



DAKE SEMI-AUTOMATIC COLD SAW

Technics 350 SA

INSTRUCTIONAL MANUAL



⚠️ WARNING!

Read and understand all instructions and responsibilities before operating. Failure to follow safety instructions and labels could result in serious injury.

Dake Corporation
1809 Industrial Park Dr
Grand Haven, MI 49417

Phone: 800.937.3253

www.dakecorp.com

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DAKE STANDARD LIMITED WARRANTY

Finished Machines

Dake warrants to the original purchaser the finished machine manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within 1 year (12 months) from the delivery date to the end user.

Parts

Dake warrants to the original purchaser the component part manufactured or distributed by it to be free from defects in material and workmanship under normal use and service within 30 days from the delivery date to the end user.

The standard limited warranty includes the replacement of the defective component part at no cost to the end user.

Sale of Service (Repairs)

Dake warrants to the original purchaser the component part repaired by Dake Corporation at the manufacturing facility to be free from defects in material and workmanship under normal use and service within 90 days from the return date to the end user, as it pertains to the repair work completed. The standard limited warranty includes repair of the defective component part, at no cost to the end user.

Warranty Process

Subject to the conditions hereinafter set forth, the manufacturer will repair or replace any portion of the product that proves defective in materials or workmanship. The manufacturer retains the sole right and option, after inspection, to determine whether to repair or replace defective equipment, parts or components. The manufacturer will assume ownership of any defective parts replaced under this warranty.

All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:

Phone: (800) 937-3253

Email: customerservice@dakecorp.com

When contacting Dake, please have the following information readily available:

- Model #
- Serial #
- Sales Order #

Purchasers who notify Dake within the warranty period will be issued a Case number and/or a Return Material Authorization (RMA) number. If the item is to be returned per Dake's request, the RMA number must be clearly written on the exterior packaging. Any item shipped to Dake without an RMA will not be processed.

Warranty Exceptions:

The following conditions are not applicable to the standard limited warranty:

- (a) Part installation or machine service was not completed by a certified professional, and is not in accordance with applicable local codes, ordinances and good trade practices.
- (b) Defects or malfunctions resulting from improper installation or failure to operate or maintain the unit in accordance with the printed instructions provided.
- (c) Defects or malfunctions resulting from abuse, accident, neglect or damage outside of prepaid freight terms.
- (d) Normal maintenance service or preventative maintenance, and the parts used in connection with such service.
- (e) Units and parts which have been altered or repaired, other than by the manufacturer or as specifically authorized by the manufacturer.
- (f) Alterations made to the machine that were not previously approved by the manufacturer, or that are used for purposes other than the original design of the machine.



RETURN & REFUND POLICY

Thank you for purchasing from Dake! If you are not entirely satisfied with your purchase, we are here to help.

Returns

All Dake manufactured / distributed machines, parts and couplings include a 30-day return option. These policies are valid from the date of final shipment to the end user.

To be eligible for a return, the item must be unused and in the same condition as received.

All requested warranty claims must be communicated to the distributor or representative responsible for the sale. Once communication has been initiated, Dake Customer Service must be contacted for approval:

Phone: (800) 937-3253
Email: customerservice@dakecorp.com

Once the return request has been approved by Customer Service, a representative will supply a Return Material Authorization (RMA) number. The returned item must have the provided RMA number clearly marked on the outside packaging. Any item received without an RMA number clearly visible on the packaging will not be processed.

An RMA number can only be provided by the Dake Customer Service team and must be obtained prior to the return shipment.

Refunds

Once the item has been received and inspected for damages, a representative will notify the requestor referencing the provided RMA number.

If the return is approved, a refund will be issued to the original method of payment, less a 20% restocking fee. The restocking fee may be waived if an order is placed at the time of return with like-value merchandise.

Transportation costs are the responsibility of the end user and will not be credited upon return approval.

Any item that is returned after the initial 30 days or has excessive/obvious use will not be considered for a full refund.



DAKE STANDARD TERMS & CONDITIONS OF SALE

All proposals and quotations for the original sale of our products are subject to the following terms and conditions:

ACCEPTANCE OF ORDER: All orders are subject to acceptance by Dake at its main office in Grand Haven, Michigan.

APPLICABLE LAWS: This quotation or acceptance shall be governed in all respects by the laws of the State of Michigan.

CANCELLATION: We reserve the right to cancel and/or refuse to complete your order if, in our opinion, you have not established credit to promptly meet the payment terms of your order. Any cancellation from the Purchaser may be subject to a 10% cancellation fee for any of our non-standard machinery upon the discretion of Dake. All custom or special quotes will not be eligible for cancellation, nor returns.

DELIVERY: The proposed shipment date is an estimate and is contingent upon causes beyond Dake's control. Under no circumstances shall Dake have any liability for loss of use or for any direct or consequential damages resulting from delay. All shipments from the Dake facilities are F.O.B.

FREIGHT CLAIM: Damage freight claims must be submitted to Dake within thirty (30) days of shipment from Dake's facility. If shipment for order was set up by the Purchaser, Dake is not liable to handle the freight claims.

PERMITS AND COMPLIANCE: Dake shall not be responsible for obtaining any permits, inspections, certifications, or licenses required for the installation or use of the equipment. Dake makes no promise or representation that the equipment or any services to be furnished by Dake will conform to any federal, state, or local laws, ordinances, regulations, codes or standards.

PRICES: Unless otherwise agreed to in writing, all prices are F.O.B. our plant in Grand Haven, Michigan and Grand Prairie, Texas. In any event, the quoted prices for component parts become invalid ten (10) days after date of quotation, and machinery may become invalid sixty (60) days after date of quotation. Unless otherwise specified in Dake's quotation, installation services and final on-site adjustments are not included in the quotation.

TAXES: Prices do not include taxes. If any sales, use or similar tax is payable to Dake in connection with any transaction or part thereof between the Purchaser and Dake with respect to goods delivered, the Purchaser will, upon demand, pay to Dake the amount of any such tax. If you are tax exempt, please include your exemption document when submitting your order.

TERMS OF PAYMENT: Terms of payment are as stated in Dake's quotation subject to credit approval by our home office. Dake will invoice Purchaser when the equipment is completed and ready for shipment. Payment terms run from invoice date. Purchaser may be required to issue a down payment before production of order and shipment, at the discretion of Dake Accounting. For credit card purchases, a 3.5% processing fee may be applicable to the order. The following states are exempt from the 3.5% processing fee: CA, CO, KS, OK, TX, FL, NY, CT, MA, and ME. Dake's preferred method of payment is as follows: ACH Wire and credit card. Checks will be accepted but may cause delay in order processing. Below is our billing address:

1809 Industrial Park Drive, Grand Haven, MI 49417





WARRANTY If, within a period of one (1) year from date of shipment, any part of any equipment sold by Dake is defective in material or workmanship and is so found after inspection by Dake, it will be replaced or repaired at the option of Dake, providing the equipment has been given normal and proper usage and is still the property of the original Purchaser. Purchased components such as Micro Drop mist system or the like, installed as a part of Dake equipment are warranted only to the extent of the original Manufacturer's warranty. Dake is not responsible for any service work performed unless authorized in advance.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE). UNDER NO CIRCUMSTANCES SHALL DAKE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SPECIFICATIONS

Model	Technics 350 SA	Slotting	No
Number	974355-2	Maximum angle	60° left / 45° right
Voltage	220V/440V	Weight	890 lbs
Phase	3-Phase	Work Height	36-3/4"
Horsepower	3.5 max HP	Height	60"
Speeds	20-105 RPM	Base	33" x 50"
Max blade diameter	14"		


CUTTING CAPACITY

				
90°	3-3/8"	4-3/4"	4-1/8"	6-1/4" x 3-1/2"
45°	3"	4"	3-3/8"	3-3/8" x 2-3/4"

In the space provided record the serial number and model number of the machine. If contacting Dake this information must be provided to assist in identifying the specific machine.

Serial No.	
Model No.	
Date Purchased:	

SAFETY

 **This is the safety alert symbol.** When you see this symbol on your machine be alert to the potential for personal injury.


Carefully read all safety messages in these instructions and on your machine safety signs. Keep safety labels in good condition. Replace missing or damaged labels.

Employer is responsible to perform a hazard/PPE assessment before work activity.

▲ DANGER

High voltage.
Can cause severe injury or death.

Service by authorized personnel only.
Use lockout.



▲ PELIGRO ▲

Alta tensión.
Puede provocar lesiones severas o la muerte.

Para reparaciones, emplee personal autorizado solamente.
Use cierre eléctrico.

Label Part No.
84395

SAFETY INSTRUCTIONS

LOCKOUT PROCEDURE

1. Announce lockout to other employees.
2. Turn power off at main panel.
3. Lockout power in off position.
4. Put key in pocket.
5. Clear machine of all personnel.
6. Test lockout by hitting run button.
7. Block, chain or release stored energy sources.
8. Clear machine of personnel before restarting machine.

