

CUT 250 COLD SAW



MANUAL FOR 250 COLD SAW



<p>MODEL: _____</p> <p>SERIAL NUMBER: _____</p> <p>DATE PURCHASED: _____</p>

DAKE Division of JSJ
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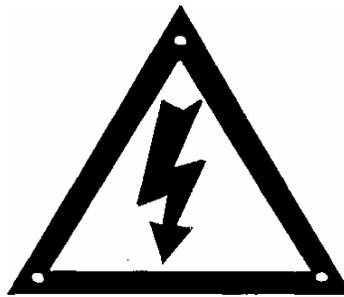
Accident prevention Regulations



- 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.
- 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 it's own grounded circuit.
- Do not operate machine without safety guards or with the electrical panel cover removed.
- Always disconnect machine from power source before changing the blade, performing maintenance or if the machine is operating abnormally.
- 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 in operation.
- Do not shift or move machine while the machine is in operation.
- Do not wear loose clothing, gloves, bracelets, rings, watches, chains or any other object that could get caught in the machine while in operation and Tie back long hair.
- Keep the machine bed free from tools or any other object, while machine is in operation.

Location of safety Covers

- Grey metal shield covering the blade.
- Blue plastic shield covering the blade.
- Black plastic cover, covering the electrical supply box.



Electrical equipment

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

- The electrical equipment ensures protection against electric shock as a result of direct or indirect contact. The active parts of this equipment are housed in a box so that access is limited, the screws can only be removed with a standard screwdriver.
- This equipment is protected against splashes of water and dust.
- This machine has been tested in conformity with EN 60204.

Recommendations for use

- 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 vice and that the end is suitably supported.
- Do not use cutting blades of a different size from those stated in the cutting capacity section (next page).
- 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 its teeth are not damaged or broken.

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-Before carrying out any repairs on the machine, consult the distributor or DAKE.

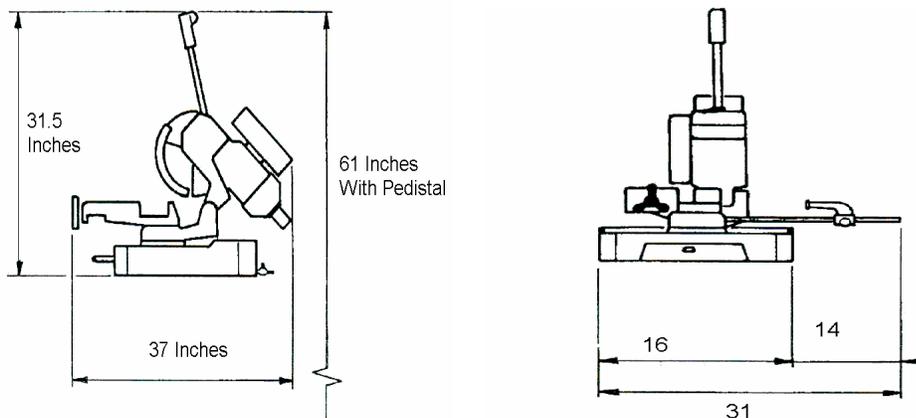
Cutting capacity

CUTTING CAPACITY				
90*	1 1/8	2 3/4	2 1/2	3 1/2 X 1 3/4
45*	1	2 3/8	2 1/8	2 1/2 X 2

-Single Phase, single speed electric motor	1HP
-Reduction gear	Ratio = 1:32
-Maximum blade diameter	Inches 10
-Blade speed rotation	rpm 44
-Max. Vice opening	Inches 4 1/8
-Machine weight without stand	Pounds 176
-Machine weight with stand	Pounds 238

Machine Dimensions

All Dimensions are in Inches



Instructions when you receive your machine

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- When you receive your machine it will be wrapped in plastic (see illustration 3).
- Remove the plastic and set pedestal to the side.
- Remove wooden walls from the crate.
- There are two bolts securing the machine to the crate, remove these two bolts.



Illustration 3

Assembling the Pedestal

- Open the box and remove all pieces. You will have four large pieces with a bag of nuts and bolts (see illustrations 4, 5 and 6)



Illustration 4

Piece 1

Piece 2



Illustration 5

Piece 3

Piece 4



Illustration 6

Bag of
nuts and
bolts

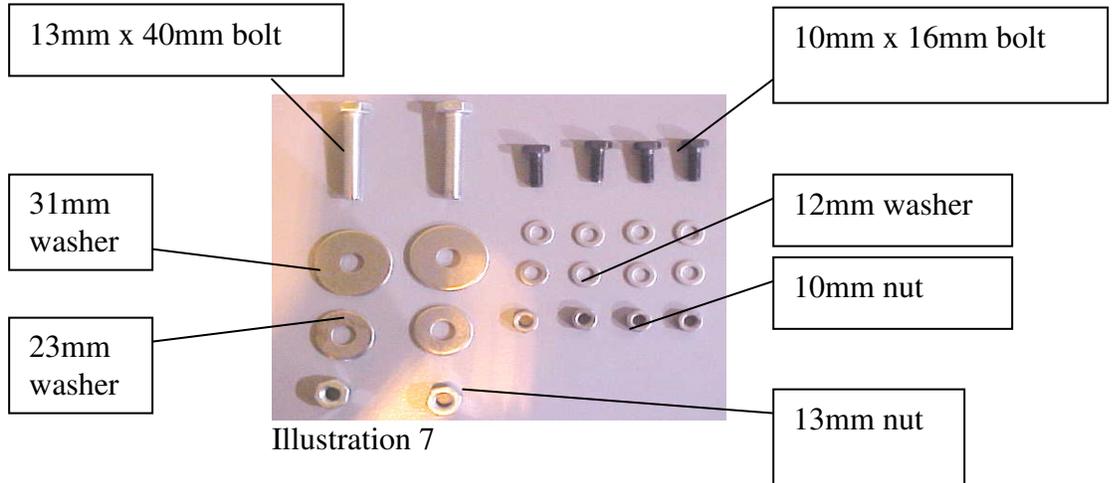
- Open the bag of nuts and bolts you will have the following contents (also see illustration 7 on page 6):

