



DAKE METAL CUTTING HORIZONTAL BANDSAW

Model SE912

INSTRUCTIONAL MANUAL



WARNING!

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

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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	SE912
Number	983101
Horsepower	1
Voltage	100V single phase
Max blade speed	328 fpm
Blade width	1"
Blade length	104.5"
Blade speeds (fpm)	98/164/246/328

Solid round 90° capacity	9"
Solid round 45° capacity	3-1/2"
Solid rectangle 90° capacity	9" x 12"
Solid rectangle 45° capacity	3-1/2" x 7-1/2"
Bed work (area)	24-1/2" x 9"
Weight	500 lbs
Floor space	56" x 21"
Floor to bed	21-3/4"

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



Serial No.	
Model No.	
Install Date:	

SAFETY

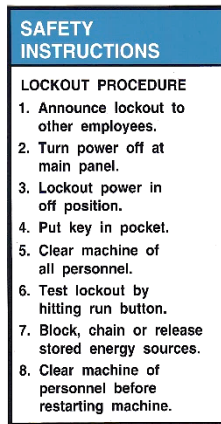


This is the safety alert symbol. When you see this symbol on your machine be alert to the potential for personal injury.

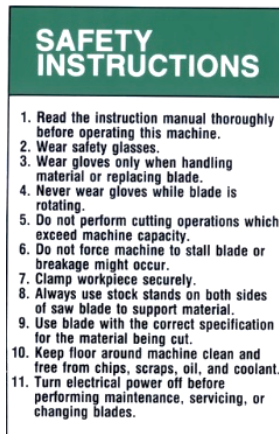
Carefully read all safety messages in these instructions and on your tool safety signs.

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

Keep safety labels in good condition. Replace missing or damaged labels.



**Label Part No.
76462**



**Label Part No.
84605**



**Label Part No.
84604**



**Label Part No.
84395**

Follow recommended precautions and safe operating practices.

User:

- This machine was designed for certain applications only. Do not modify machine to be used for any other application.
- Machine is intended to be operated by one person. This person should be conscious of the saw's operations not only for themselves but also for persons in the immediate area of the machine.
- Wear proper apparel. Do not wear gloves, loose clothing or hanging jewelry, they can get caught in moving parts.
- Keep proper footing and wear non-slip shoes.
- Always wear eye protection: Refer to ANSI Z87.1 standard for appropriate recommendations.

- Do not overreach, and never stand on or tip the tool.
- Do not operate tool under the influence of drugs, alcohol, or any medications that would affect user's ability to operate tool.
- Never leave tool unattended and do not leave until blade has come to a complete stop.
- Always keeps hands and fingers away from the blade.
- Stop the machine before removing chips.
- Shut off power and clean tool and work area before leaving the machine.

Use of machine:

- Do not force tool.
- Use vice to secure work before cutting.
- Maintain tool condition. Keep tool sharp, lubricated and clean for the best and safest performance.
- Adjust and position the blade arm before starting to cut.
- Keep blade guide arm tight, a loose guide arm will affect tools accuracy.
- Make sure blade speed is set for the material being cut.
- Ensure the blade size and type is proper for the job.
- Machine is intended to be used only used for general metal cutting within the range of cutting capacity.

Working environment:

- Saws weighted sound pressure level: 80dB.
- Keep work area clean.
- Do not use in a dangerous environment: do not use in damp or wet location or expose them to rain.
- Keep work area well lit.
- Do not install or use machine in explosive or dangerous environment.
- Keep visitors away from tool. Anyone unqualified to run the tool should have no interaction with the tool.

Maintenance:

- Disconnect machine from power when making repairs or changing the blade.
- Check for damaged parts, if any part is found damaged it needs to be properly repaired or replaced.
- Ensure that blade tension and blade tracking are properly adjusted.
- To prolong blade life release blade tension at the end of each work day.

- Check coolant daily. Insufficient or dirty coolant can cause a low cutting rate and premature blade failure. Dirty coolant may cause bacteria growth that may cause skin irritation.
- When cutting magnesium never use soluble oils or emulsions (oil-water mix) as waster may start an accidental magnesium chip fire. Talk to your industrial coolant supplier for specific recommendations.
- Pay attention to wiping dry surfaces where coolant accumulates but does not evaporate quickly such as between the bed and vice of the machine. This is to prevent the machined surfaces from corroding being that a water-soluble coolant is used.
- When the saw arm is opened the interlock switch will function to stop all blade movement. Do not remove this switch for any reason and check it's function frequently.

SET UP

ASSEMBLY

Motor pulley cover: (Items 269, 284-286, & 288)

- 1) Open the cover and slide the bottoms openings around the pulleys.
- 2) Line up the holes in the motor pulley case with the hole in the bracket coming up from the motor mount bracket.
- 3) Use the washers and hex screws to attach the cover to the bracket in the center and righthand side of the cover.
- 4) Close cover and snap lower fastener closed, then use the round head screw to keep it securely closed.

Wheels and feet: (Items 84-89)

- 1) At the end of the saw opposite to the motor, lift and put an adjustable wheel bracket through the hole in the bottom 2 corners of the stand.
- 2) Thread the hex nut onto the adjustable wheel bracket. Once the wheels are on the hex nut can be tightens or loosened to help level the saw.
- 3) Take the wheel rod and slide it though the holes at the bottom of the saw stand, on the motor side of the saw. See exploded parts view as reference.
- 4) Pace a washer on each end of the rod before placing the wheels on next.
- 5) Place a washer on the outside of each wheel then use the cotter pin and insert it through the hole in the end of the rod to secure the wheels.

Handle: (Items 93-96)

- 1) Line the holes in handle up with the holes on the side of the stand like in the exploded parts view.
- 2) Put the hex head screw with a washer through the handle and the stand.
- 3) On the back side, place another washer on the screw tighten before putting the hex nut on.
- 4) Tighten the nut just enough to get it onto the screw.
- 5) Do this for all 4 holes before tightening all 4 hex nuts.






BLADE SELECTION

An 8-tooth per inch general use blade comes installed with this metal cutting bandsaw. Additional blades in 4, 6, 8, and 10 tooth pitches are available. However, 3 teeth should be engaged with the workpiece at all times for proper cutting.

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

Located on the saw is a chart to determine the tooth pitch or TPI needed for cutting various material types and shapes.

For piping, tubing, and structural the material thickness used is the average thickness that the blade goes through during the cut.

SELECTION CHART FOR VARIABLE TOOTH PITCHES																
SHAPE	MATERIAL TYPE	MATERIAL THICKNESS	5	10	15	20	25	50	75	100	150	200	250 (mm)			
			1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/2	2	2 1/2	3	4	6
 	FERROUS/	NON-FERROUS	14/18	10/14	8/14	6/10	5/8	4/6	3/4	2/3	1.4/2.5					
	COPPER/ALUMINIUM		14/18	10/14	8/14	6/10	5/8	4/6	3/4	2/3	1.4/2.5					
 	CAST IRON	CARBON STEEL	14/18	10/14	8/14	6/10	5/8	4/6	3/4	2/3	1.4/2.5					
	STAINLESS STEEL		14/18	10/14	8/14	6/10	5/8	4/6	3/4	2/3	1.4/2.5					
	TOOL STEEL		14/18	10/14	8/14	6/10	5/8	4/6	3/4	2/3						

BLADE SPEED

Band speed recommendations presented on this chart are approximations and are to be used as a starting point for most applications. For exact sawing parameters consult your blade supplier. ⚠ 120V outlets use 60 Hz columns.

