

DAKE DUAL MITERING BANDSAW

SE-810

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 Drive
Grand Haven MI, 49417

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.

SPECIFICATIONS

Features	Dimensions
Model:	SE – 810
Blade Speed:	Variable 65 – 250 FPM
Blade Wheel Diameter:	11 5/8" (295mm)
Blade Size:	1" x 118"
Table Height:	27"
Motor:	900W 5A 110V 1HP DC DIRECT DRIVE
Head Movement:	± 45°
Vise Opening:	11"
Table Height:	27"
Overall Dimensions (L x W x H)	60" x 24" x 50"
Gross Weight:	560lbs

Cutting Capacities

Degree	Round	Pipe	Flat	Solid Rectangle
90°	10"	8"	11"	8" x 10"
45°	6"	6"		8" x 6"

- In the space provided record the serial number and model number of the machine. This information is only found on the black Dake tag. If contacting Dake this information must be provided to assist in identifying the specific machine.

Model No: SE-810

Part No:

Serial No:

Date of Purchase:

SAFETY WARNINGS



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



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

- As with all machinery there are certain hazards involved with operation and use of the machine. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.
- This machine was designed for certain applications only. We strongly recommend that this machine NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the machine until you contact with us and we have advised, you.
- This machine is for metal cutting only. It is not approved for cutting wood. The supplier accepts no responsibility for any machine when used for wood cutting.

Your machine might not come with a power socket or plug. Before using this machine, please ask your local electrician to install the socket or plug on the power cable end.

NOISE

A: Average Noise Level = continuous level of airborne noise from machines when running at full speed with no load.

C: Loudest Noise level = the peak noise level recorded from machines when running at full speed with no load.

Based on above two measurements A & C, this saw's equivalent A-weighted sound pressure level at the work station was measured at 70 dB, while its peak C-weighted instantaneous sound pressure value at the work station was measured at 75 dB.

SAFETY RULES FOR ALL TOOLS

USER

- Wear proper apparel: No loose clothing, gloves, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- Always wear eye protection. Refer to ANSI Z87.1 standard for appropriate recommendations. Also use face or dust mask if cutting operation is dusty.

- Do not overreach. Always keep proper footing and balance.
- Never stand on the machine. Serious injury could occur if the machine is tipped or if the cutting blade is accidentally contacted.
- Never leave the saw running unattended. Turn off power. Do not leave saw until it comes to a complete stop.
- Do not operate the tool while under the influence of drugs, alcohol, or any medication.
- Make sure the saw is disconnected from power supply while motor is being mounted, connected, or reconnected.
- Always keep hands and fingers away from table.
- Stop the machine before removing any chips or debris.
- Shut off power and clean the band saw and work area before leaving machine.

USE OF MACHINE

- Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the saw before turning it on.
- Do not force the saw. It will do a more efficient and safer job at the rate for which it was designed.
- Use correct blade. Do not force blade or attachments to do a job for which it was not designed.
- Secure work. Use clamps or a vise to hold work when practical. It is safer than using your hands.
- Maintain blade is in top condition. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- Use recommended accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.
- Avoid accidental starting. Make sure the switch is in the "OFF" position before plugging in the cord.
- Direction of feed. Feed work into the blade against the direction of rotation of the blade.
- Adjust and position the blade guide arm before starting the cut.
- Keep blade guide arm tight. A loose blade guide arm will affect sawing accuracy.
- Make sure blade speed is set correctly for material being cut.
- Check for proper blade size and type.
- Stop the machine before putting material in the vise.
- Always have stock firmly clamped in vise before starting the cut.
- Ground all tools. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle, the adapter plug must be attached to a known ground. Never remove the third prong.

ADJUSTMENTS

- Make all adjustments with the power off. In order to maintain the machine, precision and correct ways of adjustment while assembling, the user should read the detailed instruction in this manual.

WORKING ENVIRONMENT

- Keep work area clean. Cluttered areas and benches invite accidents.

- Do not use in dangerous environment. Do not use power tools in damp or wet locations or expose them to rain. Keep work area well-lighted.
- Keep children and visitors away. All children and visitors should be kept a safe distance from work area.
- Do not install or use this machine in an explosive, dangerous environment.

MAINTENANCE

- Disconnect machine from power source when making repairs.
- Check for damaged parts before use of the saw, a guard or other part that is damaged should be replaced immediately to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, and any other condition that may affect the saws operation.
- Disconnect the power before servicing and when changing accessories such as blades, bits, cutters, etc.
- Make sure that the blade tension is properly adjusted. Green LED will light when properly tensioned. Saw will not operate until green light is lit.
- Re-check blade tension after initial cut with new blade.
- To prolong blade life always releases blade tension at the end of each work day.

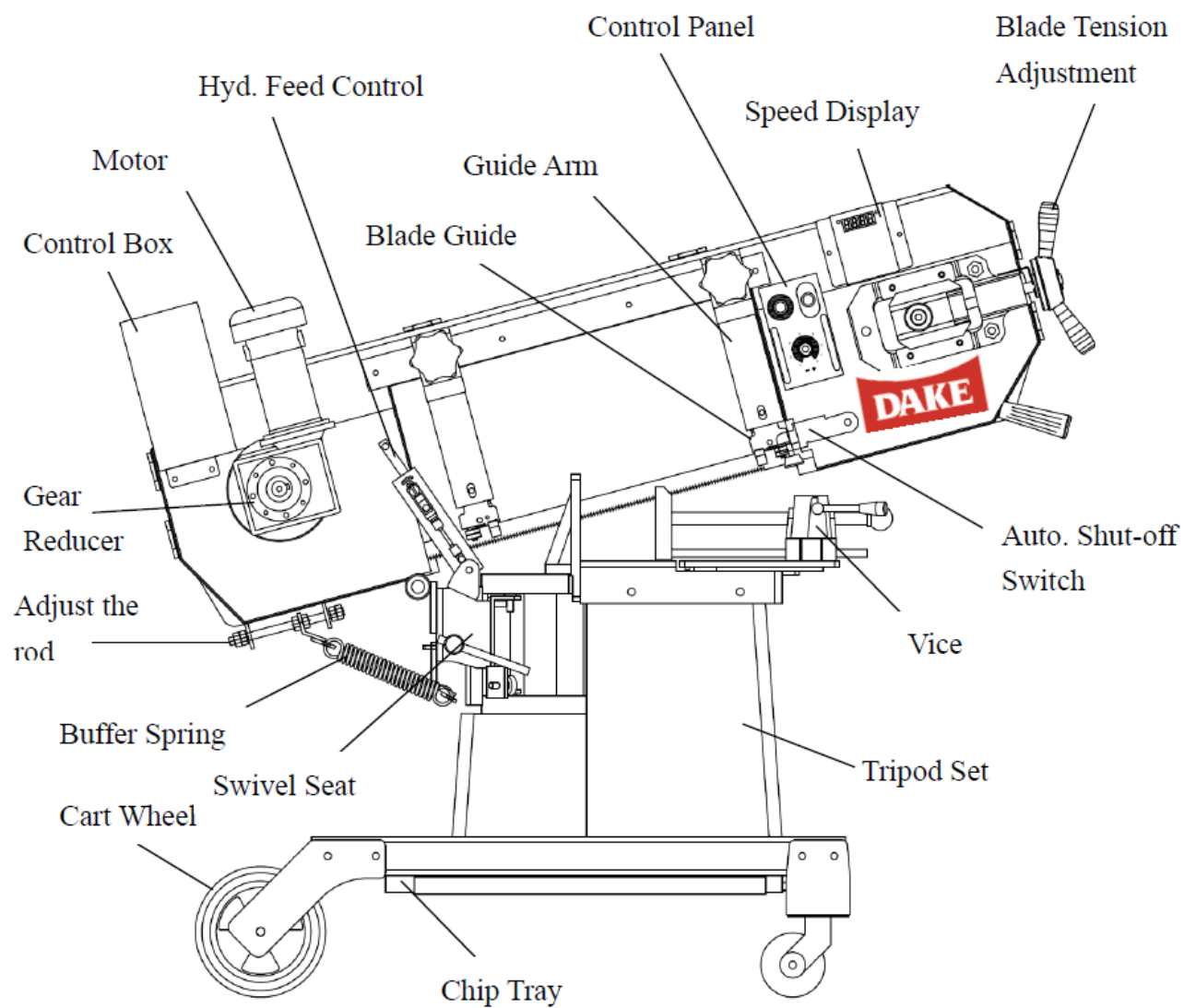
SPECIFIC USAGE

- This machine is used for general metals cutting within the range of cutting capacity.

