DAKE
a Laguna Tools Company

DAKE METAL CUTTING HORIZONTAL BANDSAW

Model SE712

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, the Warranty Representative at 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.

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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 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.

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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 and parts 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 by the distributor or representative: 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.
The item must be shipped and received back to Dake within 30 days from being issued the RMA number, or the return will be void and nonreturnable.

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.

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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.

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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	SE712
Number	983100-1
Horsepower	3/4
Voltage	110V single phase
Max blade speed	235 fpm
Blade width	3/4"
Blade length	93”
Blade speeds (fpm)	85/130/180/235

Solid round 90° capacity	7”
Solid round 45° capacity	4”
Solid rectangle 90° capacity	7” x 12”
Solid rectangle 45° capacity	3-1/4” x 5-1/2”
Bed work (area)	21” x 9”
Weight	355 lbs
Floor space	51” x 16”
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:	

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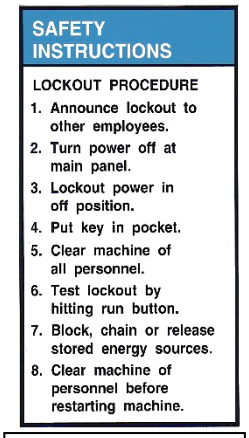
SAFETY

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

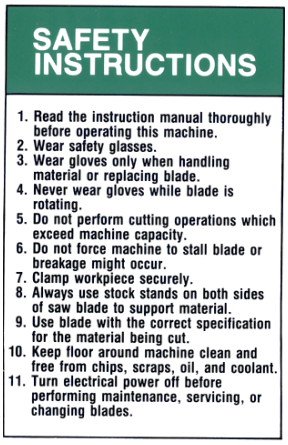
Carefully read all safety messages in these instructions and on your tool safety signs.

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 saws 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.

SET UP

ASSEMBLY

Motor Pulley Cover: (Items 290, 291, 293, 294, & 343)

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 washer and round head screw to keep it securely closed.

Wheels: (Items 94-96)

1) Take the wheel rods and slide them though the holes at the bottom of the saw stand. See exploded parts view as reference.
2) Pace a wheel on each end of the rods.
3) Use a cotter pin and insert it through the hole in the end of the rod to secure the wheels.

BLADE SELECTION

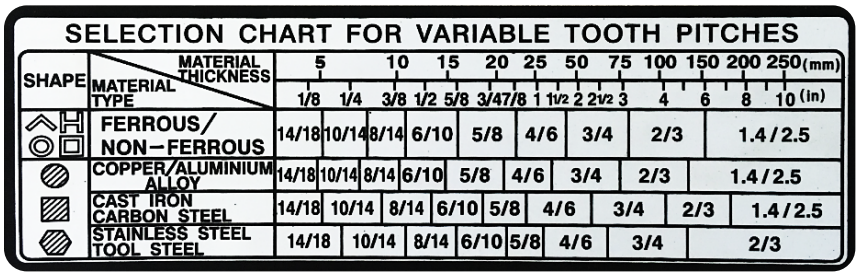
An 8-tooth per inch general use blade comes installed with this metal cutting bandsaw. Additional blades in 4, 6, 8, and 10 tooth pitches are available. However, 3 teeth should be engaged with the workpiece at all times for proper cutting.

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.

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BLADE SPEEDS

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	
	Carbon Blade	Bi-metal Blade	Carbon Blade	Bi-metal Blade
Tool, Stainless Alloy Steels, Bearing Bronze	85	98	70	81
Med. to High Carbon Steels, Hard Brass or Bronze	130	164	110	135
Low to Med. Carbon Steel, Soft Brass	180	246	150	203
Aluminum, Plastic	235	328	195	270

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

Quick Vise: To open the quick vice to accept the workpiece, turn the vice handwheel counter-clockwise 1/2 a turn. This will allow the outer jaw of the vice to move freely along the screw.