Label Part No.
76462

SAFETY INSTRUCTIONS

1. Read the instruction manual thoroughly before operating this machine.
2. Wear safety glasses.
3. Wear gloves only when handling material or replacing blade.
4. Never wear gloves while blade is rotating.
5. Do not perform cutting operations which exceed machine capacity.
6. Do not force machine to stall blade or breakage might occur.
7. Clamp workpiece securely.
8. Always use stock stands on both sides of saw blade to support material.
9. Use only blades to correct specification for the material being cut.
10. Keep floor around machine clean and free from chips, scraps, oil, and coolant.
11. Always lockout electrical power before performing maintenance, servicing, or changing blades.

Label Part No.
84605

▲ WARNING



Never reach into the point of operation.

Do not operate without all guards in place.

Label Part No.
82199



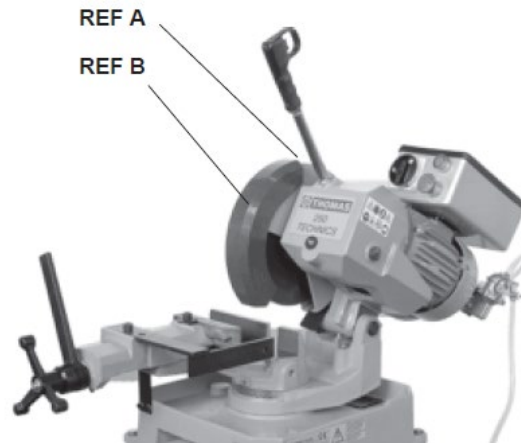
WARNING: This product contains Nickel, a chemical known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Additional Safety Warnings:

- This machine is intended to be operated by one person. This person should be conscious of the machine movement not only for themselves but also for persons on the immediate area of the machine.
- Never have several objects in your hands at once and keeps hands as clean as possible.
- This machine has been built to comply with national accident prevention regulations. Improper use and/or tampering with the safety devices will relieve the manufacturer of all responsibility.
- All internal and/or internal operation, maintenance or repairs, must be performed in a well-lit area or where there is sufficient light from extra sources so as to avoid the risk id even light accidents.
- It is forbidden to disconnect the “man present” device, known more correctly as the “safety switch with hold-down action”.
- Check that the voltage indicated on the plate, normally fixed to the machine motor, is the same as the line voltage.
- Check the efficiency of your electric supply making sure the machine has its own grounded circuit.
- Do not operation machine without safety guards or with the electrical panel cover removed.
- Then the tool head is in rest position (raised), the toothed blade must be stationary.
- Always disconnect the machine from the power socket before changing the blade or carrying out any maintenance job, even in the case of abnormal machine operation.
- Do not operate this machine without the handle and/or handle switch disconnected.
- Always wear OSHA approved safety glasses when operating this machine.
- Never put your hands or arms into the cutting area while the machine is operating.
- Do not shift or move machine while the machine is in operation.
- Do not wear loose clothing with sleeves that are too long, gloves, bracelets, rings, watches, chains, or any other object that could get caught in the machine during operation; tie back long hair.
- Keep the machine bed free from tools or any object, while the machine is in operation.

Locations of shields:

- Grey metal shield screwed onto the blade head. (REF. A)
- Self-regulating mobile blue plastic shield fitted coaxially with the fixed shield. (REF. B)



picture may vary by model


Electrical Equipment:

According to European Standard “CENELEC EN 60 204-1” which simulates modification, publication (IED 204-1)

- The electrical equipment ensures protection against electric shock as result of direct or indirect contact. The active parts of this equipment are housed in a box so that access is limited by screws can only be removed with a special tool; the parts are fed with alternating current at low voltage (24V).
- This equipment is protected against splashes of water and dust.
- Protection of the system against short circuits is ensures by means of rapid fuses and earthing; in the event of motor overload, protection is provided by thermal probe.
- In the event of incorrect operation or of dangerous conditions, the machine may be stopped immediately by pressing the red emergency stop button.
- In the event of a power cut, the specific start-up button must be reset.
- This machine has been tested in conformity with point 20 of EN 60204.

SET UP

TRANSPORTING AND ANCHORING

 When you receive your machine, you will need a forklift for transporting. When lifting the machine, a sling or original shipping pallet needs to be used.

Position the machine on a firm cement floor, keeping a minimum distance from 3 feet from any wall. Anchor it to the ground using screws and expansion plugs or tie rods sunk in the cement, ensure it is sitting level before anchoring.

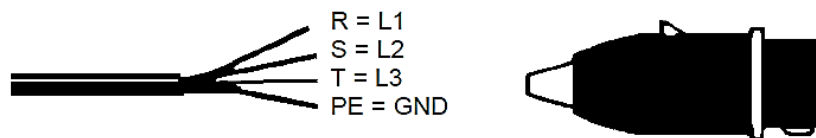
Minimum requirements for working environment of the machine:

- Main voltage and frequency complying with the machine motor characteristics.
- Environmental temperature from 15°F to 120°F, (-10°C to +50°C).
- Relative humidity no higher than 90%.

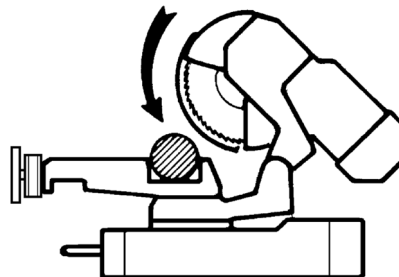
ELECTRICAL CONNECTION

The machine is not provided with an electrical plug, so the customer must find a suitable one for working conditions. Machine should be wired by professional electrician.

Three-Phase machine wiring diagram below:



After the machine is wired, ensure that the cutting direction matches the illustration below:



ASSEMBLING THE MACHINE

- Screw the cut length stop rod into the right-hand side of the vise casting as shown in the picture, use the provided nut to tighten firmly in place.
- Fit and align the roller carrying arm on the counter-vise bench.

CHOOSING A BLADE

The saw will come with a “DAKE Saw Pitch Calculator” to assist in blade selection.

First the pitch of the teeth must be chosen, suitable for the material to be cut, according to these criteria:

- Parts with a section such as profiles, pipes, and plates, need fine toothing, so the number of teeth used simulations cut.
- Parts with solids sections need wide spread toothing penetration.
- Material made of soft plastic, light alloys and mild bronze also require coarse toothing.
- If still unsure what blade to purchase contact your blade provider or DAKE.

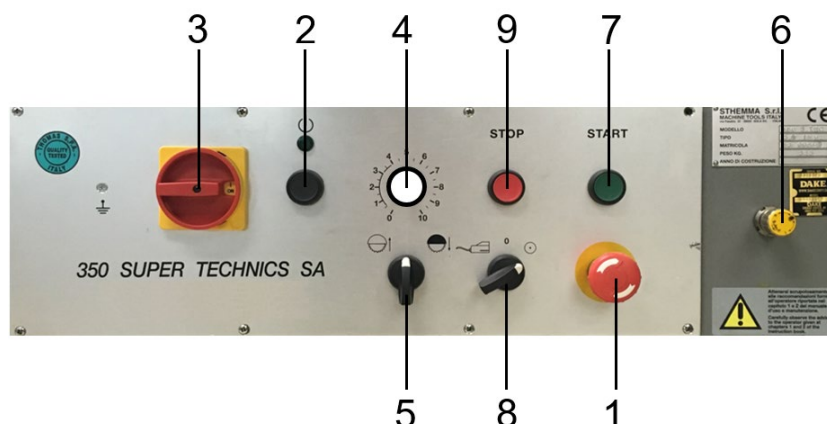
OPERATION

Use recommendations:

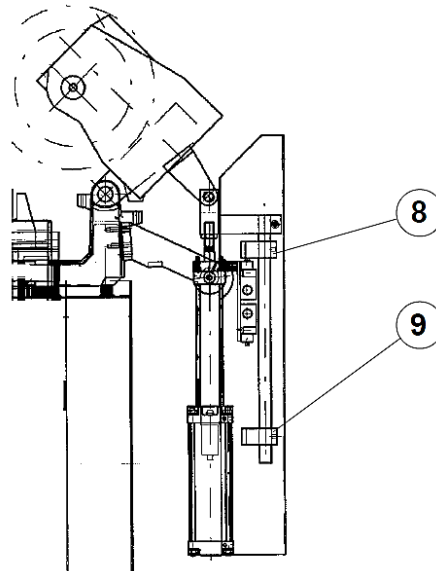
- This machine has been designed to cut metal building materials with different shapes, profiles used in workshops and mechanical structural work.
- Only one operator is needed to use the machine.
- Before starting each cutting operation, ensure that the part is firmly gripped in the vise and that the end is suitably supported.
- To obtain good running of the machine it is recommended to start using it in intervals of a half hour. This operation should be repeated two or three times, after this the machine may be used continuously.
- Do not use cutting blades of a different size from those stated in the specifications section.
- If the cutting blade gets stuck in the work piece, release the blade ON button immediately, switch off the machine and open the vise slowly. Remove the part and make sure that the cutting blade and/or teeth are not damaged or broken.
- Before carrying out any repairs on the machine, consult the distributor or DAKE.
- Move head to the full upright position when not in use, helps avoid stress on the return spring.

