machine is in operation. Keep Hands clear of the disc at all times while in operation. Tie up long hair and use the correct hair nets to avoid any entanglement with the deburring spindle or moving parts.
- 5. Deburr Disc key safety.** Make sure machine is turned off before changing discs or any adjustment to the locking bolt. Make sure Discs are locked tight before use. NOTE: Dual disc head machines will normally have a left hand thread on one side and a right hand thread on the other side. Always remove the allen key wrench and any service tools immediately after use. Allen keys left in the deburr head can cause serious injury.
- 6. Deburring Discs.** Always use the correct deburring disc for the job you are deburring. Deburring discs are labelled with the rotation, always ensure they are fitted to the correct side of the spindle. Make sure discs are in good working condition and held firmly in place. Replace worn sanding pads. Never exceed the disc maximum rpm. Use correct even pressure when deburring and never over force deburring disc onto work piece. Overloading machine can wear disc out unnecessarily, overload the motor and can cause serious injury if parts fly out of the working area under heavy pressure.
- 7. Work pieces - Material.** Inspect the work piece for sharpness, chips, or cracks before use. Be aware that cracked material or loose burrs can fly off the table by the deburring head and cause serious injury. Material edges can be very sharp and can cause lacerations. Handle material with care, wear safety gloves while handling material.
- 8. Understand the machines controls.** Make sure you understand the use and operation of all controls.
- 9. Vacuum Area of Table.** Always position parts over the vacuum area of the table. The down draft table helps hold the work pieces to the table while deburring.
- 10. Disc spindle Head.** Make sure the Disc spindle has come to a complete stop and turn machine off before changing the discs or rotating the disc head. Do not slow or stop the spindle by using you hand. Keep hand clear of moving parts at all time while deburring. Serious injury or entanglement can occur.
- 11. Dust Hazard.** Deburring causes hazardous dust, which may cause long term respiratory problems if inhaled. Always wear an approved respirator when grinding.
- 12. Speed selection.** Select the appropriate speed for the type of disc you are using, Discs can't exceed certain speeds (rpm), please refer to disc maximum working speeds before use. Allow the Disc to reach full speed before beginning deburring.
- 13. Spindle Rotation.** The main motor has a dual spindle which is marked Side A & Side B. Side A will operate in a clock wise direction and Side B will operate in a Anti-Clockwise direction. Always ensure the deburring disc is fitted to the correct spindle and rotating in the correct direction.
- 14. Rotating head.** Make sure lock pin that secure the head for tilting are locked on place correctly. If head slips and tilts while in use can cause serious injury. Please refer to Disc head Tilting Instructions for correct procedure.
- 15. Clearing chips.** Always use a brush to clear chips. Never clear chips when the disc is running.
- 16. Protective wear.** Wear a jacket and eye safety shield while operating machine. Wear safety gloves when handling work pieces off and onto the table.
- 17. Power outage.** In the event of a power failure during use of the deburring machine, turn off all switches to avoid possible sudden start up once power is restored.
- 18. Clean work area.** Keep the area around the deburring machine clean from oil, tools and chips.
- 19. Call for help.** If at any time you experience difficulties, stop the machine and call you nearest branch service department for help.

PLANT SAFETY PROGRAM

NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

Deburring Machine

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> |
|---|-------------------------------|-------------------|---|
| A | ENTANGLEMENT | HIGH | Eliminate, avoid loose clothing / Long hair etc. |
| B | CRUSHING | LOW | Secure & support workpiece on deburr table. |
| B | CRUSHING | HIGH | Deburr head tilting Locking pin - please refer to Deburr head tilting instruction for correct procedure. |
| C | CUTTING, STABBING, PUNCTURING | MEDIUM | Incorrect adjustment may result in the head becoming loose and a crushing hazard Isolate power to machine prior to any checks or maintenance being carried out. |
| D | SHEARING | MEDIUM | Do not adjust or clean machine until the machine has fully stopped. Make sure all guards are secured shut when machine is on. |
| F | STRIKING | MEDIUM | Isolate power to machine prior to any checks or maintenance. Ensure discs are secure on the spindle and locking tools are removed before use. Wear full face mask for eye safety. |
| H | ELECTRICAL | MEDIUM | Check discs for damage or work out before use. Ensure work pieces are placed over vacuum area of work table before use. Ensure correct spindle speed for disc maximum rpm. |
| M | HIGH TEMPERATURE | LOW | All electrical enclosures should only be opened with a tool that is not to be kept with the machine. |
| O | OTHER HAZARDS, NOISE. | LOW | Machine should be installed & checked by a Licensed Electrician. Wear appropriate protective clothing to prevent hot swarf. Wear hearing protection as required. |
| Plant Safety Program to be read in conjunction with manufactures instructions | | | |



www.machineryhouse.com.au



www.machineryhouse.co.nz

Authorised and signed by:
Safety officer:

Manager:

Revised Date: 5th April 2023

MACHINERYHOUSE



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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