Material	Speed (F.P.M.)	
	60 Hz	50 Hz
Tool, Stainless Alloy Steels, Bearing Bronze, Cast-iron Steel	105	85
Med. to High Carbon Steels, Hard Brass or Bronze	196	164
Low to Med. Carbon Steel, Soft Brass	288	240
Aluminum, Plastic	377	312

COOLANT

Use a water-soluble coolant.

Coolant is mixed 10:1, 10 parts water to one-part coolant. Once the coolant is mixed pour it into the tray and let it run down into the reservoir. If a lot of coolant pools on one side of the tray the saw may need to be leveled to let all the coolant drain from the tray equally and ensure all of the coolant in the system is cycled when cutting.

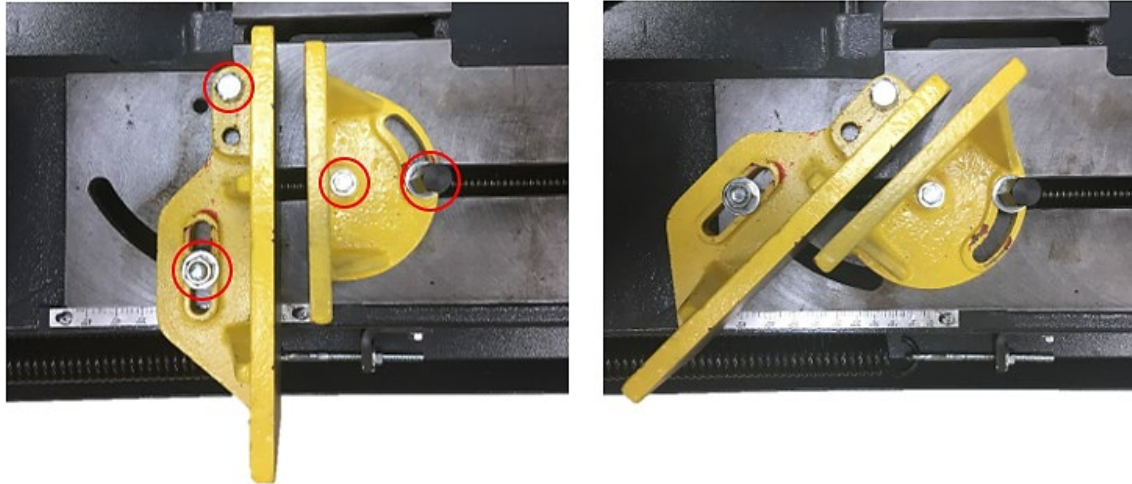
OPERATION

VICE

Turning the handwheel (item 364) at the end of the bed will move the front jaw of the vice forward and back. To tighten down a work piece insert it between the jaws and use the handwheel to tighten the vice around the workpiece. Then lock the pressure knob of the vice by pulling the handle (item 373 & 374) down into the locked position.

Vice adjustment for angled cuts:

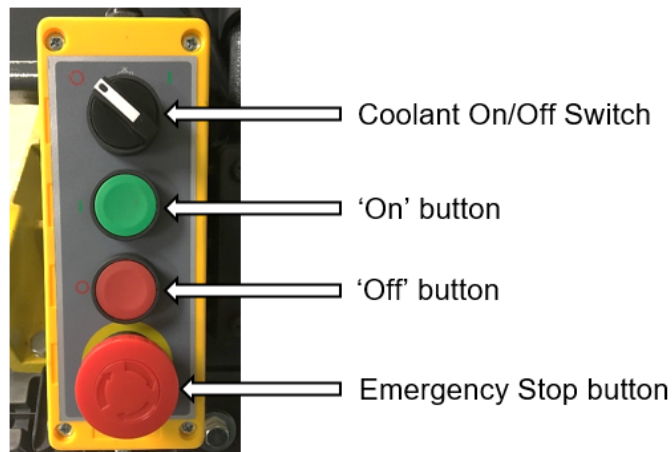
Loosen the 3 hex head screws and the nut attached to the carriage bolt. Once loosened this will allow both vice jaws rotate up to 45°. The carriage bolt may need to be loosened more to get to bigger angles. Once each jaw is set to the same angle tighten all fasteners to secure vice in place.



WORK STOP ADJUSTMENT

- 1) Loosen the thumb screw (item 48) holding the work stop casing (item 51) to the shaft.
- 2) Adjust the work stop casting to the desired length.
- 3) Rotate the work stop as close to the bottom of the cut as possible.
- 4) Tighten thumbscrew.

CONTROLS



CHANGING FEED RATE

Located on the front right of the saw is the adjustment for the feed rate as well as the down feed lock. To slow the feed rate, turn the knob clockwise, counterclockwise causes the feed to increase. Feed can be adjusted 0-10, 0 being no feed pressure causing the saw to fall the fastest. At 10 the highest feed pressure, causing the saw to fall the slowest at this setting.

To lock the saw head in an elevated position, turn the handle so that it is perpendicular with the feed cylinder. To unlock and resume down feed, turn the handle back parallel with the cylinder. See figure below.



Unlocked



Locked

OPERATING

- 1) Raise saw head to partial vertical position and use the down feed lock to lock the head.
- 2) Open vice and insert the workpiece. Close vice securely around the workpiece.
 - a. If work piece is significantly long, support the end of the workpiece.
- 3) Lower the head of the saw until the blade is within a half an inch from the workpiece.
 - a. Starting the saw while it's already running could damage the blade.
- 4) Set the down feed rate for the type of material that is being cut.
- 5) Turn the saw on and press the start button. Once the saw is up to full speed release the head stop to let the saw gravity feed down into the workpiece.
 - a. Never force the saw into the work this could damage the saw as well as the work.
- 6) Once the saw has made the cut entirely, stop the saw or let the saw hit the limit switch.
- 7) Lift the head of the saw and loosen the vice to remove the workpiece.

CHANGING BLADE SPEED

⚠ Before changing the blade speed ensure that the saw is properly disconnected from its power source

- 1) Loosen, but do not remove, the two 5/16" hex head screws under the motor pulley cover. This allows the pulley to move slightly to readjust the belt for blade speed. Shown below.



- 2) Remove the motor pulley cover and unclip the plastic fastener to open.
- 3) Using the "BLADE SPEEDS" section in the manual determine what blade speed is ideal for the material being cut.
- 4) Using the chart on the inside of the cover determine what position to move the belt to get the desired blade speed.
 - a. For standard 120V outlet use the 60Hz column.
 - b. Pulley orientation in illustration may differ slightly from actual saw. If chart displays the belt in the top grooves of the pulleys for a speed, then put the belt in the top grooves, no matter the orientation of the pulleys.

Speed Selection Chart		712N 181609	
Driven Pulley	Motor Pulley	Speed F.P.M.(M.P.M)	
		60Hz	50Hz
		105(32)	85(26)
		196(60)	164(50)
		288(88)	240(73)
		377(115)	312(95)


- 5) After getting the belt in place, slide the motor left until the belt is taught, then tighten the hex head screws securing the motor in place. Then close the pulley motor cover.

