INSTRUCTION MANUAL

H-400HA-NC Automatic Hitch Feed Double Column Band Saw (415V) 420 x 400mm (W x H) Rectangle





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.
- 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.
- Always wear correct safety glasses. When machining you must use the correct eye protection to prevent injuring your eyes.
- 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.
- 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.
- Keep machine well guarded. Make sure guards on machine are in place and are all working correctly.
- 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 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.

MACHINERYHOUSE



Metal Cutting Bandsaw Safety Instructions

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

- Maintenance. Make sure the bandsaw 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. Bandsaw Condition. Bandsaw must be maintained for a proper working condition. Never operate a bandsaw that has damaged or worn parts. Scheduled routine maintenance should performed on a scheduled basis.
- Blade Condition. Never operate a bandsaw with a dull, cracked or badly worn blade. Before using a bandsaw inspect blades for missing teeth and cracks.
- 4. Replacing Blade. Make sure teeth are facing the correct direction. Wear gloves to protect hands and wear safety glasses to protect your eyes.
- 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 bandsaw Unattended. Always turn the bandsaw off and make sure all moving parts have come to a complete stop before leaving the bandsaw. Do not leave bandsaw 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 bandsaw moving parts.
- Understand the machines controls. Make sure you understand the use and operation of all controls.

- Power outage. In the event of a power failure during use of the bandsaw, turn off all switches to avoid possible sudden start up once power is restored.
- 10. Work area hazards. Keep the area around the bandsaw 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 bandsaw 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 bandsaw on when the blade is resting on the workpiece.
- **15. Guards.** Do not operate bandsaw without the blade guard in place or with the doors open. 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 you nearest branch service department for help.

PLANT SAFETY PROGRAM

NEW MACHINERY HAZARD IDENTIFICATION, ASSESSMENT & CONTROL

Metal Cutting Bandsaw

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)

Plant Safety Program to be read in conjunction with manufactures instructions	Plant Safety Pro		
			(
Wear hearing protection as required.	MOT	OTHER HAZARDS NOISE	0
Machine should be installed & checked by a Licensed Electrician.			
All electrical enclosures should only be opened with a tool that is not to be kept with the machine.	MEDIUM	ELECTRICAL	I
Wear safety glasses			
Remove all loose objects around moving parts.			
Stand clear of machine when in operation.			
Support long heavy jobs and stand clear of offcuts.	MOT	STRIKING	П
Isolate power to machine prior to changing belts or maintenance.			
Make sure all guards are secured shut when machine is on.	MEDIUM	SHEARING	0
Check blade tracking before starting.			
If blade breaks do not open door until both wheels have stopped.			
Isolate main power switch before changing blade, cleaning or adjusting.			
Wear gloves when changing blades.			
Blade guide system should be adjusted to suit material width.		PUNCTURING	
Blade guards should always be in the closed position before starting machine.	MEDIUM	CUTTING, STABBING,	C
Secure & support Long / heavy material	LOW	CRUSHING	В
Eliminate, avoid loose clothing / Long hair etc.	HIGH	ENTANGLEMENT	Α
(Recommended for Purchase / Buyer / User)	Assessment	Identification	No.
Risk Control Strategies	Hazard	Hazard	Item



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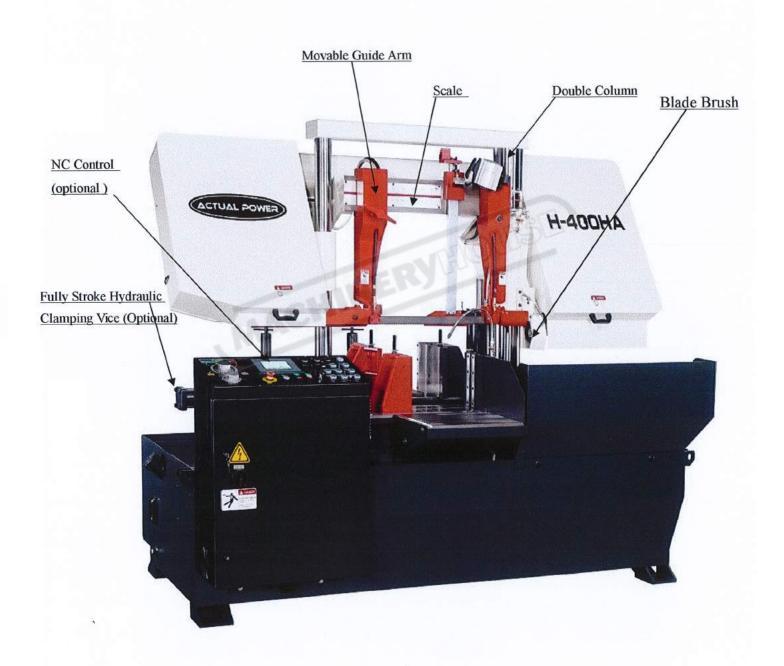
Authorised and signed by: Safety officer:...

Manager:.....

Revised Date: 12th March 2012

I: CHARACTERISTIC & SPECIFICATION

1. MODEL: H-400HA



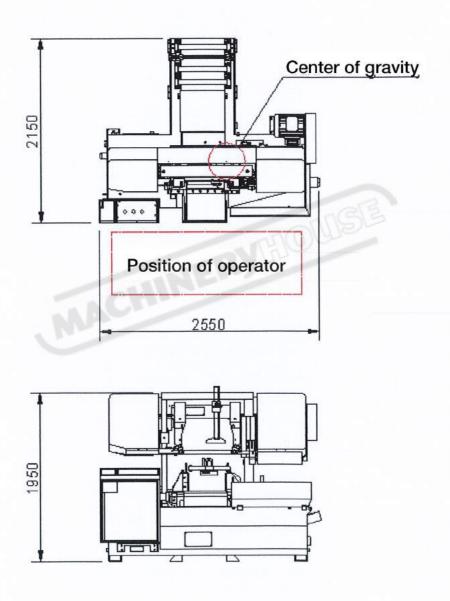
2. SPECIFICATION:

MODEL NO.	4 = 4	H-400HA
CADA OUTV		o 400mm
CAPACITY		□ 420x400mm
BUNDLE CUT	TING	200x100 ~ 350x200mm (WxH)
BLADE TENS	ION	HYDRAULIC
BLADE SIZE		L4880xW41xT1.3mm
	BLADE	5.5KW 7.5HP
MOTOR	HYDRAULIC	1.5KW 2HP
MOTOR	COOLANT	0.2KW 1/4HP
TABLE HEIGI	HT	800mm
MACHINE WE	IGHT (N.W.)	2500kgs
HYDRAULIC (OIL CAPACITY	90L
CUTTING OII	CAPACITY	110L
MATERILA LEN	IGTH OF SINGLE FEED	500mm x 9
FLOOR SPAC	Е	2650 x 2200mm

II: MACHINE INSTALLATION

1. Machine Installation

Please figure out enough space for working, inspection and maintenance afterward. Refer to the machine floor space drawing below:

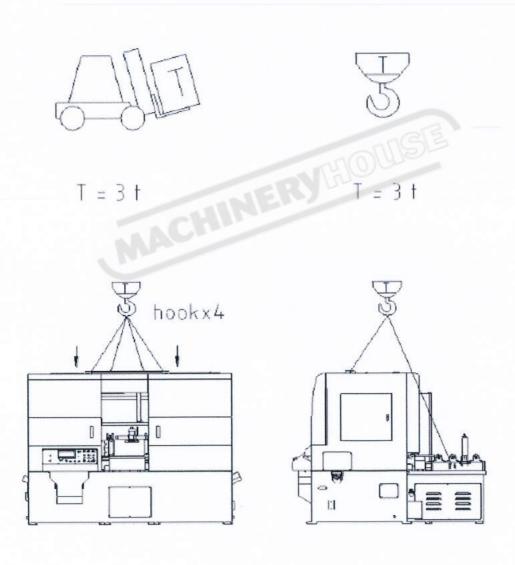


2. Machine Transportation

Be careful to take apart the outer package and fixing screw. Please make use of forklift truck or overhead crane to transit the machine. During the process, please keep the machine balance in the forklift truck and avoid to have any impact or tremble happened when machine was transported by the overhead crane.

(Note: please lift the machine from the hook exactly.)

(Machine Weight: 2350kgs)



3. Clean

After positioning the machine, clean up the anticorrosive from the machine, then lay on a coat of thin oil.

(Please removes the fixing iron plate between saw frame and table before machine operation.)

4. Adjust Level And Fixing

To calibrate the machine level for the correct flow direction of cooling water and accurate saw cutting.

There are ten adjusting screws at the base for adjusting the machine level.

5. Hydraulic Oil Level

Check the oil drain port screw was tighten or not then look over the level of hydraulic oil in the oil tank from the oil gauge. If the oil level is too low, please open the oil tank cover and pour into the standard capacity. Before the machine delivery, the oil tank was loaded with enough capacity previously.

6. Cooling Water

Before the machine delivery, the cooling water should be drained out completely. Please infuse the enough cooling water into the machine before operation. Check the drain water port screw was tighten or not and then implant the suitable water volume. The aperture of filling is under the meshed hole of steel blade brush.

7. Power Supply

- 1. Before connect the power please make sure the wire is long enough to connect between the power supply and machine.
- 2. Switch OFF the power supply and connect the machine wire. Please confirm the power voltage is matched with machine. Connect the power wire and ground wire precisely.
- 3. Before switch ON the power supply, please check the wire connection is correct or not.
- 4. Draw up the emergency switch and turn on the power, at this time the lamp will be lighted up to show the power was connected completely.
- 5. Press the hydraulic button on the control panel.(Note: Please removes all of the transport fixing screw before this procedure.)
- 6. Press the UP button of saw frame.

- 7. Press the emergency switch to cut off the power supply.
- 8. Turn off the power supply switch.
- 9. Exchange the two wires of the power supply.
- 10. Repeat the step of 3 and 6.

8. Inspection Before Operation

After the complete machine installation, please do the final inspection properly.

The item is listed as below:

- 1. Take all of the fixing plate for transporting purpose off.
- 2. Check screws and fixing items.
- 3. Check water pipe and wire guide tube.
- 4. Make sure the cooling water is enough and hydraulic pressure is normal.

MACHINERY

5. Tools or other materials should not be left on the machine.

III: OPERATION METHOD

1. The Description Of Operation Panel **MODEL: H-400HA**



(1) Emergency Stop Button

Press the button to stop all of the machine function. (picture 1)



(picture 1)

(2) Power Light

When the emergency stop switch was drew up, the power lamp will be lighted up to show the normal connection of electric power. (picture 2)



(picture 2)

(3) Hydraulic Button

Press this button to start the hydraulic motor. (picture 3)



(picture 3)

(4) Blade Start Button

Press this button to start the saw blade motor and coolant pump at the same time. The saw frame will descend according to the speed of flow control valve. (picture 4)



(picture 4)

(5) The Button For Material Zero Point Search Of Automatic Feed

Under the clamping situation of feed clamp (and manual mode), the materials will be clamped to move ahead by feed table to the zero point automatically. (the material original cutting point) The button lamp will be lighted up after the finish of this process. Afterward, please choose circulation by repeat or single circulation as the requirement, and press the start button of blade. The material will be cut as the previous setting.





(6) The Switch For Choosing Cooling Water

(picture 6)



* Turn to the position of to stop the coolant pump. (picture 6)

(7) The Adjusting Switch For Hydraulic Carbide Fixture

* Turn the position to the carbide fixture will be clipped tight.



* Turn the position to _____ the carbide fixture will be loosen.

(Carbide fixture is under the situation of being clipped, when the blade was started)

(picture 7)



(8) The Switch For Work Light

For work light use only.

(picture 8)



(9) The Adjusting Switch For Blade Tension

* Turn the position to

The blade tension will be tighten.

* Turn the position to
The blade tension will be loosen
(picture 9)

(picture 9)



(10) The Switch For Blade Cutting Speed

To control the rotational speed of blade cutting. Clockwise turn for acceleration, counterclockwise one for deceleration. (picture 10)

(Picture 10)

(11) The Switch For Circulation And Manual Mode Changeover

* Turn the position to Materials will be cut under the mode of circulation by repeat.

* Turn the position to

* Turn the position to

For single circulation work.

(picture 11)

(picture 11)



(12) The Adjusting Button For Movable Clamp Of Feeding Table

Press this button

the work piece will be clipped tight by the clamp.

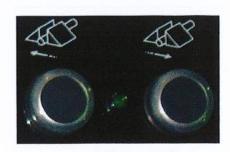
When the lamp was lighted on, the clipping process was finished completely.