2 – 13mm x 40mm bolts
4 – 10mm x 16mm bolts
2 – 23mm washers

2 – 13mm nuts
2 – 31mm washers
4 – 10mm bolts

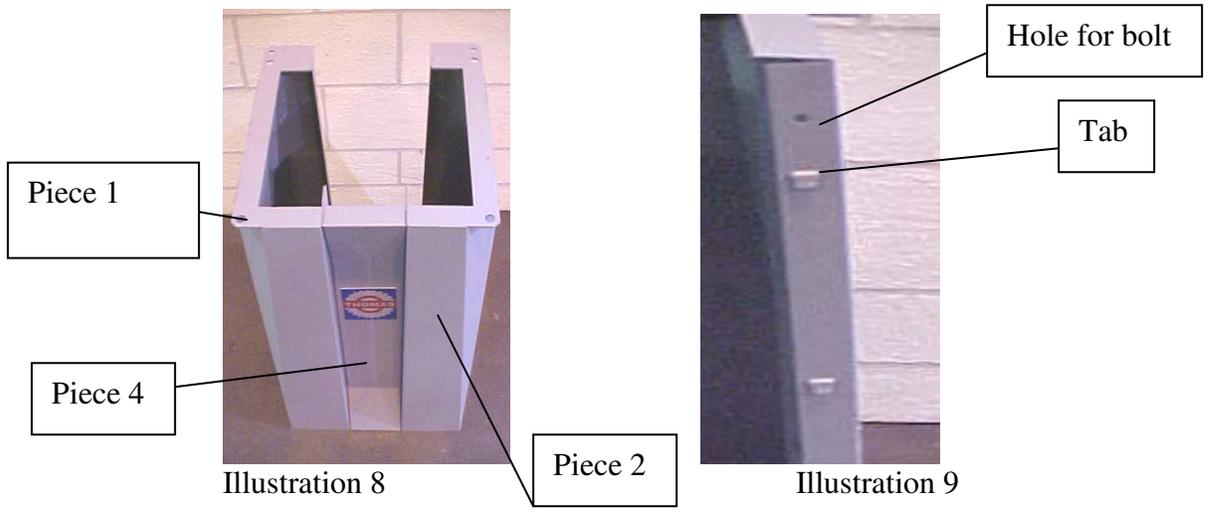
8 – 12mm washers

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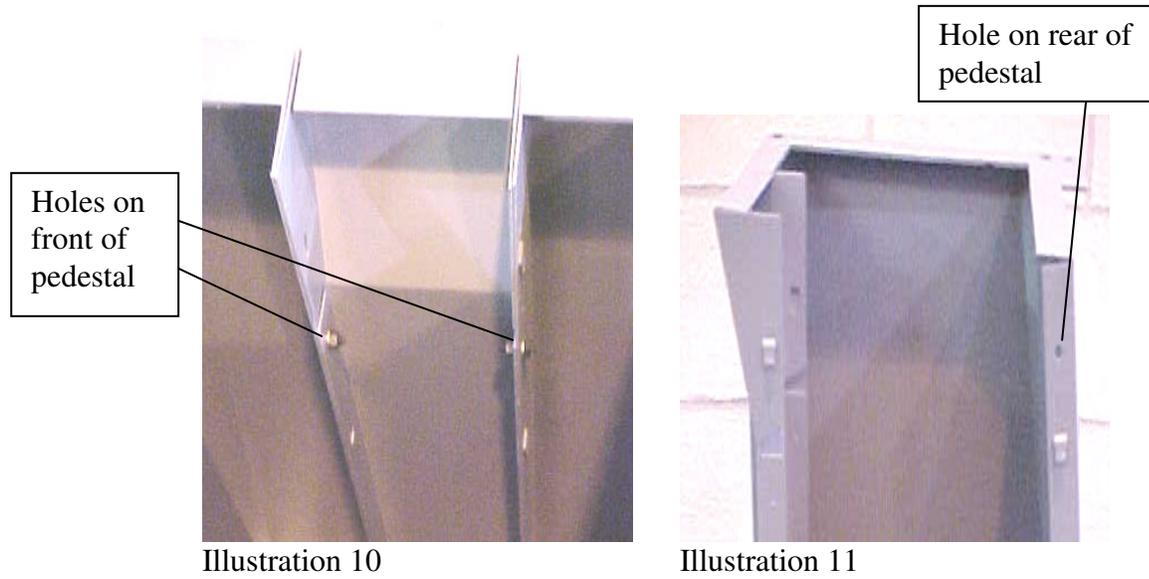
-Place both large pieces of the pedestal next to each other like in Illustration 4 on page 5.

