8-8-16

### HARE/:FORBES MACHINERYHOUSE

Estabilished 1930
Distributors of New & Used Workshop Equipment

W318

### CANISTER DUST COLLECTOR

MODEL: CD-2A



**OPERATION MANUAL AND PARTS LIST** 

### HAFCO WOODMASTER #W318

CD-2A

### **CANISTER DUST COLLECTOR**



### IMPORTANT SAFETY RULES

Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention, Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. REMEMBER: Your personal safety is your responsibility.

### WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

- 1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL. Learn the tool's application and limitation s as well as the specific hazards peculiar to it.
- 2. KEEP GUARDS IN PLACE and in working order.
- ALWAYS WEAR EYE PROTECTION.
- 4. GROUND ALL TOOLS. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached a known ground. Never remove the third prong.
- 5. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "ON".
- 6. KEEP WORK AREA AND CLEAN. Cluttered areas and benches invite accidents.
- 7. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet location, or expose them to rain. Keep work area well light.
- 8. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- MAKE WORKSHOP CHILDPROOF with padlocks, master switches, or by removing starter keys.
- 10. DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.
- 11. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
- 12. WEAR PROPER APPAREL. No loose clothing, gloves, neck-ties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 13. ALWAYS USE SAFETY CLASSES. Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.
- 14. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
- 15. DON'T OVERREACH. Keep proper footing and balance at all times.
- 16. MAINTAIN TOOLS IN TOP CONDITION. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 17. DISCONNECT TOOLS before servicing and when changing accessories such as blades, bits cutters, etc.
- 18. USE RECOMMENDED ACCESSORIES. The use of accessories and attachments not recommended by us may cause hazards or risk of injury to persons.
- 19. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in "OFF" position before plugging in power cord.
- 20. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- 21. CHECK DAMAGED PARTS. Before further use of tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function check for alignment of moving parts, binging of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 22. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of the blade or cutter only.
- 23. NEVER LEAVE TOOL RUNNING UNATTENDED TURN POWER OFF. Don't leave tool until it comes to a complete stop.
- 24. DRUGS, ALCOHOL, MEDICATION. Do not operate tool while under the influence of drugs, alcohol or any medication.
- 25. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while motor is being mounted, connected or reconnected.
- 26. WARNING: The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

### IMPORTANT SAFETY RULES FOR DUST COLLECTORS

**WARNING:** Basic precautions should be followed when using your dust collector. To reduce the risk of injury, electrical shock or fire, comply with the safety rules listed below:

- 1. READ and understand the instruction manual before operating the dust collector.
- 2. DO NOT leave the dust collector plugged into the electrical outlet. Unplug dust collector from outlet when not in use and before servicing, changing bags, unclogging and cleaning.
- 3. ALWAYS turn the power switch "OFF" before unplugging the dust collector.
- 4. WARNING: TO REDUCE THE RISK OF ELECTRICAL SHOCK do not use outdoors or on wet surface. Use for dry pickup only!
- 5. FOLLOW all electrical and safety codes, including the National Electric Code (NEC) and the Occupational Safety and Health Regulations (OSHA). Qualified personnel should make all electrical connections and wiring only.
- 6. DO NOT use the dust collector to pick up flammable or combustible liquids such as gasoline. NEVER use the dust collector near any flammable or combustible liquids.
- 7. USE the dust collector to pick up wood materials only. DO NOT use the dust collector to pick up metal shavings, dust, water, or parts.
- 8. NEVER use the dust collector to dissipate fumes or smoke. NEVER pick-up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- 9. USE only as described in this manual.
- 10. DO NOT pull the dust collector by the power cord. NEVER allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.
- 11. DO NOT unplug the dust collector by pulling on the power cord. ALWAYS grasp the plug, not the cord.
- 12. DO NOT handle the plug or dust collector with wet hands.
- 13. REPLACE a damaged cord immediately. DO NOT use a damaged cord or plug. If the dust collector is not operating properly, or has been damaged, left outdoors or has been in contact with water, return it to an Authorized Service Center for service.
- 14. DO NOT use the dust collector as a toy. DO NOT use near or around children.
- 15. DO NOT insert fingers or foreign objects into the dust intake ports. Keep hair, loose clothing, fingers, and all body parts away from openings and moving parts of the dust collector.
- 16. DO NOT use the dust collector without a filter bag and dust collection bag in place and properly secured.
- 17. DO NOT operate the dust collector with unused dust intake ports uncapped. ALWAYS cover exposed dust intake ports.
- 18. PERIODICALLY INSPECT dust and filter bags for any cuts, rips or tears. NEVER operate the dust collector with a damaged bag or vacuum hose.
- 19. The dust collector is designed for home use or light commercial duty ONLY!
- 20. CONNECT dust collector to a properly grounded outlet only. See Grounding Instructions.