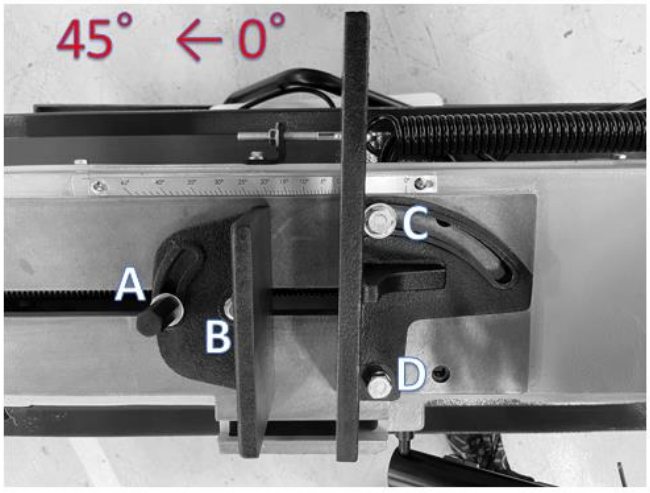
Place workpiece into the vice and use the handwheel, turning clockwise to tighten the vice securely around your workpiece.

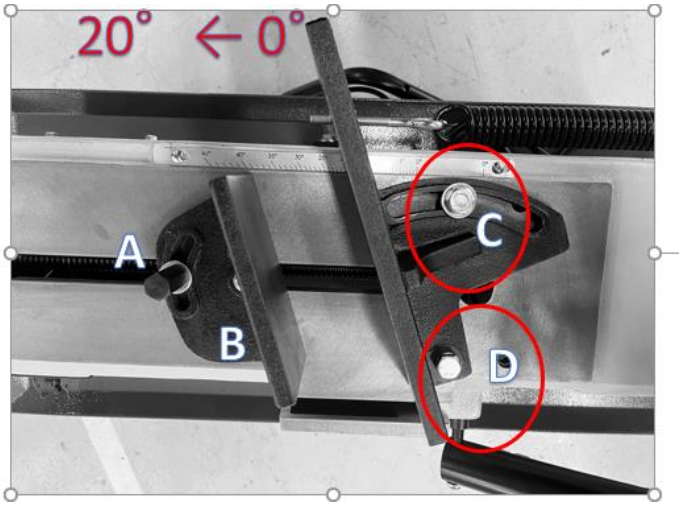
Vice adjustment for angled cuts:

Cuts ≤ 20°

For this angle range the bottom most bolt hole needs to be lined up with the leftmost hole in the bed and the C bolt should be in the bottom slot in the right vice jaw.

1) Using an adjustable wrench loosen all of the bolts.
2) Slide the right vice jaw to the desired angle using the gauge near the top of the vice then tighten Bolts C and D.
3) Slide the left jaw of the vice to meet the right to match the angle, then tighten bolts A and B.
4) The left jaw can then be operated as a quick vise again.