- Take piece 4 and place between piece 1 and 2, as you will notice there are tabs on the sides, Put these tabs in the holes of piece 1 and push down, the two pieces will snap together (see illustration 8 & 9). Do the same with piece 3.



-There are 4 holes on the inside of this pedestal (two on the front and two on the back side). Take the 10mm x 16mm (see illustration 7) bolt and put one 12mm washer on it, put this bolt in the hole located on the inside of the pedestal (see illustrations 10 & 11 next page), then put one 12mm washer and one 10mm nut on, tighten nut as needed. Repeat this step for all four-bolt holes.

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-When you finish assembling the pedestal it will look like Illustration 12.



Illustration 12

Transporting and handling

-When you receive your machine use a forklift to transport the machine.

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-When lifting the machine use a sling.

How to mount your Cold Saw on the pedestal

-Place the machine on the pedestal so that the front of the machine is facing the front of the pedestal (see illustration 14).



Illustration 14

Front side of machine

Front side of pedestal



illustration 15

Front mounting hole

-Use the two remaining bolts (13mm x 40mm) and put a 31mm washer on it, put the bolt into the front mounting hole (see illustration 15). Put a 31mm washer on the bottom side of the bolt, now put the 13mm nut on the bolt.

-See picture below (illustration 16) to mount the second bolt on the rear side of the machine.

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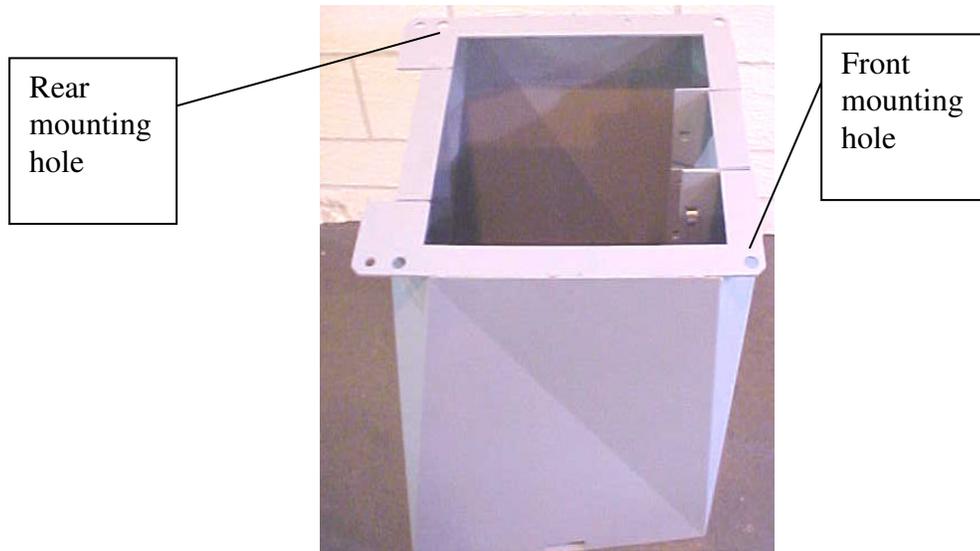


Illustration 16

How to assemble the machine

-The following parts will be with your machine upon receiving: handle and a stock stop (see photo on page 9).

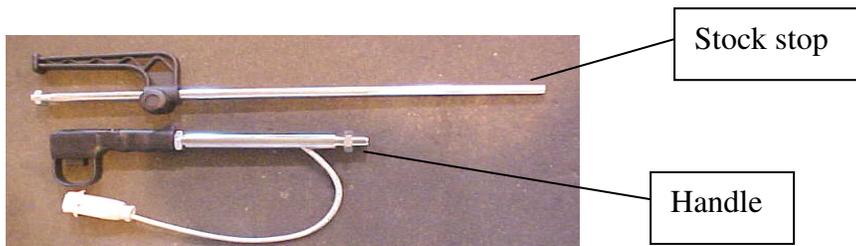


Illustration 17

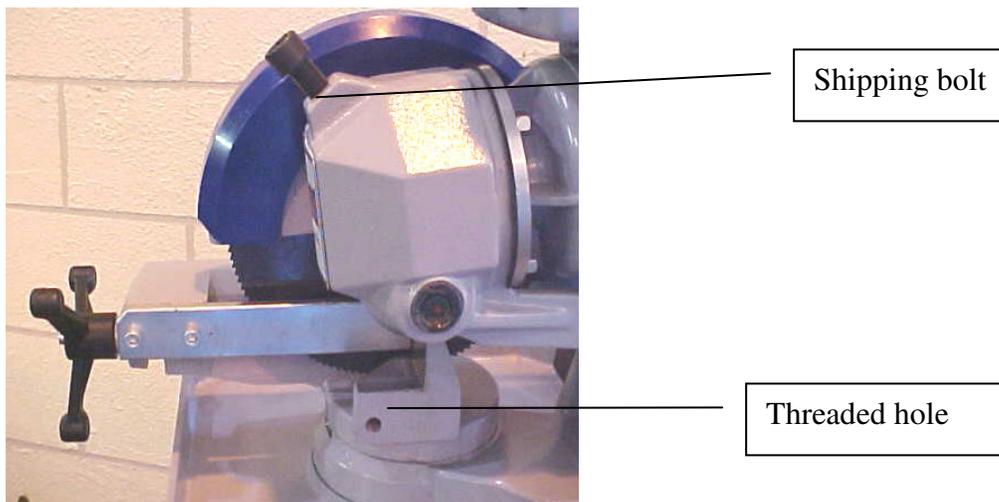


Illustration 18

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-Remove the shipping bolt (see illustration 18) and screw the handle in the hole. There is a white plug that comes out of the handle, plug this into its receptacle located on the side of the electrical box (see illustration 19). There is a lever on this attachment move this to the closed position as seen on illustration 19.