### **SAVE THESE INSTRUCTIONS**

### **GROUNDING INSTRUCTIONS**

The appliance must be grounded, if it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric current to reduce the risk of electric shock. This appliance is equipped with a cord having equipment-ground conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

### WARNING -

Improper connection of the equipment-grounding conductor can result in risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

### For grounded, cord-connected appliances:

This appliance is for use on a circuit having a normal rating more than 120 volt and is factory-equipped with a specific electric cord and plug to a proper electric circuit. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance. If the appliance must be reconnected for use on a different type of electric circuit, qualified service personnel should make the reconnection.

### For a permanently connected appliance:

This appliance must be connected to a grounded metal, permanent wiring system; or an equipment - grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance

### **INVENTORY LIST**





A. Motor/Fan Housing

B. Upper leg Square Tubes

C. Lower leg Square Tubes

D.Long bracket

E. Short bracket

F. Leg Connector Brackets

**G.Round Collector** 

H.Hose 1-1/2"

I. Upper drum & Lower drum

J. Drum lid

K. Housing cover

L. Reducing collector

M.Inlet

N.Canister filter

O. Spindle

P. N type handle

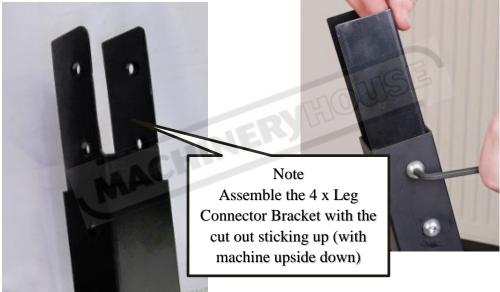
Q. PE Bag

R. Handle of drum

### **Machine Assembly**







<u>Step 1</u> Assemble Upper Leg with Motor/Fan Housing, part. A,B,F,C

Place the Motor/Fan Housing "A" Carefully upside down on the floor.

Locate the 4off Upper leg square tubes "B".

Line up the holes in the angled end of the Upper Leg square tubes with the pre-drilled holes in the mounting plates to each corner of the Motor/Fan Housing and secure using button head bolts and 5mm Hex key.

Fit the 4off Leg connector brackets "F" (with the cutout on one end of them sticking out!) into the Upper leg square tubes. Screw in 4 button head bolts to each leg assembly and tighten. Slide on the Lower Square Leg Tubes "C" onto the 4 Leg connector brackets (noting the 4 threaded holes in each Lower Square Leg Tube at the assembly point are to the front away from center of machine.)

Screw in 4 button head bolts to each leg assembly and tighten.





### Step 2 Assemble Bracket and Leg, part.D,E

Locate the two long "D"

and short cross support brackets "E"

. Line up the pre-drilled holes in one of the cross support brackets with the pre-drilled holes to the front face of the lower leg support tubes.

Secure using four button head bolts. Repeat for the remaining cross support brackets.







