















































## 6.4 TROUBLESHOOTING

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts then follow the procedure in beginning of the spare parts section or if additional help with a procedure is required, then contact you distributor.

**Note: Make sure you have the model of the machine, serial number, and manufacture date before calling.**

Symptoms	Possible Cause	Possible Solution
Machine does not start	<ol style="list-style-type: none"> <li>1. Emergency stop button depressed/at fault.</li> <li>2. Plug/receptacle at fault/wired wrong.</li> <li>3. Incorrect power supply voltage or circuit size.</li> <li>4. Power supply circuit breaker tripped or fuse blown.</li> <li>5. Wiring open/has high resistance.</li> <li>6. Capacitor at fault.</li> <li>7. Master power switch at fault.</li> <li>8. Motor at fault</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate button head to reset. Replace.</li> <li>2. Test for good contacts; correct the wiring.</li> <li>3. Ensure correct power supply voltage and circuit size.</li> <li>4. Ensure circuit is sized correctly and free of shorts. Reset breaker or replace fuse.</li> <li>5. Check/fix broken, disconnected, or corroded wires.</li> <li>6. Test; check/fix broken wiring; replace capacitor.</li> <li>7. Test/replace switch.</li> <li>8. Test/repair/replace.</li> </ol>
Machine stalls or is under-power	<ol style="list-style-type: none"> <li>1. Workpiece crooked; vise jaws are loose or incorrectly adjusted.</li> <li>2. Machine undersized for task.</li> <li>3. Wrong workpiece material.</li> <li>4. Dull blade.</li> <li>5. Plug/receptacle at fault.</li> <li>6. Motor wired incorrectly.</li> <li>7. Motor overheated.</li> <li>8. Contactor not energized.</li> <li>9. Motor bearings at fault.</li> <li>10. Gearbox at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Straighten or replace workpiece/adjust vise jaws to avoid workpiece binding saw blade.</li> <li>2. Use correct blade; reduce feed rate, use more coolant if possible.</li> <li>3. Use correct type/size of metal for cutting operation.</li> <li>4. Sharpen/replace blade.</li> <li>5. Test for good contacts/correct wiring.</li> <li>6. Wire motor correctly.</li> <li>7. Clean motor, let cool, and reduce workload.</li> <li>8. Test all legs of contactor; repair/replace.</li> <li>9. Test/repair/replace.</li> <li>10. Replace broken or slipping gears.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Workpiece loose.</li> <li>2. Machine incorrectly mounted to floor.</li> <li>3. Motor or component loose.</li> <li>4. Motor fan rubbing on fan cover.</li> <li>5. Motor bearings at fault.</li> <li>6. Gearbox at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use correct vise locations and re-clip workpiece.</li> <li>2. Tighten mounting bolts; relocate/shim machine.</li> <li>3. Inspect/replace damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>4. Fix/replace fan cover; replace loose/damaged fan.</li> <li>5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>6. Replace broken or slipping gears.</li> </ol>
Premature blade wear.	<ol style="list-style-type: none"> <li>1. Cutting pressure too high.</li> <li>2. Cutting pressure too low.</li> <li>3. Incorrect blade for material type.</li> <li>4. Inadequate blade lubrication</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce cutting pressure.</li> <li>2. Increase cutting pressure.</li> <li>3. Choose correct blade for material type.</li> <li>4. Check level of cutting fluid, valve position, fluid screens, functionality of pump, and flow of hose.</li> </ol>
Teeth breaking or chipping.	<ol style="list-style-type: none"> <li>1. Material type too hard, incorrectly shaped, or has flaws.</li> <li>2. Wrong tooth pitch/profile.</li> <li>3. Workpiece not secured in vise.</li> <li>4. Vibrations in machine causing blade to "bounce" on workpiece.</li> <li>5. Cutting pressure too high.</li> <li>6. Teeth touching workpiece before cut starts</li> <li>7. Inadequate blade lubrication.</li> </ol>	<ol style="list-style-type: none"> <li>1. Decrease cutting pressure, ensure workpiece does not contain flaws.</li> <li>2. Choose correct blade for material type.</li> <li>3. Check vice, jaws, and clamping pressure.</li> <li>4. Find/correct source of machine vibration.</li> <li>5. Reduce cutting pressure.</li> <li>6. Do not allow blade teeth to touch workpiece during start-up.</li> <li>7. Check level of cutting fluid, valve position, functionality of pump, and flow of hose.</li> </ol>

# SPARE PARTS SECTION

## COLD SAW

### Model. CS-275A

Order Code S822

*Edition No* : CS-275A-1

*Date of Issue* : 04/2021

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.