SAFETY DEVICE

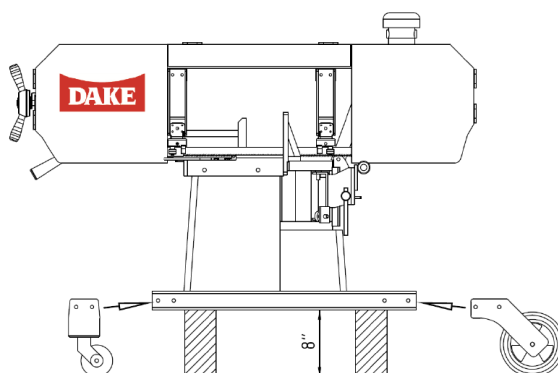
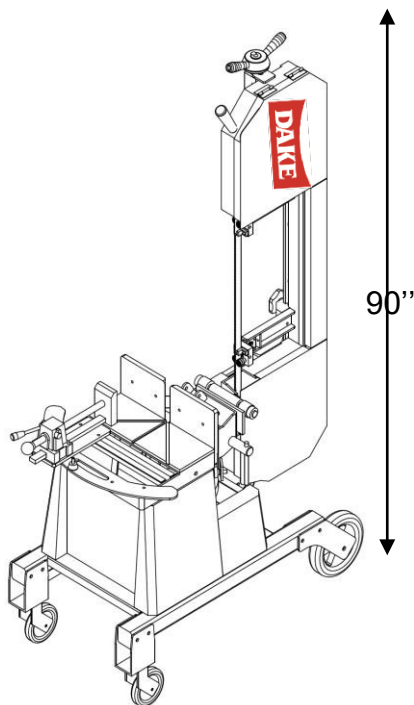
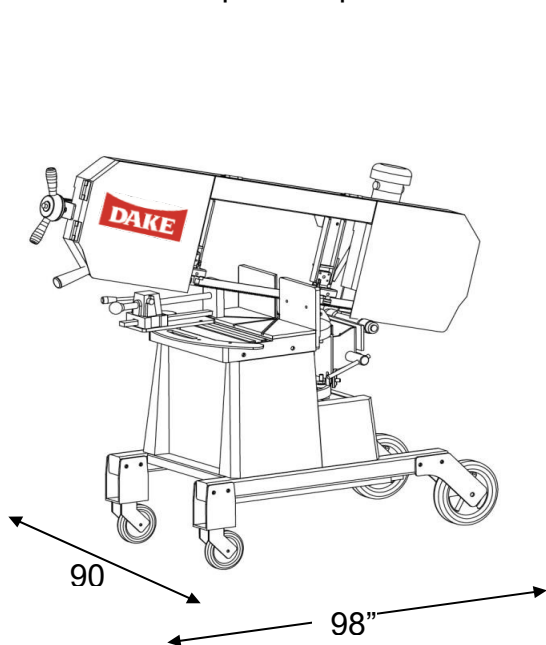
- By the time the saw arm cover is opened, the interlock switch will function to stop the all involvement. Do not remove this switch from machine for any reason and check its function frequency.

MAIN MACHINE



SET UP

- This machine weighs **530lbs**. Transport to desired location before unpacking, please use lifting jack. Transportation after unpacking, please use heavy duty fiber belt to lift up the machine. Always keep proper footing and balance while moving this machine.
- Minimum space required for machine operation below:



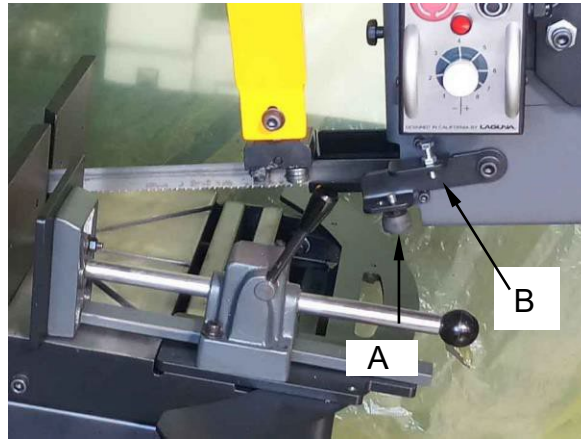
INSTALLATION:

Assemble saw pedestal and bolt saw on the pedestal.

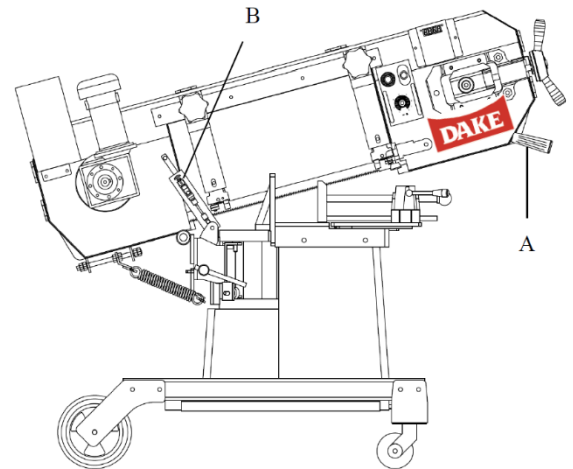
1. Tighten all locks before operation.
2. Turn off the power before wiring, and be sure machine is properly grounded. Overload and circuit breakers are recommended for safety wiring.
3. Check to make sure the main shaft is rotating clockwise, if not reverse the wiring and test again.
4. Carefully lift the machine to a sturdy stand or work bench. For the best performance, fasten the machine to a bench or stand. Make sure that the machine is level in all directions.
5. When installing the wheel, raise the table about 8 inches high to facilitate the installation of the wheel frame and ensure safety.

OPERATION STEPS:

- Before use, make sure that the position of the lower limit screw (B) is correct.
- Make sure that the lower limit screw (A) of the saw blade is at the tooth surface of the blade below the work surface.
- Make sure that the screw position of the lower limit switch is so that the band saw reaches the lower limit position and the power is turned off immediately to stop the band saw.



1. Turn the on/off control valve (B) on the hydraulic cylinder to the 90° position. Close and lock the hydraulic cylinder and hold the handle (A) to raise the saw bow about 5 inches high.
2. Place workpiece between the vice, clamp down to secure the work, and adjust the height of the bow up or down to ensure the blade is 1 inch about the working height.
3. After confirming that the workpiece is clamped, start the sawing belt. Please select a different cutting speed according to the material of the workpiece (refer to next section).



4. Turn the throttle valve of the hydraulic cylinder to the 0 position (clockwise to the bottom), close the hydraulic cylinder, and then open the on-off valve to the 0-degree position. At this time, the bow will not drop. (When the on-off valve is opened, the saw bow will not descend, because the throttle valve is set to 0, closed position) (the throttle valve at 0 position alone, cannot stop the saw, bow does not lower, it may be oil (Caused by damage to the cylinder)).
5. Slowly open the throttle valve of the hydraulic cylinder (turn counterclockwise) to adjust the speed of the saw bow and start to approach the workpiece surface to be cut (when

the bandsaw is brand new, please reduce the speed as much as possible. The cutting speed of the saw is about 5-10 minutes. After the teeth of the bandsaw are properly run in, the normal sawing work is performed)

6. The band saw will cut normally until the bow reaches the lower limit position, the work of the workpiece is finished, and the bandsaw is automatically stopped.
7. Close the oil cylinder on-off valve, and then manually lift the saw bow away from the workpiece, loosen the vise to take out the workpiece, and then complete the sawing work (note the length of the workpiece, to avoid falling directly to the ground after sawing, resulting in personal or material damage).

OPERATION OF HYDRUALIC CYLINDER

- Saw bow slow-down hydraulic cylinder (Fig.H), which provides the control of the speed of the saw belt when cutting the workpiece.
- ON / OFF on / off valve (P), which directly controls the stop and movement of the hydraulic cylinder. Generally, when performing repeated sawing of the workpiece, this function can be used.
- The flow control valve (V) provides the control of the speed of the saw bow and controls the speed when sawing the workpiece. Turning clockwise will slow down and turning counterclockwise will speed up.

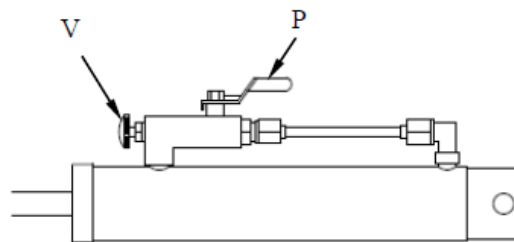


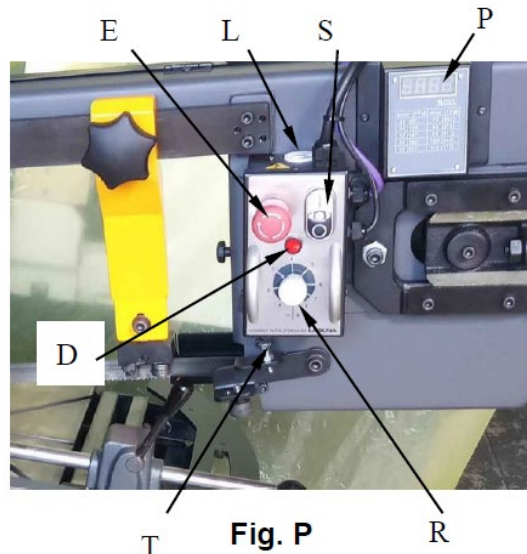
Fig. H

Note: When turning clockwise to the end, the saw bow will stop completely. If the slow-down situation occurs, the hydraulic cylinder may be damaged, please contact the dealer's technician for inquiries.