MAINTENANCE

PERIODICAL MAINTENANCE


Frequency	Maintenance
Daily	Fill coolant as needed before operating.
	Clean up metal chips and debris.
Weekly	Clean and coat head screw with oil as needed.
	Check sliding surfaces and turning parts if lubricant is needed.
	Lubricate the driven pulley with 6-8 drops of oil (SAE-30).
Monthly	Lubricate bearing, worm, and worm shaft to avoid wear.
Yearly	Check electrical cord, plugs, and switches for loosening.

BLADE REMOVAL AND INSTALLATION

 Before performing a blade change ensure that the saw is properly disconnected from its power source. Gloves should be worn while handling the both the old and the new blade.

- 1) Raise saw head to its highest position and open the back blade cover by unscrewing the two knobs on the back side of the blade guard (item 332).
- 2) Loosen the blade tensions knob (counter-clockwise) enough to allow the blade to slip off the pulleys.
 - a. Set the old blade aside to dispose of.
- 3) Place new blade between the guide bearings.
 - a. Make sure the teeth are slanting towards the motor when installed.
- 4) Slip the blade around the motor pulley and hold in position.
- 5) Pull the blade taught around the motor pulley and pull the other end up towards the top pulley.
- 6) Carefully slip the other end of the blade over the top pulley.
- 7) Tighten the tension knob (clockwise) until the blade is just tight enough to not slip.
 - a. Using a gloved hand pull along the blade's length to make sure the blade does not slip.
 - b. Be careful not to overtighten the blade.
- 8) Replace the blade guards.
- 9) Place 2-3 drops of oil on the blade.
- 10) Recheck blade tension after initial cut with new blade.

BLADE GUIDE BEARING ADJUSTMENT

 Before adjusting the blade guide bearings ensure that the saw is properly disconnected from its power source.

Guide bearing position is extremely important in order get a straight, proper cut. The need for adjustment should rarely occur if the saw is being used properly. If the guides get out of adjustment is important to readjust immediately to avoid blade damage and waste of materials.

Because guide adjustment is a critical factor in performance of your saw it is best to a new blade in to see if it will correct the poor cutting before beginning to adjust the guides. The guides should have .000" (just touching) to .001" of clearance between themselves and the blade.

- 1) The outer bearing is mounted to an eccentric bushing and can be adjusted.
 - a. The inner bearing is fixed and cannot be adjusted.
- 2) While holding the bolt with a hex wrench loosen the nut on the outside.
- 3) Position the eccentric by turning the bolt to the desired position of clearance.
- 4) Tighten the nut.
- 5) Adjust the second blade guide in the same manner.

LUBRICATION

- 6-8 drops of SAE-30 oil on driven pulley bearing once a week.
- Vise lead screw as needed.
- Drive gears run in an oil bath and does not require a lubricant change more than once a year unless the oil gets contaminated or a leak occurs. Use 80/90 synthetic gear oil.

TROUBLESHOOTING

WHEN TO CHANGE FEED RATE OR BAND SPEED

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

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

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

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

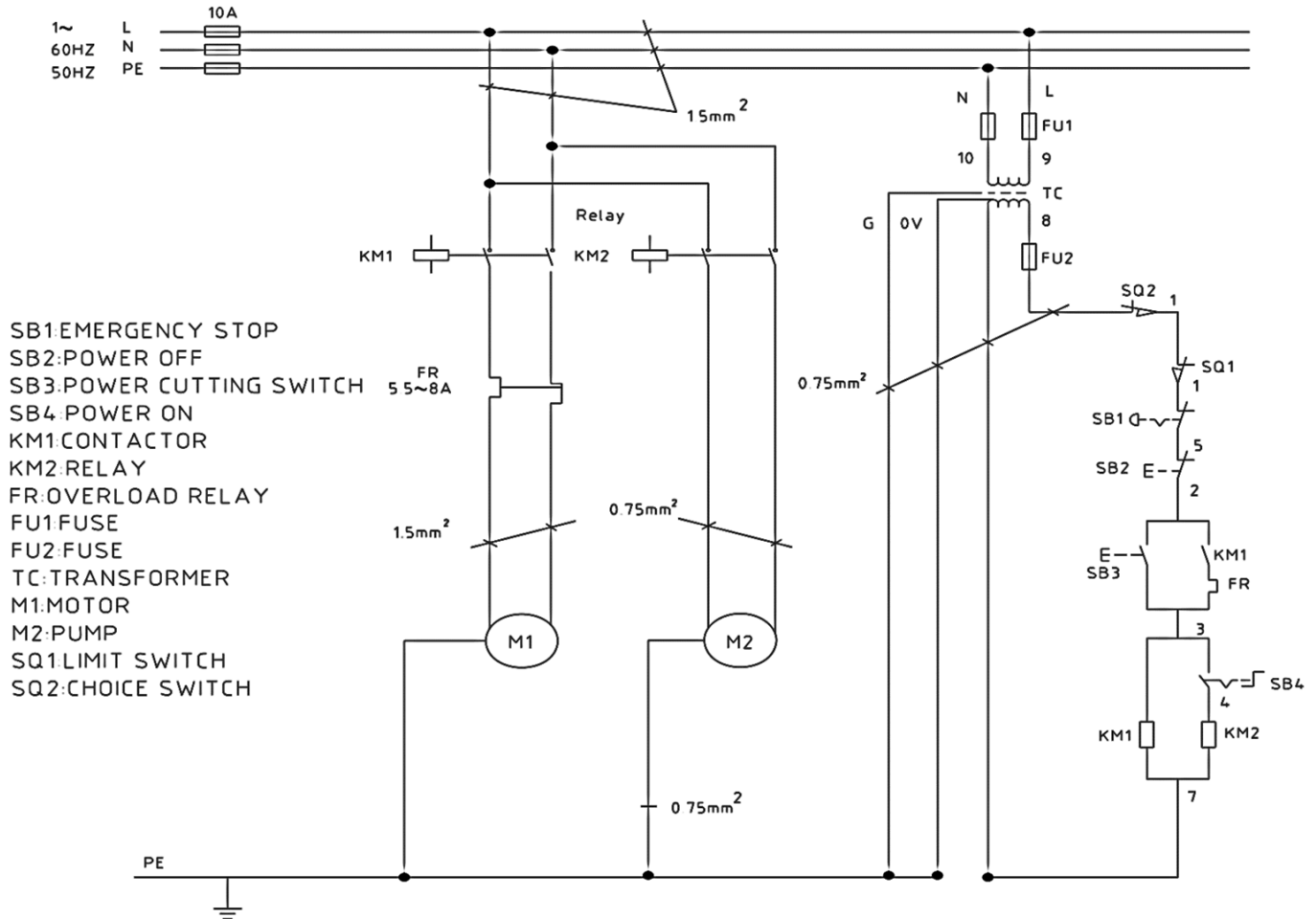
PROBLEM/SOLUTION GUIDE

SYMPTOM	CAUSE	SOLUTION
Excessive blade breakage	Materials loosen in vice	Re-clamp work more securely
	Incorrect blade speed or feed pressure	Adjust blade speed and/or feed pressure. See “BLADE SPEED” and “CHANGING FEED RATE” sections in manual.
	Blade teeth spacing too large	Replace with higher TPI blade
	Material is too coarse	Slow down speed or blade and possibly use a blade with a higher TPI
	Incorrect blade tension	Readjust blade tension so the blade is tight enough where it just barely does not slip when pulled on
	Teeth in contact with material before saw is started	Place blade slightly above the material and then turn the saw on and lower the blade into the material
	Blade rubs against wheel flange	Adjust blade alignment
	Miss-aligned guide bearings	Adjust guide bearings. See “BLADE GUIDE BEARING ADJUSTMENT” section of manual
	Blade too thick	Replace blade with thinner blade
	Cracking at blade weld	Weld again and inspect before use