STARTING AND CUTTING

1. Ensure that the machine is not in emergency stop conditions; if it is, release the red emergency stop button (1).
2. Turn the main switch (3) to the "ON" position.
3. Press the start/reset button (2): the green light will light up, reset any time power is shut off or E-stop is pressed.
4. Select cutting speed on the speed switch (4), **adjust only with motor running.**
5. Ensure that the selector (8) is set mid position (neutral).
6. Place material to be cut in the vise, close jaws against material then back off clamp 3-4mm from the work piece.
7. Adjust the cutting stroke using the selector (5) letting the blade approach up to 10mm above the workpiece.
8. Set the microswitch.
 - a. Run the cutting head down to where the blade just breaks through the material level and set the lower micro-switch at this point. Micro-switch is located on the back of the head feed cylinder.
 - b. NOTE: Do not place material under the blade when making this adjustment. Place it close enough to see where the material is in correspondence to the blade, but not under the blade.
9. Close the blade downfeed speed on the regulator (6) off until you are ready to start cutting and adjust according to specifications of the workpiece.
10. Turn the selector (8) either to the left (foot control switch) or to the right (control panel).
11. Press "Cycle Start" (7) or foot pedal and verify the following functions: vise is camped, blade rotation clockwise (according to the arrow on the guard), coolant flow, and cutting cycle execution (motorhead stops against upper end stroke). When ready to start the cycle adjust blade speed and down feed speed.
 - a. When cutting with a new blade the first two or three cuts must be made while exerting a slight pressure on the part, so that the time to cut is about double the normal cutting time.
12. Press the red emergency stop or stop button (1 or 9) if there are conditions of danger or malfunction in general, stopping the machine immediately.



HEAD RETURN STROKE LIMITING DEVICE



To carry out this operation you must:

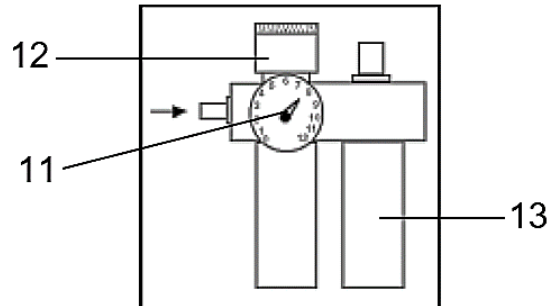
1. Slightly open regulator.
2. Rotate the selector (5) either to the right or left to lower or lift the motorhead.
3. Position the secure mechanical stop (8) against upper plate of the cylinder to press against the upper limit switch.
4. The lower limit switch (9) is set during assembly and inspection and limits the lower stroke of the motorhead.

ATTENTION: It is not necessary to adjust the upper end-stroke every time:

- You can bring the blade near the workpiece by means of the selector (5) and then start the automatic cutting cycle which will take place from the actual position of the blade.
- Notice that once the cut is complete the motorhead will go to the upper endstroke.
- Operate on regulator to modify motorhead return speed.

ADJUSTING PNEUMATIC SYSTEM PRESSURE

The pressure in the pneumatic system necessary for the proper operation of the saw must be 87-101 PSI.



- Check the pressure by the pressure gauge (11) and use the regulator (12) to set the ideal pressure.

MAINTENANCE

⚠ Before performing any maintenance ensure that the machine is LOCKED OUT and unplugged.

Special maintenance operations must be carried out by skilled personnel. However, we advise contacting DAKE. The term special maintenance also covers resetting of protection/safety equipment and devices.

ROUTINE MAINTENANCE

DAILY MAINTENANCE

- Check/fill coolant.
- Check blade wear.
- Check functionality of safety shields.
- Make sure emergency stops are working properly.
- General cleaning and removal of accumulated material.
- Move head to the full upright position when not in use, helps avoid stress on the return spring.

WEEKLY MAINTENANCE

- Sharpen blade if needed.
- Clean blade housing.
- Make sure the gearbox is full of oil.
- Check power cord for any damage.
- Clean shavings from lubricant tank.
- Clean and grease the screw and sliding guide vise.
- Clean the pump suction head and the suction area.

MONTHLY MAINTENANCE

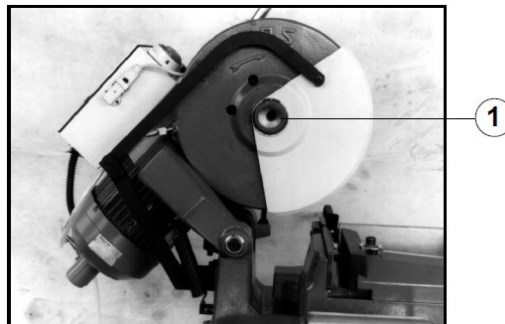
- Check tightness of the screws on the motor, pump, jaws, and safety guard.
- Check safety shields are not broken.
- Grease the head hinge pin.

SIX MONTH MAINTENANCE

- Change gear box oil.
- Flush coolant tank. This can be done by removing the tank cover on the back of the tank. And remove the filter screen on the deck of the saw.
- Check all electrical components and connections in the electrical box. Saw vibration may have loosened items wires or connections.
- Change the gearbox fluid. Drain all oil out and wipe down box and all gears before refilling. Use 90 weight synthetic gear oil.

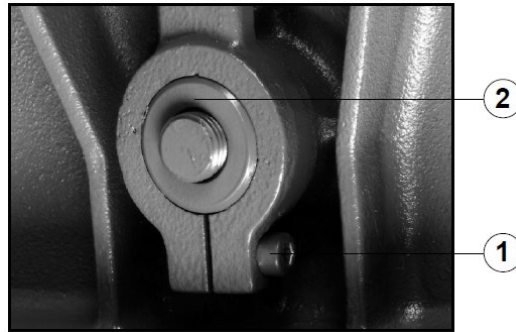
CHANGING THE BLADE

⚠ WARNING! Before changing the blade, electrical supply must be LOCKED OUT!
Always use gloves while handling loose blades.



1. Release the blade guard and push it back as far as it allows.
2. Raise head to the upper most position.
3. Insert the special hex wrench provided and remove the screw (1), loosen it in the counter-clockwise direction as it has left-handed threads.
4. Slip off the flange that holds the blade in place and remove old blade.
5. Fit the new blade, checking the cutting direction and direction of the teeth.
6. Install flange and tighten spindle bolt tight by hand.
7. Push the blade against direction of rotation until the holes deadhead against the flange drive pins and tighten spindle bolt securely. **⚠ This step is to remove backlash and is required before operating with a new blade.**
8. Install blade guard back in place.

REGULATING ARM BLOCKAGE



If there is insufficient blockage of the head arm in the desired position, loosen the screw (1) on the lever, hold the bushing (2) in position, turn lever left to tighten the screw.

CHANGING THE GEAR BOX OIL

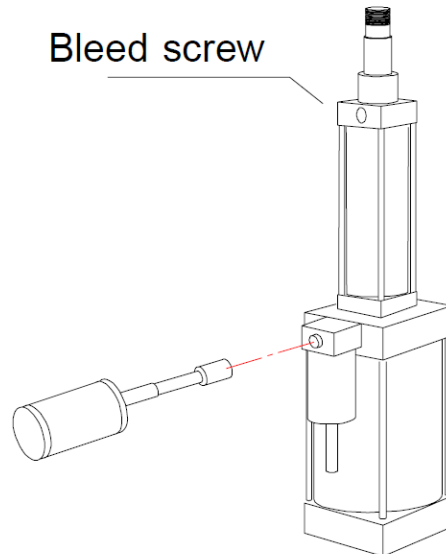
80/90 Synthetic Gear Oil, we recommend MOBIL SHC635.

1. Disconnect machine from power supply.
2. Use a bucket to collect old oil ; unscrew oil plug to let oil drain, when finished draining replace oil plug.
3. Keeping the head in the upper position, pour new oil into the handle opening until it is seen half way up the sight level gauge.
4. Follow local rules and regulations to dispose of oil properly.

FILLING THE HYDRAULIC SYSTEM

Braking fluid in the cylinder, controlling the head may consume oil throughout time. Therefore, it is important to restore the oil quantity inside the compression tank by removing the plug and then using a syringe type injector (see picture below) to fill the tank.

Use SHELL Hydraulic OIL 32, or equivalent.