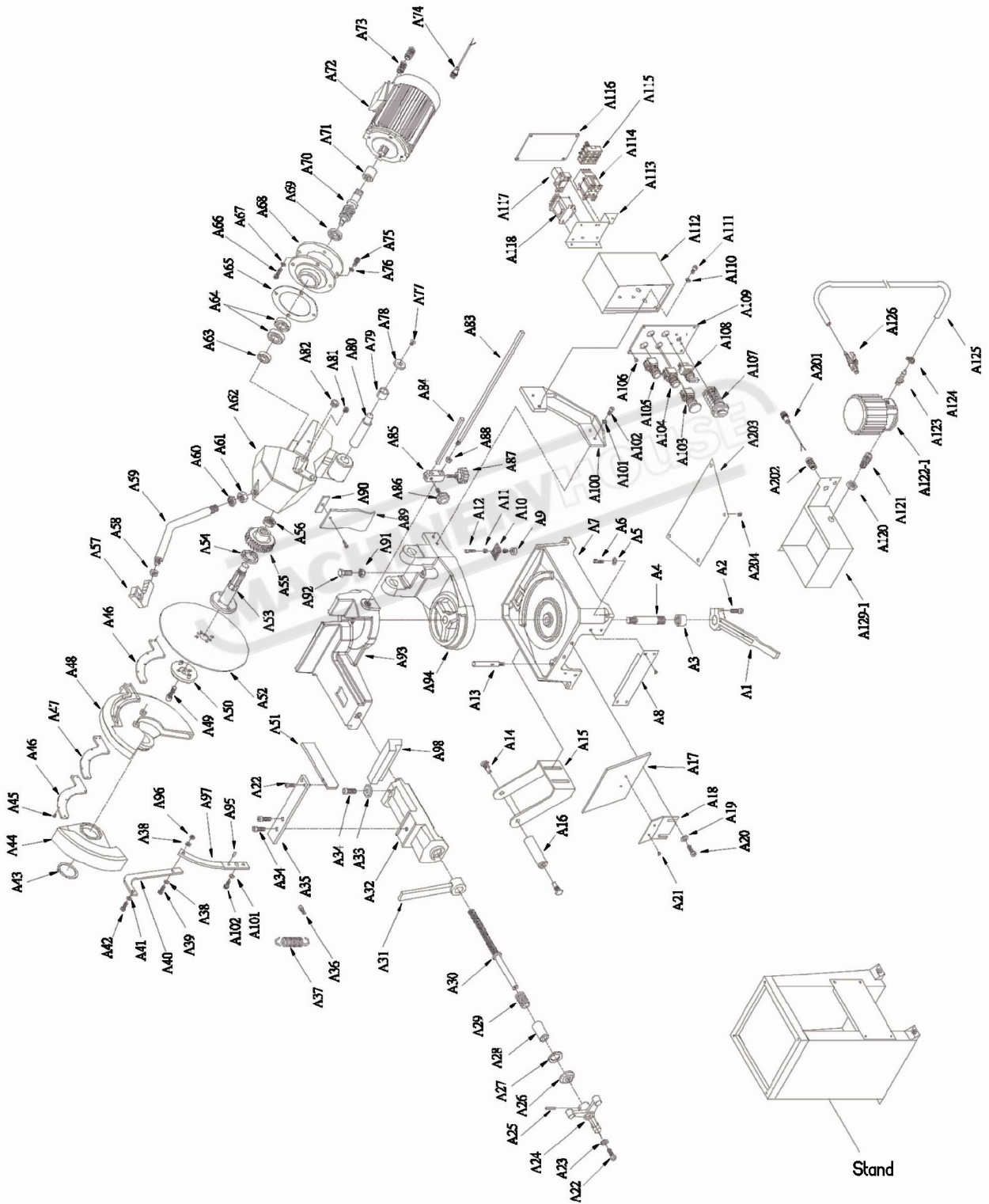
#### HOW TO ORDER SPARE PARTS

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
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.