SYMPTOM	CAUSE	SOLUTION
Premature blade dulling	Blade teeth are too coarse	Use a blade with finer teeth/higher TPI
	Blade speed is too high	Decrease speed
	Feed pressure is too little	Decrease spring tension on side of the saw. See "CHANGING FEED RATE" section
	Hard spots or scale on material	Reduce speed and/or increase feed pressure
	Work hardening of material	Increase feed pressure by reducing spring tension
	Blade is twisting	Replace with new blade. See "BLADE REMOVAL AND INSTALLATION" section in manual
	Blade is sliding	Increase blade tension
Unusual wear on side/back of blade	Blade guides worn	Replace blade guides
	Blade guide bearings not adjusted properly	Readjust guide bearings. See "BLADE GUIDE BEARING ADJUSTMENT" section of manual.
	Blade guide bearing bracket is loose	Tighten guide bracket using the adjustment knob (item 319)
Teeth ripping from blade	Blade teeth too coarse for material	Use blade with a higher TPI
	Blade speed too slow	Decrease feed pressure and/or increase blade speed
	Vibrating workpiece	Re-clamp work more securely
	Blade teeth loading up with material	Use a coarser tooth blade, or use brush to remove chips
Blade is twisting	Cut is binding the blade	Decrease feed pressure
	Blade tension is too high	Decrease blade tension
Rough cuts	Blade speed and/or feed pressure is too high	Lower blade speed and/or feed pressure
	Blade too coarse	Use a finer tooth blade
	Blade tension is too loose	Increase tension on the blade

SYMPTOM	CAUSE	SOLUTION
Motor running too hot	Blade tension is too high	Reduce tension on blade
	Drive belt tension is too high	Reduce tension on drive belt by loosening the two hex head screws under the motor pulley cover. Same screws loosened in "CHANGING BLADE SPEED" section of the manual
	Blade is too coarse for material	Use a finer tooth blade
	Blade is too fine for material	Use a coarser tooth blade
	Gears alighted improperly	Adjust gears to that worm is in the center of the gear
	Gears need lubrication	Check oil path
	Cut is binding the blade	Decrease feed pressure
Blade not cutting straight	Feed pressure is too high	Reduce feed pressure by increasing the spring tension on side of saw
	Feed pressure is too low	Increase feed pressure by decreasing the spring tension on side of saw
	Guide bearings not adjusted properly	Adjust guide bearing, clearance should be no greater than .001"
	Dull blade	Replace blade. See "BLADE REMOVAL AND INSTALLATION" section in manual
	Incorrect blade speed	Use chart inside pulley cover and chart in the "BLADE SPEED" section of the manual to determine correct blade speed
	Blade guides are spaced too far	Adjust blade guides. See "BLADE GUIDE BEARING ADJUSTMENT" section of the manual
	Blade guide assembly is loose	Tighten blade guide assembly
	Blade tracks too far away from wheel flanges	Re-track blade. See SET UP section in manual

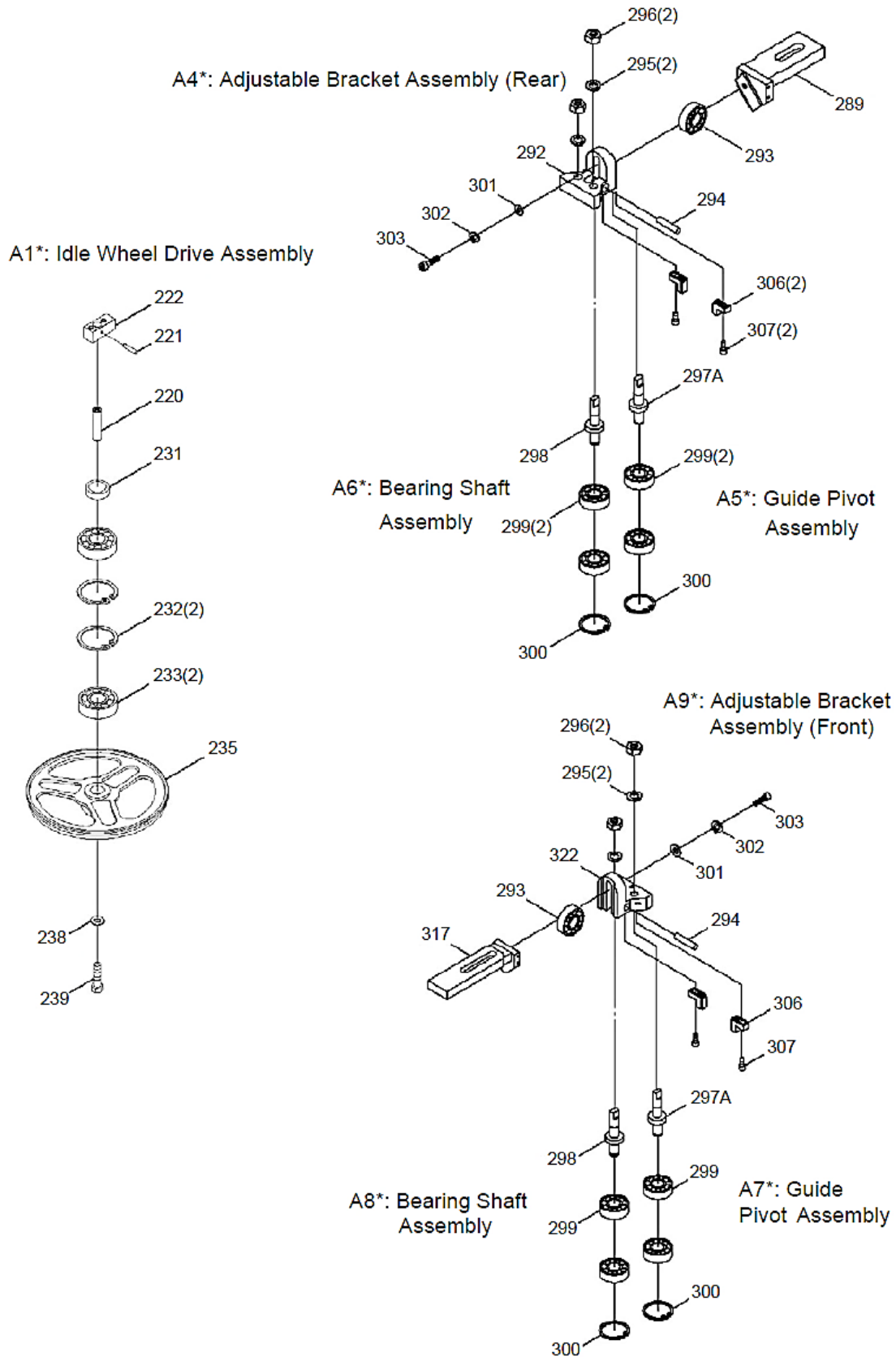
ELECTRICAL COMPONENTS



Part No.	Part Name	Qty
300343	Electrical box	1
301462	Connector 24 volt	1
301795	Overload	1
300828	Relay (orange)	1
302409	Motor reset button	1
73326011	Transformer	1