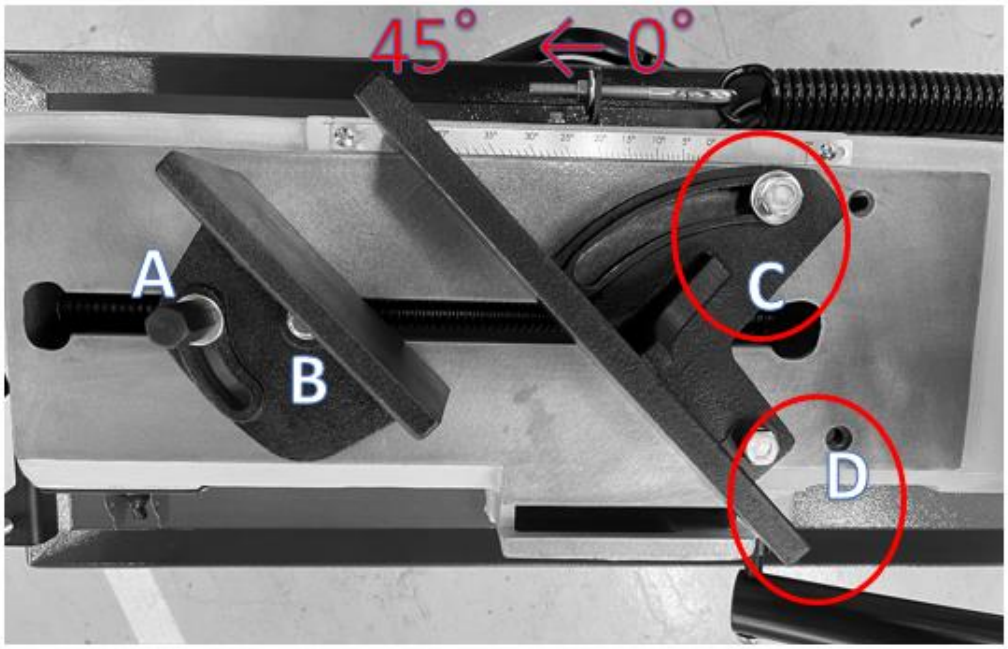


20° ≤ Cuts ≤ 45°

For angles bigger than 20 coming from 0° use the same steps as above but the top most bolt hole in the right jaw should be in line with the leftmost hole in the bed and the C bolt needs to be in the top slot.

To remove bolt C, loosen the nut and reach under the bed of the vice to secure the bolt before removing the nut completely. Figure below displays the 45° set up.

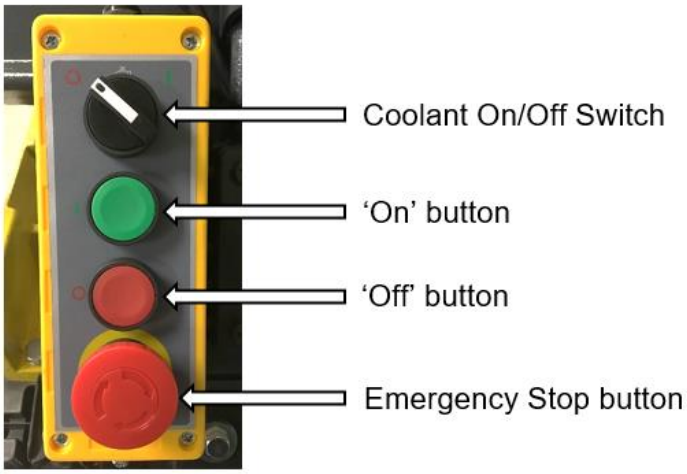
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WORK STOP ADJUSTMENT

1) Loosen the thumb screw (item 38) holding the work stop casing (item 41) 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.