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**SPARE PARTS DIAGRAM**





**OPERATION MANUAL**

**SPARE PARTS LIST**

ITEM	DESCRIPTION	SIZE	QTY	ITEM	DESCRIPTION	SIZE	QTY
A1	LOCK HANDLE		1	A41	WASHER	1/4"	1
A2	HEX SOCKET CAP SCREW	M10X30	1	A42	HEX SOCKET CAP SCREW	M6X12	1
A3	LOCK NUT		1	A43	C-CLIP	S60	1
A4	SHAFT		1	A44	BLADE SHIELD		1
A5	SPRING WASHER	5/16"	4	A45	SCREW	M5X10	7
A6	HEX SOCKET CAP SCREW	M8X35	4	A46	PLATE		2
A7	MACHINE BASE		1	A47	RUBBER SHEET		2
A8	PLATE		1	A48	BLADE COVER		1
A9	COUNTER WEIGHT		1	A49	HEX SOCKET CAP SCREW	M12X35	1
A10	FILTER NET		1	A50	FIXING FLANGE		1
A11	NUT		2	A51	STOPPER		1
A12	HEX SOCKET CAP SCREW	M8X25	1	A52	SAW BLADE		1
A13	SUPPORT ROD		1	A53	SPINDLE SHAFT		1
A14	ROLLER SHAFT		2	A54	OIL SEAL	35X47X8	1
A15	ROLLER BRACKET		1	A55	WORM GEAR		1
A16	ROLLER		1	A56	LOCK NUT		1
A17	PLATE		1	A57	TRIGGER SWITCH WITH HANDLE		1
A18	PLATE		1	A58	NUT	M10	1
A19	WASHER	5/16"	2	A59	CONTROL HANDLE ROD		1
A20	HEX SOCKET CAP SCREW	M8X16	2	A60	NUT	M20	1
A21	SCREW	M5	2	A61	NUT	M20	1
A22	HEX SOCKET CAP SCREW	M8X20	3	A62	MACHINE HEAD		1
A23	WASHER	5/16"	1	A63	BALL BEARING	6205ZZ	1
A24	HANDLE WHEEL		1	A64	BALL BEARING	6301ZZ	2
A25	PIN	5X40	1	A65	RUBBER SHEET		1
A26	BEARING COVER		1	A66	HEX CAP SCREW	M8X20	4
A27	THRUST BEARING		1	A67	WASHER	5/16"	4
A28	BUSHING		1	A68	FLANGE		1
A29	SPRING		1	A69	OIL SEAL	25X45X10	1
A30	LEADING SCREW		1	A70	WORM SHAFT		1
A31	LOCK HANDLE		1	A71	COUPLING		1
A32	SLIDING VISE		1	A72	MOTOR 1HP		1
A33	WASHER		1	A73	WIRE TERMINAL CLAMP		2
A34	HEX SOCKET CAP SCREW		2	A74	CONTROL WIRE		1
A35	PLATE		1	A75	HEX CAP SCREW	M8X20	4
A36	SCREW	M10X30	1	A76	WASHER	5/16"	4
A37	SPRING		1	A77	SCREW	M8	2
A38	WASHER	1/4"	2	A78	COVER		2
A39	HEX SOCKET CAP SCREW	M6X25	1	A79	BUSHING		1
A40	SWITCHING HANDLE		1	A80	SHAFT		1