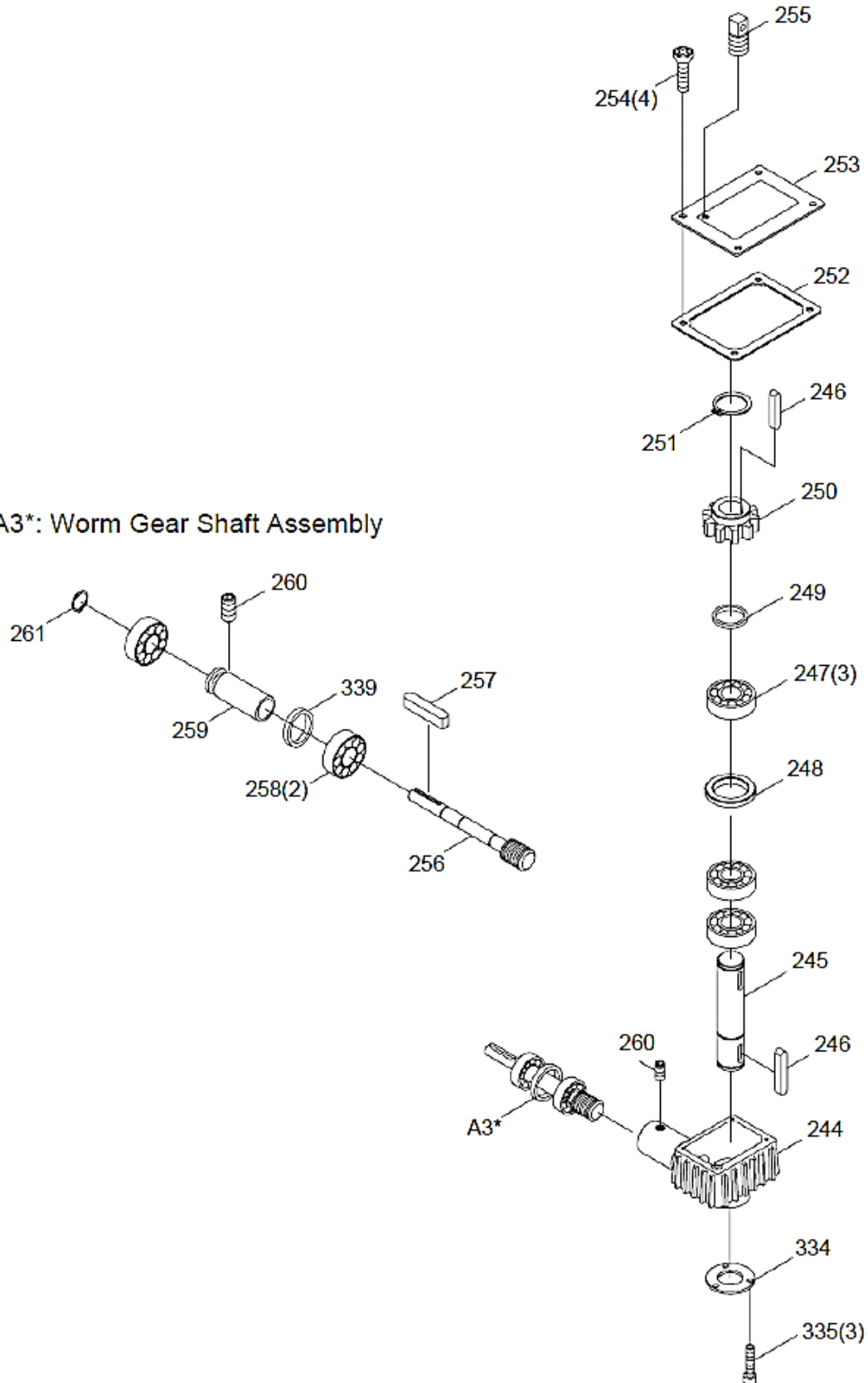
Part No.	Part Name	Qty
716558	Coolant on/off button	1
716540	Start button (green)	1
716539	Stop button (red)	1
716538	Emergency Stop	1
300733	Limit switch (end of cut)	1