⚠ CAUTION! When the size and position of the flow valve (V) are unknown, do not directly open the on-off valve (P), to avoid the saw bow falling rapidly, causing the saw belt to hit the workpiece and causing tooth damage.

OPERATIONAL CONTROLS

- Emergency button ©. When the emergency button is pressed, the saw belt will stop. (When returning power, turn © to make it jump)
- Power button (S), ON / OFF / Power lamp indication, 3 functions.
- The VR rotary button © controls the speed of the bandsaw.
- Speed display (P), you can directly see the current line speed of the bandsaw.
- Motor overload protection lamp (D). When the feed speed of the sawing workpiece is too fast, causing the motor to run at over-rated current, the overload protection lamp © will light red and slow down the saw belt speed to reduce the motor load, if the re-cutting is continued continuously, the system will stop directly and do overload protection.
- Lower limit switch (T), when the saw bow is lowered to the bottom, it will touch the lower limit screw to stop the saw band.
- Power socket (L), for users to use external work lights or other accessories.



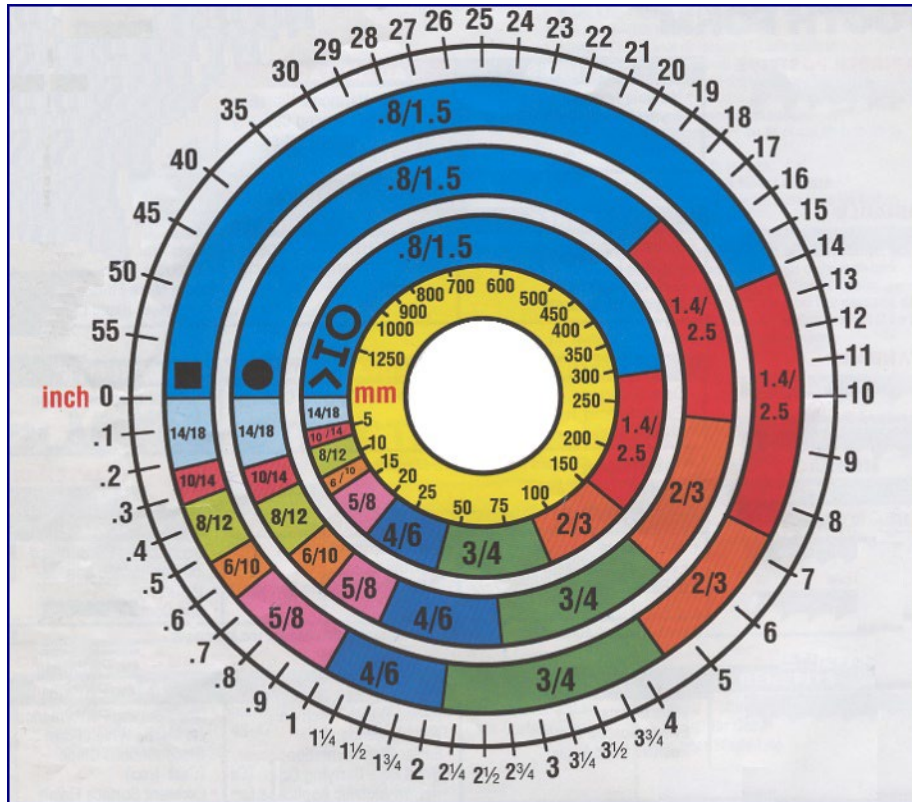
HELPFUL CUTTING TIPS:

1. The more hardness of the material is, the slower the cutting speed.
2. When the saw is stuck on the work piece, please stop the saw action, reverse the saw belt to slowly withdraw from the work piece, and do not perform the second sawing on the same sawing path. If the sawing path is repeated, the saw teeth wear will cause serious damage to the tip of the entire bandsaw and will result is a low quality cut.
3. When the blade speed is high, additional cutting oil is recommended.
4. To control the descending speed of the hydraulic cylinder, you can control the flow of the throttle valve. Turn clockwise-the flow becomes smaller-the speed becomes slower, and counterclockwise-the flow becomes larger-the speed becomes faster. Drop too fast and damage items.
5. When using a new saw blade, it is necessary to carry out a saw-tooth running-in procedure, which can prolong the service life of the saw blade and increase the sawing efficiency.
6. When using your band saw always change the blade speed to best suit the material being cut. The material cutting chart gives suggested setting for several materials.

ADJUSTMENTS

TOOTH SELECTION:

- For maximum cutting efficiency and lowest cost per cut, it is important to select the blade with the right number of teeth per inch for the material being cut. The material size and shape dictate tooth selection.



YOU NEED TO CONSIDER:

The width of the cut. That is, the distance in the cut that each tooth must travel from the point it enters the work piece until it leaves the work piece, and the shape of the work piece. Use the chart above to assist with tooth selection.

- Squares, Rectangles, Flats (Symbol: ■)
Locate the width of your work piece on the chart. (Inches on the outer circle and millimeters on the inner circle.) Select the tooth pitch on the ring marked with square which aligns with the width of the cut.
Example: 6" (150mm) square, use a 2/3 Vari-Tooth.
- Round Solids (Symbol: ●)
Locate the diameter of your work piece on the chart. Select the tooth pitch on the ring marked with the circle which aligns with the size of stock you are cutting.
Example: 4" (100mm) round, use a 3/4 Vari-Tooth.
- Tubing, Pipe, Structural (Symbols: O, H, ^)

Determine the average width of cut by dividing the area of the work piece by the distance the saw blade must travel to finish the cut. Select the tooth pitch on the ring marked with the tubing and structural shape which aligns with the average width you are cutting.

Example: 4" (100mm) outside diameter, 3" (75mm) inside diameter tubing.

$$\begin{array}{rcl}
 4"(100\text{mm}) \text{ OD} & = & 12.5 \text{ in}^2 (79 \text{ cm}^2) \\
 3"(75 \text{ mm}) \text{ ID} & = & 7.0 \text{ in}^2 (44 \text{ cm}^2) \\
 \hline
 \text{Area} & = & 5.5 \text{ in}^2 (35 \text{ cm}^2)
 \end{array}$$

Example: $5.5 \text{ in}^2 (35 \text{ cm}^2) / 4" (100\text{mm}) \text{ distance} = 1.38" (35 \text{ mm}) \text{ average width}$ 1.38" (35 mm),
use a 4/6 Vari-Tooth.

BLADE SPEED:

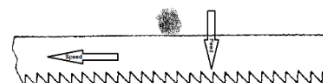
The band speeds are to be used as a starting point for most application. For exact parameters consult your saw blade supplier.

Material	Speed (FPM)
Tool, Stainless, Alloy Steels, Bearing Bronze	114
Med. to High Carbon Steels, Hard Brass or Bronze	114
Low to Med. Carbon Steel, Soft Brass	230
Aluminum, Plastic	230

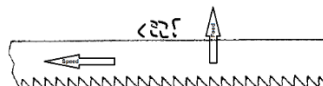
TELLTALE CHIPS:

Chips are the best indicator of correct feed force. Monitor chip information and adjust feed accordingly.

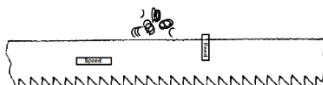
Thin or powdery chips – increase feed rate or reduce band speed.



Burned heavy chips – reduce feed rate and/or band speed.



Curly silvery and warm chips – optimum feed rate and band speed.



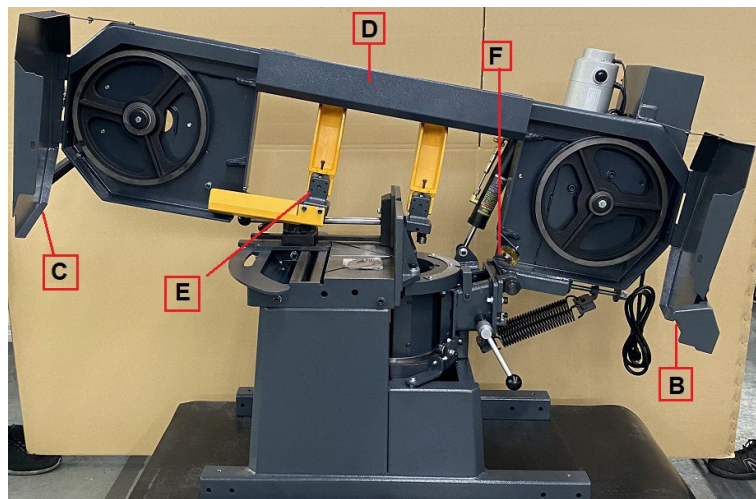
SPEED FEED MATERIAL GUIDE:

Material	Alloy ASTM No.	Blade Speed	
		FT/MIN	M/MIN
Copper Alloy	173, 932	314	96
	330, 365	284	87
	623, 624	264	81
	230, 260, 272	244	74
	280, 264, 632, 655	244	74
	101, 102, 110, 122, 172	234	71
	1751, 182, 220, 510	234	71
	625, 706, 715, 934	234	71
	630	229	70
	811	214	65
Carbon Alloy	1117	339	103
	1137	289	88
	1141, 1144	279	85
	1141 HI STRESS	279	85
	1030	329	100
	1008, 1015, 1020, 1025	319	97
	1035	309	94
	1018, 1021, 1022	299	91
	1026, 1513	299	91
	A36 (SHAPES), 1040	269	82
	1042, 1541	249	76
	1044, 1045	219	67
	1060	199	61
	1095	184	56
NI-Cr-Mo	8615, 8620, 8622	239	73
Alloy Steel	4340, 8630	219	67
Tool Steel	A-6	199	61
	A-2	179	55
	A-10	159	49
	D-2	90	27
	H-11, H-12, H-13	189	58
Stainless Steels	420	189	58
	430	149	46
	410, 502	140	43
	414	115	35
	431	95	29
	440C	80	24
	304, 324	120	36
	304L	115	35
	347	110	33
	316, 316L	100	30
	416	189	58

INSTALLING BLADE:

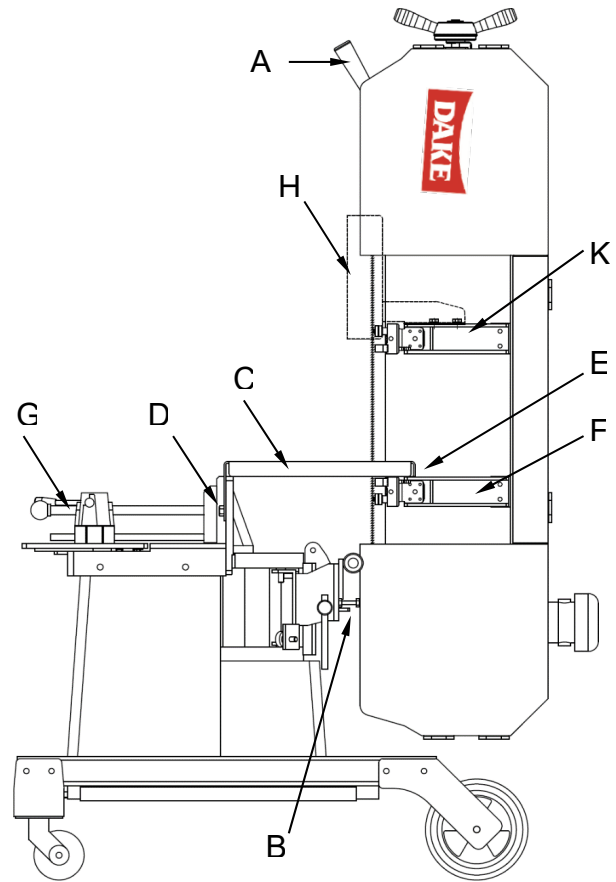
1. Make sure that the main power switch is off.
2. Raise the saw so that the blade is 1" above the fixed vise.
3. Open bow cover (B) (C) (D) remove the tooth cover (E) and remove the steel brush wheel (F) that is in contact with the bandsaw.
4. Turn the handle (A) counterclockwise to loosen the tension of the saw belt. Press belt with gloved hand to prevent blade from popping off the wheel and injuring the operator or persons nearby.
5. After the blade is completely relaxed then withdraw the saw wheel surface and remove blade from the guide block.
6. Take out the new blade and spread out the saw blade. Check to make sure the seam welds are ground flat and without sharp edges.
7. Put the new saw blade into the guide block, make sure that the back of the saw blade is in contact with the upper bearing surface.
8. Put the blade surface on the bandsaw wheel and press the blade on the saw wheel with gloves. Be careful to turn the blade tension handle (A) clockwise to prevent the blade from popping out in the process and hurting operator. (Note: Before the blade is fixed by tension, you must press the blade on the saw wheel with your hands. If necessary, two people should work together to ensure safety).
9. After the blade is installed, continue to turn the loading handle clockwise until the tension pointer reaches the standard scale area on the mark.
10. Slowly start the bandsaw, and check whether the back of the blade and the back of the saw wheel are between 1-2mm, and there is no sound of rubbing on the saw wheel.
11. When the bandsaw can run on the saw wheel at normal speed and without abnormal noise, it means that the blade has been correctly installed.
12. Install the steel brush wheel (F) against the saw teeth. (Note: Do not press too deep into the tooth surface, to avoid making excess noise and wearing sharp points of the saw teeth during rotation).
13. Install the tooth cover (E) back on the saw guide, cover the bow cover (B) (C) (D) and fasten it with screws.
14. Slowly rotate the saw blade wheel to ensure that the saw blade can operate normally and will not dry out with the saw wheel and the cover. Friction noise will occur.

NOTE: When a new blade is installed, it is necessary to reduce the saws feed rate and allow the saw to run for 5-10 minutes to increase the life of the blade and have better sawing efficiency.



VERTICAL SAW POSITION:

1. Make sure that the moving wheels of the machine are fixed, and the machine will not move.
2. Close the on-off valve of the hydraulic cylinder and put the bow on the table with the handle (A), so that the saw belt is raised to an angle of about 40 degrees with the table.
3. Loosen the spring bracket, remove the fixing screw of the weight spring, and remove the weight spring.
4. Raise the saw bow again, so that the back end of the saw bow rests on the upper threaded screw of (B), and the bandsaw and the workbench are at an angle of about 90 degrees, as shown in Fig. 3. Lastly, open the hydraulic cylinder switch valve.
5. Remove the vertical saw blade (C). Insert the cut groove into the saw belt. Hold saw blade against the upper end of the fixing vise, fixed with the screw (D). and the position of the saw blade groove in the middle of the saw blade rear fixed up right board. The main support arm (F) loosen the handle and adjust the upper and lower positions so that the support arm (F) can contact the vertical saw board. Press against the surface of point (C), which can maintain the stability of the vertical saw board in use.
6. Take out the vertical saw cover (H) and fix it on the slave arm (K) with screws to ensure the safety protection of the exposed bandsaw.
7. Adjust the up and down position from the support arm (K) to match the height of the workpiece to be sawed.
8. Clamp the vise surface of the vise (G) and fix it so that it will not shake.
9. Check if there is any foreign matter interference on the moving line of the saw belt.
10. After making sure that it is correct, turn on the power and make the saw belt run at the slowest speed to see if there is any noise or intervention.
11. When the saw belt can rotate normally, the normal, vertical saw cutting pin can be started.



SAW ADJUSTMENTS

1. Raise the saw to the upward position and the bandsaw roughly $\frac{1}{2}$ " high from the workpiece as shown in (Fig. 4).
2. Remove the 90° angle ruler (C) and lean it against the workpiece surface.
3. Check the saw belt (B) is perpendicular to the work piece. NOTE: (If the deviation is large, you can adjust the blade guides accordingly).
4. First make sure that the bearings (F) and (G) are in close contact with the bandsaw surface. (Note: Visually, the bearing surface and the bandsaw surface are in close contact. Once the bearing can still be rotated freely, it is to ensure that the bearing is not crushed. , Easy to cause damage).
5. Adjust the bearing shaft. It can be adjusted with a slotted screwdriver (H) and fixed with a hexagon wrench (M). (Fig. 6) (Fig. 7)
6. Adjust the bandsaw 90 degrees, you can put the hex wrench (K) to loosen the screw, use the hex wrench (I) to adjust 90 degrees, and the hex wrench (J) to adjust the gap between the back of the bandsaw and the upper bearing After finishing the fine adjustment, fix the screw lock with the hexagon wrench (K). NOTE: (It is necessary to check and adjust the 90-degree angle between the main block and the two positions from the guide block at the same time)
7. The slowest speed of the saw belt can be performed after the completion to ensure that the rotation of the saw belt does not cause problems involving abnormal sounds, and check whether the upper bearing and the back of the saw blade only maintain proper contact without crushing.
8. After the saw belt has been tested correctly, the tungsten steel guide block (O) can be fixed on the guide block (C) with screws (P) to improve the stability of the saw belt when it rotates. (Note: The gap between the tungsten steel guide block and the saw blade surface must be about 0.1mm (about 1 sheet of paper) to prevent the tungsten steel from directly scratching the saw blade surface and causing damage)