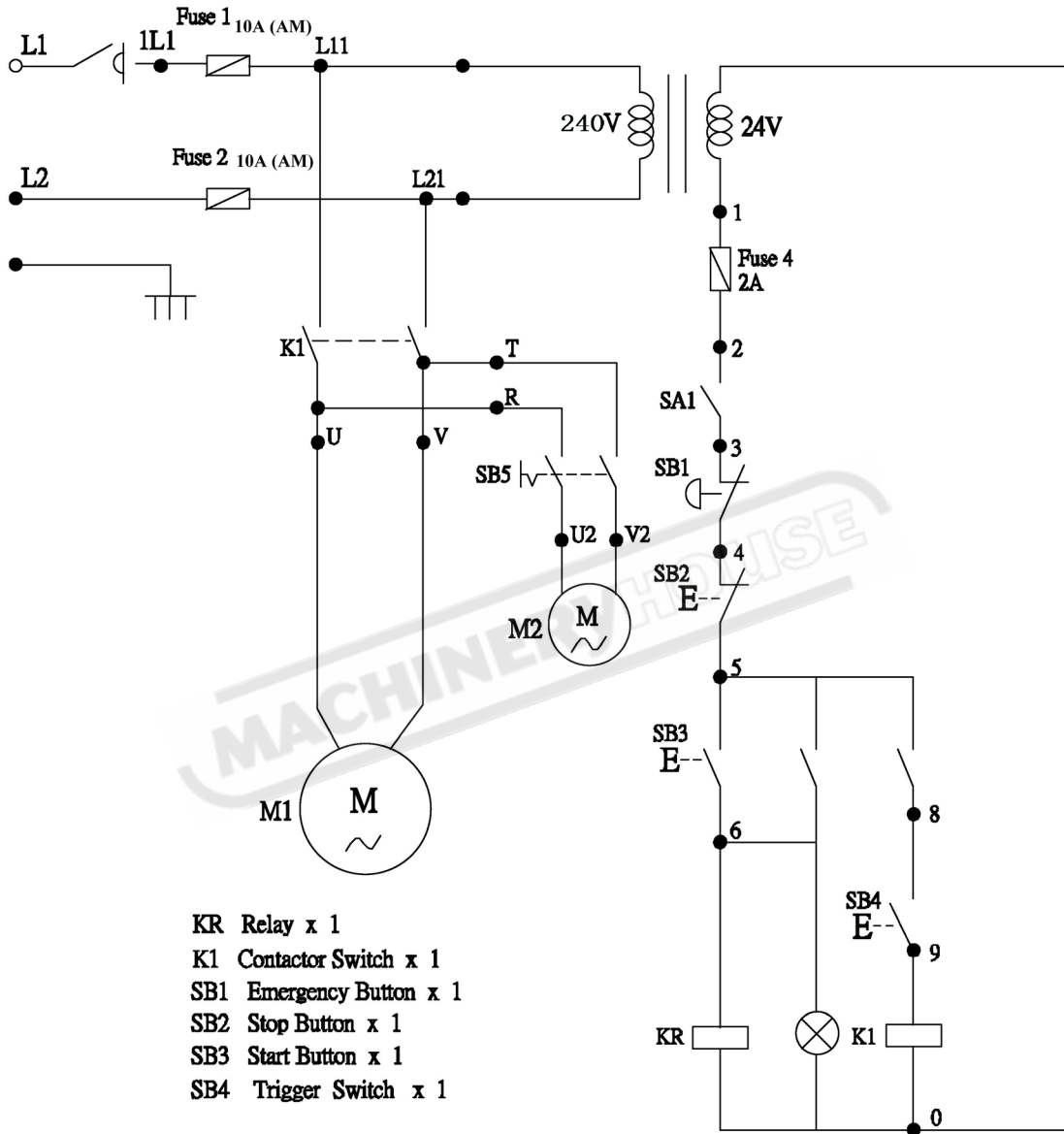
**NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY**

**SPARE PARTS LIST**

ITEM	DESCRIPTION	SIZE	QTY	ITEM	DESCRIPTION	SIZE	QTY
A81	SET SCREW	PT1/4"	2	A123	CONNECTING BOLT		1
A82	OIL PILOT	20M/M	1	A124	HOSE CLAMP		2
A83	LOWER LENGTH SETTING ROD		1	A125	HOSE		1
A84	UPPER LENGTH SETTING ROD		1	A126	VALVE		1
A85	LENGTH SETTING RODS HOLDER		1	A129-1	COOLANT TANK		1
A86	LOCK BOLT WITH KNOB		1	A201	CONTROL WIRE		1
A87	LOCK BOLT WITH KNOB		1	A202	WIRE TERMINAL CLAMP		1
A88	NUT	M12	1	A203	SUPPORT PLATE		1
A89	ANTI-DUST PLATE		1	A204	HEX. CAP SCREW	M6X10	4
A90	HOLDER PLATE		1				
A91	NUT	M12	1				
A92	HEX CAP SCREW		1				
A93	WISE BENCH		1				
A94	SWING ARM (BASE)		1				
A95	PIN	5X14	2				
A96	NUT	M6	1				
A97	SWITCHING SUPPORTER		1				
A98	WISE CLAMP		1				
A100	SUPPORTER		1				
A101	WASHER	5/16"	2				
A102	HEX SOCKET CAP SCREW	M8X20	2				
A103	EMERGENCY SWITCH		1				
A104	START BUTTON		1				
A105	STOP BUTTON		1				
A106	SCREW	M5	4				
A107	SELECT SWITCH		1				
A108	PUMP SELECTION SWITCH		1				
A109	CONTROL PANEL		1				
A110	WASHER	5/16"	2				
A111	HEX SOCKET CAP SCREW	M8X20	2				
A112	ELECTRIC CONTROL BOX		1				
A113	CONTROL BOX BOTTOM PLATE		1				
A114	MAGNETIC CONTACTOR		1				
A115	FUSE SET		1				
A116	COVER PLATE		1				
A117	RELAY		1				
A118	TRANSFORMER		1				
A120	NUT	M20X1.5	1				
A121	PT SCREW		1				
A122-1	COOLANT PUMP		1				

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

**WIRING DIAGRAM**



- KR Relay x 1
- K1 Contactor Switch x 1
- SB1 Emergency Button x 1
- SB2 Stop Button x 1
- SB3 Start Button x 1
- SB4 Trigger Switch x 1