### Step 3 Assemble Round Collector Main Housing part.G

Place the main housing upside down, and place the Round Collector on the housing on motor side with inlet Chute positioned. Fixing by 12 off, 3/16" x 3/8" Cap screws around drum and 6 off, 1/4 Hex head Bolts on leg supports.



<u>Step 4</u> Assemble Reducing Collector, part.L

Locate the Reducing collector. Loosen the clamping rig bolt/nut to the base of the Reducing collector, lower the wide end of Reducing collector on top of Round Collector and line up the rims. Position the belt clamp over the rims and tighten the bolt/nut to lock both units together.





Step 5 Assemble The Drum lid, part.J

Locate the drum lid, 1/4"Hex bolts, 1/4" nuts and the supplied 10-12mm spanner. Place the drum lid face up, on top of Reducing collector. Line up the pre-drilled holes, place a Hex bolt down through one of the holes and lightly secure with a 1/4"nut. Repeat for the remaining holes then fully tighten



Locate the four wheel.

Screweach wheel into the threaded holes on top of legs, leaving sticking out about 20mm (to be adjusted later) Lightly tighten the nut at the base of each wheel to lock the assembly in position at the leg as shown.





<u>Step 7</u> Assemble The Dust drum, part.l Position the belt clamp over the upper and lower drum, place the bolt/nut and tighten to lock both units together.





Step 8 Assemble The Casters

Locate the four ball casters at the base of the dust drum.

### Step 9 Assemble The Clips

Locate the clips remove the four nuts and screws to one of the clips and place safely aside. Line up the holes in the clips assembly





### Step10 Assemble The Handle, part.R

Fit Handle to Drum using 2 off 1/4" x 3/4" long Truss head bolt as shown, with Washer and nut fitted on inside.



### **Step11** Assemble The Spindle, part.O

Insert the threaded Hex bolts through the holes and finger tighten, make sure the seal on top of the filter is flush against the underside of the housing. Using a spanner or ratchet tighten the six Hex bolt.

Put the spindle, loosen the two cap head screws on the drive socket and slot the Hex drive over the shaker paddle drive shaft. Tighten the cap head screws to secure the spindle.



### Step13 Assembly the handle of canister filter, part.P

Find the shaker paddle operating handle and M6x12mm bolt. Insert the handle's drive socket onto the shaker paddle's drive shaft and screw on the M6 bolt.

### Step12 Fix the housing cover, part.K

Locate the housing cover with the cap head screws.









### Step14 Assembly the switch plate, part.H

Remove the bag packaging from the switch assembly. Locate the two remaining 5/16" Hex bolts, line up the two pre-drilled holes in the switches mounting bracket with the threaded holes to the underside of the motor assembly housing and secure using the Hex bolts.



Fix the 1-1/2"hose on the tube of the round collector and the dust drum.







### Step16 Assembly the belt clamp, part.Q

Locate the remaining dust bag and securing belt. Open up the bag and rap it around the base of the canister filter assembly. Straighten the retaining belt, wrap it around the filter and dust bag and latch it down to hold and to seal the filter assembly.



Fit as shown and fasten with 3x 3/16"x 3/8 socket head cap screws.



Locate the large dust bag, open the bag and place it inside the Dust drum.

The drum can now be wheeled under the drum Lid of the reducing collector and Clipped up into place with the 3 toggles supplied.