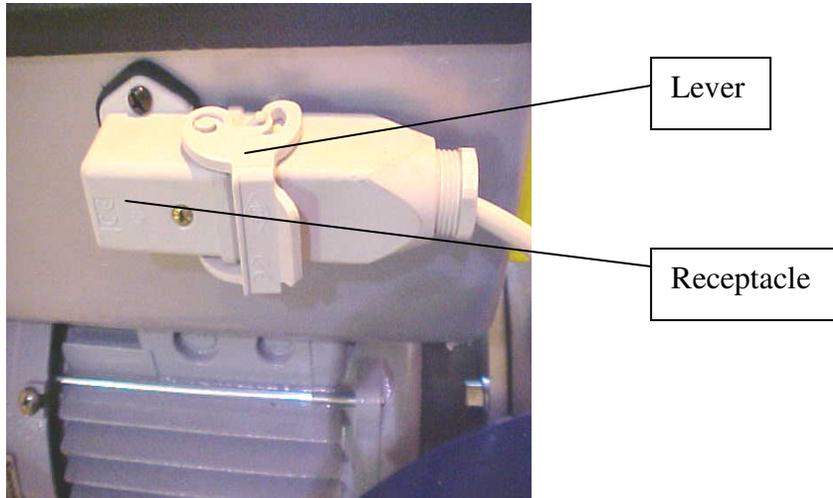
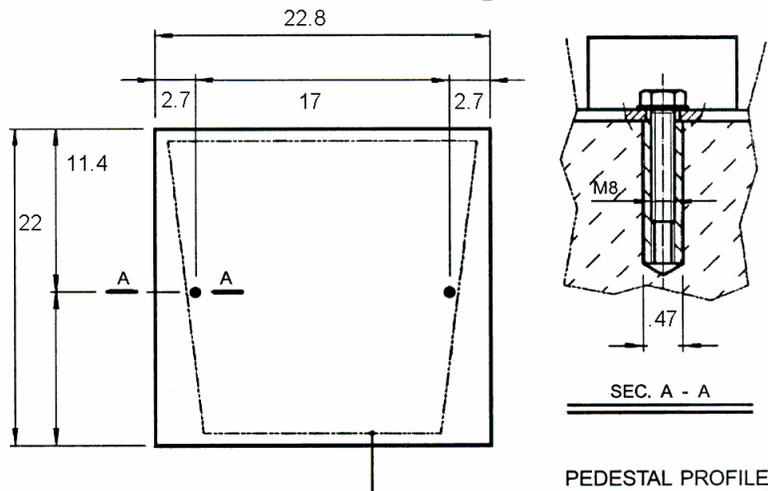


Illustration 19

Anchoring The Machine

-Position the machine on a firm cement floor; keep a minimum distance of 2 1/2 feet from the wall. Mount to the floor as shown in diagram



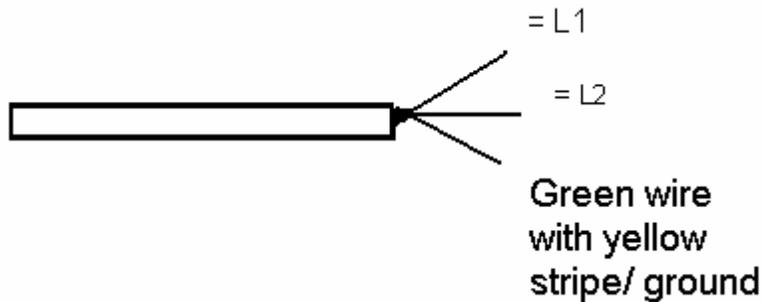
3.
Diagram 3

Instructions for electrical connection

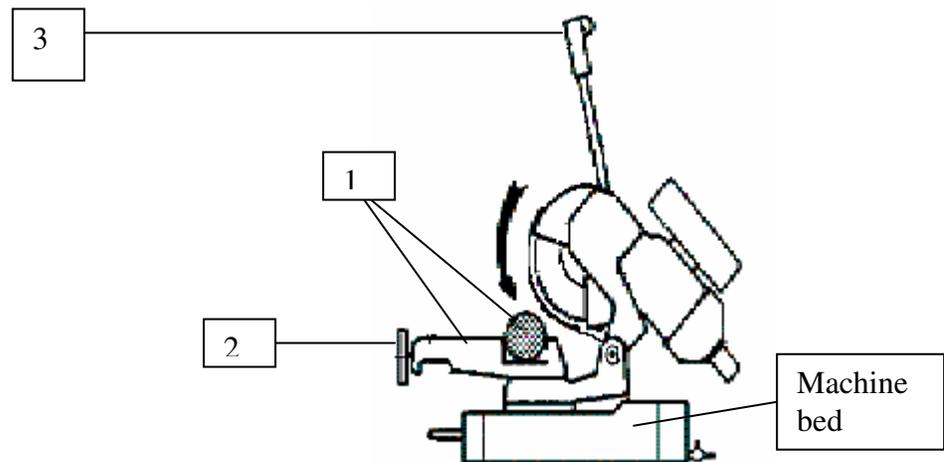
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-Before connecting the machine to the main power, make sure that your installation has a disconnect box.