Press this button

The work piece will be loosen.

(picture 12)

If the guide wheel base is not higher 20mm than the movable clamp, the moving measure of the clamp will be 1 inch for one step.



(picture 12)

(13) The Adjusting Button For Movable Clamp Of Feeding Table

Press this button



the work piece will be clipped tight by the clamp.

When the lamp was lighted on, the clipping process was finished completely.

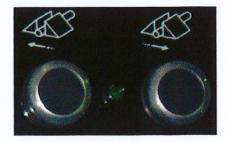
Press this button



The work piece will be loosen.

(picture 13)

If the guide wheel base is not higher 20mm than the movable clamp, the moving measure of the clamp will be 1 inch for one step.



(picture 13)

(14) The Button For The Meyement Of Feed Table

Press this button



To make the feed table move ahead.

Press this button



To make the feed table move slowly to the requirement.

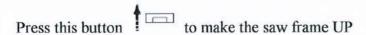


(picture 14)

Press this button

To make the feed table move back. (picture 14)

(15) The Button For Saw Frame UP And Down



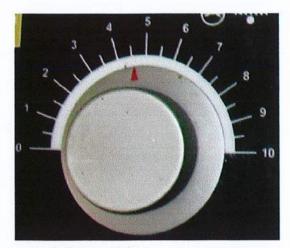
Press this button to make the saw frame DOWN (picture 15)



(picture 15)

(16) The Switch Of Hydraulic Oil Control Valve

To control the cutting speed. The more large number to indicate, the more cutting speed to obtain.



(picture 16)

(17) The Switch Of Pressure Control

For Blade Cutting

To control the pressure given to the blade during the process for different materials. The more large number to indicate, the more great pressure to offer.

(picture 17)



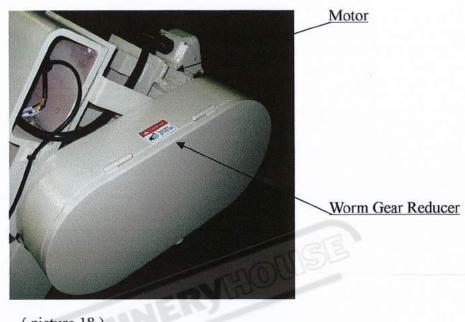
(picture 17)

2. MACHINE PARTS DESCRIPTION

(1) Motor

The motor of driving pulley is 5.5 KW (7.5HP)

The rotation rate was adjusted by reducer and transmitted to driving pulley.



(picture 18)

(2) Chipping Discharge Device

Power Source: hydraulic motor

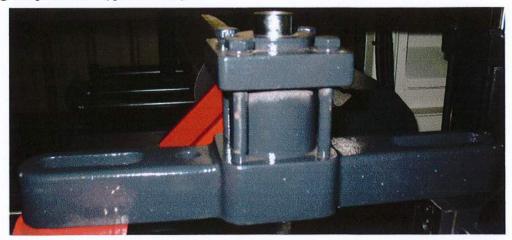
Banish the iron chipping from the machine.



(picture 19)

(3) Upper Impaction Device For Bundle Cutting

It is mobile and for the purpose of prevention the material slip out of looseness during the process. (picture 20)



(picture 20)

(4) The Adjustment Of Movable Guide Arm

The left guide arm should be adjusted properly to close to the work piece.

Step 1: loose carbide fixture

Step 2: loose locking handle

Step 3: move the guide arm to the work piece

Step 4: lock the handle

(picture 21)

Guide Arm

(picture 21)

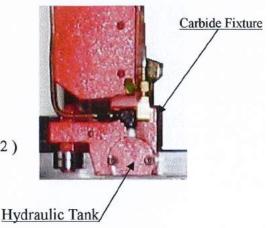
Locking Handle



(5) The Guide Wheel Base Of Hydraulic Clipping Carbide Fixture

Hydraulic clamp system make the blade cutting more stable.

Carbide material is more wear-resisting. (picture 22)



(picture 22)

13

(6) (6) Switch of Safty Guard(For CE)

When the guard cover be opened, the blade cutting will be stopped automatically. (picture 23)



(picture 23)

(7) Micro Clamp Device Of Table

To avoid the material scrape out of the direct contact, this clamp will step back by small extent during the working.



(picture 24)

(8) Washing Gun

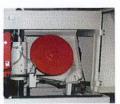
Flush the machine table surface or wash iron chipping away. (picture 25)



(picture 25)

3. THE INSTALLATION OF SAW BLADE





(picture 26)

(picture 27)

Step 1: Make the saw frame ascend to the position higher than the clamp.

Step 2: Open the right and left front door of the splash guard. (picture 27 and 28 above)

Step 3: Turn the adjusting switch of hydraulic carbide fixture to the position to (picture 7 of Page 8)

Step 4: Turn the adjusting switch of blade tension to the position of (picture 9 of Page 9)

Step 5: Clean up the iron chipping from the carbide fixture.

Step 6: Install the blade on the main driving pulley.

(Note: Please wear the glove to take the blade)

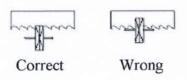
Step 7: The teeth of blade was faced down and turned to the right.

Step 8: The back of saw blade was touched the edge of main driving and drived pulley.

Step 9: Turn the adjusting switch of blade tension to the position of (picture 9 of Page 9)

Step 10: Turn the adjusting switch of carbide fixture to the position of (picture 7 of Page 8)

Step 11: Adjust the position of blade brush.



Step 12: Close the splash guard and lock the safe knob.

3. OPERATION DIRECTION

There are three operation mode of **H-400HA**:

- 1. Circulation By Repeat
- 2. 2. Manual Way (manual operation for every function of machine)
- 3. Single Circulation Work

Step as below:

- (a.) Start the hydraulic pump , and choose the mode of manual
- (b.) By the basis of appearance, material and size of work piece to choose the proper blade cutting pressure and blade rotation rate setting.
- (c.) Confirm that the saw blade was installed well.
- (d.) Make the movable guide arm close to the work piece.
- (e.) Move the materials to the clamp.
 - * Make the saw frame ascend and the position is higher than clamp.
 - * Make the clamp open and large than the material in width.
 - * Move the material carefully to the position of front clamp.
 - * Press the button of front & back clamp
 until the lamp was lighted on when the material was clipped tight.
- (f.) Choose the proper blade speed according to the material of work piece.

Note: Process of above should only be fulfilled when the blade was stopped.

Then make the following choice:

Circulation By Repeat or Single Circulation

- * Take the Circulation By Repeat for example:
- (a.) Turn the switch of circulation by repeat and manual mode to the position of
- (b.) Press the start button of blade to deliver on the previous setting.
- (c.) After repeat of cutting, blade will be stopped when the setting was carried out.
- (d.) Take off the remainder.
- * Take the Single Circulation for example:
- (a.) Turn the switch of circulation by repeat and manual mode to the position of
- (b.) Press the start button of blade to deliver on the previous setting.
- (c.) After the completion of one circulation cutting, blade will be stopped directly.
- (d.) Take off the remainder.

IV: MAINTENANCE

After Every Day Work:

- 1. Clean up the iron chipping on the machine.
- 2. Clean up the iron chipping of the carbide fixture.
- 3. Turn off all of the machine switch.

1. Every Day

Before operate the machine, please check the following procedure:

- (1). Check the hydraulic oil level and refill the capacity if it is not enough.
- (2). Check the cutting oil level and refill the capacity if it is not enough.
- (3). Check the saw blade if it was installed on the saw frame or not.
- (4). Check the blade steel brush contact the saw blade exactly or not.

3. One Week

Refill the lubrication for: drived & driving pulley.

3. Every Six Months

Replace the gear box oil of hollow shaft reduce.

Note: please replace the gear oil of gear box after the period of 3 months or 600 hours, and the gear oil of hollow shaft reducer for 6 months or 1,200 hours.

The variety of gear oil:

STORK, HIGH CLASS THUBAN 140

4. Every Year

Please leak out the used one and refill the capacity in enough.

The variety of hydraulic oil:

ISO-VG grade NO.32

Gear Oil 140 (VG460)	
HYDRAULIC OIL AW32 (VG32)	
High Temperature Grease NO.3	

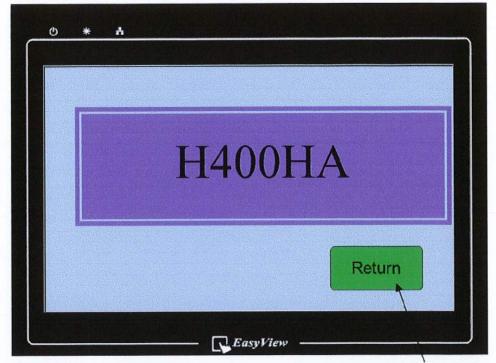
V: SAFE MATTERS

- 1. Please don't approach the machine inside when the saw blade is on working.
- 2. Any maintenance will be forbidden during the machine operation.
- 3. Please offer the proper material measurement for machine cutting.
- 4. During the machine operation, please don't play pranks around.
- 5. Please don't smoke in the factory or put any flammable article nearby.
- 6. Please press the emergency button to stop the operation if any accident happened.

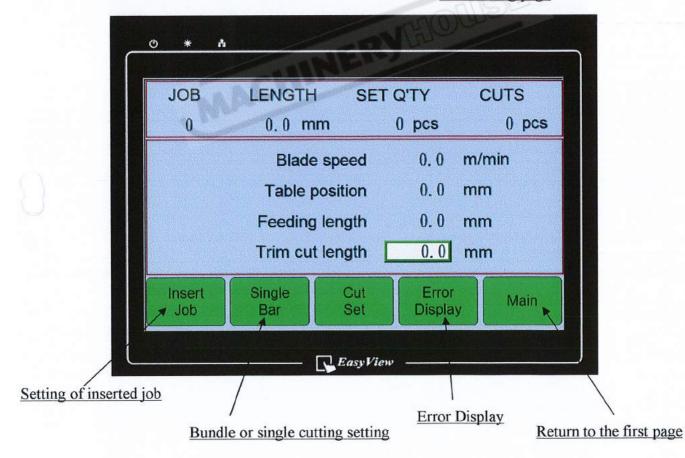


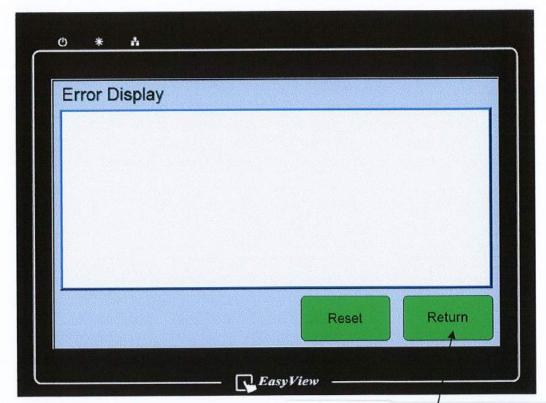
- 7. The guidance of qualified professional was required for the first operation of the beginner.
- 8. Please wear the glove for the saw blade installation to avoid the blade wound.

VI: NC CONTROL PANEL DESCRIPTION

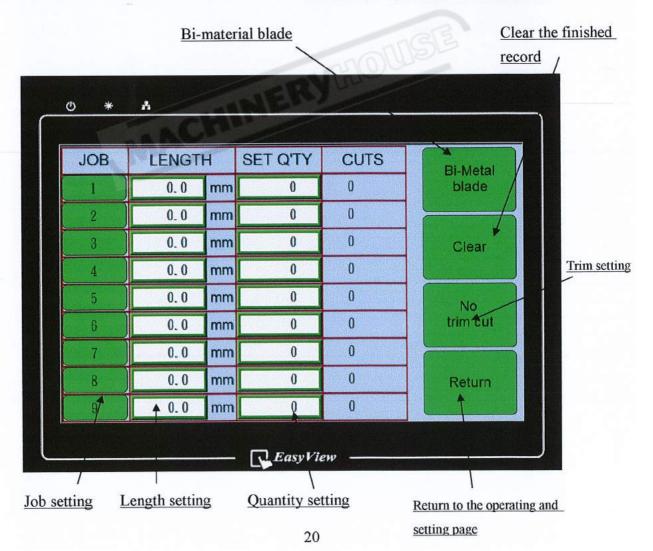


Return to the operating and setting page





Return to the operating and setting page



Material Cut end, location Cycle Button

Used for locating material "Zero Point" (end of stock clamped in rear vice) when the "No Trim cut" option in "Cut Set" screen is used. Use prior to an auto cycle.

Note: Cannot use this option if "Trim Cut" is selected..