1. Put the head in the upper position in the mechanical stop.
2. Switch on the machine and push the "Line" button.
3. Remove the plug and add oil, using a syringe type injector, until it is up to the plug opening, corresponding with the second mark on the stem.
4. Air must be bled from the tank by loosening the bleed screw, located on the side of the cylinder, until a small amount of oil seeps out. After this tighten the bleed screw back in to the cylinder.
5. Remove the injector and replace the plug.

TROUBLESHOOTING

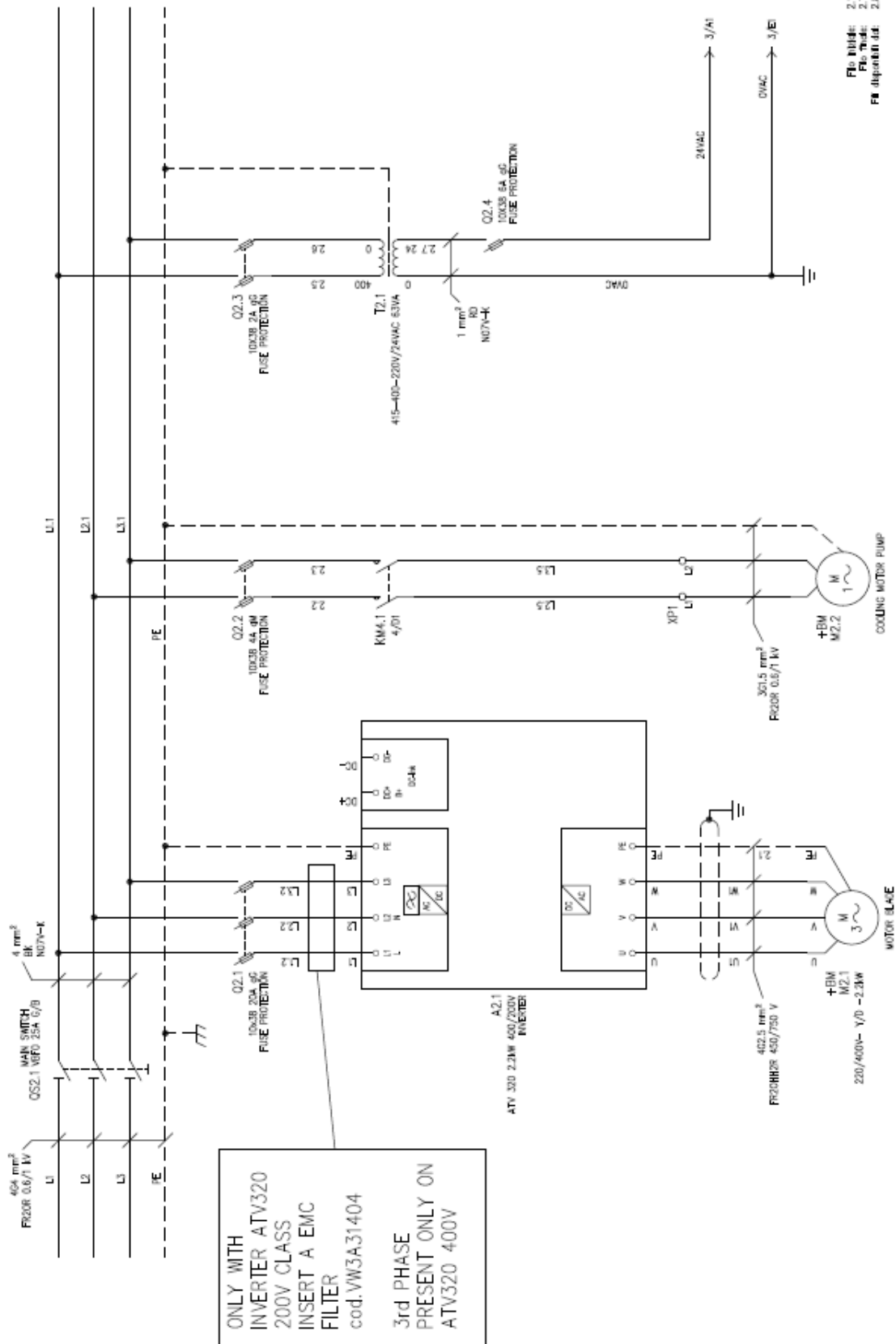
SYMPTOM	CAUSE	SOLUTION
Tooth Breakage	Too fast of an advance on the material	Decrease the level of downward feed
	Wrong cutting speed	Change the blade speed or the diameter of the blade

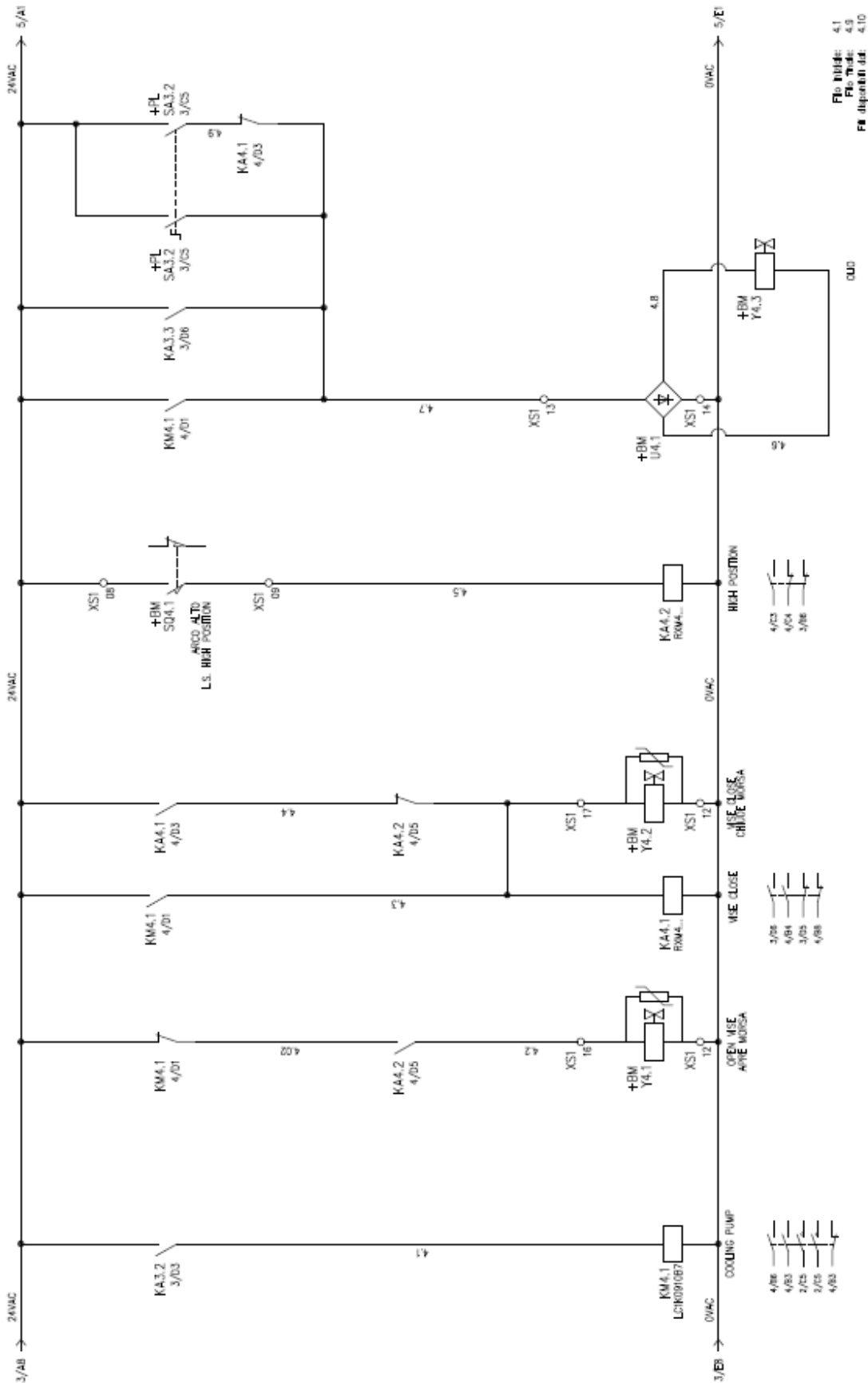
	Wrong tooth pitch	Use the blade calculator to determine the correct pitch or consult your blade provider
	Low quality and/or dull blade	Speak with blade provider and sharpener
	Poor clamping pressure causing the part to move	Check the material for tightness before cutting
		Check the condition of the jaw faces
Insufficient coolant or incorrect type of coolant	Check the level of coolant in tank and increase the flow of coolant.	
	Talk to your coolant provider	
Premature Blade Wear	Wrong blade being used	Consult your blade provider for adequate blade
	Wrong cutting speed or feed	
	Insufficient coolant or incorrect type of coolant	Check the level of coolant in tank and increase the flow of coolant
Talk to your coolant provider		
Blade Vibration	Wrong blade being used	Consult your blade provider for adequate blade
	Poor clamping pressure causing the part to move	Check the material for tightness before cutting
		Check the condition of the jaw faces
	Dimensions of the solid section too large with respect to the maximum cutting dimensions	Check the cutting capacity of the saw
Blade diameter incorrect and/or too large	Decrease blade diameter	