-The machine is not provided with an electrical plug, the customer must provide a suitable plug for the machine. See diagram below for wire connection.



Operating your Cold Saw cut 250



-Mix the coolant that came with the machine (Trim Sol) at a 10:1 ratio, add about a half gallon of mixed coolant in the machine bed.

-Place the material to be cut in the vice (1) and clamp the material in place by turning the hand wheel (2) clockwise.

-Turn the power switch clockwise to the on position (illustration below).

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Off position



ON position

-Be sure that the blade is rotating in the correct direction indicated (the blade will rotate clockwise, be sure the blade is on correctly, also see changing the blade page 12) and check to make sure the coolant is on.

-The machine is now ready to cut the material. Keep in mind that the cutting speed and the type of blade, combined with a suitable descent of the head are of decisive importance for cutting quality and machine performance.

- When starting to cut with a new blade, be sure to take out the back lash (see changing the blade) on the blade, in order to safeguard the blade life and efficiency, the first two or three cuts must be made while exerting a slight pressure on the part, so that the time taken to cut is about double the normal time. Grip the handle and press the button, slowly move the head in the down position and begin to cut the material. When you are done cutting the material, release the blade “on button” and move the head in the up position.

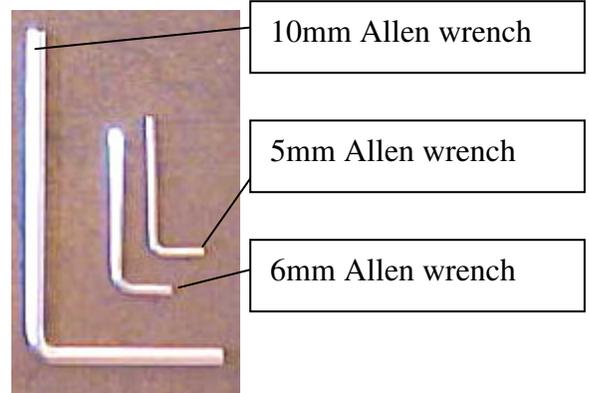
Changing the blade

Warning!!!! Before performing the following operations, the electrical supply must be LOCKED OUT.



Illustration 20

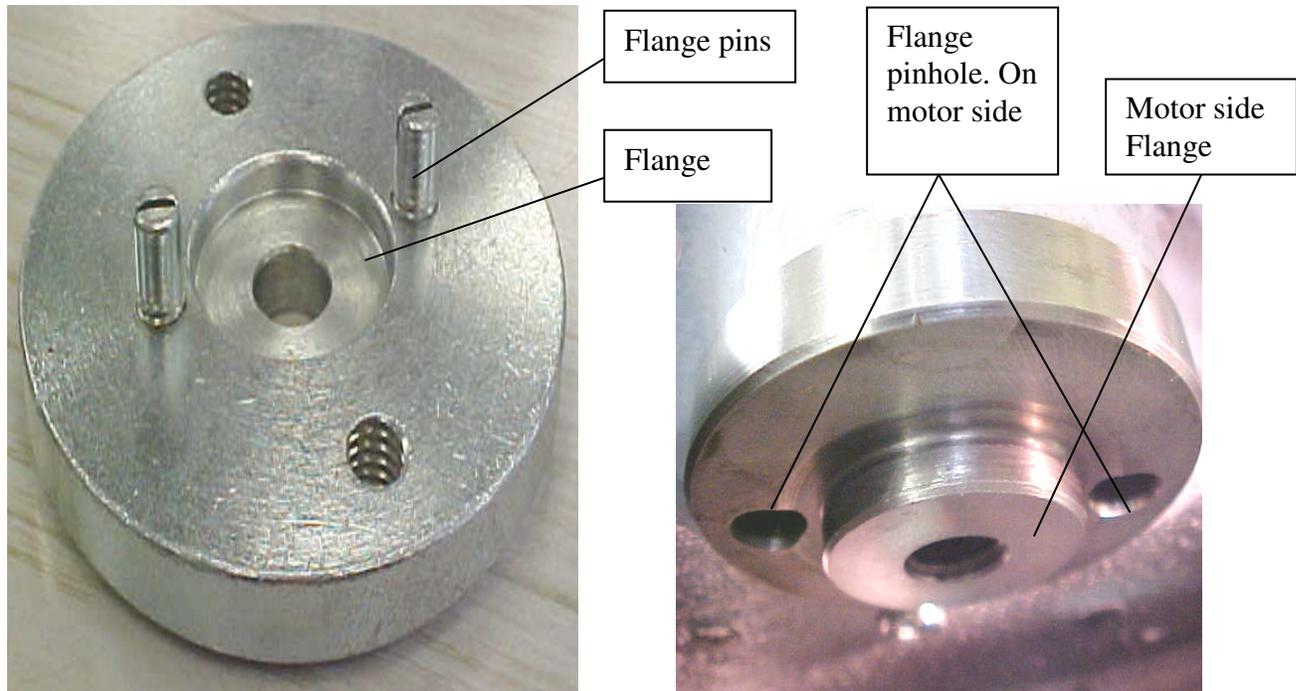
-Move the head to the upright position and remove the blue safety guard bolt (5mm Allen wrench see illustration 20), move the safety guard in the back position.