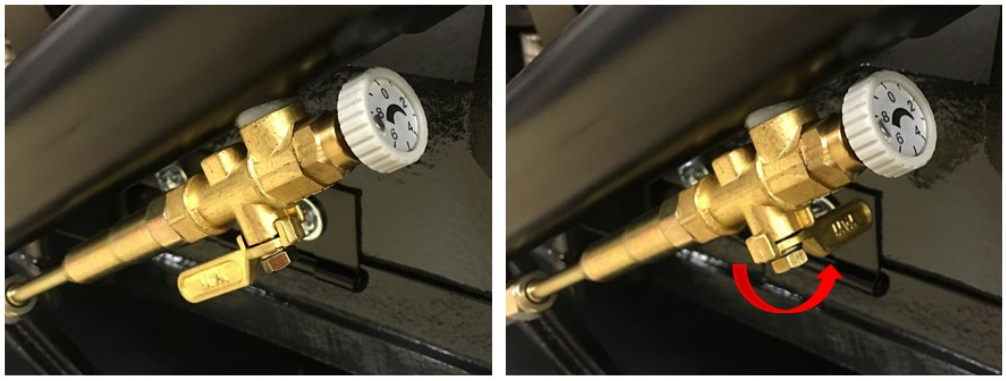
CONTROLS



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

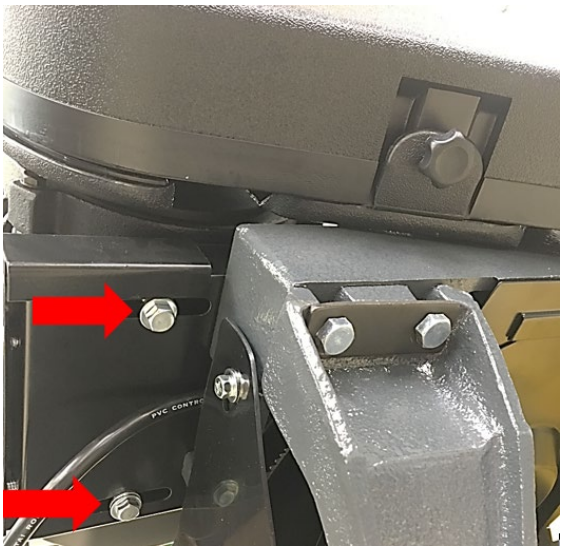
OPERATING

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.

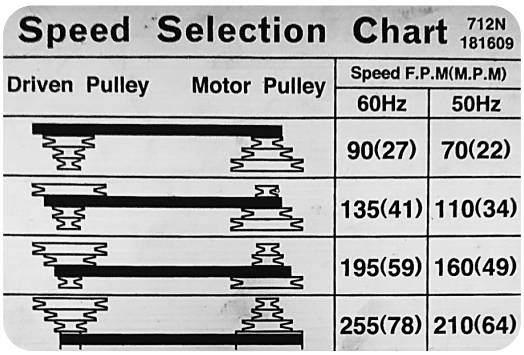
1) Loosen, but do not remove, the two 5/16" hex head screws under the motor pulley cover. This allows the pulley to move slightly to readjust the belt for blade speed. Shown below.



2) Remove the motor pully 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 groves 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
	90(27)	70(22)
	135(41)	110(34)
	195(59)	160(49)
	255(78)	210(64)

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.

VERTICAL CUTTING

To switch to vertical cutting position:

1) Lift the head of the saw into the most upright position, 90° to ground.
2) Lock the down feed valve.
3) Remove the 2 cross-head screws (item 272) and the deflector plate (item 271) that are located on the rear blade adjustable (item 262). Set aside the deflector plate for later use.

4) Take the vertical saw table (item 313) and slide it onto the blade, line up the holes on the plate with the holes on the rear blade adjustable where the deflector plate was just removed from.
5) Using the cross-head screws attach the plate to the rear blade adjustable.
6) Adjust the glade guide and guards if needed.
7) The saw is ready to operate. Keep in mind proper blade speed settings and safety protocols.

To return saw to horizontal position:

1) Make sure the saw is off.
2) Unscrew the cross-head screws (item 272) and remove the vertical saw table (item 313) and set aside.
3) Align the deflector plate (item 271) and screw back on to the rear blade adjustable (item 262).
4) Unlock the down feed and pull the saw head down until it lowers on its own with the chosen down feed rate.
5) Adjust blade guides and guards if necessary.

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 the 90° vertical position and remove the wheel cover (item 287) by pulling up and sliding it out from its position.
2) Open the blade guards by unscrewing the two knobs on backside of the blade guard (item 284).

3) 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.
4) Place new blade between the guide bearings.
    a. Make sure the teeth are slanting towards the motor when installed.
5) Slip the blade around the motor pulley and hold in position.
6) Pull the blade taught around the motor pulley and pull the other end up towards the top pulley.
7) Carefully slip the other end of the blade over the top pulley.
8) 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.
9) Replace the blade guards.
10) Place 2-3 drops of oil on the blade.
11) 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 unless the oil gets contaminated or a leak occurs.
- 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 fed and speed accordingly.

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

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

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

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.

SYMPTOM	CAUSE	SOLUTION
	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 maintenance section)
	Blade too thick	Replace blade with thinner blade
	Cracking at blade weld	Weld again and inspect before use
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.