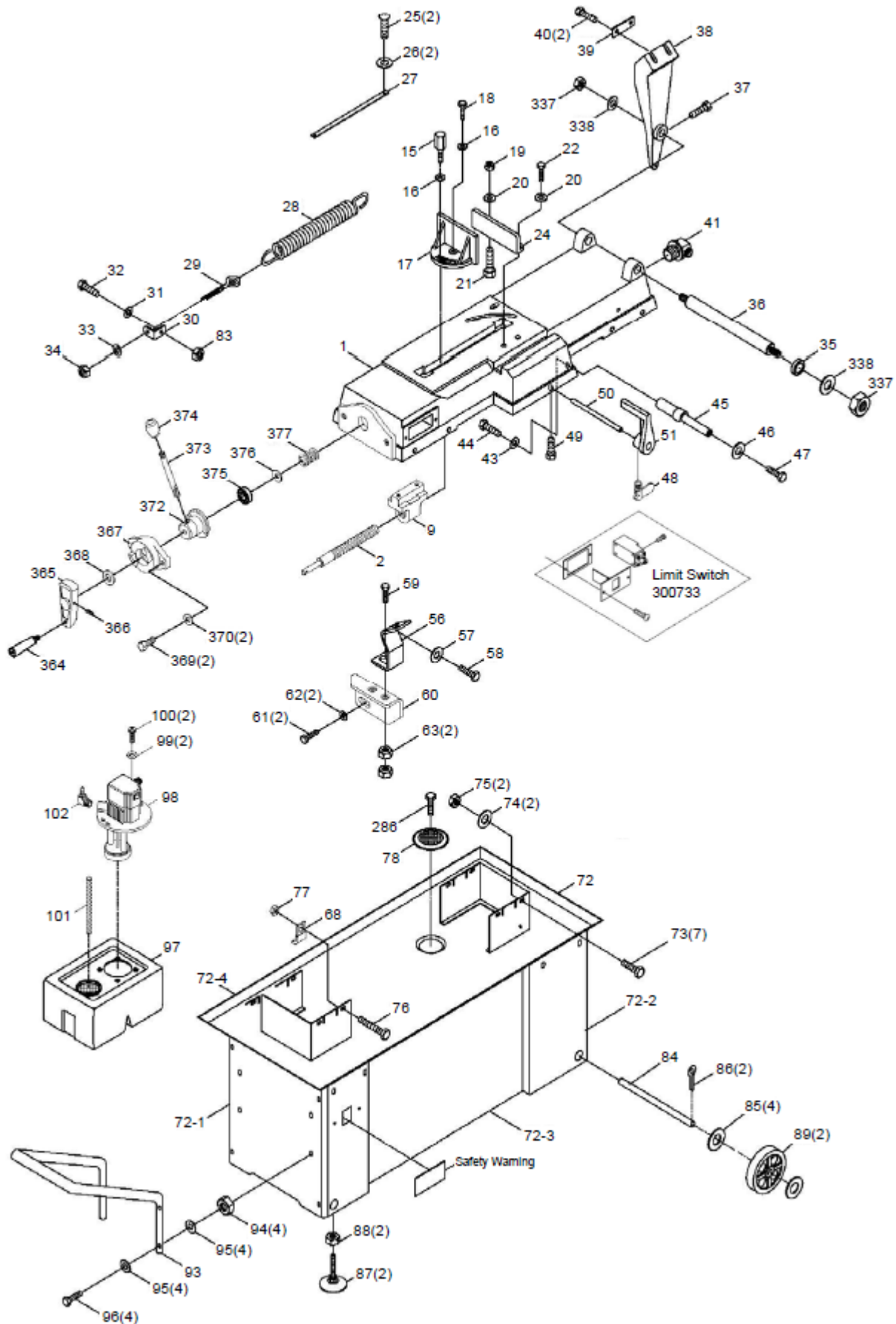
EXPLODED PARTS VIEW

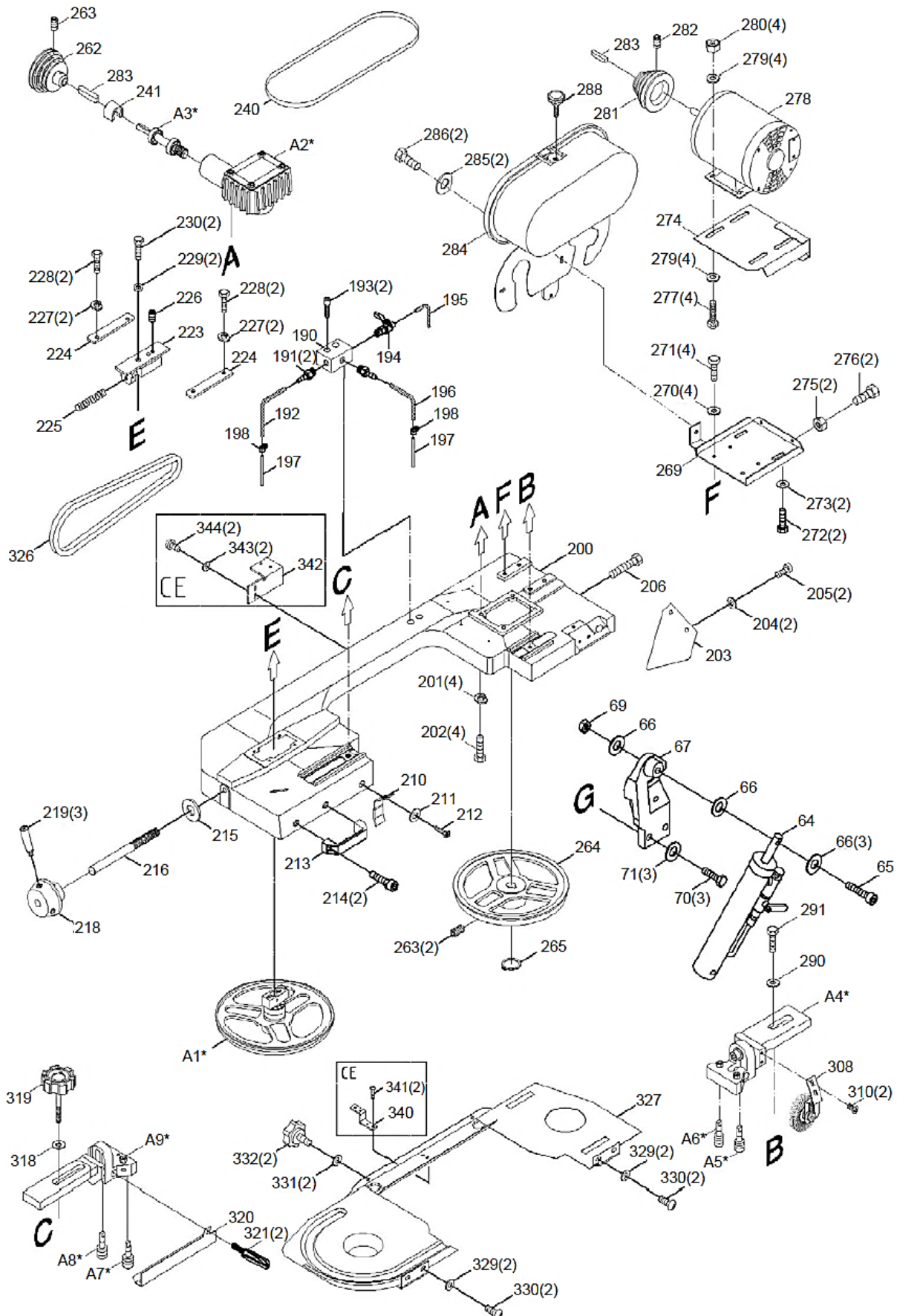


A2*: Gear Box Assembly

A3*: Worm Gear Shaft Assembly







PARTS LIST

Assemblies:

A1: Idle Wheel Drive Assembly

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
220	N/A	193050	Blade Wheel Shaft	1
221	N/A	P005	Pin	1
222	301606	193052	Sliding Plate Draw Block	1
231	301705	193051	Bushing	1
232	302324	HCR06	C-Retaining Ring	2
233	304279	MCA6205LLU	Ball Bearing (6205LLU)	1
235	301841	192016A	Idler Wheel	1
238	43632	W017	Washer (5/16")	1
239	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1

A2: Gear Box Assembly

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
244	N/A	181216-1AS	Gear Box Casting	1
245	301467	181219-1	Transmission Wheel Shaft	1
246	301468	K015	Key	2
247	300693	6205-FRS	Sealed Bearing	3
248	301699	181217-1	Bushing	1
249	301471	181218-1	Bushing	1
250	302424	181220M-SVM4	Worm Gear	1
251	76827	C110	Retaining Ring (25mm)	1
252	302953	3092	Gear Box Gasket	1
253	301697	181222-1	Gear Box Cover	1
254	43412	S201	Hex. Head Screw	4
255	302952	3149	Vent Plug (M8 x P1)	1
260	43574	S607	Set Screw	1
334	301700	181246	Bearing Cover	1
335	300905	S712	Cross Round Head Screw (5/32" x 3/8"L)	3
N/A	300748	-	Gear Box Assembly	1

A3: Worm Gear Shaft Assembly

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
256	301839	192010	Worm Shaft	1
257	300877	K008	Key (5 x 5 x 30mm)	1
258	300853	6003	Sealed Bearing	2
259	301476	181224	Bushing	1
260	43574	S607	Set Screw	1
261	300495	C005	Retaining Ring	1
339	301748	192049	Bushing	1
N/A	301951	-	Worm Gear Shaft Assembly	1

A4: Adjustable Bracket Assembly (Rear) (Part No.: 301873)

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
289	301873	192004A	Adjustable Bracket (Rear)	1
292	303615	192006A	Blade Adjustable (Rear)	1
293	300744	CA608ZZ	Bearing	1
294	301445	-	Bearing Pin	1
295	43645	W208	Lock Washer (3/8")	2
296	300504	N006	Hex. Nut (3/8"-24)	2
301	43632	W017	Washer (5/16")	1
302	43644	W205	Lock Washer (5/16")	1
303	43434	S416	Socket Head (5/16-18 x 1")	1
306	300743	191331	Carbide Guide	2
307	43412	S401	Screw (1/4"-20 x 1/2")	2

A5 & A7: Guide Pivot Assembly

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
297	302216	181244	Guide Pivot	1
299	300744	CA608ZZ	Bearing	2
300	300477	-	C-Retaining Ring	1