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-Always wear gloves when handling the cutting blade or any sharp object.

-Use the 10mm Allen wrench to remove the blade bolt (see illustration 20), this is a **left hand thread**; turn it clockwise to loosen the bolt. Slip off the bolt and the flange that holds the blade on.



-When placing on a new blade be sure to clean all surfaces and that the cutting teeth are facing in the down position (the blade turns clockwise), line the holes up on the blade with the holes on the motor side (Clean both sides of the flange), put the flange back on, making sure the flange pins are in line with the flange pinholes.

-Screw the blade bolt back in turning it counter clockwise, before tightening the blade be sure to remove the **back lash by pulling up on the blade in the reverse direction and holding it while tightening the blade.**

-Screw in the safety guard bolt and you are finished.

Routine maintenance

If the following operations are neglected, the result will be premature wear of the machine and poor performance.

Daily maintenance

- General cleaning of the machine, remove accumulated shavings.
- Keep coolant level full.
- Check for blade wear
- Lift the head to the up position, to avoid stress on the return spring when not is use
- Check functionality of the safety shields.

Weekly maintenance

- Remove metal shavings from the coolant tank
- Clean and grease the screw and the sliding guide of the vice.
- Clean the blade housing
- Sharpen the blade

Monthly maintenance

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

Six Month maintenance

How to change the oil in the gearbox

- Disconnect machine from the power supply
- Change the oil in the reduction unit using gear lube 80/90. **We recommend MOBIL SHC635.**



- Remove the handle and the plug coming from the handle to the electric box.
- Unscrew the sight level gauge; this will drain all the oil in the gearbox. Use a bucket to catch all the oil from the gearbox.
- When oil stops coming out of the sight level hole, screw the sight level gauge back into the hole.
- Fill gearbox with 80/90-gear oil. **We recommend SHC 635 MOBIL** when refilling the gearbox be sure to fill only to the middle of the sight level gauge when the cutting head is sitting level.
- Screw handle back in hole and connect the Plug coming from the handle.

Oil disposal

- The disposal of oil and coolant products are controlled by strict regulations, follow local rules and regulations to dispose of properly.

Choosing a blade

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

- Parts with a thin and/or variable section such as profiles, pipes and plate, need fine tothing, so that the number of teeth used simultaneously cut.
- Parts with solid sections need wide spaced tothing penetration.
- Material made of soft plastic, light alloys and mild bronze also requires coarse tothing.
- Attached to the on/off switch on the machine you will find a blade pitch calculator (Part number 71756) with instructions on how to use it.

Troubleshooting

This lists the probable faults and malfunctions that could occur while the machine is being used and suggests possible remedies for solving them.

PROBLEM	PROBABLE CAUSE	REMEDY
<p>Tooth breakage</p> 	<p>Too fast advancement</p> <p>Wrong tooth pitch</p> <p>Low quality blade</p> <p>Ineffective gripping of the vise</p> <p>Previously broken tooth left in material</p> <p>Insufficient coolant</p> <p>Blade is on backwards</p>	<p>Decrease advancement, use less cutting pressure</p> <p>Choose a different blade</p> <p>Choose a better quality blade</p> <p>Tighten vise if necessary</p> <p>Remove all pieces from material</p> <p>Check coolant level, Add more if necessary</p> <p>Turn blade around</p>
<p>Premature disk wear</p> 	<p>Incorrect blade</p> <p>Insufficient coolant</p>	<p>Change blade for one that has more or less teeth</p> <p>Check coolant level, add more if necessary</p>
<p>Chipped disk</p> 	<p>Flaws in the material</p> <p>Wrong tooth pitch</p>	<p>Reduce the cutting pressure and/or advancement</p> <p>Change blade for suitable blade (use blade pitch calculator)</p>

Noise test

In accordance with point 1.7.4f of the Machines Directive EEC 89/392

- The microphone was located close to the operator's head at medium height.
- The equivalent continuous acoustic pressure level was 77,6dB (A).
- The maximum level of the weighted instantaneous acoustic pressure C was always less than 130 dB.

NOTE: With the machine operating, the noise level will vary according to the different materials being processed. The user must assess the intensity and if necessary provide the operators with the necessary personnel protection, as required by law 277/1991.