**WIRING SPARE PARTS LIST.**

Item name	Description and function	Technical data	Quantity	Supplier	Suppliers reference	Remarks
FU1 FU2 FU3	Fuses	10A(T) 10A(T) 2A	1 1 1	JENN FENG	S15A	
	Fuses base	10A 3P	1		FSB-104	CE
K1	Contactors	Coil 24V I <sub>e</sub> =25A 220V 2.2kw 400V 4.0kw	1	NHD	C-09D	ICE 158-1 BS 5424-1 VDE 0660 J13 8325
KR	Relay	250VAC 5A	1	SHINOHAWA	MY-2N AC 24V	CE CSA
TC	Transformer	35VA 400/24V	1	JIA LIXIN	57	
SB1	Emergency Stop	250V 6A	1	KEDU	HY57B	CE CUS
SB2 SB3	OFF button Start button	250V 6A	1 1	MAACK	ABF-22Φ 1b ABLFS-22Φ 1a 30V	CE CUS
SB4	Trigger switch	15A 1/2HP 125 250VAC 0.6A 125VDC 0.3A 250VDC	1	OMRON	V-15-1A5	CE CUS
SB5	Pump switch	250V	1	GIKOKA	OSS-22Φ	CE CUS
SA1	Hi/Low speed select switch	440V 5kw	1	KEDU	ZH-HC-5	CE CUS
M1	Motor	220V~240V/ 0.75kw (1HP) 1ph/4P	1	KAI SHEN		
M2	Coolant pump	220~240V / 1ph 0.09kw (1/8HP)	1	KAI SHEN		

# WARNING

## General Machinery Safety Instructions

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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

## Metal Cutting Coldsaw Safety Instructions

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

- 1. Maintenance.** Make sure the saw 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. Saw Condition.** Saw must be maintained for a proper working condition. Never operate a saw that has damaged or worn parts. Scheduled routine maintenance should be performed on a scheduled basis.
- 3. Blade Condition.** Never operate a saw with a dull, cracked or badly worn blade. Before using a saw inspect blades for missing teeth and cracks.
- 4. Replacing Blade.** Make sure teeth are facing the correct direction. Wear gloves to protect hands.
- 5. Hand Hazard.** Keep hands and fingers clear from the line of cut of the blade and offcuts workpieces. Hands can be crushed in vice or from falling machine components and cut by the blade.
- 6. Leaving a saw Unattended.** Always turn the saw off and make sure all moving parts have come to a complete stop before leaving the saw. Do not leave saw running unattended for any reason.
- 7. Avoiding Entanglement.** Blade guard must be used at all times. Remove loose clothing, belts, or jewelry items. Never wear gloves while machine is in operation. Tie up long hair and use the correct hair nets to avoid any entanglement with the saw moving parts.
- 8. Understand the machines controls.** Make sure you understand the use and operation of all controls.
- 9. Power outage.** In the event of a power failure during use of the saw, turn off all switches to avoid possible sudden start up once power is restored.
- 10. Work area hazards.** Keep the area around the saw 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.
- 11. Workpiece Handling.** Workpieces must be supported with table, vice, roller conveyor/stands, or other support fixtures. Unsupported workpieces may cause the machine to tip over and fall. Flag long pieces of material to avoid tripping hazards. Never hold a workpiece with your hands during the cut process.
- 12. Hearing protection and hazards.** Always wear hearing protection as noise generated from saw blade and workpiece vibration, material handling, and power transmission can cause permanent hearing loss over time.
- 13. Hot surfaces.** Workpieces, machine surfaces and chips become hot due to friction and can burn you.
- 14. Starting position.** Never turn the saw on when the blade is resting on the workpiece.
- 15. Guards.** Do not operate saw without the blade guard in place. Ensure all guards removed to do maintenance or change blades on the machine are refitted correctly in place before the machine is used again.
- 16. 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**

### **Metal Cutting Coldsaw**

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 Long / heavy material
C	CUTTING, STABBING, PUNCTURING	MEDIUM	Isolate main power switch before changing blade, cleaning or adjusting. Check blade is tight and in good condition before starting. Make sure blade guard is down in correct position when machine is on.
D	SHEARING	MEDIUM	Make sure all guards are secured shut when machine is on. Isolate power to machine prior to any checks or maintenance.
F	STRIKING	LOW	Support long heavy jobs and stand clear of offcuts falling. Remove all loose objects around moving parts. Wear safety glasses.
H	ELECTRICAL	MEDIUM	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 hearing protection as required.
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