A6 & A8: Bearing Shaft Assembly

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
297	302216	181244	Guide Pivot	1
299	300744	CA608ZZ	Bearing	2
300	300477	HCS39	C-Retaining Ring	1

A9: Adjustable Bracket Assembly (Front)

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
293	300744	CA608ZZ	Bearing	1
294	301445	-	Bearing Pin	1
295	43645	W208	Lock Washer (3/8")	2
296	300504	N006	Hex. Nut (3/8"-24)	2
301	43632	W017	Washer (5/16")	1
302	43644	W205	Lock Washer (5/16")	1
303	43434	S416	Socket Head (5/16-18 x 1")	1
306	300743	191331	Carbide Guide	1
307	43412	S401	Screw (1/4"-20 x 1/2")	1
317A	301684	192005S	Adjustable Bracket (Front)	1
322	302315	192007B	Blade Adjustable (Front)	1

Individual Parts:

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
1	301266	192012A	Swivel Base	1
2	301267	192009A	Acme Screw	1
9	301268	181138B	Acme Nut	1
15	301269	181266	Fixed Bolt	1
16	43633	W014	Flat Washer (3/8")	2
17	301271	192015	Vise Jaw Bracket (Front)	1
18	43331	S410	Hex. Socket Head Screw (3/8"-16 x 1-1/2")	1
19	43916	N001	Hex. Nut (1/2"-13)	1
20	300907	W002	Washer (1/2")	2
21	302492	S501	Carriage Screw (1/2"-12 x 2")	1
22	302491	S003	Hex. Head Screw (1/2"-12 x 2")	1
24	301288	192008	Vise Jaw Bracket (Rear)	1
25	43881	S708	Cross Round Head Screw (#10-24 x 3/8")	2
26	301274	HW007	Spring Washer (M12)	2
27	301289	192044	Scale	1
28	301290	181117-1	Spring or 300943	1
29	301291	181118	Spring Adjusting Screw	1
30	301292	192040	Spring Handle Bracket	1
31	43632	W016	Flat Washer (5/16")	1
32	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1
33	43633	W014	Flat Washer (3/8")	1
34	43912	N005	Hex. Nut (3/8"-16)	1
35	301293	192051	Bushing	1
36	301294	192042A	Support Rod	1
37	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1
38	301295	192003	Pivot Bracket	1

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
39	301296	181270	Retaining Plate	1
40	43331	S012	Hex. Head Screw (3/8"-16 x 1-1/2")	2
41	301297	ET2108	Wire Nipple (5/8")	1
43	43632	W016	Flat Washer (5/16")	1
44	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1
45	301299	181299-2	Cylinder Lower Support	1
46	43632	W016	Washer (5/16")	1
47	43313	S018	Hex. Head Screw (5/16"-18 x 1/2")	1
48	301688	191224	Thumb Screw	1
49	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1
50	301300	3021	Stock Stop Rod	1
51	300945	181125	Distance Set Bracket	1
54	303706	181989	Switch Bracket (For CE only)	1
56	303848	192011	Fixed Plate	1
57	43631	W005	Washer (1/4")	1
58	43317	S019	Hex. Head Screw (5/16"-18 x 1-1/2")	1
59	43332	S014	Hex. Head Screw (3/8"-16 x 3/4")	1
60	303617	181112A	Support Plate	1
61	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	2
62	43632	W017	Washer (5/16")	2
63	43912	N005	Hex. Nut (3/8"-16)	2
64	300730	181304-2	Cylinder Complete Set	1
65	43334	S412	Hex. Socket Head Screw (3/8"-16 x 2-1/4")	1
66	43633	W013	Washer (3/8")	3
67	301191	181302-2	Cylinder Upper Support	1
68	N/A	-		-
69	43912	N005	Hex. Nut (3/8"-16)	1
70	43315	S017	Hex. Head Screw (5/16"-18 x 1")	3
71	43632	W017	Washer (5/16")	3
72	303628	192045S	Stand Complete Assembly	1
73	43315	S017	Hex. Head Screw (5/16"-18 x 1")	7
74	43632	W017	Washer (5/16")	2
75	43911	N007	Hex. Nut (5/16"-18)	2
76	43330	S013	Hex. Head Screw (3/8"-16 x 1-1/4")	1
77	43912	N005	Hex. Nut (3/8"-16)	1
78	301404	191106A	Filter	1
84	302518	192022	Wheel Rod	1
85	73545	W019	Washer (5/8")	4
86	301536	HP210	Cotter Pin (Ø3mm x 25mm)	2
87	303627	195038	Adjustable Stand Foot	2
88	302490	N001	Hex. Nut (1/2")	2
89	300742	181129	Wheel	2
93	300953	192039	Handle	1
94	43912	N005	Hex. Nut (3/8"-16)	4
95	43633	W014	Spring Washer (3/8")	8
96	43330	S013	Hex. Head Screw (3/8"-16 x 1-1/4")	4
97	300962	181256	Coolant Tank	1
97-1	300961	-	Filter	1