This cycle automatically positions the rear vice in the correct position to locate & set the start "Zero Point" of the material clamped in vice, Therefore when activating a cutting cycle it feeds the correct pre-set length of material as set in the program "Cut Set" screen, saving time & material waste.



Caution

While the machine is operating in this setting Cycle, care must be taken to keep clear of machine as movements of the machine in various operations is automatic until finished.

Vices and blade arm will move automatically.

Ensure there are no tools or material off cuts etc on the machine including front table

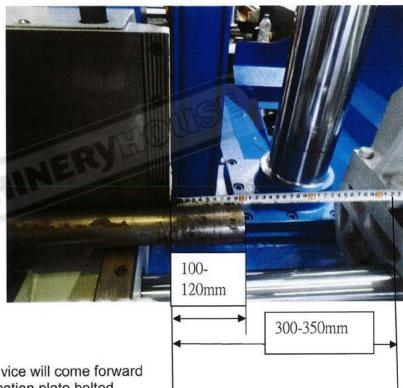
In manual mode.

- 1. Position rear vice approximately 300mm to 350mm away from rear of front vice base.
- 2. Raise blade arm all the way up
- 3. Close Front vice.

Caution!

If blade arm is not up or front vice is not closed they will be closed automatically before Cycle begins

4. Select material to be cut and clamp it in the rear vice with approximately 100mm to 120mm of material protruding.



5. Press the Material Cut end, location Cycle Button

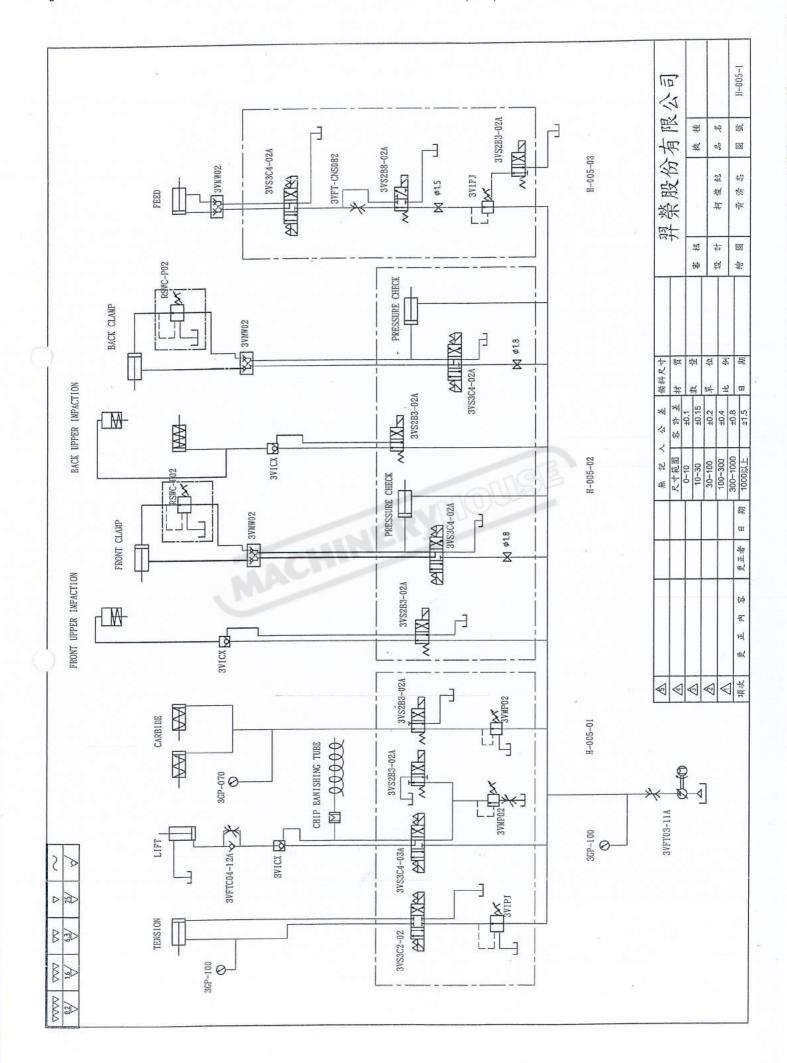
After a short delay. The rear vice will come forward bringing the workpiece to stop on the location plate bolted to the front vice moving jaw

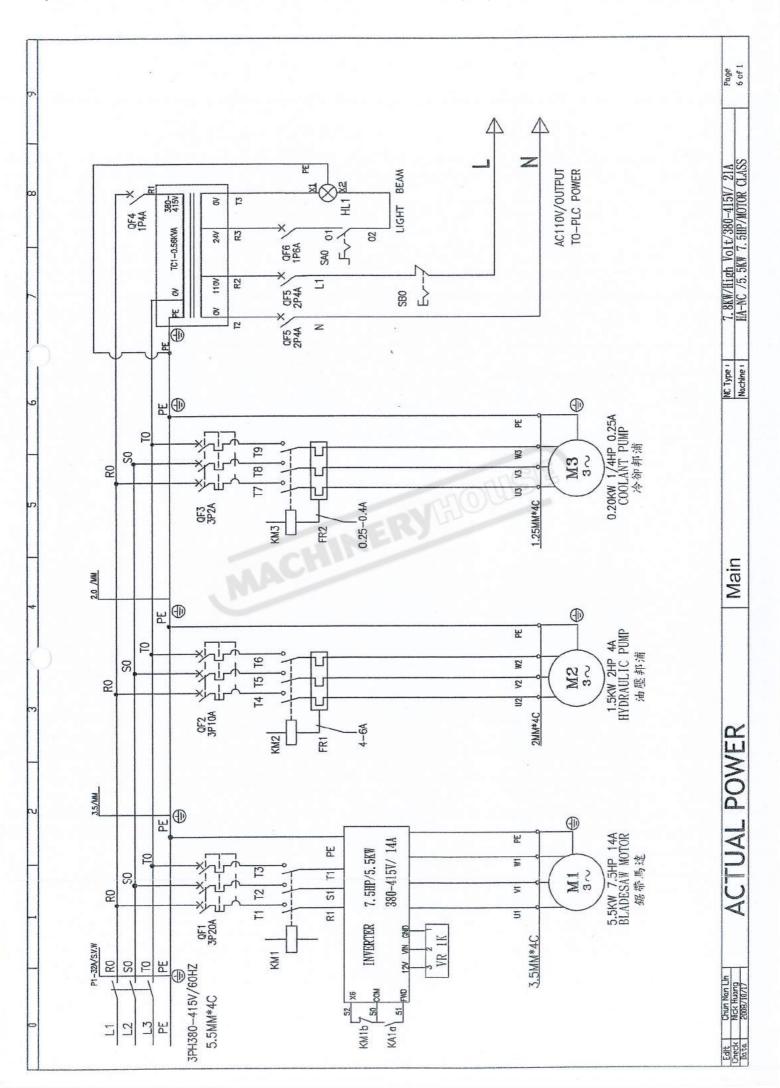
The Material Cut end, location Cycle Button will light up steady.

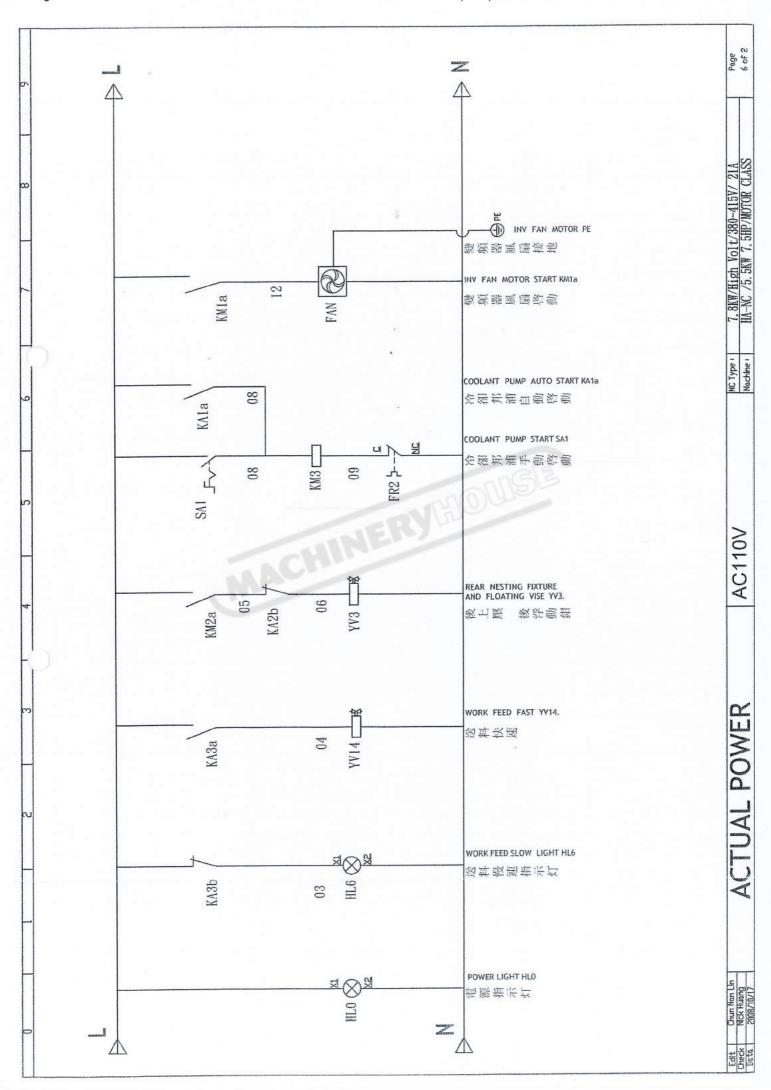
Then the rear vice will move away approximately 3mm Then the Front vice will open completely

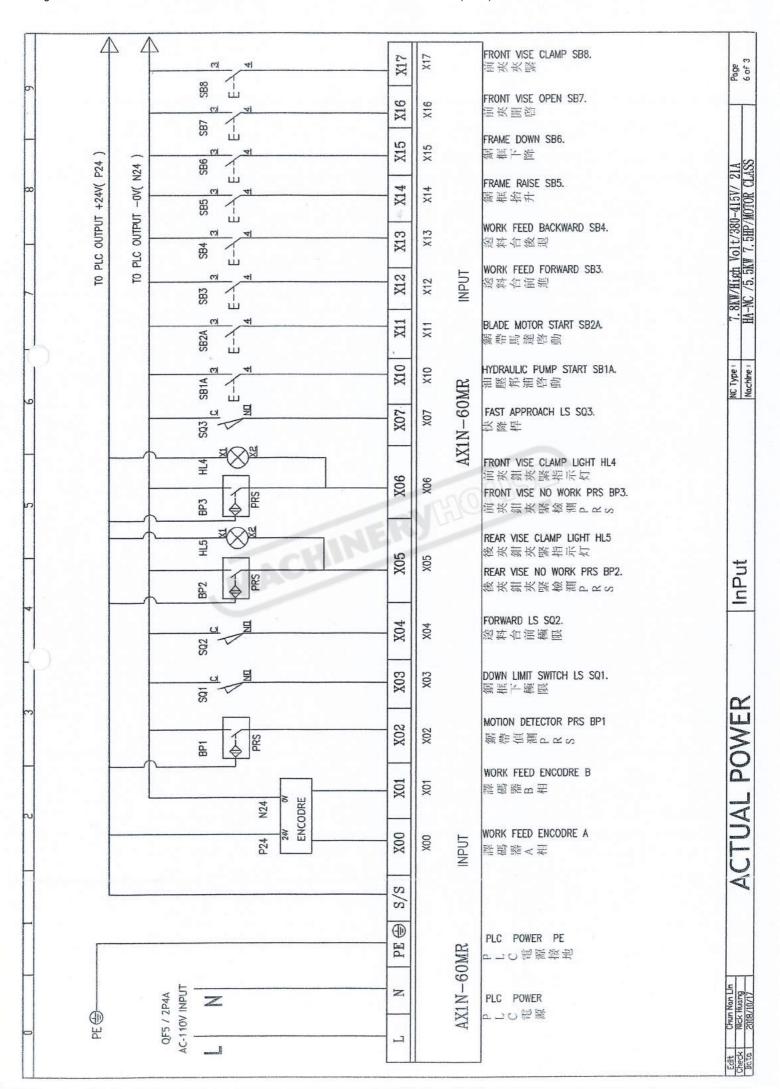
Material position is now set to switch machine into an auto cycle and proceed.