SYMPTOM	CAUSE	SOLUTION
Blade sticks in the cut	Too fast of an advance on the material	Decrease the level of downward feed
	Cutting speed too slow	Increase blade speed
	Wrong blade	Use the blade calculator to determine the correct pitch or consult your blade provider
		Use a higher quality of blade

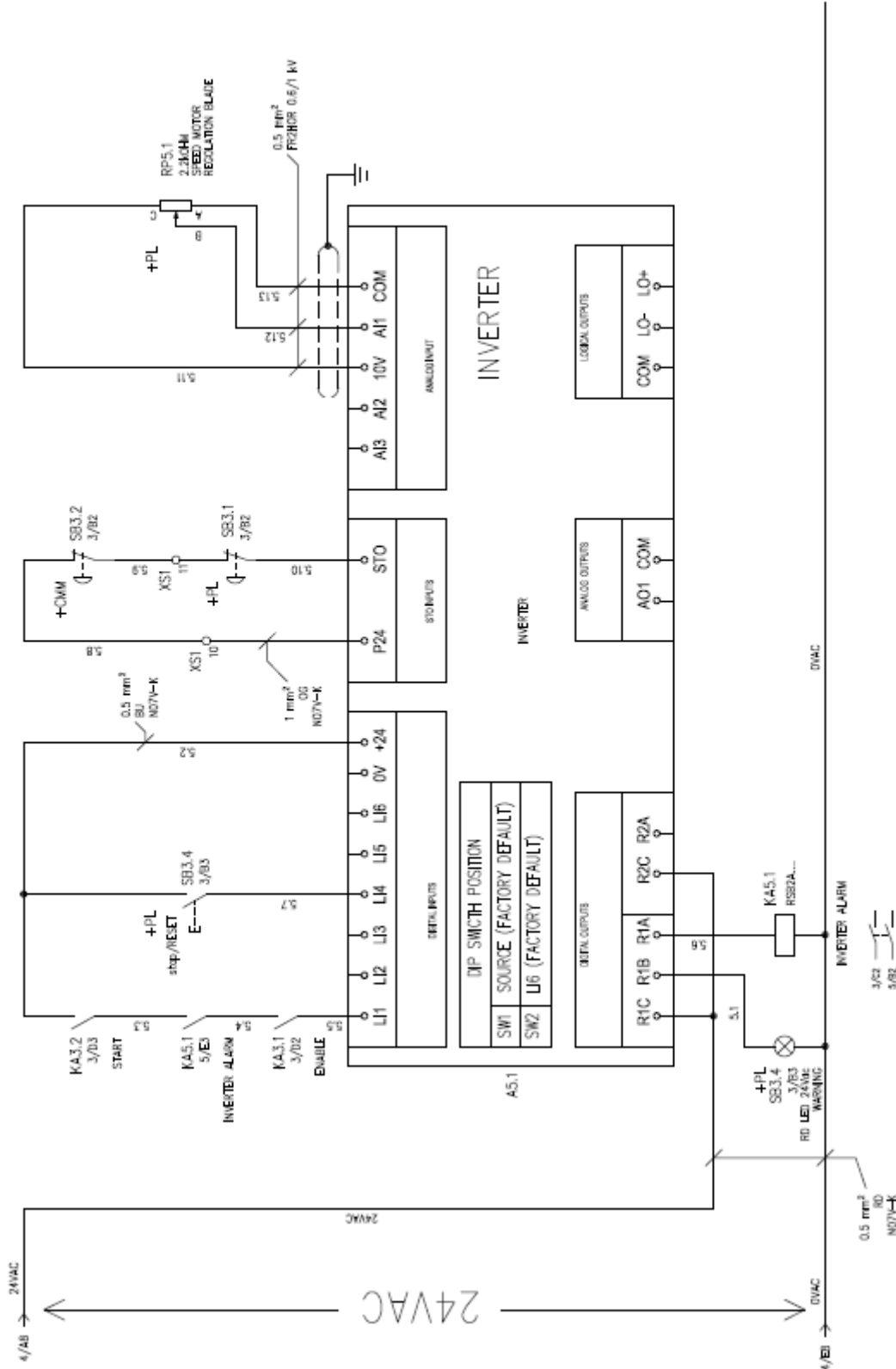
	Sticky accumulation of material on blade	Check the blend of coolant
	Insufficient coolant	Check the level of coolant in tank and increase the flow of coolant
		Talk to your coolant provider
Ridges on cutting surface	Blade diameter incorrect and/or too large	Decrease blade diameter
	Poor clamping pressure causing the part to move	Check the material for tightness before cutting
		Check the condition of the jaw faces
	Blade advance is too fast	Exert less cutting pressure on the material
	Blade teeth are worn	Sharpen blade or replace
	Insufficient coolant	Check the level of coolant in tank and increase the flow of coolant
		Talk to your coolant provider
Toothing does not unload shavings well	Select a blade with a larger tooth pitch	
Cut is not straight	Blade advance is too fast	Exert less cutting pressure on the material
	Poor clamping pressure causing the part to move	Check the material for tightness before cutting
		Check the condition of the jaw faces
	Blade head is not straight	Adjust head
	Blade side are sharpened differently	Choose tool quality carefully in every detail in regard to type and construction characteristics
	Blade thinner than the commercial standard	
Dirt on the gripping device	Carefully clean the contact surfaces	