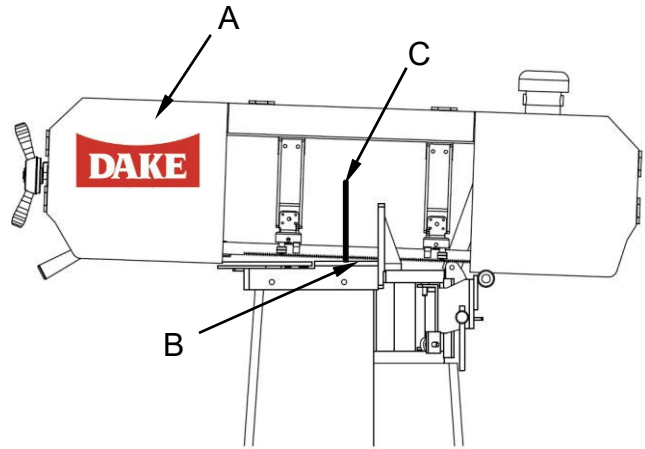


Figure 4

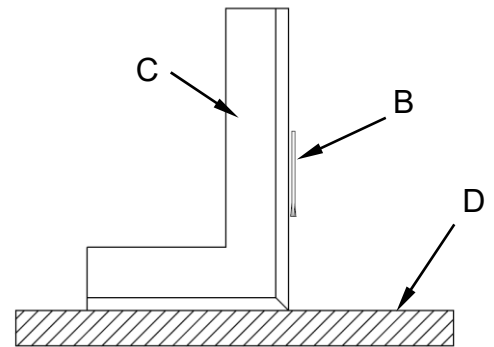


Figure 5

9. Lift the saw bow after completion, as shown in Fig.4, loosen the rotating seat mechanism, adjust the saw belt and fix the vise surface at a 90-degree angle, and use the zero-point fixing frame screws to perform zero adjustment. (Note: Make sure that the iron cut of the roller groove of the rotating seat is clean, to avoid the damage caused by the deposit when the bearing rolls)
10. The above action is a complete adjustment of the bandsaw guide block bearing. It only needs to be adjusted when sawing is inaccurate. Generally, it is not necessary to adjust the bandsaw when it is replaced.

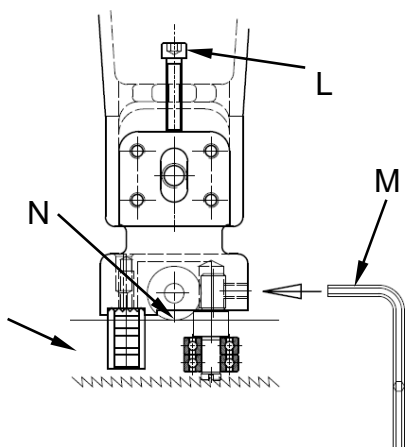


Figure 7

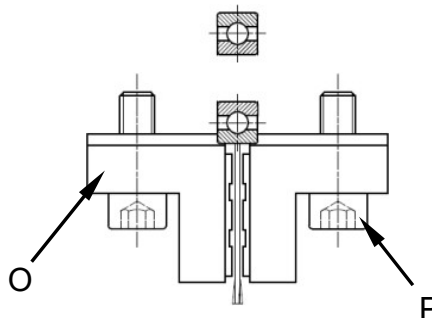


Figure 8

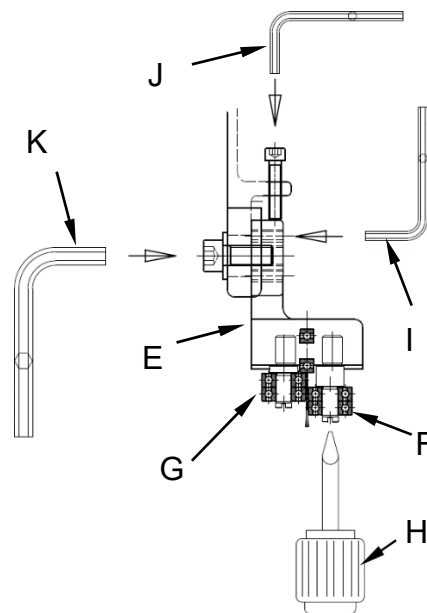


Figure 6

MAINTENANCE

- Below is a useful maintenance reference to use that can be repeated throughout the year to keep up to date on general maintenance for your machine.

<u>Daily Maintenance</u>	<u>Weekly Maintenance</u>	<u>Monthly Maintenance</u>	<u>Yearly Maintenance</u>
1) Fill the lubricant before starting the machine every day. 2) If the temperature of the spindle is overheating, or making a strange noise, shut down the machine immediately and check it for accurate performance. 3) Keep work area clean.	1) Clean and coat the cross leading screw with oil. 2) Check all sliding surfaces, pivoting points, and turning parts to see if any are lacking any lubrication. If they are lacking lubrication, fill it.	1) Adjust the accurate clearance both vertical and horizontal feed. 2) Lubricate bearings, worm shaft, and worm gears to avoid long term wear.	1) Adjust the horizontal position of the table for accuracy. 2) Check electric plug, cord, wires, and switches to avoid long term wear once a year.

LUBRICATION & CLEANING

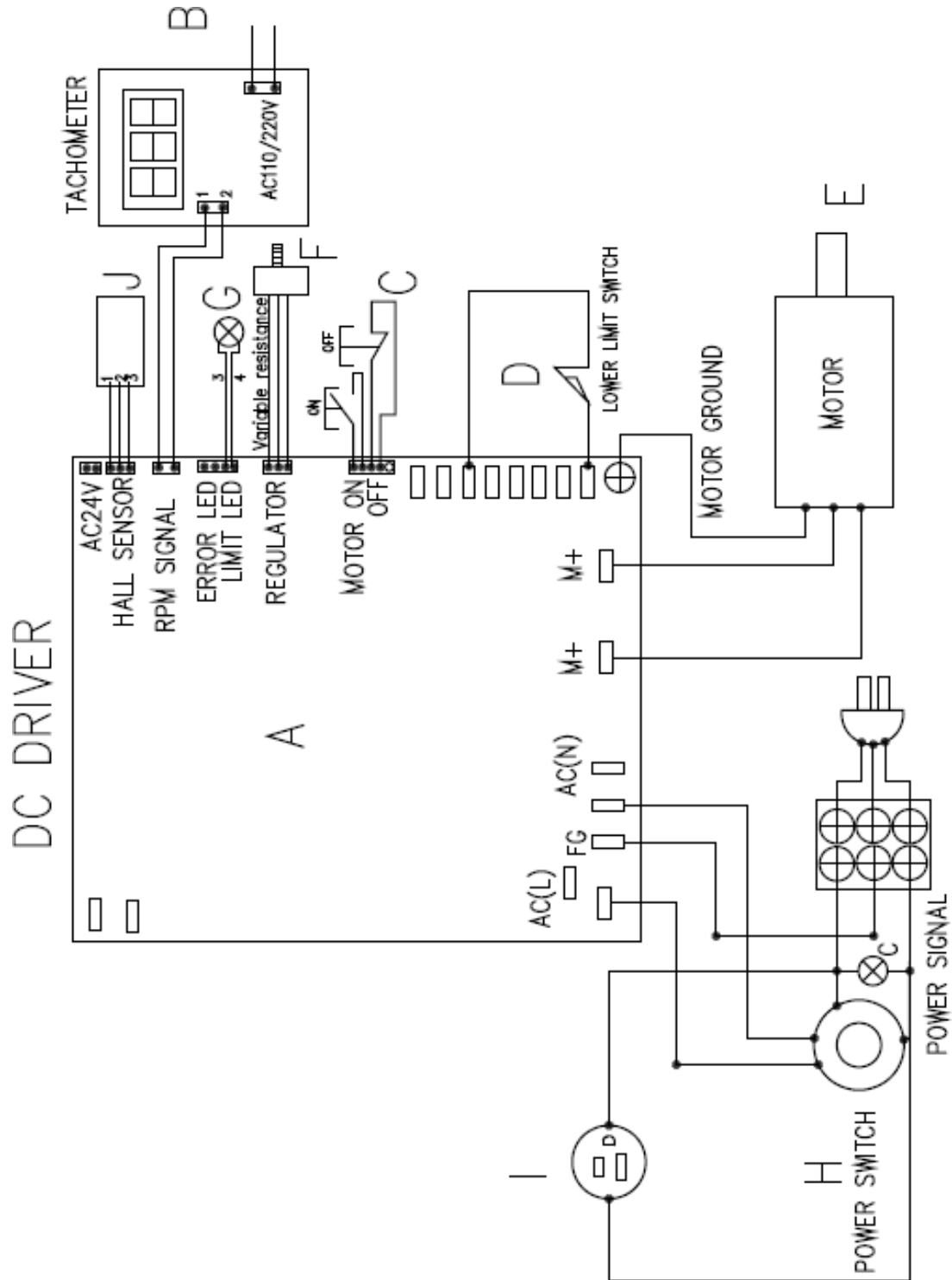
- 1) Your machine has been coated heavy grease to protect it in shipping. This coating should be completely removed before operating the machine. Commercial degreaser, kerosene or similar solvent may be used to remove the grease from the machine but avoid getting solvent on belts or other rubber parts.
- 2) Be sure to clean. The band saw after operation. And coat this machine with rust-less oil. And clean the iron filings of the roller grooves of the rotating seat to avoid the rust and the damage caused by the rolling of the bearing.
- 3) Use SAE-30 oil to lubricate the components.
- 4) Lubricate the vise lead screw if needed to do so.
- 5) The driving gears will not require a lubricant change more often than once a year, unless of a leak or overheating as occurred.