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
98	300754	MB13103	Pump	1
99	43631	W005	Washer (1/4")	2
100	301484	S701	Cross Round Head Screw (1/4"-20 x 1/2")	2
101	301454	181854	Hose (OD 16mm x ID 13mm x 260mm)	1
102	301694	181852	Coupler (3/8" PT)	1
109	300343	181401	Control Box (Not shown)	1
190	303626	101073	3 Way Valve	1
191	303630	1341089	Hose Fitting (1/4" PT x 1/4")	2
192	303625	MHD807	Hose (OD 8mm x ID 6mm x 1100mm)	1
193	43416	S475	Hex. Socket Head Screw (1/4"-20 x 1-1/4")	2
194	303624	MHD811	Valve (1/4" PT x 5/16")	1
195	301456	192058	Hose (OD 12mm x ID 8mm x 200mm)	1
196	303623	192057	Hose (OD 8mm x ID 6mm x 400mm)	1
197	303622	101079	Hose Bib	2
198	303621	103126-4	Hose Clamp	2
200	301172	192001	Body Frame	1
201	303619	W204	Spring Washer (3/8")	4
202	43330	S013	Hex. Head Screw (3/8"-16 x 1-1/4")	4
203	303620	192041	Support Plate	1
204	43631	W005	Washer (1/4")	2
205	301484	S701	Cross Round Head Screw (1/4"-20 x 1/2")	2
206	43433	S608	Hex. Socket Headless Screw (5/16"-18 x 3/4")	1
210	303618	3076	Switch Cut Off Tip	1
211	43631	W005	Washer (1/4")	1
212	301484	S701	Cross Round Head Screw (1/4"-20 x 1/2")	1
213	301826	1965052	Knob	1
214	43434	S414	Hex. Socket Head Screw (5/16"-18 x 1")	2
215	43633	W014	Flat Washer (3/8")	1
216	301749	192038A	Blade Tension Bar	1
218	301372	192037A	Handle Body	1
219	301373	3027-1	Knob	3
220	303642	193050	Blade Wheel Shaft	1
222	301606	193052	Sliding Plate Draw Block	1
223	301433	192052	Blade Tension Sliding Block	1
224	300934	181210	Sliding Plate or 300737	2
225	302789	192026	Spring	1
226	43433	S608	Hex. Socket Headless Screw (5/16"-18 x 3/4")	1
227	302330	W205	Spring Washer (5/16")	4
228	43315	S020	Hex. Head Screw (5/16"-18 x 1")	4
229	43632	W015	Washer (5/16")	2
230	43317	S019	Hex. Head Screw (5/16"-18 x 1-1/2")	2
231	301705	193051	Bushing	1
232	302324	HCR06	C-Retainer Ring (52mm)	2
233	304279	CA6205	Ball Bearing (6202LLB)	2
235	301841	192016A	Idler Wheel	1
235A	303638	192016AS	Idler Wheel Assembly	-
238	43632	W017	Washer (5/16")	1
239	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
240A	301431	192050A	Blade if saw manufactured before 02/2001	1
240B	301677	1803189	Blade if saw manufactured after 02/2001	1
241	NA	192014	Gear Box Protector (For CE Only)	1
244-260	300748	181216-1AS	Gear Box Assembly	-
244	NA	181216-1A	Box Casting	1
245	301467	181219-1	Transmission Wheel shaft	1
246	301468	K015	Key (6mm x 6mm x 20mm)	2
247	300693	6205-FRS	Bearing, Sealed	3
248	301699	181217-1	Bushing	1
249	301471	181218-1	Bushing	1
250	302424	181220M-SVM4	Worm gear	1
251	76827	C110	Retaining ring 25mm	1
252	302953	3092	Gear Box Gasket	1
253	301697	181222-1	Gear Box Cover	1
254	43301	S201	Hex Head Screw (1/4"-20 x 1/2")	4
255	302952	3149	Vent Plug (M8)	1
256	301839	192010	Worm Shaft	1
257	300877	K008	Key (5mm x 5mm x 30mm)	1
258	300853	6003	Bearing, Sealed	2
259	301476	181224	Bearing bushing	1
260	43574	S607	Set Screw 43562	2
261	300495	C002	Retaining Ring (17mm)	1
256-261	301951	192010S	Worm Gear Shaft Assembly	1
262	304104	181226B	Spindle Pulley Gear Box Input	1
263	301451	S604	Hex. Socket Headless Screw (M6-1.0 x 6mm)	3
264	301470	192017A	Drive Wheel	1
265	-	HCS13	C-Retaining Ring (M25)	1
266	NA	181991	Emergency Switch Bracket (For CE only. Not shown)	-
267	NA	S449	Hex. Socket Head Screw (For CE only. Not shown) (M6 x15L)	-
268	43881	S708	Cross Round Head Screw (For CE only. Not shown) (#10-24 x 3/8")	-
269	302595	192034	Motor Mount Bracket	1
270	43632	W016	Flat Washer (5/16")	4
271	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	4
272	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	2
273	43632	W016	Flat Washer (5/16")	2
274	301708	181234A	Motor Mount Plate	1
275	43911	N007	Hex. Nut (5/16"-18)	2
276	43319	S021	Hex. Head Screw (5/16"-18 x 2")	2
277	70320	S503	Carriage Screw (5/16" x 1"L)	4
278	300740	M301-1	Motor 12.5 amps	1
-	-	-	Motor Fan	-
-	301375	-	Motor Cover	4

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
279	43632	W016	Flat Washer (5/16")	4
280	43911	N007	Hex. Nut (5/16"-18)	4
281	300878	181235B	Motor Pulley	1
282	43560	S604	Hex. Socket Headless Screw (1/4"-20 x 3/8"L)	1
283	300877	K008	Key (5mm x 5mm x 30mm)	1
284	300960	181237I	Motor Pulley Cover	1
285	43631	W202	Washer (1/4")	2
286	43301	S006	Hex. Head Screw (1/4-20 x 1/2")	3
288	303640	3058	Plum Screw	1
289	301873	192004S	Adjustable Bracket Assembly (Rear)	1
290	43633	W014	Flat Washer (3/8")	1
291	43330	S013	Hex. Head Screw (3/8"-16 x 1-1/4")	1
292	301873	192004AS	Blade Adjustable (Rear)	1
293	300744	CA6000ZZ	Bearing	2
294	301445	-	Bearing Pin	2
295	43645	W208	Lock Washer (3/8")	4
296	300504	N006	Hex. Nut (3/8"-24)	4
297	300745	181244	Guide Pivot (Right) Holds two bearings (Not shown)	-
297A	302216	-	New style holds three bearings for 1" blade	2
298	300746	181243	Bearing Shaft holds two bearings for 3/4" blade	2
299	300744	CA600ZZ	Bearing 8mm for 1" blade new style	8
299A	10026-01	-	Bearing 10mm for 3/4" blade old style (Not shown)	8
300	300477	-	C-Retaining Rings	4
301	43632	W017	Washer (5/16")	2
302	43644	W205	Lock Washer (5/16")	2
303	43316	S416	Hex. Socket Head Screw (5/16"-18 x 1-1/4")	2
306	300743	191331	Carbide Guide	3
307	43412	S401	Screw (1/4"-20 - 1/2")	3
308	301619	192027S	Brush Assembly Items 308-316	1
310	43881	S708	Cross Round Head Screw (#10-24 x 3/8")	2
316	300735	181241A	Brush only brass	-
316A	302073	-	Brush only Steel	-
317A	301684	192005S	Adjustable Bracket Assembly (Front)	1
318	43633	W014	Flat Washer (3/8")	1
319	301685	3066-3	Blade Adjustable Knob	1
320	301605	181231A	Blade Cover (Front)	1
321	303639	S711	Cross Round Head Screw (5/32"x1/4"L)	2
322	302315	192007B	Blade Adjustable	1
326	300747	181874	Drive Belt	1
327	302944	192002B	Back Blade Cover	1
329	43631	W005	Washer (1/4")	4
330	301484	S701	Cross Round Head Screw (1/4"-20 x 1/2")	4
331	43631	W005	Washer (1/4")	2
332	301534	181202	Knob	2
334	301700	181246	Bearing Cover	1
335	300905	S712	Cross Round Head Screw (5/32" x 3/8"L)	3

<u>Item</u>	<u>Part No.</u>	<u>Ref No.</u>	<u>Part Name</u>	<u>Qty</u>
337	43916	N016	Nut (1/2"-13)	2
338	300907	W002	Washer (1/2")	2
339	301748	192049	Bushing	1
340	N/A	181306	Bracket (For CE only.)	1
341	N/A	S720	Cross Round Head Screw (For CE only.) (M4 x 5L)	2
342	N/A	181305	Switch Base (For CE only.)	1
342	N/A	181305A	Switch Base (For CE only.) For special request.	1
343	N/A	W023	Spring Washer (For CE only.) (M5)	2
344	N/A	S721	Cross Round Head Screw (For CE only.) (M5 x 10L)	2
364	301373	3027-1	Vice Knob	1
365	301272	193057	Knob	1
366	300860	S601	Hex. Socket Headless Screw (1/4"-20 x 1/2")	1
367	301273	193055	Pressure Lump	1
368	301274	HW007	Spring Washer M12	1
369	43330	S013	Hex. Head Screw (3/8"-16 x 1-1/4")	2
370	43633	W013	Washer (3/8")	2
372	300973	193056	Pressure Shaft	1
373	300972	193059	Knob W/Shaft	1
374	301277	290086	Plastic Round Knob	1
375	301278	CA51101	Bearing	1
376	301279	193063	Washer	1
377	301280	193058	Spring	1

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.