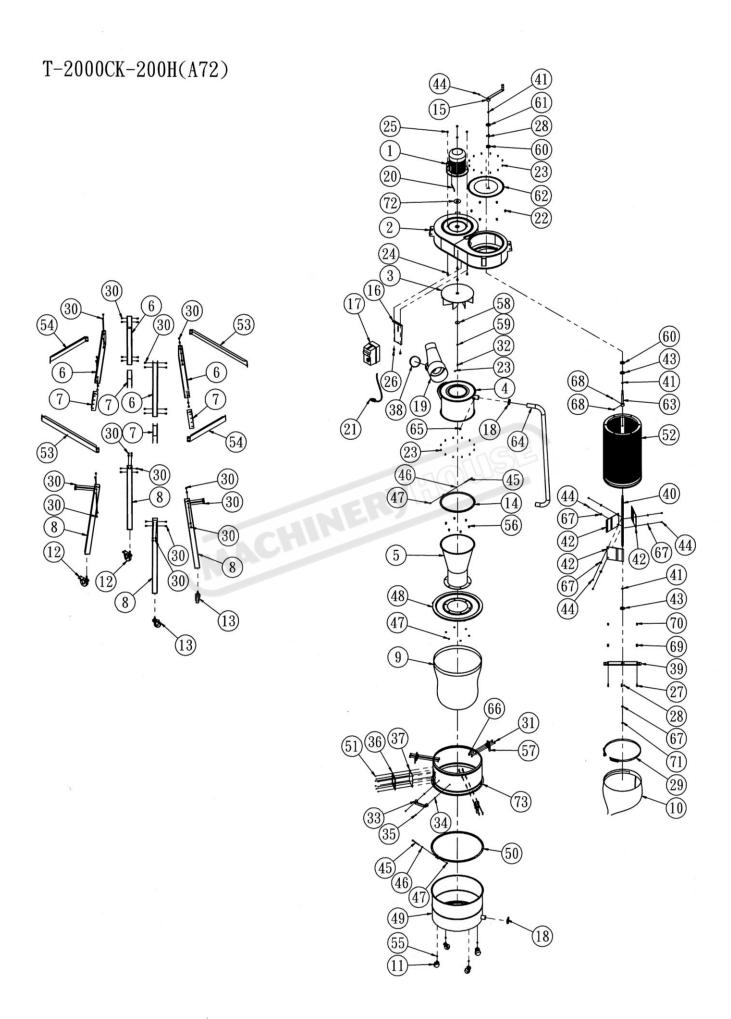
At this stage the 4 Wheels on the legs of the machine may need adjusting up or down so as to allow the drum to be easily wheeled under the lid, clipped up and lifted of the floor when done. When wheels are correct height, lock the lock nut on the thread of the wheel up.







Now . The cyclone is ready for running testing



### Part List

No.	Description	Q'TY	No.	Description	Q'TY
1	Motor	1	38	Inlet cap 4"	1
2	Main housing	1	39	Lower Fixing Plate	1
3	Impeller 12-3/4"	1	40	Main Spindle	1
4	Round Collector	1	41	Bearing	3
5	Reducing Collector	1	42	Rubber Flapper	3
6	Upper Leg	4	43	Bearing Fixing Plate	2
7	Connecting Tube	4	44	Hex bolt M6x16	7
8	Lower Leg	4	45	Phillip Round HD Screw 1/4"x4"	2
9	PE bag	1	46	Washer 1/4"*13	2
10	PE bag (small)	1	47	Flange nuts 1/4"	. 8
11	Caster 2"	4	48	Drum lid	1
12	Wheel 3"	2	49	Lower Drum	1
13	Wheel 3"	2	50	Belt clamp 525	1
14	Barrel clamp 347	1	51	Rivet	8
15	N type handle	1	52	Canister filter	1
16	Switch plate	1	53	Long Brace	2
17	Magnetic Switch 2hp	1	54	Short Brace	2
18	Hose Clamp 1-3/4"	2	55	Nuts 5/16"	4
19	Inlet	1	56	Flange screw 1/4"*1/2"	6
20	Moror cord	1	57	Clip	3
21	wire	1	58	Impeller washer	1
22	Flange bolt 5/16"*1/2"	6	59	Spring washer	1
23	Phillip Round screw 3/16"*1/2"	25	60	Rubber Pad	2
24	Flange bolt 5/16"*3/4"	4	61	Bearing Fixing Plate( No Thread)	1
25	Domed nuts 5/16"	4	62	Housing Cover	1
26	Flange screw 5/16"*3/4"	2	63	Connecting Spindle	1
27	Phillip Round HD Screw M5*15mm	4	64	Hose 1-1/2"	1
28	Phillip Round HD Screw M5*10mm	. 6	65	Hose clamp 3/4"	1
29	Belt clamp	1	66	Lock nuts M4	12
30	Button HD Screw 5/16"*1/2"	64	67	Flat washer 1/4"*18	7
31	Round HD Screw M4*8mm	12	68	Cap screw M6*12	2
32	Cap screw M6*16	1	69	Meter Fixing Plate	2
33	Plastic handle	. 1		Nuts M5	4
34	Nuts 1/4"	2		Phillip Round HD Screw M6*10	1
	Phillip Round Truss Head Screw 1/4"*4"	2		Motor Packing	1
	Square Pad	1		Upper Drum	1
	PC board	1			