TROUBLESHOOTING

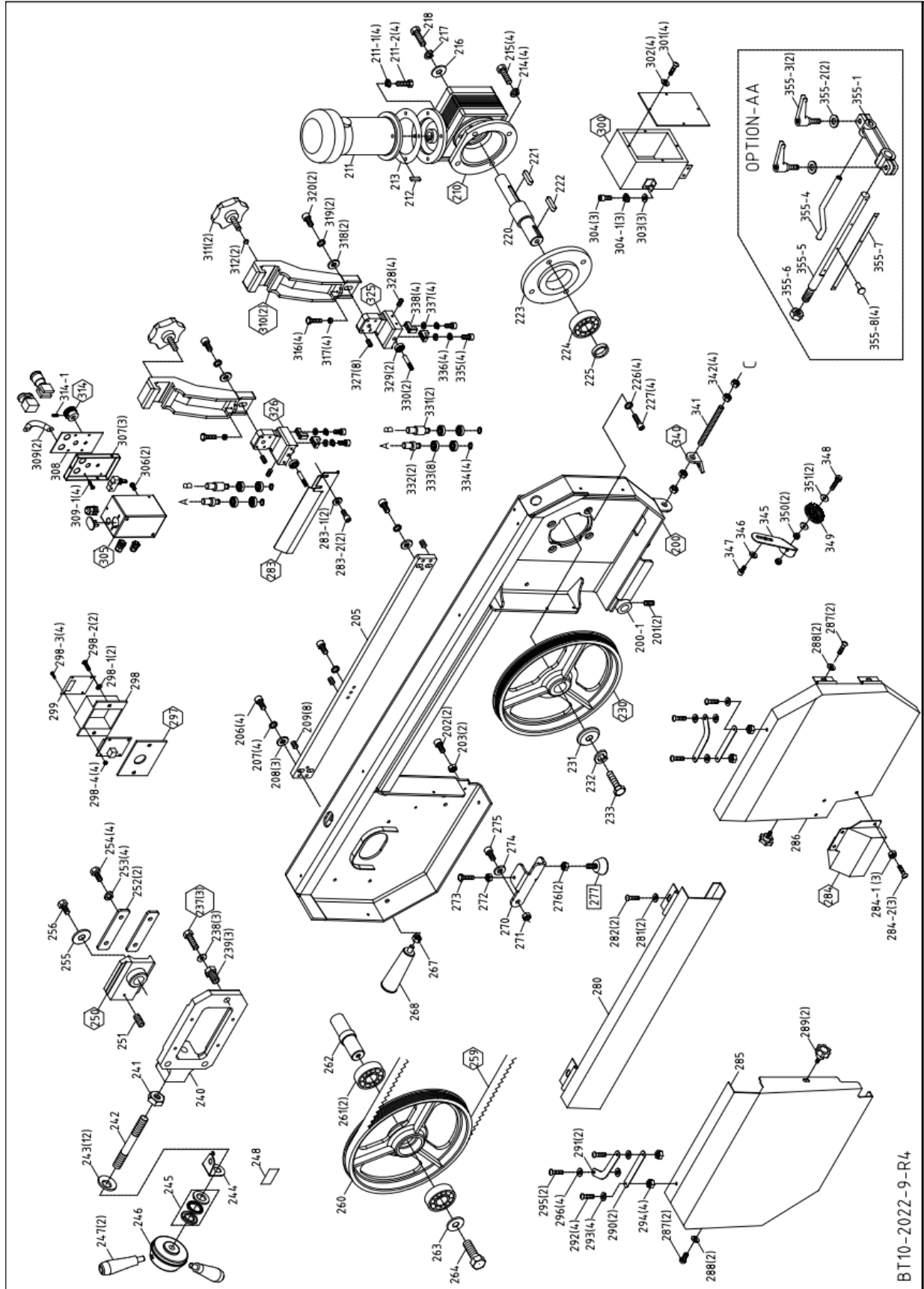
<u>Symptom</u>	<u>Possible Cause</u>	<u>Corrective Action</u>
Excessive Blade Breakage	1) Materials loosen in vise. 2) Incorrect speed or feed. 3) Blade teeth spacing too large. 4) Material too coarse. 5) Incorrect blade tension. 6) Teeth in contact with material before saw is started. 7) Blade rubs on wheel flange. 8) Miss-aligned guide bearings. 9) Blade too thick 10 Cracking at weld.	1) Clamp work securely. 2) Adjust speed or feed. 3) Replace with a small tooth spacing blade. 4) Use a blade of slow speed and small teeth spacing. 5) Adjust to where blade just does not slip on wheel. 6) Place blade in contact with work after motor is started. 7) Adjust wheel alignment. 8) Adjust guide bearings. 9) Use thinner blade.
Premature Blade Dulling	1) Teeth too coarse. 2) Too much speed. 3) Inadequate feed pressure. 4) Hard spots or scale on material. 5) Work hardening of material. 6) Blade twist. 7) Insufficient blade. 8) Blade slide.	1) Use finer teeth 2) Decrease speed 3) Decrease spring tension on side of saw 4) Reduce speed, increase feed pressure 5) Increase feed pressure by reducing spring tension 6) Replace with a new blade and adjust blade tension.
Unusual Wear on Side/Back of Blade	1) Blade guides worn. 2) Blade guide bearings did not adjust properly	1) Replace. 2) Adjust as per operator's manual.
Teeth Ripping from Blade.	1) Tooth too coarse for work. 2) Too heavy pressure; too slow speed. 3) Vibrating workpiece.	1) Use finer tooth blade. 2) Decrease pressure, increase speed 3) Clamp work piece securely

		4) Use coarser tooth blade or brush to remove chips.
Motor running too hot	1) Blade tension too high. 2) Drive belt tension too high. 3) Blade is too coarse for work 4) Blade is too fine for work 5) Gears aligned improperly 6) Gears need lubrication 7) Cut is binding blade	1) Reduce tension on blade. 2) Reduce tension on drive belt. 3) Use finer blade. 4) Use coarse blade. 5) Adjust gears so that worm is in center of gear. 6) Check oil path. Decrease reed anti speed
Bad Cuts (Crooked)	1) Blade tension too high. 2) Drive belt tension too high. 3) Blade is too coarse for work. 4) Blade is too fine for work. 5) Gears aligned improperly. 6) Gears need lubrication. 7) Cut is binding blade.	1) Reduce pressure by increasing spring tension on side of saw. 2) Adjust guide bearing, the clearance be greater than 0.001". 3) Increase blade tension by adjust blade tension 4) Replace blade. 5) Adjust speed. 6) Adjust guides' space. 7) Tighten. 8) Re-track blade according to operating instructions.
Bad Cuts (Rough)	1) Too much speed or feed. 2) Blade is too coarse. 3) Blade tension loose.	1) Decrease speed or feed. 2) Replace with finer blade. 3) Adjust blade tension.
Blade is twisting	1) Cut is binding the blade. 2) Too much blade tension present.	1) Decrease reed pressure. 2) Decrease blade tension.