ELECTRICAL SCHEMATIC

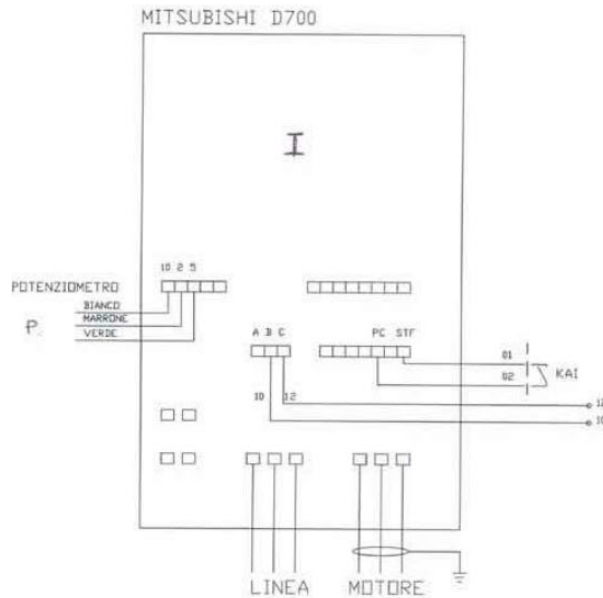




File Name: 4.1
File Type: 4.9
File Description: 4.10



SIGLA	DESCRIZIONE	DESCRIZIONE 2	DESCRIZIONE ESTESA	POSIZIONE	MORSI/ETIERA	UBICAZIONE	NOTE
A2.1	INVERTER		INVERTER	2/03			ATV 320 2.2KW 400/200V
A5.1	INVERTER		INVERTER	5/02			
K3.1	RTARDO PARTENZA	DISCESA LAMA	RTARDO PARTENZA DISCESA LAMA	3/04			REB867215
K4.1	ENABLE		ENABLE	3/02			CA2K...
K4.1	ENABLE		ENABLE	5/02			
K4.3.2	ACTIVE START		ACTIVE START	3/03			CA2KN...
K4.3.2	START		START	5/42			
K4.3.3	SAUTA LAMA	BLADE UP	SAUTA LAMA BLADE UP	3/06			ROMA...
K4.4.1	WFE CLOSE		WFE CLOSE	4/03			ROMA...
K4.4.2	HIGH POSITION		HIGH POSITION	4/05			ROMA...
K4.5.1	INVERTER ALARM		INVERTER ALARM	5/02			
K4.4.3	COOLING PUMP		COOLING PUMP	4/01			LC1K910E7
M2.1	MOTOR BLADE		MOTOR BLADE	2/E3	EXT	+BM	220/ACDV- Y/D -2.2KW
M2.2	COOLING MOTOR PUMP		COOLING MOTOR PUMP	2/E5	EXT	+BM	
Q2.1	FUSE PROTECTION		FUSE PROTECTION	2/03			10035 20A 00
Q2.2	FUSE PROTECTION		FUSE PROTECTION	2/05			10035 4A 0V
Q2.3	FUSE PROTECTION		FUSE PROTECTION	2/07			10035 2A 00
Q2.4	FUSE PROTECTION		FUSE PROTECTION	2/07			10035 5A 00
Q52.1	MAIN SWITCH		MAIN SWITCH	2/42			VEFO 25A 0/0
RPS.1	SPEED MOTOR	REGULATION BLADE	SPEED MOTOR REGULATION BLADE	5/06		+FL	2.2KWH
S4.1	START SELECTION	FEDAL/BUTTON	START SELECTION PEDAL/BUTTON	3/03			
S8.1	EMERGENCY STOP		EMERGENCY STOP	3/02		+FL	
S8.1.2	EMERGENCY STOP	ON PEDAL	EMERGENCY STOP ON PEDAL	3/02		+CMM	
S8.1.3	ENABLE		ENABLE	3/02		+FL	LED NH
S8.1.4	STOP/RESET		STOP/RESET	3/03		+FL	LED RD
S8.1.4	WARNING		WARNING	5/E2		+FL	RD LED 24VAC
S8.1.4	STOP/RESET		STOP/RESET	5/03		+FL	
S8.1.5	PEDAL START		PEDAL START	3/03		+CMM	
S8.1.6	MANUAL START		MANUAL START	3/04		+FL	LED ON
SQ4.1	ARCO ALTO	L.S. HIGH POSITION	ARCO ALTO L.S. HIGH POSITION	4/05		+BM	
Y3.1	DISCESA LAMA	BLADE DOWN	DISCESA LAMA BLADE DOWN	3/05		+BM	
Y3.2	SAUTA LAMA	BLADE UP	SAUTA LAMA BLADE UP	3/07		+BM	
Y4.1	APRE MORSA	OPEN WFE	APRE MORSA OPEN WFE	4/03		+BM	
Y4.2	CHIUE MORSA	WFE CLOSE	CHIUE MORSA WFE CLOSE	4/04		+BM	
Y4.3	CLD		CLD	4/E7		+BM	



Lista parametri

P1=FREQUENZA MAX	100Hz
3=FREQUENZA LINEA	60Hz
7=ACCELERAZIONE	2
8=DECELERAZIONE	2
9=ASSORB. MOTORE	---
18=FREQ. MAX	100
22=LIMITE STALLO	OK=150 (200 con mot. saccardo)
71=TIPO MOTORE	3
72=TIPO FREQ.	3
80=PDOT. MOTORE	---
83=TEWS. MOTORE	---
84=FREQ. MOTORE	50/60 Hz
96=AUTO TEST	11/13
125=GUADAGNO	100

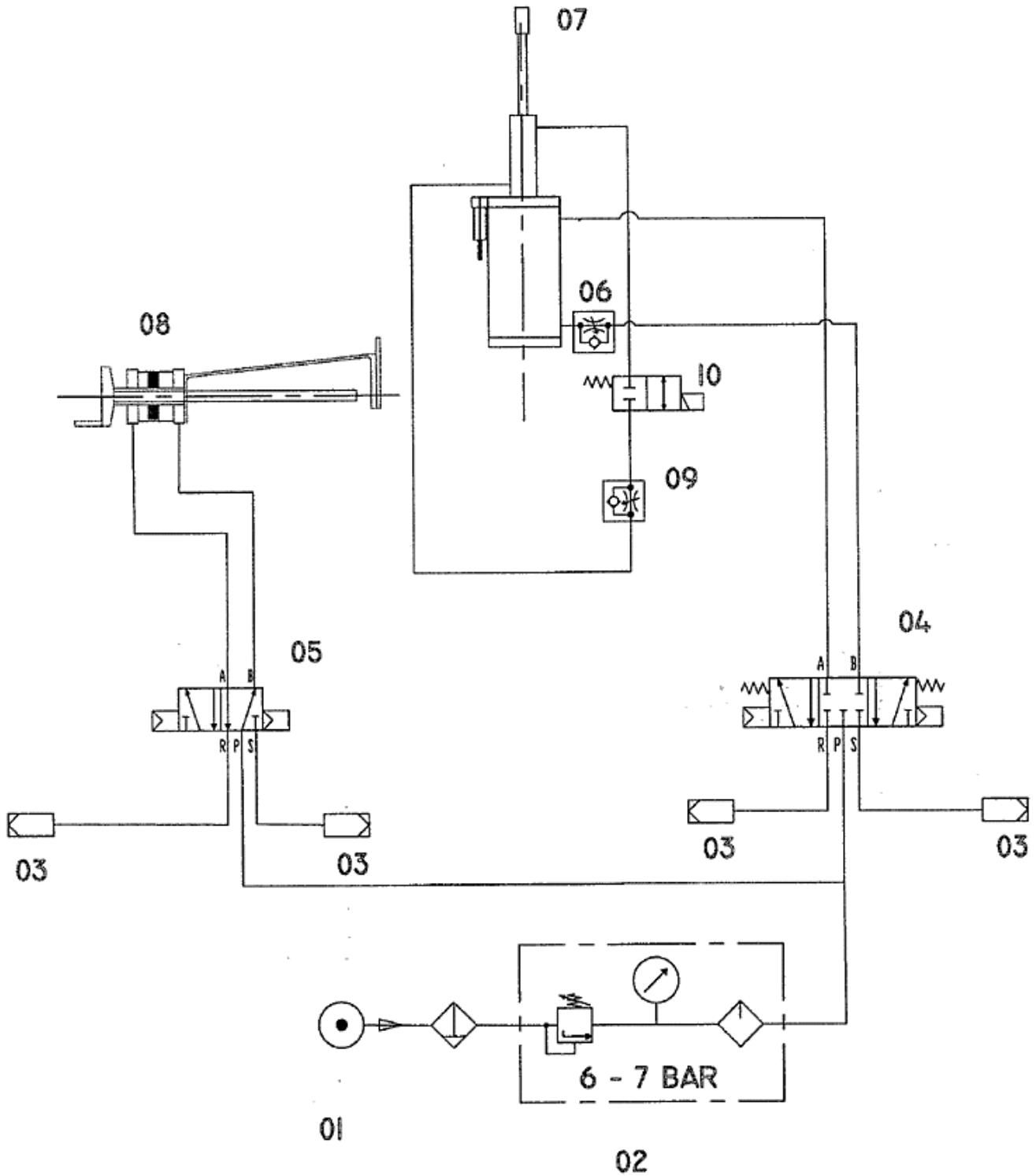
C= PER INSERIRE FREQ. MINIMA=PDOTENZ. A 0
C2=20