### **General Machinery Safety Instructions**

### **Machinery House**

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

- 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.
- 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.
- 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. Tum 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. Donot 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 ellergic 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.





### **Wood Dust Collector Safety Instructions**

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

- Maintenance. Make sure the Dust collector 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. Dust collector Condition.** Dust collector must be maintained for a proper working condition. Never
  - operate a Dust collector that has damaged or worn parts. Scheduled routine maintenance should performed on a scheduled basis.
- 3. Inlet Hazard. Do not place hands or tools near the
  - open inlets during operation for any reason. The impeller could cause serious damage to body parts if touched while spinning.
- 4. Avoiding Entanglement. Guards and dust bags must be used at all times. Remove loose clothing, belts, or jewelry items. Tie up long hair and use the correct hair nets to avoid any entanglement with the Dust collector.
- **5. Understand the machines controls.** Make sure you understand the use and operation of all controls.
- 6. Power outage. In the event of a power failure during use of the Dust collector, turn off all switches to avoid possible sudden start up once power is restored.
- 7. Work area hazards. Keep the area around the Dust collector clean from oil, tools, chips. Pay attention to other persons in the area and know what is going on around the area to ensure unintended accidents.

- **8. Hearing protection and hazards.** Always wear hearing protection as noise generated from dust collector can cause permanent hearing loss over time
- 9. Dust Collector use. This Dust Collector is designed to be used with wood only. Do not pick up material that can not safety pass through the impeller.
- **10. Fire Hazard.** Do not use this dust collector to pick up metal scraps and filing as they could spark by
  - hitting the spinning impeller and cause a severe fire hazard.
- **11. Bags &guards.** All safety bags and guards must be used at all times. Bags must be replaced when damaged.
- **12. Emptying bags hazard.** Always wear a respirator and safety glasses when emptying dust into approved containers and dispose of properly.
- **13. Wood dust may cause allergic reactions.** Make sure you know what type of dust you are exposed to as it may cause you an allergic reaction. Always wear an approved respirator.
- **14. 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**

## Wood Dust Collector

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)

ltem	Hazard	Hazard	Risk Control Strategies
No.	Identification	Assessment	(Recommended for Purchase / Buyer / User)
В	CRUSHING	LOW	Ensure dust collector is on level solid ground and in a safe place to avoid tipping.
C	CUTTING, STABBING,	MEDIUM	Isolate power to machine prior to any checks or maintenance being carried out.
	PUNCTURING		Do not adjust or clean dust collector until fully stopped.  Ensure hose remains fitted to prevent access to fan blade.
			Keen hody parts away from moving parts.
I	ELECTRICAL	MEDIUM	All electrical enclosures should only be opened with a tool that is not to be kept with the machine.
0	OTHER HAZARDS, NOISE.	MOT	Wear hearing protection as required.
			NE NE
			CH
			A
		Plant Safety Proc	Plant Safety Program to be read in conjunction with manufactures instructions





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Authorised and signed by:
Safety officer:......

Manager: ......

Revised Date: 12th March 2012