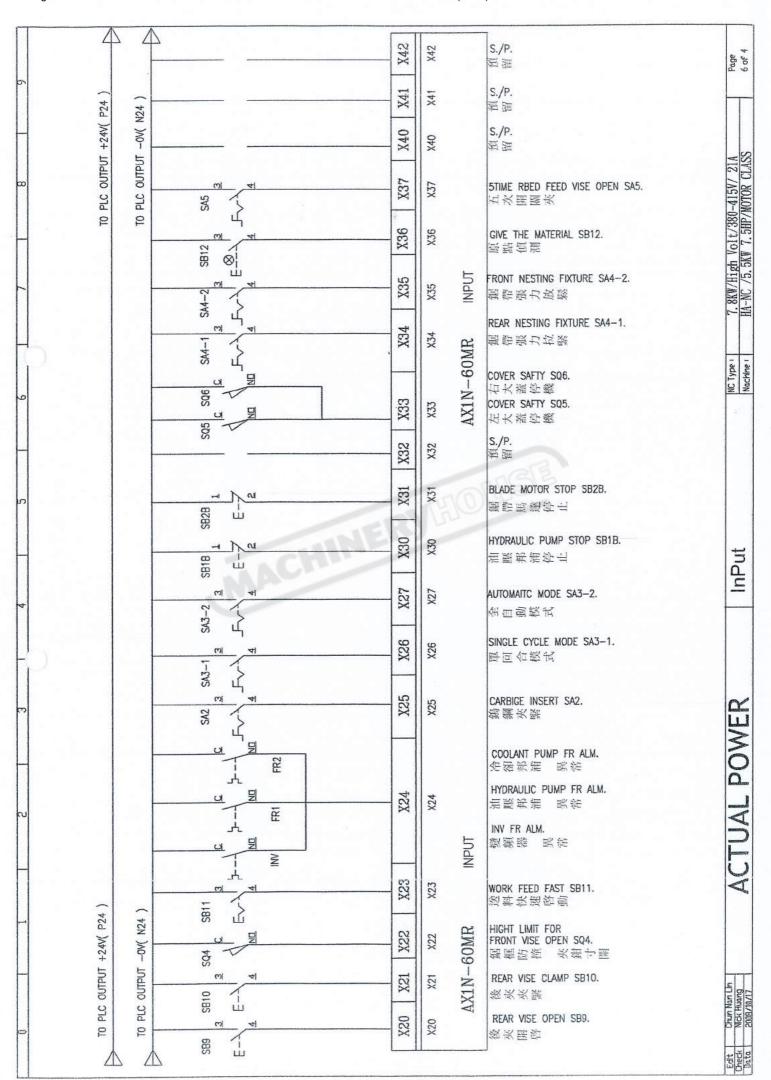
"NO Trim Cut" must be showing in "Cut Set" screen before switching into Auto Cycle....