LEGENDA - Electrical components

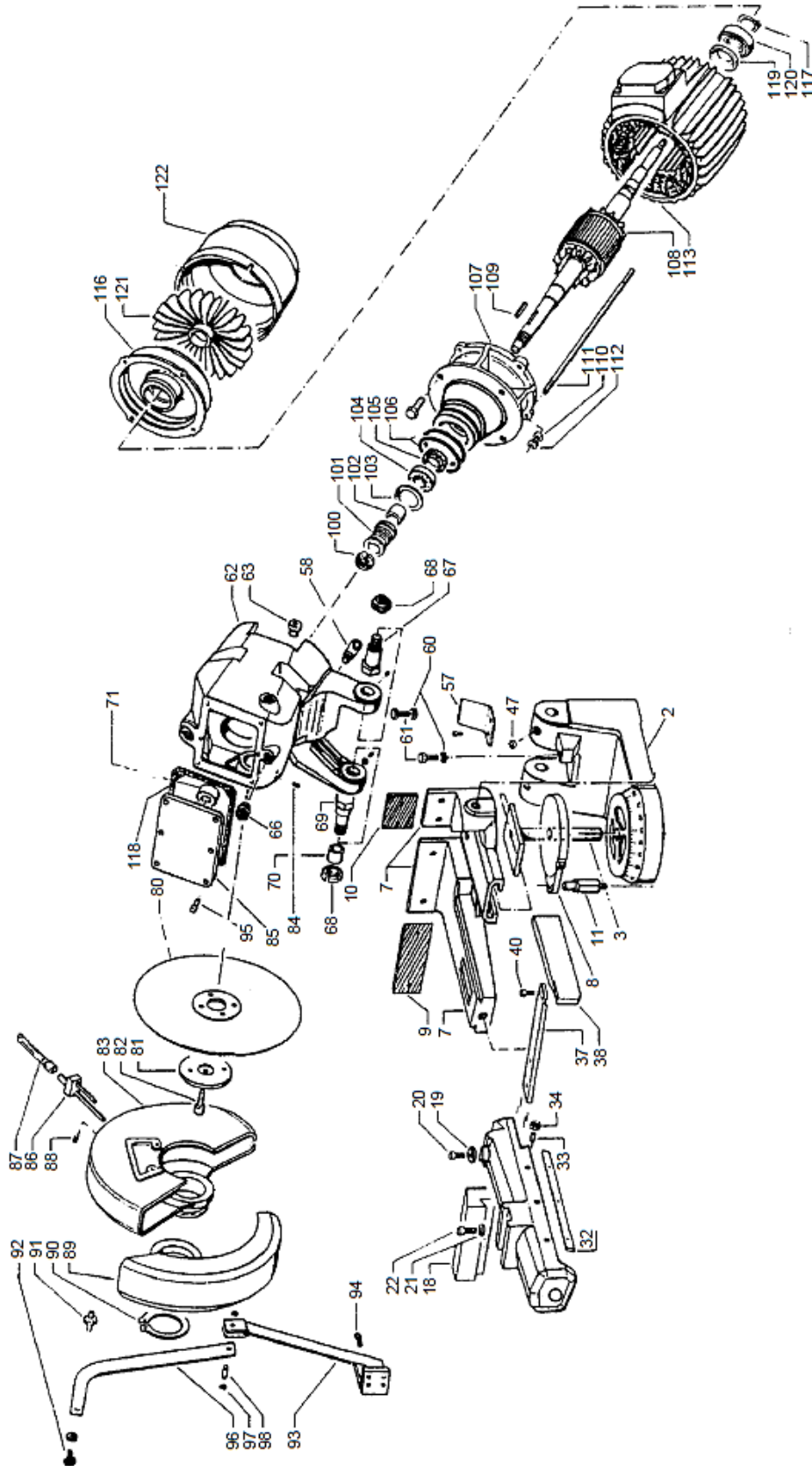
- QS1.....Main Switch
- FU1.....Fuse Cartridge
- FU2.....Fuse Cartridge
- FU3.....Fuse Cartridge
- TC.....Transformer
- KM1.....Remote Switch
- SA2.....Cutting up/downfeed
- SB0.....Emergency Stop
- SB1.....Emergency Stop
- SB2.....Line push-button
- SB3.....Cycle Start push-button
- SB4.....Cycle Stop push-button
- KA.....Aux Relay
- KA0.....Remote switch Line (*)
- KA1.....Aux Relay
- KA2.....Aux Relay
- KA3.....Aux Relay
- KA4.....Aux Relay
- KB.....Aux Relay (*)
- KC.....Aux Relay (*)
- KL.....Aux Relay (*) KX Aux Relay
- SQ3.....Microswitch on lower endstroke
- SQ5.....Microswitch on upper endstroke
- SQ6.....Microswitch on carriage back stop (*)
- SQ7.....Microswitch for material end (*)
- SQ8.....Microswitch on carriage (*)
- SQ9.....Microswitch on carriage protection (*)
- SQ10.....Microswitch on front guard (*)
- YV1.....Electrovalve for head downfeed
- YV2.....Electrovalve for head upstroke
- YV3.....Electrovalve for vice locking
- YV4.....Electrovalve for vice opening
- YV5.....Electrovalve for blocking
- YV6.....Electrovalve for feeding vice (*)
- YV7.....Electrovalve for carriage (*)
- YV8.....Electrovalve for oil nebulizer (*option*)
- HL1.....Light bulb
- HL2.....Light bulb (*)
- HL3.....Light bulb (*)
- HL4.....Light bulb (*)
- KT1.....Timer for delaying feeding vice opening (*)
- KT2.....Timer for delaying carriage start (*)
- KT3.....Timer for delaying carriage return (*)
- KT4.....Timer for delaying head downfeed start

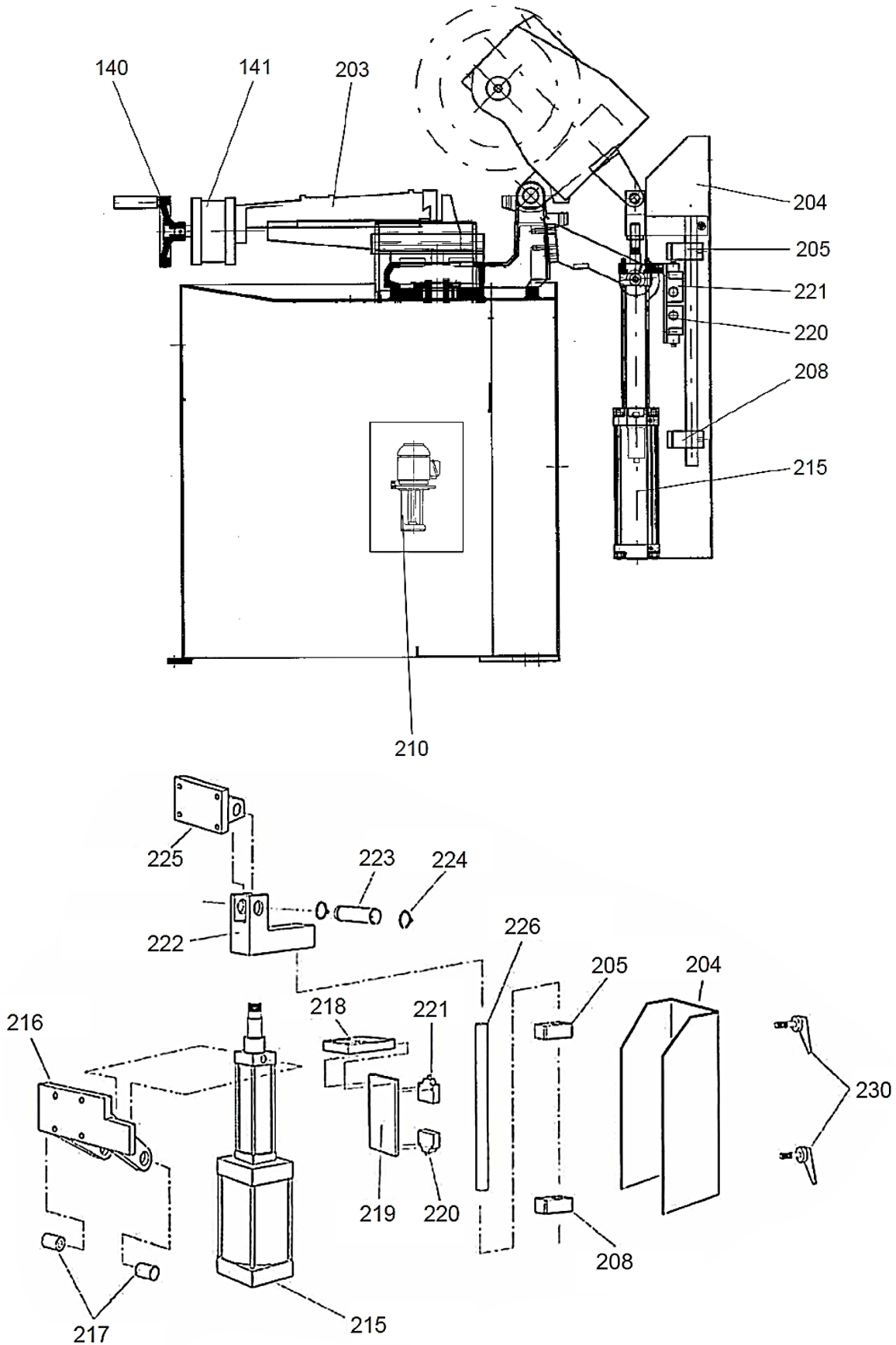
(*).....These parts are for the machine equipped with automatic material feeding system only.

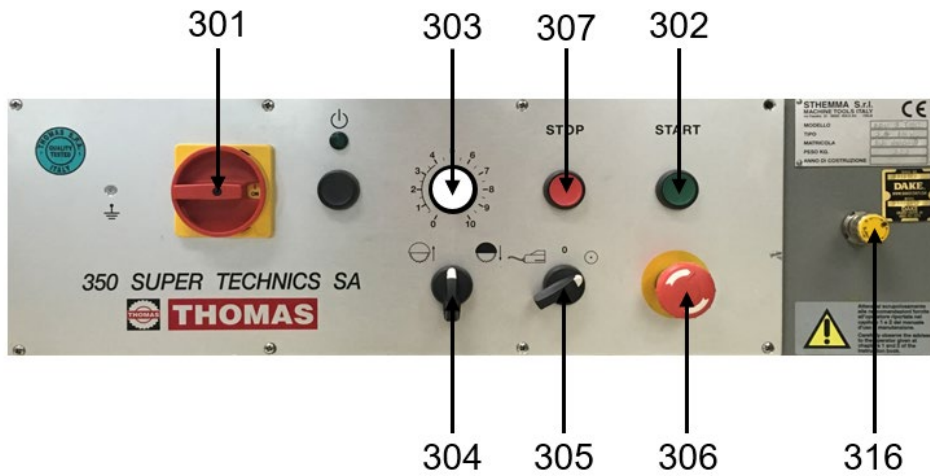
PNEUMATIC SYSTEM SCHEMATICS



EXPLODED VIEWS & PARTS LISTS







KEY

- 301** Main Switch
- 302** Start Push-button
- 303** Potentiometer
- 304** Cutting Head Up/Down Selector
- 305** Cycle Start Selector
- 306** Emergency Push-button
- 307** Stop Push-button
- 310** Transformer
- 311** Auxiliary Contact
- 312** Remote Control Switch
- 313** Auxiliary Relay
- 314** Fuse Cartridges
- 316** Head Descent Speed Adjustment