DRAWING NUMBER	PART NAME	PART NUMBER
1	MACHINE BED	AGC11070
2	REVOLVING ARM	AG190046
3	REVOLVING ARM PIN	AFC10029
4	REVOLVING ARM LOCKING BRUSH	AFC10030
5	REVOLVING ARM LOCKING LEVER	AG160022
6	SCREW TCCE M8	81110080
7	ELASTIC PIN 6	82504217
8	COUNTERVICE	AG940011
9	DOWEL M6 5927	81132062
10	BAR STOP ROD	ANC10046
11	BAR STOP	ANC10046
12	VICE	AG940012
17	OILER 5	82901005
18	VICE HAND WHEEL	47100000
19	ROLL PIN	82504217
20	VICE SCREW	AFC10058
23	BURR-FREE PLATE	AF940081
24	SEAL FITTER SUPPORT FLANGE	ANC10072
25	SNAP RING 42	82610000
26	TANK COVER FITTER	AFB80043
27	FITTER SUPPORT FLANGE	ANC10071
28	SCREW TCCE M5	64180
29	WASHER	82100000
30	COOLANT ON/OFF VALVE	88600000
31	COOLANT HOSE	69102002
32	SCREW TCCE M6	81110055
33	COOLANT TANK SCREEN	AFB80044
34	SCREW TSPEI M8	81120074
35	NUT M8 HEXAGONAL	81600008
36	HINGE PIN	060A0010
37	DOWEL M6 5927	81132062
38	NUT M6 HEXAGONAL	81600006
40	NUT M16 HEXAGONAL	81600016

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41	HEAD LEVER	AF190052
42	HAND GRIP	44600001
43	ANELLOSM 30-40-7	86001049
44	KEY UNI 8X7 6604	82502082
45	BLADE SHAFT	AF190006
47	BLADE SHAFT FLANGE PINS	AFC10013
48	BLADE SHAFT FLANGE	AF19B006
49	BLADE BOLT M12X30 LEFT HAND THREADS	S1110136
50	FIXED BLADE GUARD	AG190086
51	DOWEL M16 5923	81130102
52	COOLANT TUBE	AFC10091
53	BLADE GUARD	AH190087
54	SNAP RING 60	82600000
55	SCREW TCCE M6	81110055
57	UPPER BLADE GUARD SUPPORT ARM	AF19B090
58	SNAP RING 10	82600000
59	SAFETY GUARD SUPPORT PIN	AF19B090
60	LOWER SAFETY GUARD SUPPORT ARM	AF190088
61	SCREW TCCE M8	81110080
62	PIN 4	82504165
63	WORM WHEEL	AB190042
64	DOWEL M8 5923 M8x1.25 stock room	81130082
65	WORM WHEEL RETAINING WASHER	AFB8B037
66	SCREW M12	81110133
67	NUT M16 HEXAGONAL	81600016
68	WORM SCREW	AF160010
70	FRONT MOTOR FLANGE	AHH80004
73	MOTOR 3PH CE	74320104
73.1	MOTOR 3PH NON CE	74300104
74	MOTOR 1PH CE	74320103
74.1	MOTOR 1PH NON CE	74300103
79	HEAD GASKET	AN160031
82	TESTA	AG190054
83	REAR MOTOR FLANGE	AHH80005
84	MOTOR FAN	74310007
85	FAN COVER	AHH80006
86	SCREW TCCE M4	81701
87	BEARING 609	84101016
88	PUMP CONNECTION BOX	AG190044
89	SCREW TCCE M5 72528	72528
90	COOLANT PUMP	88141000
91	SCREW TCCE M6	81110055
92	OIL PLUG	88302002
93	SPTING TOP CONNECTION	110C0012
94	HEAD RETURN SPRING	AFC10021