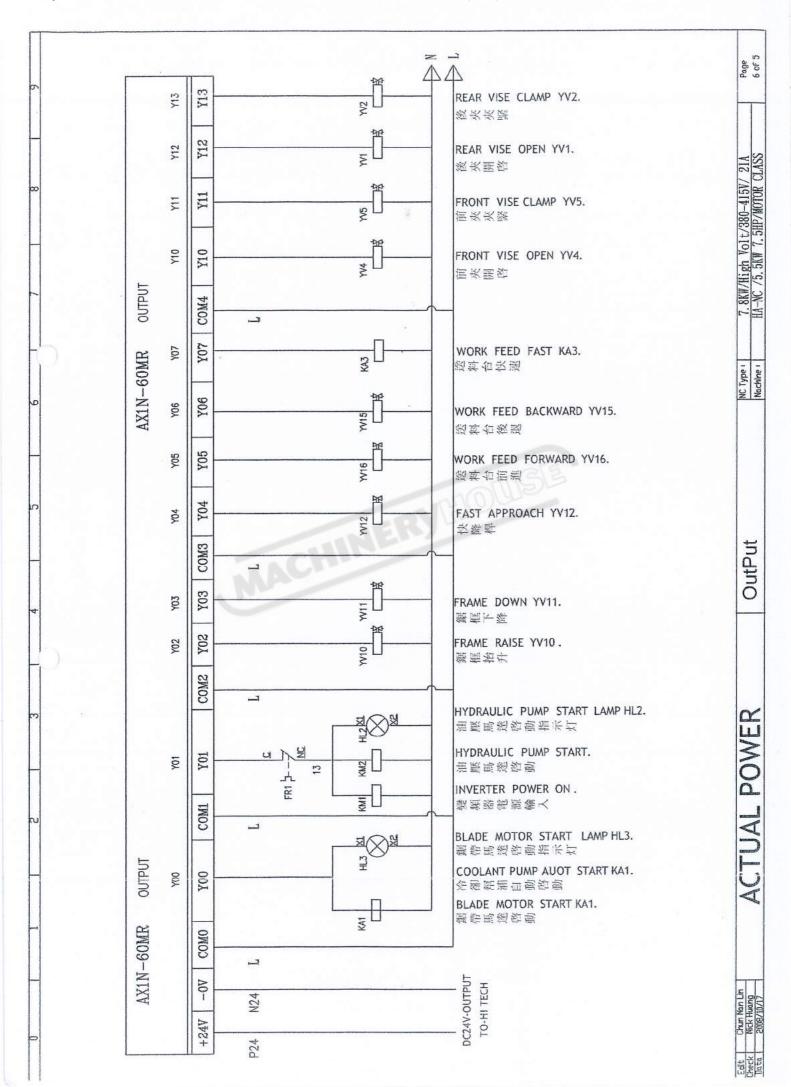


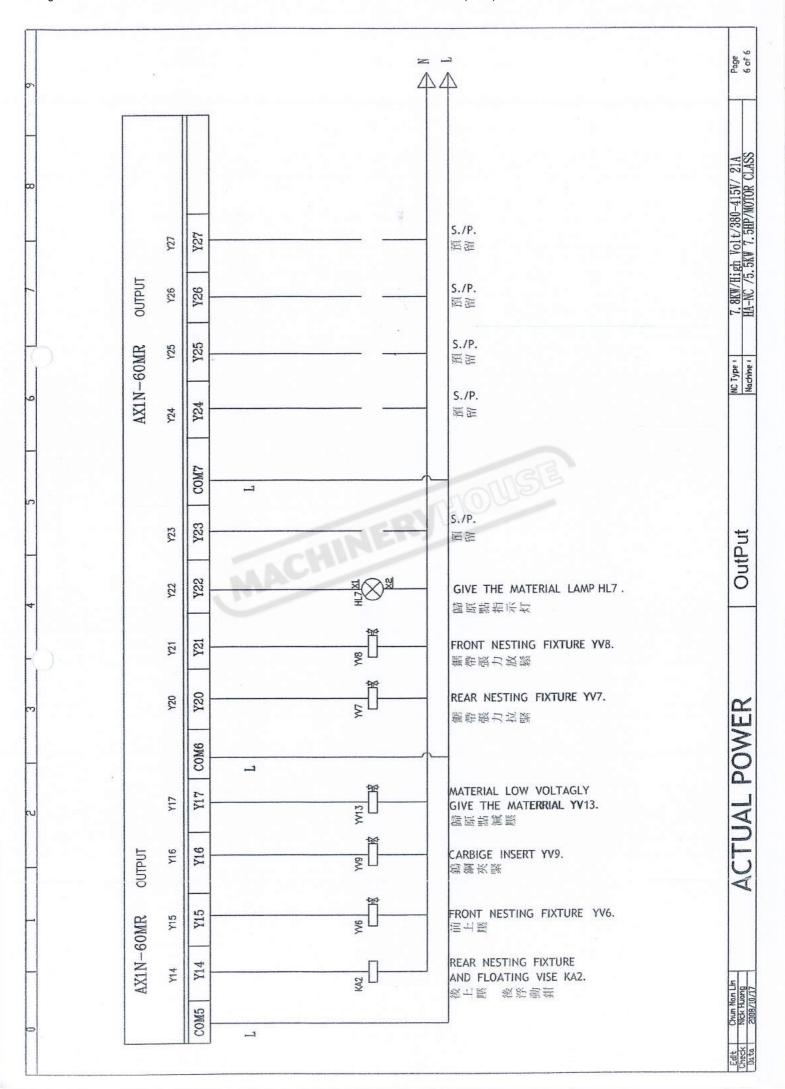


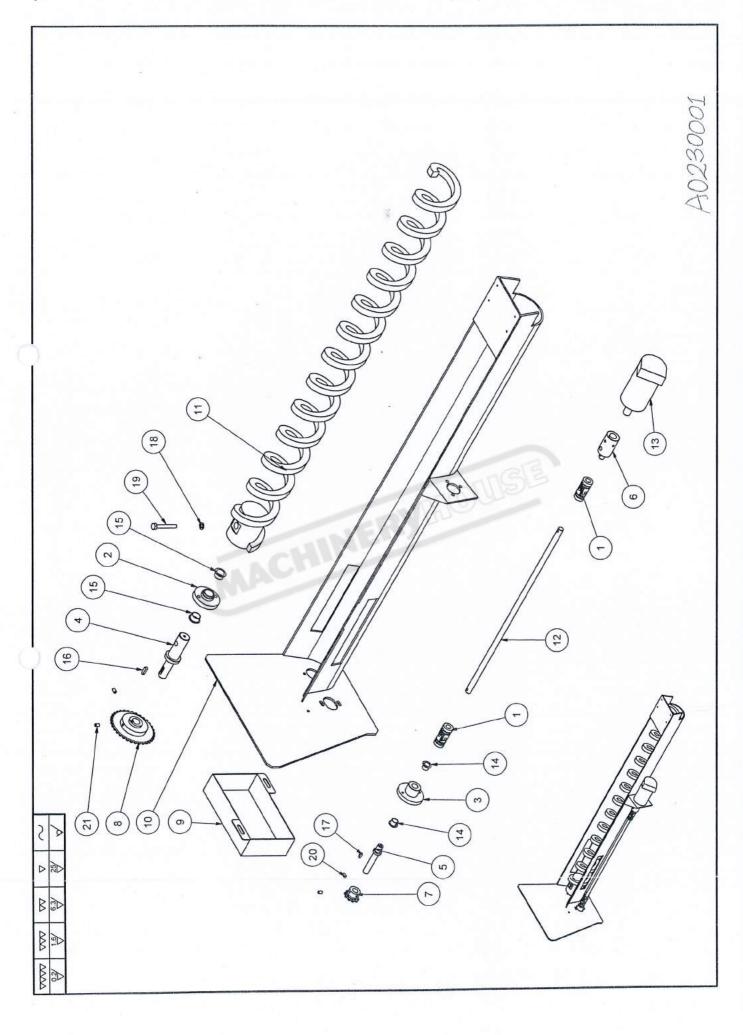






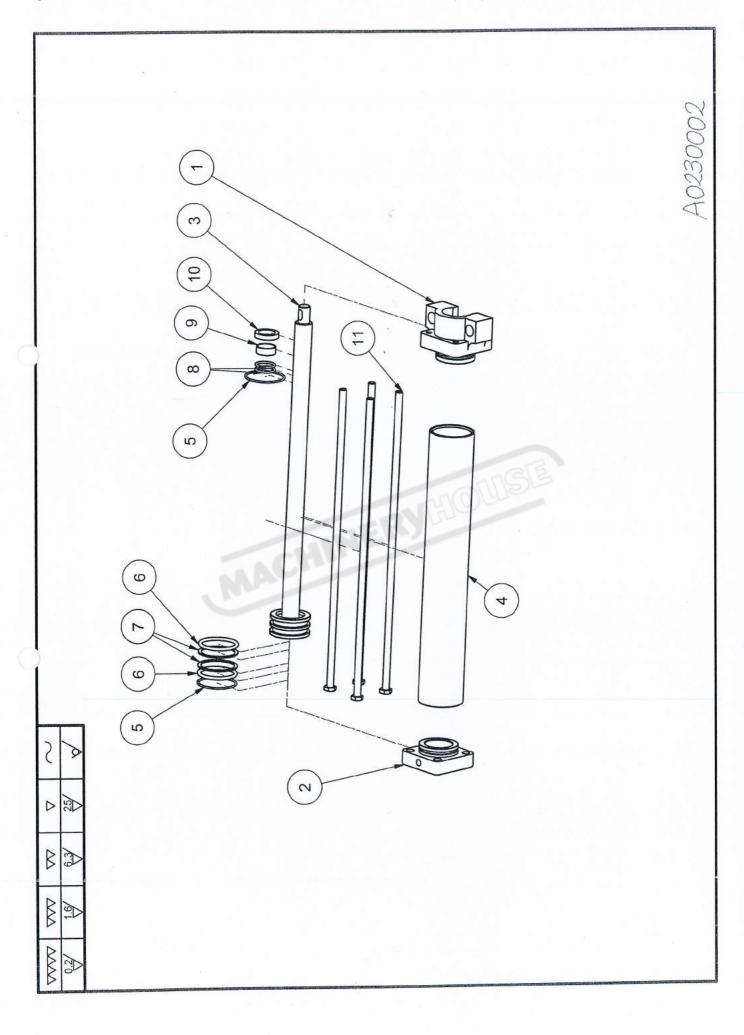






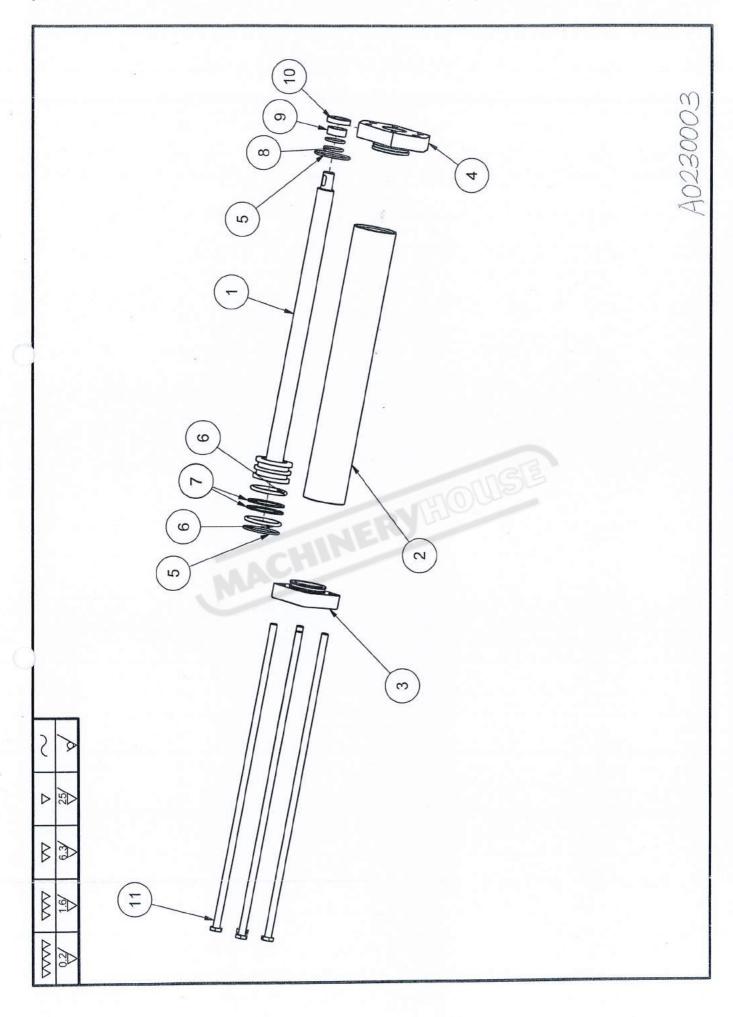
NO	QTY	TYPE	DESCRIPTION	NO NO	Q'TY	TYPE	DESCRIPTION
1	2	5UJ-NJ12	COUPLING				
2	Ţ	B02031500	FLANGE BASE				
3		B02031600	ADJUSTING BASE				
4		B02031700	SHAFT				
5	—	B02031800	CHAIN WHEEL SHAFT				
9	1	B02031900	MOTOR COUPLING				
7	ī	B02032900	DRIVING CHAIN WHEEL				
8	1	B02033000	DRIVED CHAIN WHEEL				
6	1	B02013401	COVER				
10	1	H02310500	CHIPPING DISCHAGE CHASE				
11	1	H03231900	DISCHARGE SCREW		-	*	200
12	Ţ	H03232700	CLEAN SCREW				
13	1	3HM-OMM32MOTOR	32MOTOR				
14	2	2DUF1210-2	2DUF1210-20 LUBRICATING BEARING				
15	2	2DUF1810-2	2DUF1810-26LUBRICATING BEARING	0			
16	-	6x6x20	CAP KEY	U			
17	1	5x5x15	CAP KEY	No.			
18		M8	SPRING WASHER	3/5			
19	1	M8x55L	HEX BOLT				
20	2	M5x10	HEXAGON FIXING SCREW				
21	2	M6x10	HEXAGON FIXING SCREW				
22							
23							
24							
25							

A023001 CHIPPING CONVEYER UNIT



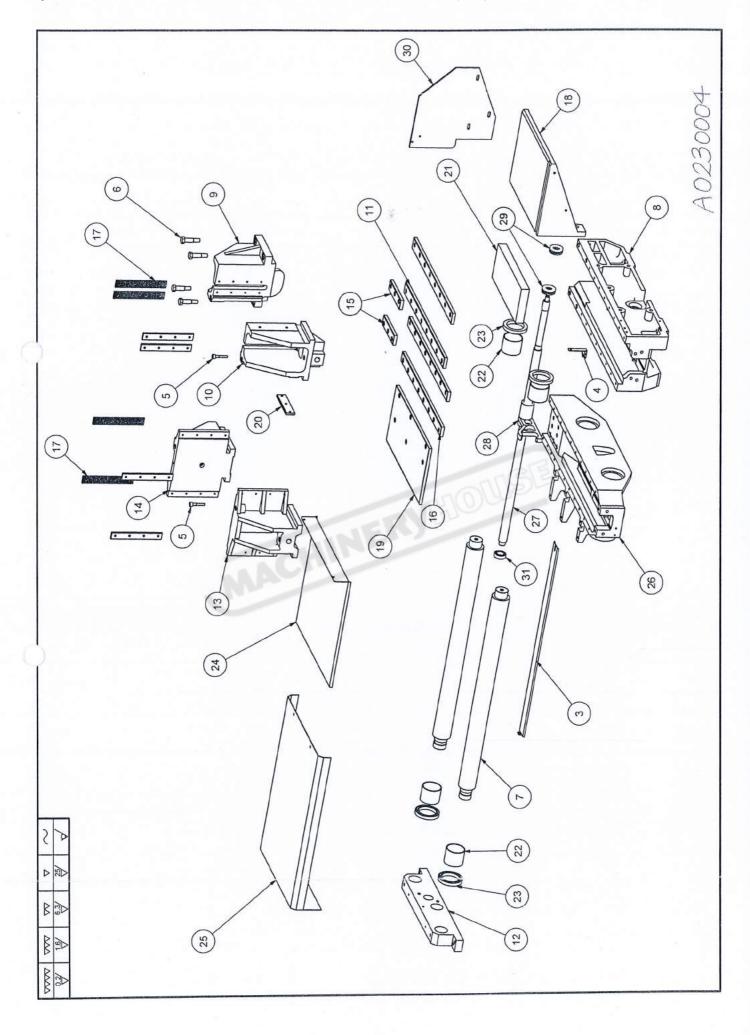
	117	I YPE	DESCRIPTION	0N	QTY	TYPE	DESCRIPTION
—	,—1	H03262000	FRONT COVER				
2		B02162000	BACK COVER				
3	1	H02360401	PISTON BAR				
4	_	H02360600	CYLINDER				
5	2	G65	O RING				
9	2	P60	O RING				
7	2	P60	BACKING UP RING				
00	2	P30	O RING				
6		2DU3012	LUBRICATING BEARING				
10		D42-D30-B8	OIL SEAL				
11	4	H02360700	SCREW				
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A023002 CYLINDER UNIT OF FEED



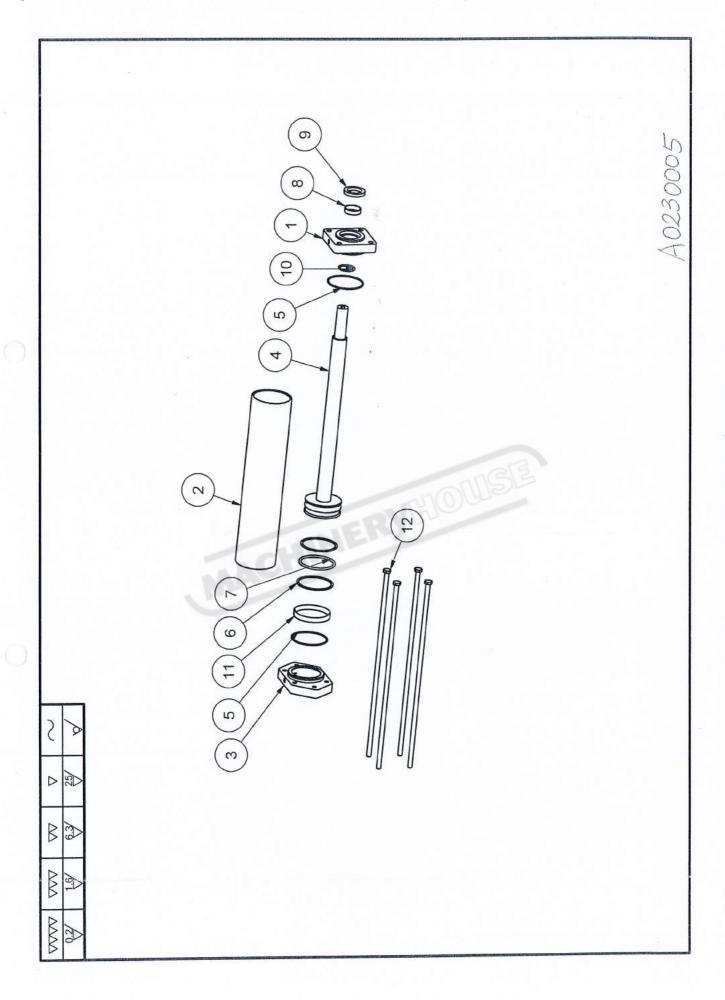
3	+			111	7777	
3 2	-	H02360301	PISTON			
6		H02360500	CYLINDER			
_	1	H03261000	BACK COVER OF CYLINDER	4.		
+	1	H03260900	FRONT COVER OF CYLINDER			
2	2	09D	O RING			
9	2	P55	O RING			
7	2	TP55	BACKING UP RING			
8	2	P30	O RING			
6		2DU3012	LUBRICATING BEARING			
10		D42-D30-B8	OIL SEAL			
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A023003 CYLINDER UNIT OF TABLE

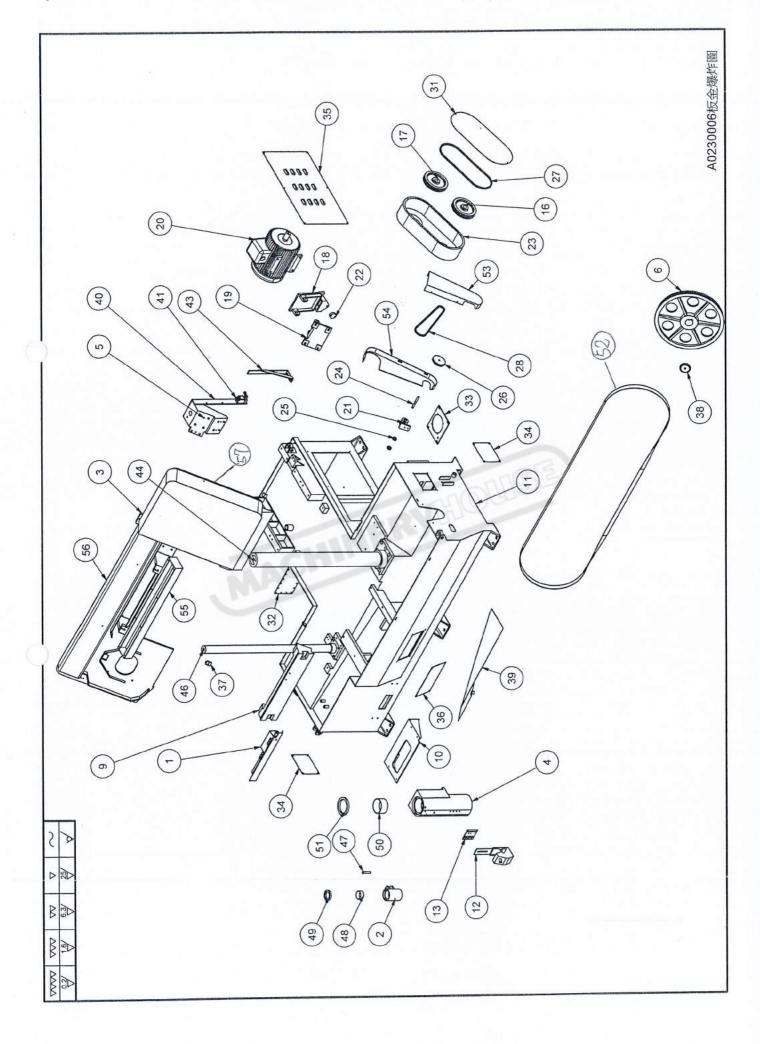


NO	Q'T'Y	TYPE	DESCRIPTION	NO	Q'T'Y	TYPE	DESCRIPTION
	I	A0230002	CYLINDER UNIT OF FEED	26		H02331200	MOVABLE TABLE
		A0230003	CYLINDER UNIT OF TABLE	27		H03230300	LEAD SCREW
		B02110300	COVER FOR LEAD SCREW	28	1	H03231100	
		B02113100	BRACKET	29	2	51305	BEARINGS
	2	B02130200	SCREW OF FIXING PIN	30		H02311400	ANTI-FALLING PLATE
	4	B02130700	LOCATING SCREW	31	-	600577	BFARINGS
	2	B02131101	GUIDE CLUMN				
	1	H02331100	FIXING TABLE				
		H02330100	FIXING VISE				
	1	H02330200	MOVABLE VISE				
	2	H02331500	WEARING PLATE			, x	
	1	H03231200	BASE				
	Ţ	H02330300	FEEDING VISE				
		H02330400	FLOATING VISE				
	2	H03231500	SHORT WEARING PLATE	0			
	7	H02331400	ANTI-FALLING PLATE				
	∞	H02330600	STEEL PLATE	000			
	1	H03232000	MATERIAL HOLDING RACK	5			
	_	H03232300	MATERIAL HOLDING PLATE				
		H03232500	PLATE				
	П	H03232600	SUPPORTING PLATE				
	4	2DU7060	SELF LUBRICATING BEARING				
	4	D95-d70-B13 OIL SEAL					
		H03211600	COVER FOR				
-		TT00011500	בייייין מדמימ ביייי מכת מדוזכב				