308 Inverter - controls blade speed



<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
1*	Machine Bed	AGB81040
2	Revolving Arm	AGB90025
3	Revolving Arm Locking Pin	AFB90029
4*	Revolving Arm Locking Bushing (Not Shown)	AFB90029
5*	Revolving Arm Locking Lever (Not Shown)	AGB80027
6*	Screw (M10)	81110110
7	Countervise	AGB90040
8	Mobile Countervise	AGB90041
9	Countervise Jaws	AFB90042
10	Burr-free Jaws	AFB90043
11	Countervise Rotating Locking Pin	AFB90044
12*	Roller Arm	AFB91100
13*	Roller	49001001
14*	Nut (M12)	81600012
15*	Screw (M12)	81100195
18	Vise Jaws	AFB90056
19	Vise Jaw Washer	AFB8B037
20	Screw (M12)	81110133
21	Washer (8.5mm ID x 21mm OD)	82100000
22	Screw (M12)	81110133
23*	Dowel (M8 X 30)	81132081
24*	Lever Bushing	AFB80032
25*	Quick Lock Vise Lever	AGB80031
26*	Thrust Bearing (AX 3047) & Counter-bearing (CP 3047)	84500001
27*	Quick Lock Vise Lever Washer	AFB80033
29*	Elastic Pin (Ø6)	82504217
30*	Washer (8.5mm ID x 21mm OD) (Not Shown)	82100000
31*	Screw (M8)	80521
32	Vise Gib	AFB80036

<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
33	Dowel (M8 X 30)	81132081
34	Hex Nut (M8)	81600008
35*	Vise Thread	AFB80034
36*	Quick Lock Vise Spring	AFB80035
37	Burr-free Transverse Plate	AFB90058
38	Burr-free Plate	AFB90059
	Burr-free Plate	110B0038
40	Socket Cap Screw (M8-1.25 x 20mm)	80521
41*	Tank Cover Filter	AFB80044
42*	Screw (M6)	80521
43*	Bar Stop Rod	AFB80024
44*	Ruler	AHB80026
45*	Screw (M2)	
46*	Bar Stop	AG260030
47	Oiler (Ø8)	82901005
48*	Dowel (M8 x 30)	81132081
49*	Tank Cover Gasket	ANB80042
50*	Ring (Seeger Ø421)	82610000
51*	Tank Cover Filter	AFB80043
52*	Tank Cover Wire Gauze	AFB8B043
53*	Tank Cover	ANB80041
54*	Washer (8.5mm ID x 21mm OD)	82100000
55*	Coolant Flow Control Valve (1/4")	88600000
56*	Coolant Tube	69102002
57	Extra Shield	AFB90091
60	Hex Nut (M12)	81600012
61	Screw (M12)	81100195
62	Head	AGB90001
63	Oil Plug (M15 x 1.5)	88302002
64*	Ring Nut (GUK M25 x 1.5)	81700025
65*	Spring Thrusting Washer	AFB90018
66	Oil Plug (M15 x 1.5)	88302002
67	Cylindrical Hinge Pin	AFB90027

<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
68	Ring Nut (GUK M25 x 1.5)	81700025
69	Eccentric Hinge Pin	AFB90026
70	Eccentric Bushing	AFB90028
71	Bearing (6202)	84101031
72*	Hex Nut (M20)	81600020
73*	Head Lever	120C0004
74*	Head Lever Handgrip	44600001
75*	Bushing	AFB90012
76*	Bearing (32008X)	84320032
77*	Ring (DPSM 50728)	86000000
78*	Cylindric Pin (Ø5 x 12)	302417
79	Blade Shaft	AFB90010
80	Blade	-
81	Blade Shaft Flange	AF710163
82	Screw (M12 x 35 left threaded)	S1110136
83	Fixed Blade Guard	AGB90085
84	Dowel (M8 x 30)	81132081
85	Front Head Cover	AGB90002
86	Coolant Distributor	AFB80055
87	Coolant Tube	69102002
88	Dowel (M8 X 30)	81132081
89	Mobile Blade Guard	160C0063
90	Ring (Seeger Ø60)	82600000
91	Pin	AF190092
92	Screw (M6 x 12mm)	80625
93	Tie Rod Support	AFB90087
94	Screw (M6 x 12mm)	80625
95	Screw (M6 x 12mm)	80625
96	Tie Rod	AFB90088
97	Ring (Seeger Ø 10)	82600000
98	Tie Rod Support Pin	AF19B090
99*	Ring (OR 4205)	86002004
100	Ring Nut (GUK M20 x 1)	81700020

<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
101	Worm Screw	AFB90015
102	Worm Screw Spacer	AFB90017
103	Ring (Seeger Ø 621)	82610000
104	Bearing (3305)	84301010
105	Ring (SM 32527)	301959
106	Rings (OR 4312)	302920
107	Front Motor Flange	ABG90004
108	Motor Shaft (Rotor)	AFB90008
109	Key (5 x 6 x 35mm)	82502025
110	Washer (in motor assembly)	-
111	Stud Bolt (in motor assembly)	-
112	Nut (in motor assembly)	-
113	Motor (Frequency Driven)	303318
113	Motor (2 Speed, 3-Phase, old model)	74320125
113	Motor (3 Speed, 3-Phase, old model)	74320130
116	Motor Rear Flange	ABG90005
117	Ring (Seeger Ø25)	82600000
118	Head Cover Gasket	ANB90003
119	Nilos Ring (4205 AV)	86005005
120	Bearing (4205)	84130010
121	Motor Fan	74310007
122	Fan Cover	AHB90006
123*	Bearing (609)	84101016
129*	Washer (8.5mm ID x 21mm OD)	82100000
130*	Screw (TE M6)	-
131*	Clutch Cone	AFB90014
132*	Worm Gear	ABB90016
133*	Clearance Adjustment Ring	AFB90013
134*	Ring Nut (KM8 M40 x 1.5)	81702040
135*	Safety Washer (MB8)	81703040
136*	Belleville Washer	82505101
137*	Blade Shaft Flange Pin	AFB8B007
140	Vise Handwheel	47100000R

<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
141	Pneumatic Vise Cylinder	78200096
-	Vise Cylinder Repair Kit	86045005
203	Vise Casting	303092
204	Cylinder Guard	-
205	Upper Adjustable Stock	110H0016
208	Lower Adjustable Stop	110H0016
210	Coolant Pump	302666
215	Cutting Head Cylinder	200H0006
	Head Cylinder Repair Kit	302725
	Oil Cylinder Pump	302824
	Oil Pump Nozzle	302494
216	Head Cylinder Bracket	-
217	Bushings	-
218	Plate	-
219	Plate for Microswitch	-
220	Microswitch	72212000
221	Microswitch	72212000
222	Cylinder Mounting Fork	110H0013
223	Fork Pin	-
224	Ring (Seeger Ø20)	-
225	Fork Attachment	-
226	Head Guide Rod	060H0001
230	Handle for Limit Switch	300362
301	Main Switch	70201011
302	Start Push-button	70101000
303	Potentiometer (2-speed, old model)	70221013
303	Potentiometer (3-Speed, old model)	70201018
303	Potentiometer (current model)	303650
304	Cutting Head Up/Down Selector	71100000
305	Cycle Start Selector	716812
306	Emergency Push-button	716538
307	Stop Push-button	716539
308*	Start Cycle Foot Control	73903000

<u>Item</u>	<u>Part Name</u>	<u>Part Number</u>
310	Transformer 100VA	73322011
311	Auxiliary Contact	72610001
312	Remote Control Switch	73401001
313	Auxiliary Relay	72300000
314	Fuse Cartridges	73142005
316	Head Descent Speed Adjustment	88900007
	Service Tool Bag – Complete	53100004
*	Parts not shown in exploded view	

Please contact factory for current prices.

ORDERING INFORMATION

Parts are available for direct purchase from Dake or through a distributor. When placing a parts order, you will need to provide the part number, name of part, and model number. All parts shipped F.O.B. Factory in Grand Haven, MI.

DEACTIVATING THE MACHINE

If the machine is not going to be in use for a long period of time it is recommended that you do the following:

1. Unplug machine.
2. Empty coolant tank.
3. Carefully clean and grease machine.
4. If necessary cover the machine.

DISMANTLING THE MACHINE

If this machine is permanently demolished and/or scrapped, divide the material to be disposed of and dispose of them in accordance to local disposal laws. This includes raw materials such as metals, electrical components, and special waste such as old oils.