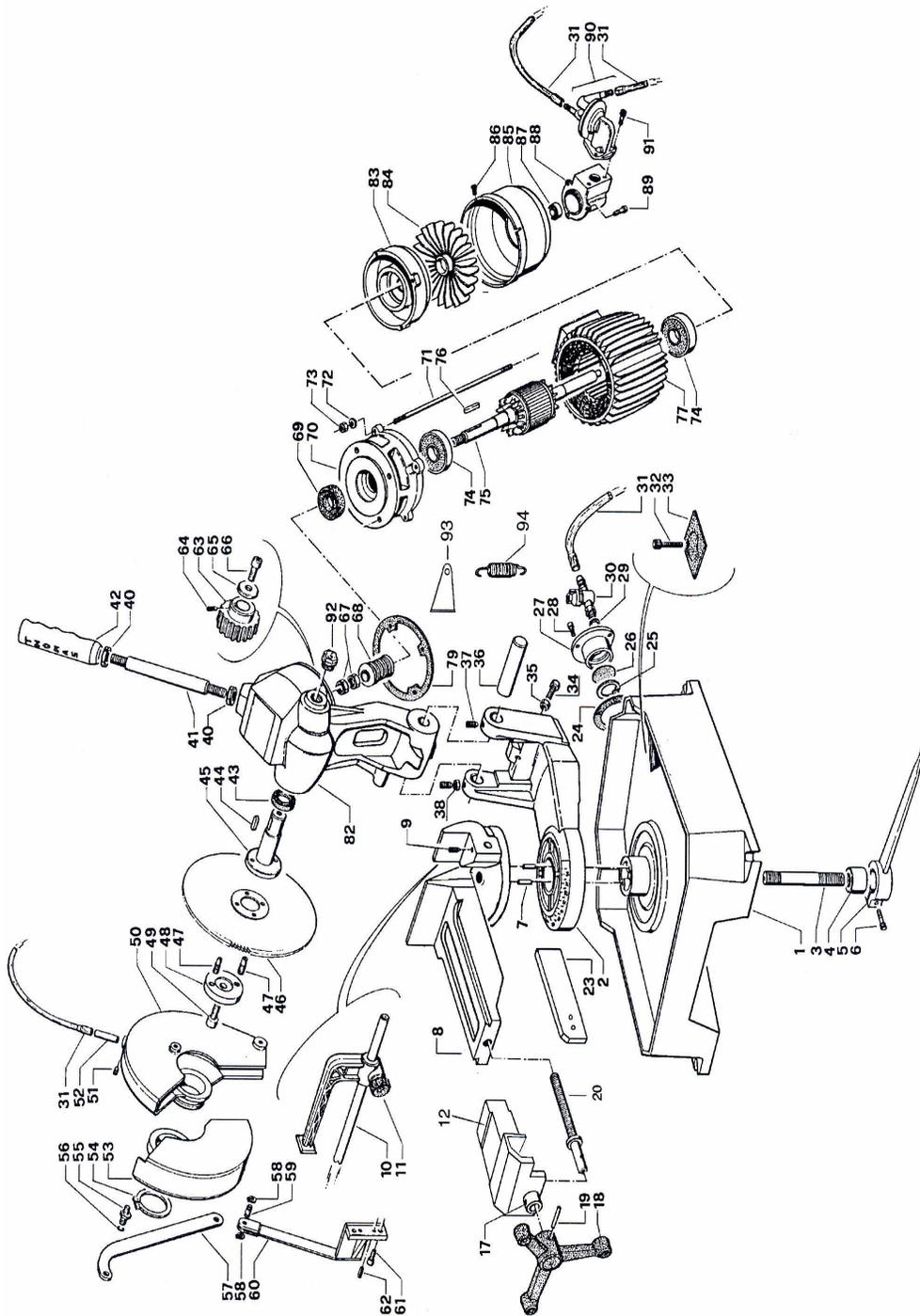
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95	AUXILIARY RELAY	72300000
96	REMOTE-CONTROL SWITCH	73401001
97	FUSE HOLDER	73142005
98	TRANSFORMER 30VA	73327011
99	SOCKET CONNECTOR	73600005
100	PLUG CONNECTOR	73600052
101	SWITCH 2SP CE BRETER 1167	70221013
101	SWITCH 1SP 1PH CE KEDU	70240000
102	RESET PUSH-BUTTON	70101000
103	EMERGENCY PUSH BUTTON	70101000
104	ELECTRIC BOX	230E0017
105	BOX COVER (NOT INCLUDED IN 104)	NO NUMBER
106	BOX GASKET	D80E0306
	ELECTRIC COMPONENT BOX 1PH	68240000
	WARNING LIGHT	70651000
	Capacitor	302020

If you would like to order parts please contact: DAKE 724 ROBBINS ROAD, GRAND HAVEN, MI 49417 Phone: 800-937-3253 Web: www.dakecorp.com

EMAIL: customersupport@dakecorp.com
technicalsupport@dakecop.com

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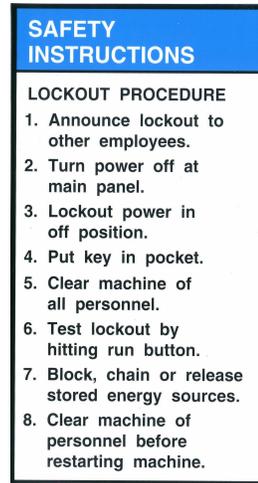
The following labels are on the machine for your safety and protection:



Part number 82199



Part number 84395



Part number 76462



Part number 84605

Warranty

Our products are warranted free of manufacturer's defects for one year after delivery to the original purchaser. Replacement parts are warranted free of manufacturer's defects for the longer of ninety days after delivery or the remaining warranty period for our products on which the part is installed.

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.

This warranty will not apply to:

- (a) Units and parts which are not installed in accordance with applicable local codes, ordinances and good trade practices;
- (b) Defects or malfunctions resulting from failure to properly install, operate, or maintain the unit in accordance with the printed instructions provided;
- (c) Failure resulting from abuse, accident or negligence;
- (d) Normal maintenance service 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) Units and parts used for purposes other than for what it was designed and manufactured.

Return of warranted components

Purchasers who notify the manufacturer in writing, within the warranty period, will be issued a Return Material Authorization Number. Any item to be repaired or replaced under this warranty must be returned to the manufacturer, at Grand Haven, Michigan or such other place as the manufacturer may designate, freight prepaid. The packaging used for returns must be supplied by purchaser and clearly marked with the Return Material Authorization Number.

Repair and Replacement of warranted components:

Any item covered under this warranty will be repaired or replaced free from all charges except authorized transportation and installation labor.

This warranty is in lieu of all other warranties and no representations, guarantees, or warranties, expressed, implied, or statutory (included, but not limited to, a warranty of merchantability of fitness for a particular purpose) are made by manufacturer in connection with the manufacture or sale of its products.

The remedies set forth herein are exclusive and in lieu of all other remedies and manufacturer shall not, under any circumstances, be liable for incidental, consequential or special damages, such as, but not limited to, damage to, or loss of, other property or equipment, loss of profits, inconvenience, or other incidental or consequential damages of any type or nature. The liability of the manufacturer shall not exceed the price of the product upon which the liability is based.

No employee, distributor, or representative is authorized to change this warranty in any way or grant any other warranty on behalf of manufacturer.