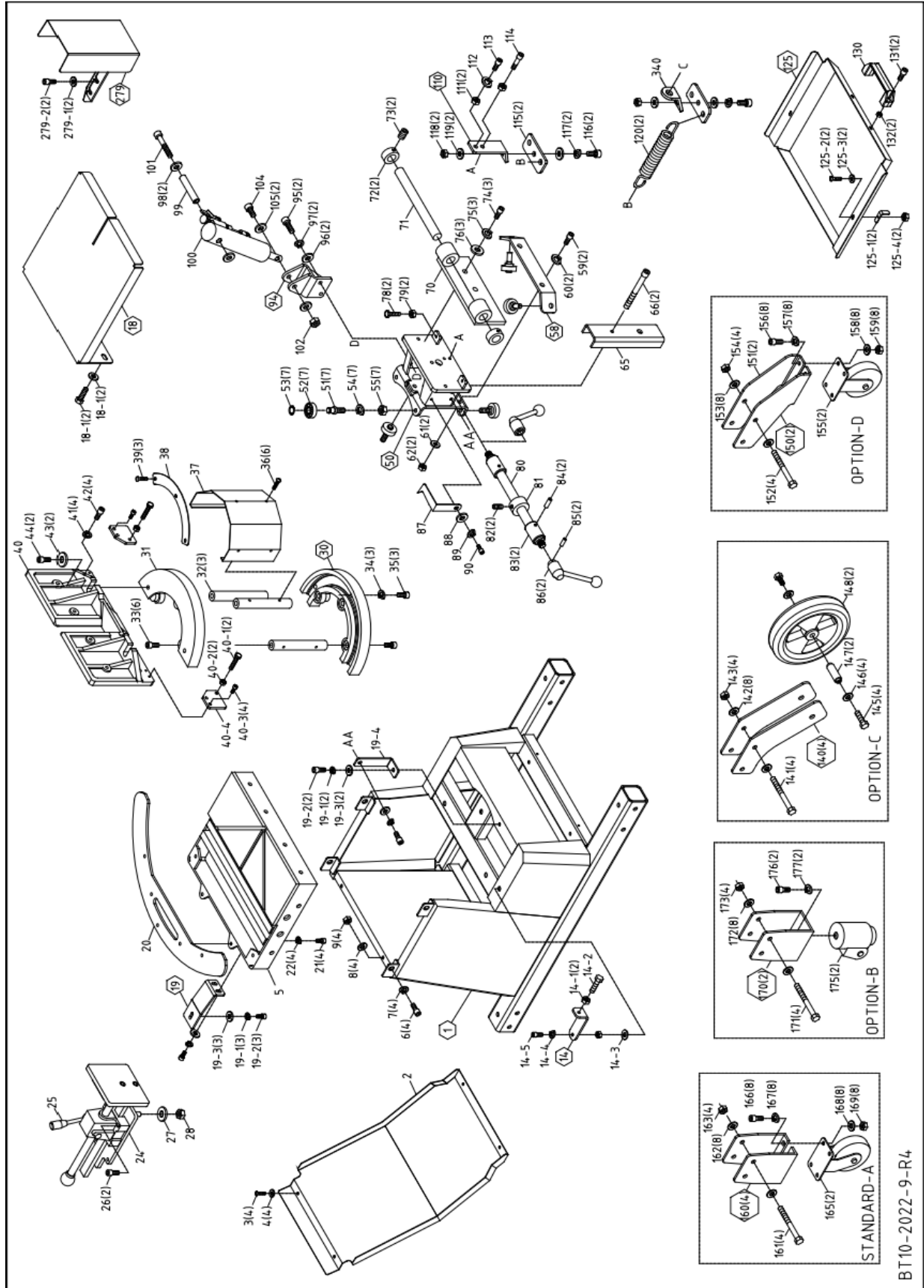
CIRCUIT DIAGRAM



SCHEDULE OF ELECTRICAL EQUIPMENT		
Item.	Designation and function	Suppliers
A	DC DRIVER	
B	LINEAR SPEEDOMETER	
C	ON/OFF/SIGNAL SWITCH	
D	LOWER LIMIT SWITCH	
E	DC MOTOR	
F	VARIABLE RESISTANCE	
G	LIMIT SIGNAL	
H	EMERGENCY STOP SWITCH	
I	SOCKET	
J	HALL SENSOR	



BT10-2022-9-R4



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EXPLODED VIEW & PARTS LIST

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
1	163010		Stand		1
2	163010-2		Guide plate		1
3	MHS328		Hex Soc Screw	M6x16L	4
4	MW004		Washer	1/4"x19xt1.5mm	4
5	163015	304080	Vise base		1
6	MHS259		Hex Soc Screw	M10-1.5Px25L	4
7	HW106		Spring Washer	M10	4
8	MHW006		Washer	M10x20xt2	4
9	MHN006		Hex. Nut	M10	4
14	163067		Positioning bracket		1
14-1	MHN005		Hex. Nut	M8	2
14-2	MHS050		Hex. Head Screw	M8x40L	1
14-3	MW016		Washer	5/16"x23xt2mm	1
14-4	MHW105		Spring Washer	M8	1
14-5	MHS244		Hex Soc Screw	M8x30L	1
18	163060		Vertical saw board		1
18-1	HS058	304009	Hex. Head Screw	M10x20L	2
18-2	MHW006	304010	Washer	M10x20xt2	2
19	163068A		Support		1
19-1	MHW105		Spring Washer	M8	5
19-2	MHS243		Cap Screw	M8x25L	5
19-3	MW016		Washer	5/16"x23xt2mm	5
19-4	163068B		Support		1
20	163019	304082	Pallet		1
21	MHS328		Hex Soc Screw	M6x16L	4
22	HW104		Spring Washer	M6	4
23	Included in #25	Included in 303955 #25	Vise splint		1
23-1	Included in #25	Included in 303955 #25	Flat head socket head cap screws	M8x20L	2
24	163021	303955	Vise bottom plate		1
25	163020	303952	Pusher vise assembly	163065A	1
26	MHS247		Hex Soc Screw	M8x45L	2
	Pusher Vise Assembly	304061			
27	MW002	43634	Washer	1/2"x28xt2mm	1
28	MHN007	301134	Hex. Nut	M12	1
30	163013		Down plate		1
31	163012		Upper plate		1
32	163018		Axle column		3

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
33	MHS260		Hex Soc Screw	M10x30L	6
34	MHS258		Hex Soc Screw	M10-1.5Px20L	3
35	HW106		Spring Washer	M10	3
36	MHS635		Cross hole screw	M5x10L	6
37	163014		Cover		1
38	163054		Angle ruler		1
39	MHS635		Cross hole screw	M5x10L	3
40	163017		Fixed vise		1
40-1	MHS050		Hex Head Screw		2
40-2	MHN005		Hex Nut		2
40-3	MHS334		Hex Soc Screw		4
40-4	163140		Position Plate		2
41	HW106		Spring Washer	M10	4
42	MHS259		Hex Soc Screw	M10-1.5Px25L	4
43	MHW006		Washer	M10x20xt2	2
44	MHS261		Hex Soc Screw	M10x35L	2
50	163040		Slide Base		1
51	163039		Eccentric shaft		7
52	MCA6201ZZ		Ball bearing	12x32x10B	7
53	MHCS02		C-shaped buckle	S12	7
54	HW106		Spring Washer	M10	7
55	MHN006		Hex. Nut	M10	7
58	163042		Lower bracket		1
59	MHS259		Hex Soc Screw	M10x25L	2
60	HW106		Spring Washer	M10	2
61	MHW006		Washer	M10x20xt2	2
62	MHN006		Hex. Nut	M10	2
65	163043		Position bracket		1
66	MHS237		Hex Soc Screw	M6x55L	2
70	163041		Bow bracket		1
71	163048	304018	Support shaft		1
72	163045	304019	Locating ring		2
73	MHS240		Hex Soc Screw	M8x10L	2
74	MHS261		Hex Soc Screw	M10x35L	3
75	HW106		Spring Washer	M10	3
76	MHW006		Washer	M10x20xt2	3
78	MHS047		Hex. Head Screw	M8x25L	2
79	MHN005		Hex. Nut	M8	2
80	163046		Press Axle	S30C	1
81	163044		Eccentric ring	S45C	1
82	163082		Cup Point Screw	M8x10L	2

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
85	MHMO		Spring pin	5x30L	2
86	163073		Handle	M16	2
87	163053		Zero Pointer		1
88	MWM		Washer	1/4"x19x1.5mm	1
89	HWI104		Spring Washer	M6	1
90	MHS328		Hex Soc Screw	M6x16L	1
94	163036	304020	Cylinder bracket		1
95	MHS243		Hex Soc Screw	M8X25L	2
96	MW016		Washer	5/16"x23x1mm	2
97	MHN005		Hex. Nut	M8	2
98	MW016		Washer	5/16"x23x1mm	2
99	163069		Bushing		1
100	181304BT		Hydraulic Cylinder		1
101	MHS269		Hex Soc Screw	M10x75L	1
102	MHN006		Hex. Nut	M10	1
104	MHS262		Hex Soc Screw	M10x40L	1
105	MHW006		Washer	M10x20x2	2
110	163055		Bracket		1
111	MHN005		Hex. Nut	M8	2
112	MHW105		Spring Washer	M8	2
113	MHS243		Hex Soc Screw	M8x25L	2
114	MHS246		Hex Cap Screw	M8-40L Half Tooth	1
115	163056		Bracket		2
116	MHS259		Hex Soc Screw	M10- 1.5Px25L	2
117	HW106		Spring Washer	M10	2
118	MHN006		Hex Nut	M10	2
119	MHI323		Washer	M10	2
120	163027	304021	Tension Spring		2
125	163010-1		Shredding Groove		1
125-1	163010-3		Baffle		2
125-2	MHS637		Cross hole screw	M6x15L	2
125-3	MW025		Washer	1/4" x 19 x 1.5mm	2
125-4	MHN004		Hex Nut	M6	2
130	1965052		Handle		2
131	MHS242		Hex Soc Screw	M8x20L	2
132	MHN005		Hex. Nut	M8	2
140	163032	304032	Wheel Bracket		4
141	HS072		Hex Head Screw	M10x90L	4
142	MHW006		Washer	M10x20xT2	8
143	MHN006		Hex Nut	M10	4