A023004 TABLE UNIT



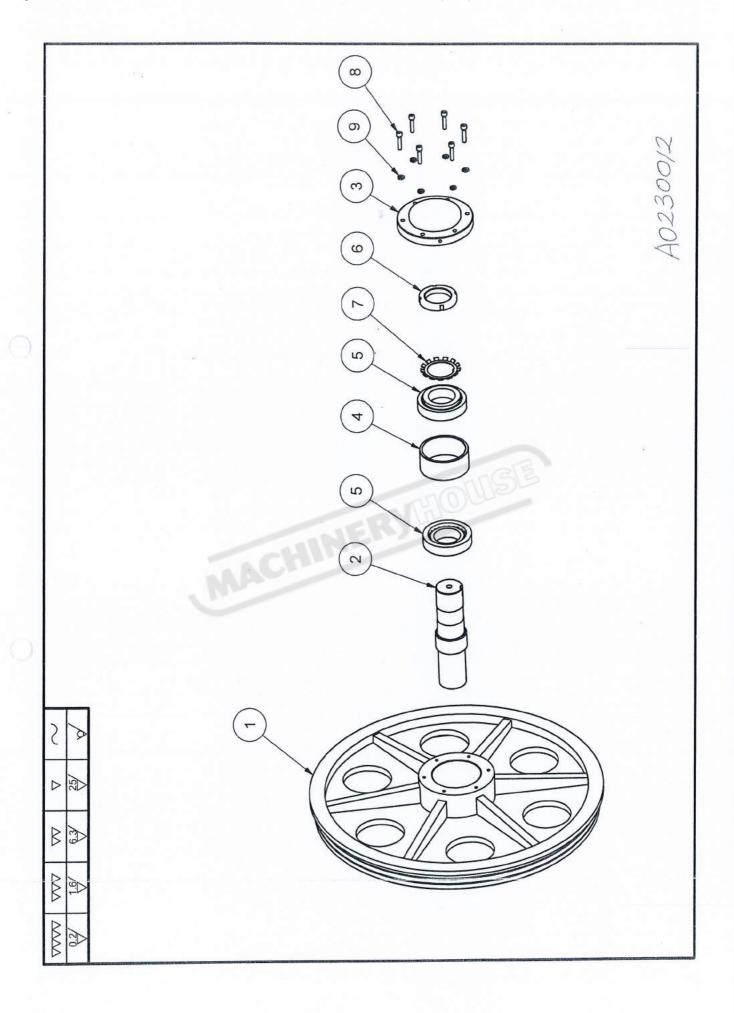
Z I Z	TYPE	DESCRIPTION	ON	OTY	TYPE	DESCRIPTION
	B02061301	UPPER COVER				
<u>,</u>	H02360100	CYLINDER				
1	B02061100	UNDER COVER				
1	H02360200	PISTON			T.	
2	G95	O RING				
2	TP90	BACKING UP RING				
	P90	O RING				
	2DU4012	LUBRICATING BEARING				
1	4TC40-58-8	OIL SEAL				
2	P40	O RING				
	MWR100	WEARING RING				
4	M12	SPRING WASHER				
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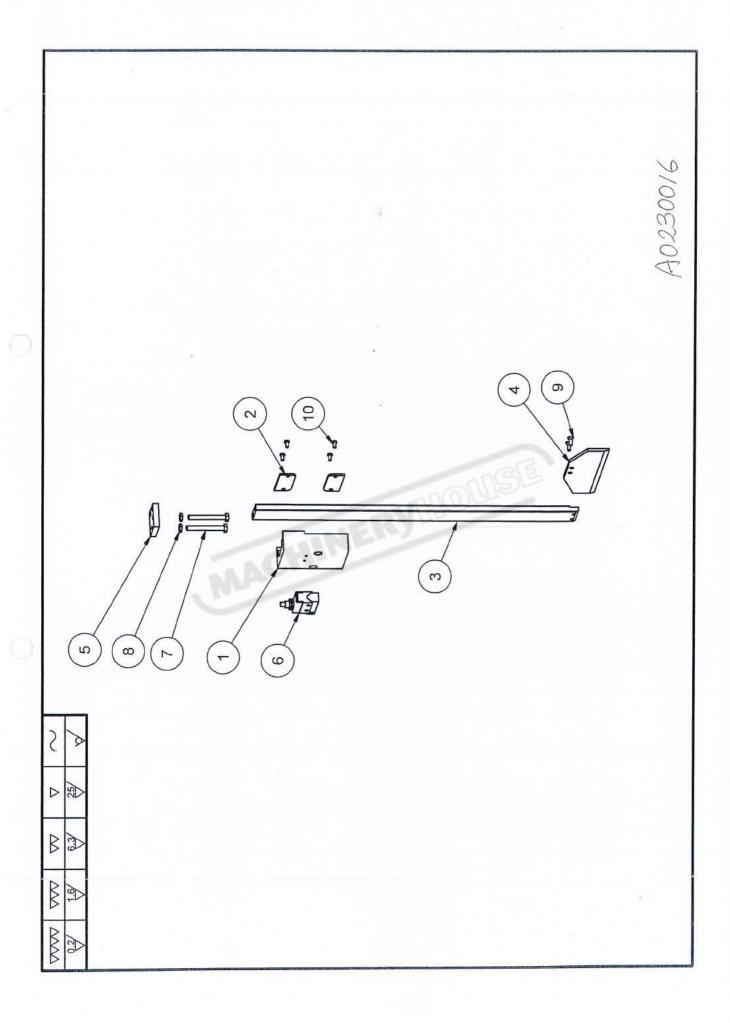
1 2 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	H03211400 H02240500 H02340800 H02230100 H02231300 - H02341300 - H02340700	COVER OF BLADE SECOND SLIDING TUBE ADJUSTING BASE SLIDING TUBE JOINTING BASE DRIVING WHEEL	26 27 28	-	H03221700	PULLY FOR WIRE BRUSH BELT
2 2 4 3 3 5 4 9 5 5 6 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6	H02240500 H02340800 H02230200 H02230100 H02341300 - - H02340700	SECOND SLIDING TUBE ADJUSTING BASE SLIDING TUBE JOINTING BASE DRIVING WHEEL	27 28		37500	BELT
2	H02340800 H02230100 H02341300 - H02340700	ADJUSTING BASE SLIDING TUBE JOINTING BASE DRIVING WHEEL	28	7	2222	
4 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	H02230200 H02230100 H02341300 - H02340700	SLIDING TUBE JOINTING BASE DRIVING WHEEL		_	M42	BELT
5 0 7 8 6 5 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H02341300 H02341300 - H02340700	JOINTING BASE DRIVING WHEEL	29	ı	-	-
9 8 6 1	H02341300 - - H02340700	DRIVING WHEEL	30	10	7.1	1
7 8 6 5	- - H02340700	1	31		H03210900-1	H03210900-1 PULLY COVER
9 6	- H02340700		32		H03212500	COVER PLATE
9 1	H02340700	_	33	Ĭ	H03213400	COVER PLATE
-		GUIDE WAY	34	2	B02011000	COVER PLATE
10 1	B02012600	BASE OF ELECTRICAL BOX	35	2	B02110400	COVER PLATE
11 1	H02310101	BASE	36	1	H03213500	COVER PLATE
12 1	H03211900	COVER FOR WIRE BRUSH	37	-	B02014900	BASE OF SWITCH
13 1	H03210700	FIXING BASE	38	1	B02043300	WASHER OF DRIVING WHEEL
14 1	-	_	39	Т	H02310900	
15 1	1	-	40	Η	H02214600	
16 1	H03220400	DRIVED PULLY	41	Ţ	1	
17 1	H03220300	DRIVING PULLY	42	1	-	
18 1	H02320200	MOTOR STAND	43	1	H02311000	PLATE
19 1	H02320100	BASE	44	I	H02340100	MAIN CLUMN
20 1	7.5HP	MOTOR	45	Ī	E.	-
21 1	H03221800	PULLY BASE	46		H02340200	ADJUSTING CLUMN
22 1	H02320300	ADJUSTING BASE	47	1	H02242400	PIN OF SECOND SLIDING TUBE
23 1	H02310600	PULLY COVER	48	2	2DU6030	LUBRICATING BEARING
24 1	B02022200	SHAFT OF PULLY	49	2	D82-d60-B12 OIL SEAL	OIL SEAL
25 2	6201	BEARING	50	2	2DU11060	LUBRICATING BEARING

A023006 METAL STRUCTURE

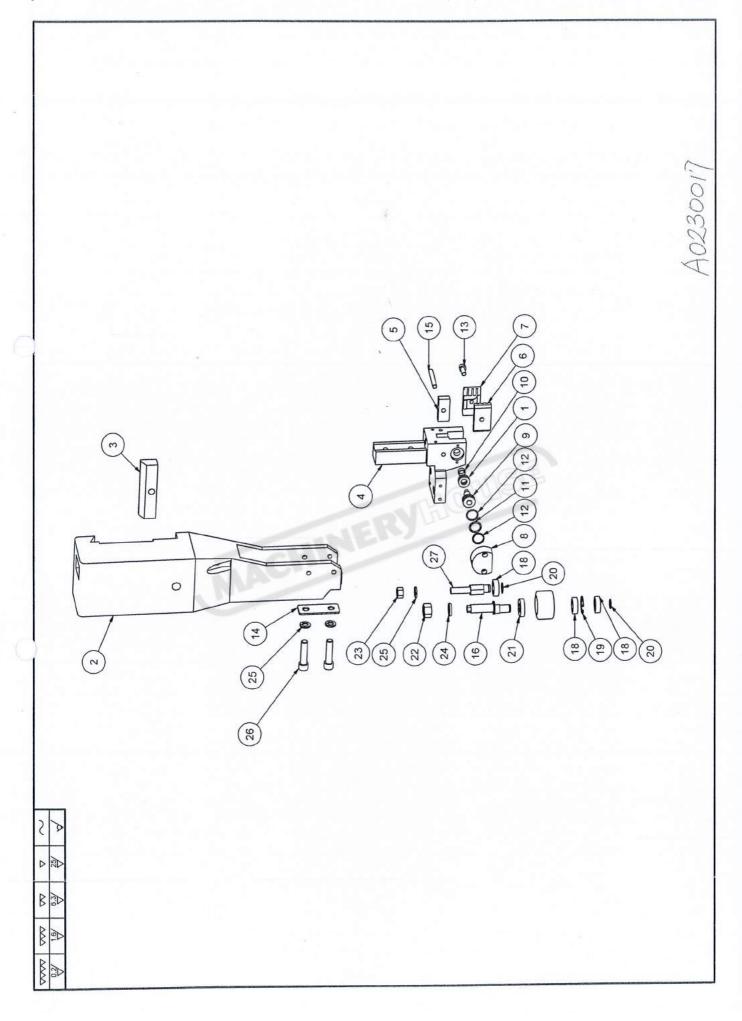
A023006 METAL STRUCTURE



ON	QTY	TYPE	DESCRIPTION	ON	QTY	TYPE	DESCRIPTION
1		H02341200	IDLER WHEEL				
2		H03221300	SHAFT		100	×	
3	1	B02040600	BEARING COVER				
4		B02044000	SPACER RING				
5	2	E32210J	BEARING				
9	1	AN10	SCREW NUT				
7	7	AW10	WASHER				
8	9	M6x30	HEXAGON SOCKET HEAD CAP SCREW				
6	9	M6	WASHER			- 5520	
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023012	DRIVED	A023012 DRIVED WHEEL UNIT					A CONTRACTOR OF THE CONTRACTOR