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
145	MHS045		Hex Head Screw	M8x15L	4
146	MW013	304034	Washer	3/8"x20xt2mm	4
147	163062		Wheel Axle		4
148	163035	304033	Wheel		4
150	163032A-1		Wheel bracket		2
151	163032A-2		Wheel bracket		2
152	HS072		Hex. Head Screw	M10x90L	4
153	MHW006		Washer	M10x20xt2	8
154	MHN006		Hex. Nut	M10	4
155	163034A		Wheel		2
156	MHS243		Hex Soc Screw	M8x25L	8
157	MHW105		Spring Washer	M8	8
158	MW016		Washer	5/16"x23xt2mm	8
159	MHN005		Hex. Nut	M8	8
160	163033		Wheel bracket		4
161	HS072		Hex. Head Screw	M10x90L	4
162	MHW006		Washer	M10x20xt2	8
163	MHN006		Hex. Nut	M10	4
165	163034		Wheel		2
166	MHS243		Hex Soc Screw	M8x25L	8
167	MHW105		Spring Washer	M8	8
168	MW016		Washer	5/16"x23xt2mm	8
169	MHN005		Hex. Nut	M8	8
170	163033A	304035	Wheel bracket		2
171	HS072		Hex. Head Screw	M10x90L	4
172	MHW006		Washer	M10x20xt2	8
173	MHN006		Hex. Nut	M10	4
175	163035A	304038	Wheel		2
176	MHS280		Hex Soc Screw	M12x30L	2
177	MW201		Spring Washer	M12	2
200	163005		Saw bow		1
200-1	163049		Bow Pivot		1
201	MHS240		Cap Screw	M8x10L	2
202	MHS328		Cap Screw	M6x16L	2
203	MHN004		Hex. Nut	M6	1
205	163031		Slide rail		4
206	MHS244		Cap Screw	M8x30L	4
207	MHW105		Spring Washer	M8	4
208	MW016		Washer	5/16"x23xt2mm	6
209	MHS430		Hex. Headless Screw	M8x10L	1
210	163074	304022	Gear Box	E=1/40	1

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
211	MDV10509-3	303956	Motor	1.5HP-230V-1PH	4
211-1	HW104		Spring Washer	M6	4
211-2	MHS034		Hex. Head Screw	M6x20L	1
212	HK114		Key	6*6*40	1
213	198214	304023	Gasket		4
214	MHW106		Spring Washer	M10	4
215	MHS059		Hex. Head Screw	M10x25L	1
216	198037		Drive Shaft Washer		1
217	HW106		Spring Washer	M10	1
218	MHS059		Hex. Head Screw	M10x25L	1
220	163023		Drive shaft		1
221	HK091		Round Head Key	8X7X50	1
222	HK044		Key	7x7x30L	1
223	163024		Main flange		1
224	MCA6206LLU		Bearing	6206	1
225	163022		Back ring		4
226	MHS259		Hex Soc Screw	M10-1.5Px25L	4
227	HW106		Spring Washer	M10	1
230	189016	304024	Drive Wheel		1
231	198037		Drive Shaft Washer		1
232	HW106		Spring Washer	M10	1
233	HS058		Hex. Head Screw	M10x20L	3
237	HS066		Hex. Head Screw	M10-1.5Px60L	3
238	MHW106		Spring Washer	M10	3
239	189054		Screw		31
240	189050		Tension		1
241	MHN008		Hex. Nut	M16	1
242	198026	303855	Leadscrew		1
243	198093		Spring Washer	ID16.3 x OD31.5 x T1.8	12
244	189053		Tension Indication Ring		1
245	CA51203		Bearing	51203	1
246	198051A		Blade Tension Handle		1
247	198086J		Knob		2
248	163071		Tension Scale		1
250	189051		Anchor Block		1
251	HS423		Hex. Headless Screw	M6-1.0Px15L	1
252	189052		Press Board		2
253	MHW105		Spring Washer	M8	4
254	MHS240		Hex Soc Screw	M8x10L	4
255	121011		Washer		1

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
256	MHS242		Hex Soc Screw	M8x20L	1
259	163011	304059	Blade	0.9X27X2997mm	1
260	189017	303903	Idler Wheel		1
261	CA6205LLU		Bearing	6205	2
262	163030		Shaft		1
263	121011		Washer	6mm	1
264	HS046		Hex. Head Screw	M8-1.25Px20L	1
267	MHN006		Hex. Nut	M10	1
268	189033		Handle		1
270	163029		Lower limit bracket		1
271	MHN006		Hex. Nut	M10	1
272	MHN005		Hex. Nut	M8	1
273	HS046		Hex. Head Screw	M8x20L	1
274	MHW006		Washer	M10x20xt2	1
275	MHS259		Hex Soc Screw	M10-1.5Px25L	1
276	MHN005		Hex. Nut	M8	2
277	189087		Lower limit screw		1
279	163070		Vertical saw cover		1
279-1	MW004	81938	Washer	1/4"x19xt1.5mm	2
279-2	MHS328	302396	Cap Screw	M6x16L	2
280	163008		Middle cover		1
281	MW004		Washer	1/4"x19xt1.5mm	2
282	MHS637		Cross hole screw	M6x15L	2
283	163063	304060	Side Blade Cover		1
283-1	MW004	81938	Washer	1/4"x19xt1.5mm	2
283-2	MHS259	78758	Hex Soc Screw	M10-1.5Px25L	2
284	163064		Main Blade cover		1
284-1	MHN004		Hex. Nut	M6	3
284-2	MHS637		Cross hole screw	M6x15L	3
285	163007		Side cover		1
286	163006		Main Cover		1
287	MHS637		Cross hole screw	M6x15L	4
288	MW004		Washer	1/4"x19xt1.5mm	4
289	103127	304005	Knob	M6-1.0Px10L	2
290	163009-1		Board A		2
291	163009-2		Board B		2
292	MHS635		Cross hole screw	M5x10L	4
293	MW049		Washer	3/16"x12xt1mm	4
294	MHN003		Hex. Nut	M5x10L	4
295	MHS637		Cross hole screw	M6x15L	2
296	MW004		Washer	1/4"x19xt1.5mm	4

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
297	163066		Pad		1
298	151187		Speed Indicator Dial Cover		1
298-1	HW004B		Flat Washer	M6	2
298-2	MHT001		Hex Soc Screw	M5-0.8Px10L	2
298-3	MHS504		Round Hd. Screw	M3X15L	4
298-4	MHN001		Hex Nut	M3	4
299	151197		Speed Plate		1
300	163052		Electrical box		1
301	MHS635		Cross hole screw	M5x10L	4
302	MW049		Washer	3/16"x12xt1mm	4
303	MW004		Washer	1/4"x19xt1.5mm	3
304	MHS328		Cap Screw	M6x16L	3
305	163050		Operation Box		1
305-1	MET21AK				1
306	MHS637		Cross hole screw	M6x15L	2
307	MHS635		Cross hole screw	M5x10L	3
308	PJNB631136E		Panel Sticker	164 mm X 94 mm	1
309	163061		Handle		2
309-1	MHS626		Cross hole screw	M4x8L	4
310	163025	304025	Arm Seat		2
311	1965015-1	304026	Blade Adjustable Knob	M10x50L	2
312	260158		Copper gasket	D8x3mmL	2
314	272048		Speed Button		1
314-1	HS408		Hex. Headless Screw	M4x8L	1
316	MHS034		Hex. Head Screw	M6x20L	4
317	MHN004		Hex. Nut		4
318	MHW006		Washer	M10x20xt2	
319	HW106		Spring Washer	M10	2
320	MHS259		Cap Screw	M10x25L	2
325	189015		Bearing Bracket (Right)		1
326	189014		Bearing Bracket (Left)		1
327	HS422		Hex. Headless Screw	M6-1.0Px10L	8
328	HS422		Hex. Headless Screw	M6-1.0Px10L	4
329	CA6082RS		Bearing	608-2RS	2
330	121061		Bearing Shaft		2
331	189019		Eccentric Guide		2
332	189018		Eccentric Guide		2
333	CA6082RS		Bearing	608-2RS	8

<u>Ref. No.</u>	<u>Part No.</u>	<u>Dake Part No.</u>	<u>Description</u>	<u>Specification</u>	<u>QTY</u>
334	HCS39		C-Retainer	8	4
335	HS230		Hex. Head Screw	M6-1.0Px20L	4
336	HW004		Washer	6.5x13x1mm	4
337	HW104		Spring Washer	M6	4
338	103120	304044	Carbide Guide		4
340	163057		Screw Plate		1
341	163059		Screw Rod		1
342	MHN007		Hex. Nut	M12	4
345	163038		Brush Bracket		1
346	MW004		Washer	1/4"x19x1.5mm	1
347	MHS328		Cap Screw	M6x16L	1
348	HS037		Hex. Head Screw	M6-1.0Px35L	1
349	191334A		Brush		1
350	MHN004		Hex. Nut	M6	2
351	MW004		Washer	1/4"x19x1.5mm	2
355-1	198057		Distance Set Bracket		1
355-2	HW005		Washer	M8	2
355-3	198088		Muti directional Handle		2
355-4	198058		Distance Set Rod		1
355-5	121059N		Distance Set Rod		1
355-6	HN010		Hex. Nut	M14xP1.5	2
355-7	198087		Scale		1
355-8	HH001		Rivet	2	4

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.