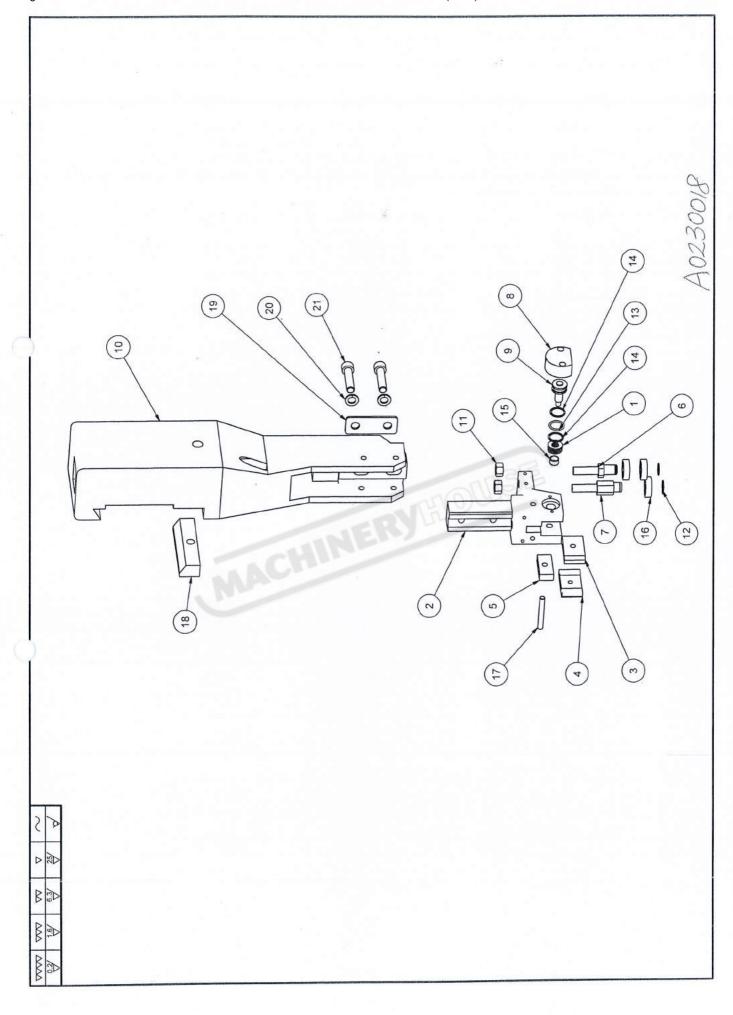


1 1 B02041700 BASE 2 B02042100 LUBRICATING BEARING PLATE 3 1 H022431000 DETECTING ROD 4 1 H022431000 PLATE 5 1 H03242100 PLATE 6 1 M8X70 PLATE 7 2 M8X70 HEXGON SOCKET SCREW 8 2 2 M6X10 HEXGON SOCKET HEAD CAP SCREW 10 4 M5X10 HEXCON SOCKET HEAD CAP SCREW 11 HXCON SOCKET HEAD CAP SCREW 12 M6X10 HEXCON SOCKET HEAD CAP SCREW 13 M6X10 HEXCON SOCKET HEAD CAP SCREW 14 M5X10 HEXCON SOCKET HEAD CAP SCREW 15 M6X10 HEXCON SOCKET HEAD CAP SCREW			IIFE	DESCRIPTION	CNI	7117	LICE	COOVIII IION
2 B02042100 1 H02341000 1 H02340900 1 H03242100 2 M8x70 2 M8x70 4 M5x10		-	B02041700	BASE				
1 H02341000 1 H02340900 1 H03242100 2 M8x70 2 M6x10 4 M5x10	2	2	B02042100	LUBRICATING BEARING PLATE			Description of the second	
1 H02340900 1 H03242100 2 M8x70 2 M6x10 4 M5x10	3	1	H02341000	DETECTING ROD				
1 H03242100 1	4		H02340900	PLATE				
1 2 M8x70 2 M8x10 4 M5x10	5		H03242100	PLATE				
2 M8x70 2 M8 2 M6x10 4 M5x10	9	,		SWITCH				
2 M8 2 M6x10 4 M5x10	7	2	M8x70	HEXGON SOCKET SCREW				
2 M6x10 4 M5x10	8	2	M8	SCREW NUT				
4 M5x10	6	2	M6x10	HEXGON SOCKET HEAD CAP SCREW				
	10	4	M5x10	HEXGON SOCKET HEAD CAP SCREW				
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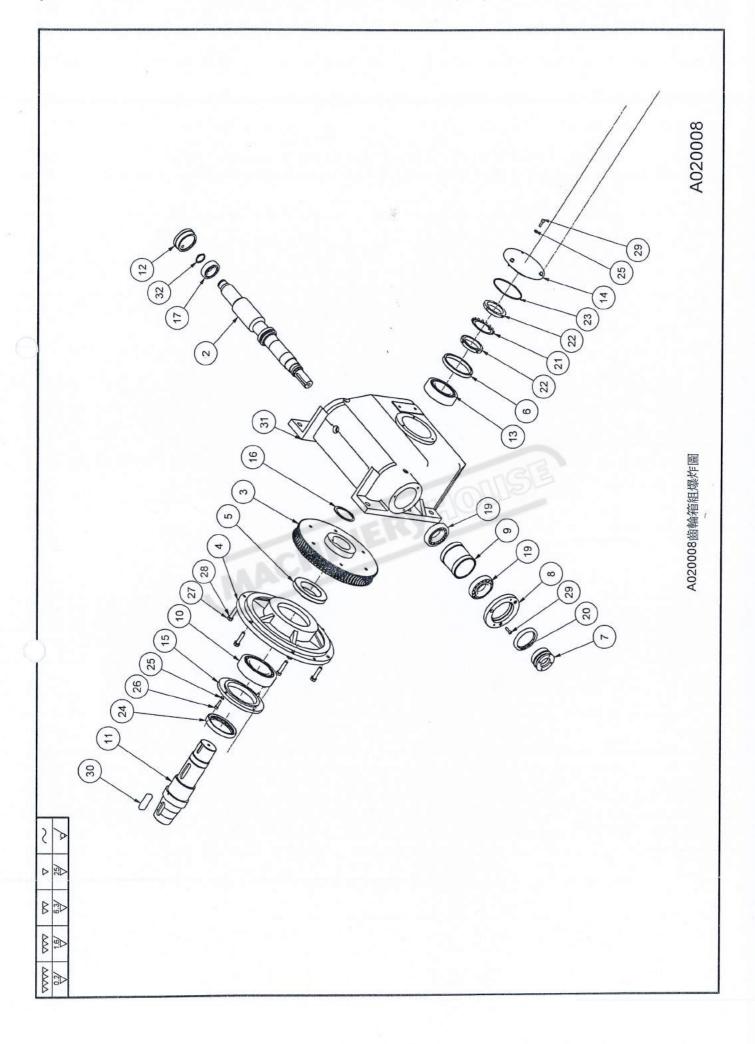


NO NO	QTY	TYPE	DESCRIPTION	9N	QTY	TYPE	DESCRIPTION
1	9	12.2x23x1t	DISC SPRING	26	2	M12x15	HEXAGON SOCKET HEAD CAP SCREW
2	1	H02340401	LEFT GUIDE ARM	27	1	B02044200	LONG ECCENTRIC SHAFT
3		H03240900	BLOCK	28	1	H03242300	DAMPER ROLLING
4	П	H03242800	LEFT GUIDE WHEEL BASE				
5	1	B02041100	UPPER CARBIDE FIXTURE				
9	1	B02041301	LEFT FRONT CARBIDE FIXTURE				
7	1	B02041401	LEFT BACK CARBIDE FIXTURE				
8		B02062600	CYLINDER				
6	1	B02062700	PISTON				
10	1	2DU1210	LUBRICATING BEARING				
11		P20	O RING				4
12	2	TP20	BACK UP RING				
13	,	M8x20	HEXGON SOCKET HEAD CAP SCREW				
14		H03216200	GASKET				
15		8x60L	PIN				
16	Н	H03242200	SHAFT	1			
17	9	ı		G			
18	3	6002	BEARING	TE S			
19	1	R32	C TYPE RNG				
20	2	R15	C TYPE RNG				
21	,1	D35-d17-B8	OIL SEAL				
22		M16	SCREW NUT				
23		M12	SCREW NUT				
24	-	M12	SPRING WASHER				
25	'n	M12	SPRING WASHER				

A0230017 HYDRAULIC LEFT GUIDE ARM

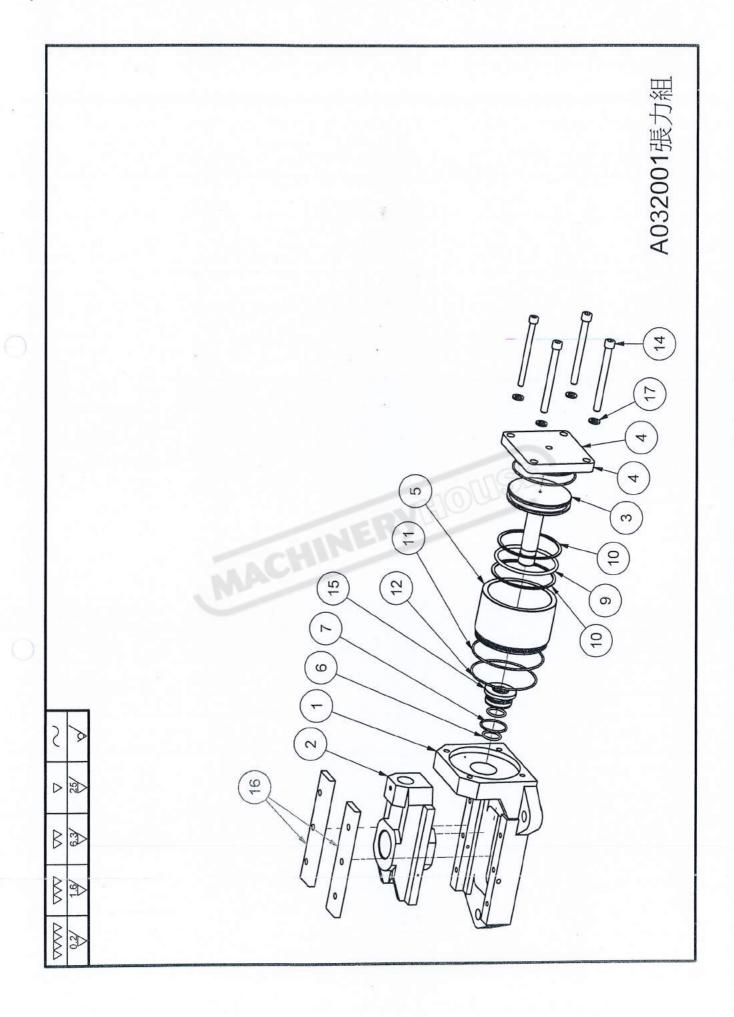


2	VI Y	TYPE	DESCRIPTION	NO NO	QTY	TYPE	DESCRIPTION
	9	§ 12.2 x § 23 x 1t DISC SPRING	t DISC SPRING				
2		B02043700	RIGHT GUIDE WHEEL BASE				
3		B02040901	RIGHT FRONT CARBIDE FIXTURE				
4	, ,,,,	B02041001	RIGHT BACK CARBIDE FIXTURE				
5		B02041100	UPPER CARBIDE FIXTURE				
9	1	B02044100	SHORT ECCENTRIC SHAFT				
7		B02044200	LONG ECCENTRIC SHAFT	11			
00	-	B02062600	CYLINDER				
6		B02062700	PISTON				
10	1	H02340501	RIGHT GUIDE ARM				
11	2	M12	SCREW NUT				(9)
12	2	S15	C TYPE RING				
13		P20	O RING				
14	2	TP20	BACK UP RING	70			
15	-	2DU1208	LUBRICATING BEARIING	0)			
16	3	6002	BEARING	U			
17		8x60L	PIN	(0,0)			
18	-	H03240900	BLOCK	J. B.			
19	-	H03216200	GASKET				
20	2	M12	WASHER				
21	2	M12x50	HEXAGON SOCKET HEAD CAP SCREW				



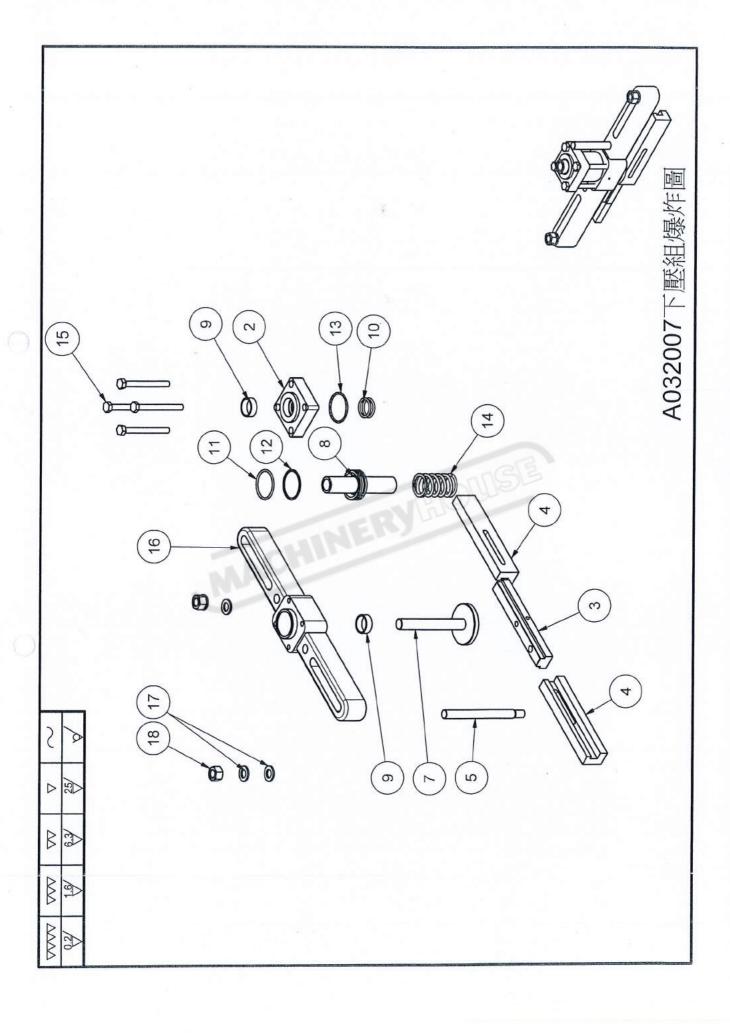
NO	Q'TY	TYPE	DESCRIPTION	ON	QTY	TYPE	DESCRIPTION
1	1	B02022300	GEAR BOX	26	2	M6 x 25	HEX SOCKET CAP SCREW
2		B02020200	OUTPUT SHAFT	27	9	M10 x 45	HEX BOLT
3	1	B02020500	WORM GEAR	28	9	M6	SPRING WASHER
4	1	B02020600	UPPER COVER OF GEAR BOX	29	9	M6 x 20	HEX SOCKET CAP SCREW
5		B02020900	BEARING COVER OF WORM GEAR	30	Ţ	16 x 10 x 60	DOUBLE ROUND KEY
9	1	B02021000	BEARING SLEEVE				
7		B02021300	LINUT				
8	1	B02021200	BEARING COVER			-	
6	1	B02021400	BEARING SLEEVE				
10		22215	SPHERICAL ROLLER BEARING				
11	1	B02020100	SHAFT OF DRIVING PULLEY				
12	1	B02021100	BACK COVER OF WORM GEAR			78	
13	1	22212	SPHERICAL ROLLER BEARING				
14	1	B02020700	UNDER COVER OF GEAR BOX				
15	1	B02020800	UPPER COVER OF OIL SEAL				
16		§ 65 x 2.5t	C TYPE RETAINING RING				
17	1	6206	BALL BEARING				
18	,	§ 30 x 1.6t	C TYPE RETAINING RING				
19	2	3020913	CYLINDRICAL ROLLER BEARING				
20	1	4TC65-85-10	OIL SEAL				
21	1	AW12	BEARING NUT GASKET				
22	2	AN12	BEARING NUT				
23	Ţ	40R-G100	O RING				
24		4TC85-110-13 OIL SEAL	OIL SEAL				
25	5	BMST6	SPRING GASKET				
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A020008 GEAR BOX UNIT



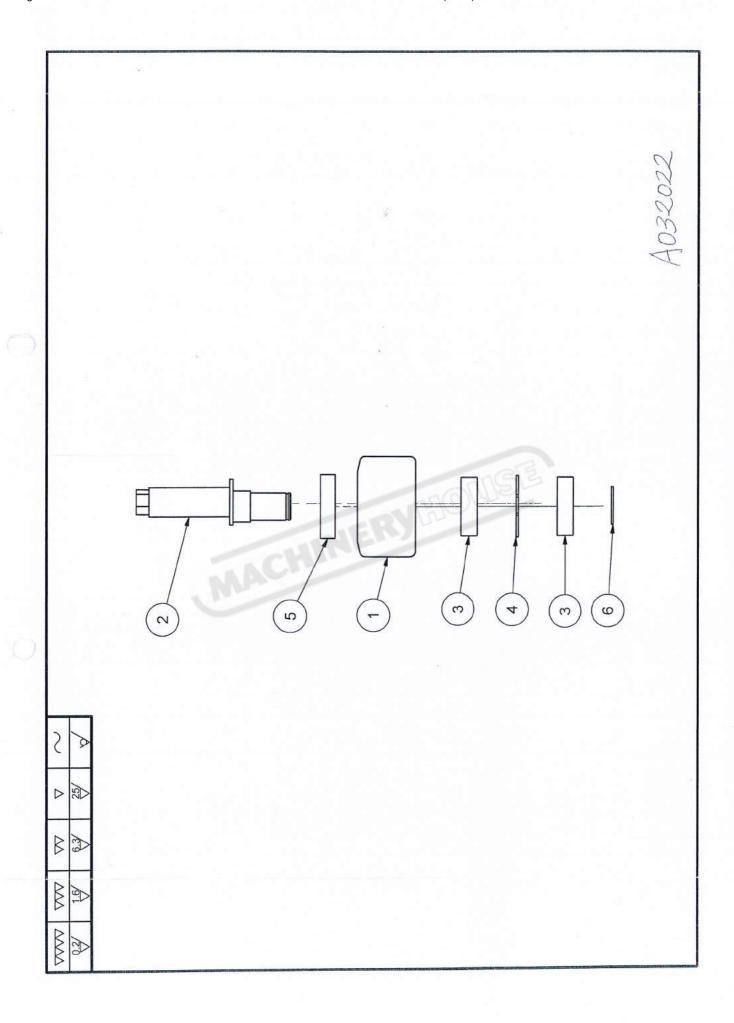
9 0 0	QTY	TYPE	DESCRIPTION	NO	QTY	TYPE	DESCRIPTION
	1	H03243600	SLIDE BASE				
2	1	H03243700	SLIDE BLOCK				
3	1	H03262600	PISTON				
4	1	H03262700	COVER				
5	1	H03262800	CYLINDER				
9	2	P30	ORING				
7	1	G45	O RING				
8		G115	O RING				
6	-	P110	O RING				
10	2	TP110	BACK UP RING				
11		G130	O RING			2.244.17	
12		G120	O RING		,	3	
13		M10x130	HEXAGON SOCKET HEAD SCREW				
14	3	M12x130	HEXAGON SOCKET HEAD SCREW				
15	1	B02060600	COPPER RING				
16	2	H03243800	PLATE				
17	4	M12	SPRING WASHER				
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A032001 TENSION BASE UNIT

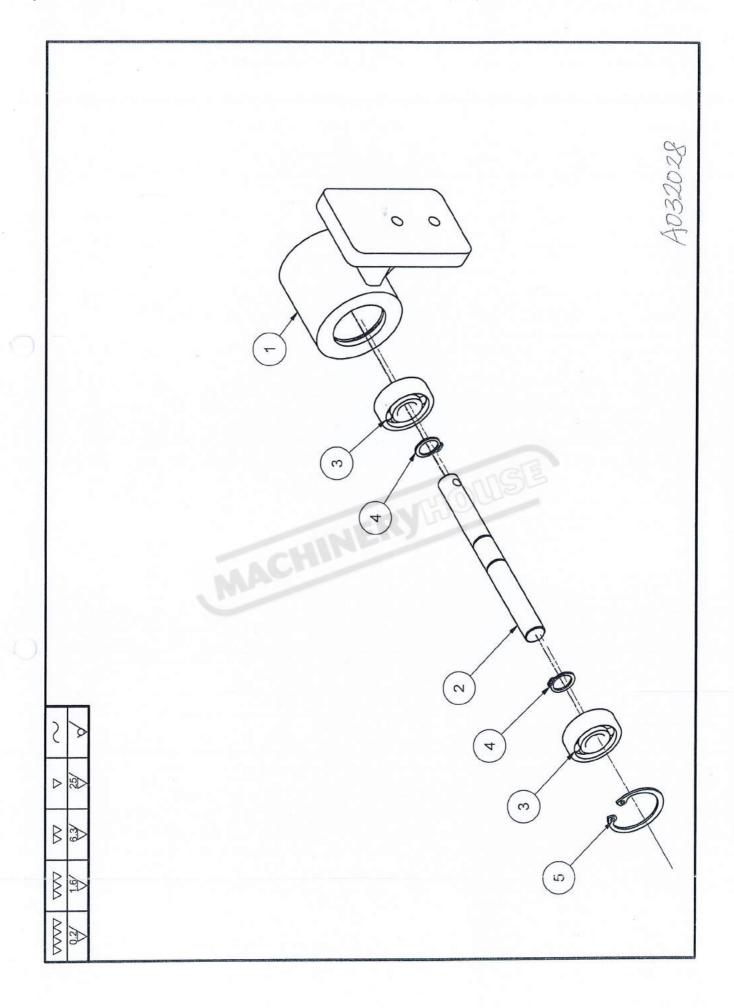


O'TY	I IYPE	DESCRIPTION	NC	CIY	IYPE	DESCRIPTION
\vdash	B02161400	CYLINDER				
	B02161500	BACK COVER				
	H03241300	PRESSING BLOCK				
7	H03241400	FLEXIBLE BLOCK			i.	
\leftarrow	H03241700	GUIDING ROD				
2	H03241800	GUIDING SCREW				
1	H03241900	ADJUSTING DISK				
	H03261500	PISTON BAR				
2	2DU3012	LUBRICATING BEARING				
2	P30	O RING				
	P49	O RING				
	TP49	BACKING UP RING				
-	G50	O RING		\$4. \$2.000		525
	DIAMETER 33	SPRING				
4	M10xP1.5x100L	HEX HEAD CAP SCREW				
,1	H03241200	PRESSING BASE				
4	M16	GASKET	0			
2	M16	NUT	U			
			NO BOOK			
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A032007 HYDRAULIC VERTICAL CLAMPING DEVICE



2	Q'I'Y	TYPE	DESCRIPTION	N	Q'TY	TYPE	DESCRIPTION
	1	H03242300	DAMPER ROLLING				
2	Ţ	H03242200					
3	2	6002	BEARING		L.		
4	1	R32	C TYPE RING				
5	1	D35-d17-B8	OIL SEAL				
9	1	S15	C TYPE RING				
7							
8			34				
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12						X	
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	NO NO	Q'TY	TYPE	DESCRIPTION	NO	Q'TY	TYPE	DESCRIPTION
1 B02022200 SHAFT 2 6201 BEARING 2 12 C TYPE RING 1 32 C TYPE RING 1		1	H03221800					
2 6201 BEARING 2 12 C TYPE RING 1 32 C TYPE RING 1 1 1 2 1 1 3 C TYPE RING 4 4 4 5 4 4 6 6 6 7 6 6 8 7 6 9 7 7 10 8 7 11 9 7 12 1 7 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 10 1 1 11 1 1 12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 18 1 1 18 1 1 18	2	1	B02022200	SHAFT				
2 12 C TYPE RING 1 32 C TYPE RING	3	2	6201	BEARING				
1 32 C TYPE RING	4	2	12	C TYPE RING				
	5	Ţ	32	C TYPE RING				
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