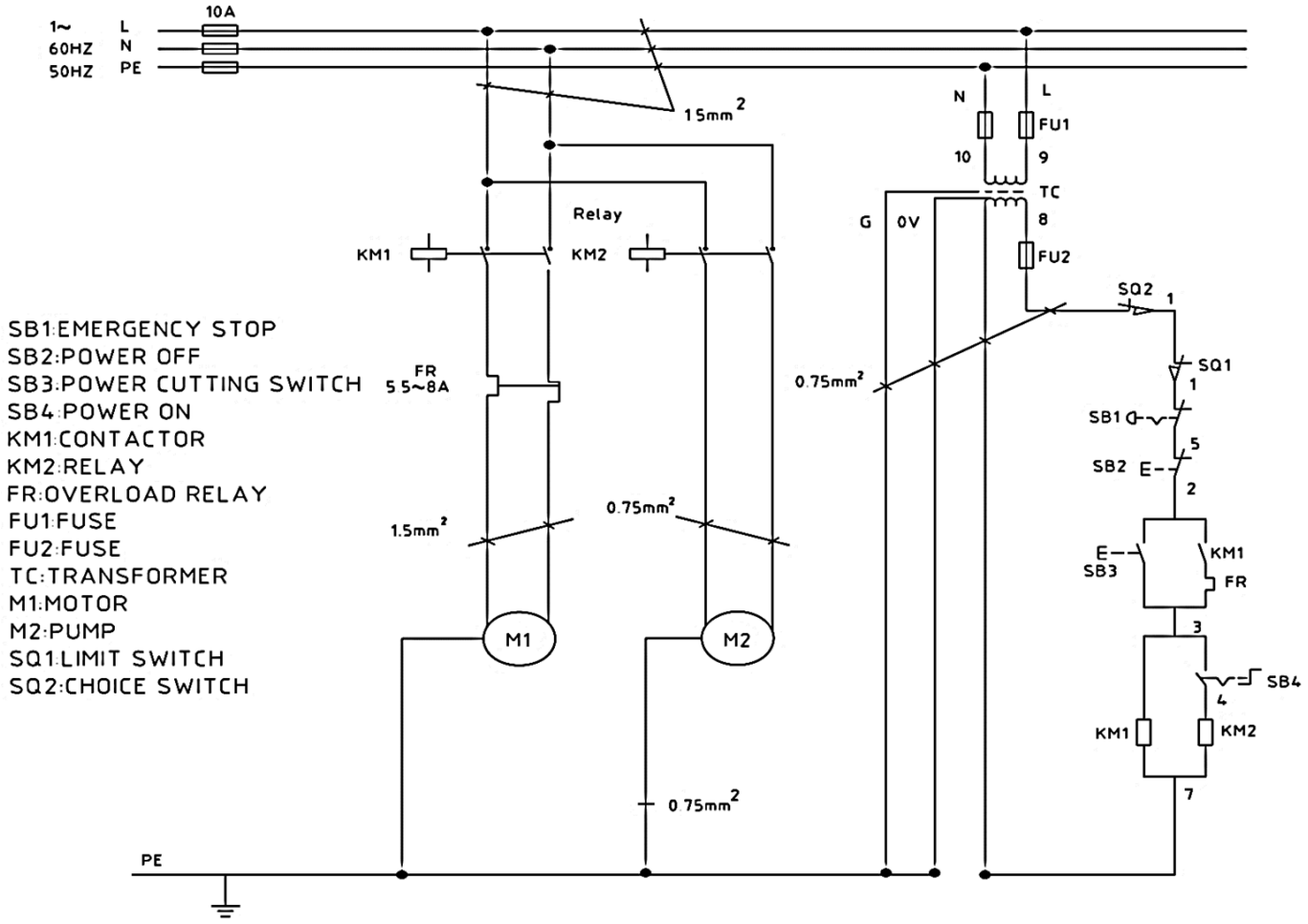
SYMPTOM	CAUSE	SOLUTION
	Blade guide bearing bracket is loose	Tighten guide bracket using the adjustment knob (item 261)
Teeth ripping from blade	Blade teeth too coarse for material	Use blade with a higher TPI
	Blade speed too slow	Decrease feed pressure and/or increase blade speed
	Vibrating workpiece	Re-clamp work more securely
	Blade teeth loading up with material	Use a coarser tooth blade, or us brush to remove chips
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
Blade is twisting	Cut is binding the blade	Decrease feed pressure
	Blade tension is too high	Decrease blade tension

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 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
	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

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ELECTRICAL COMPONENTS



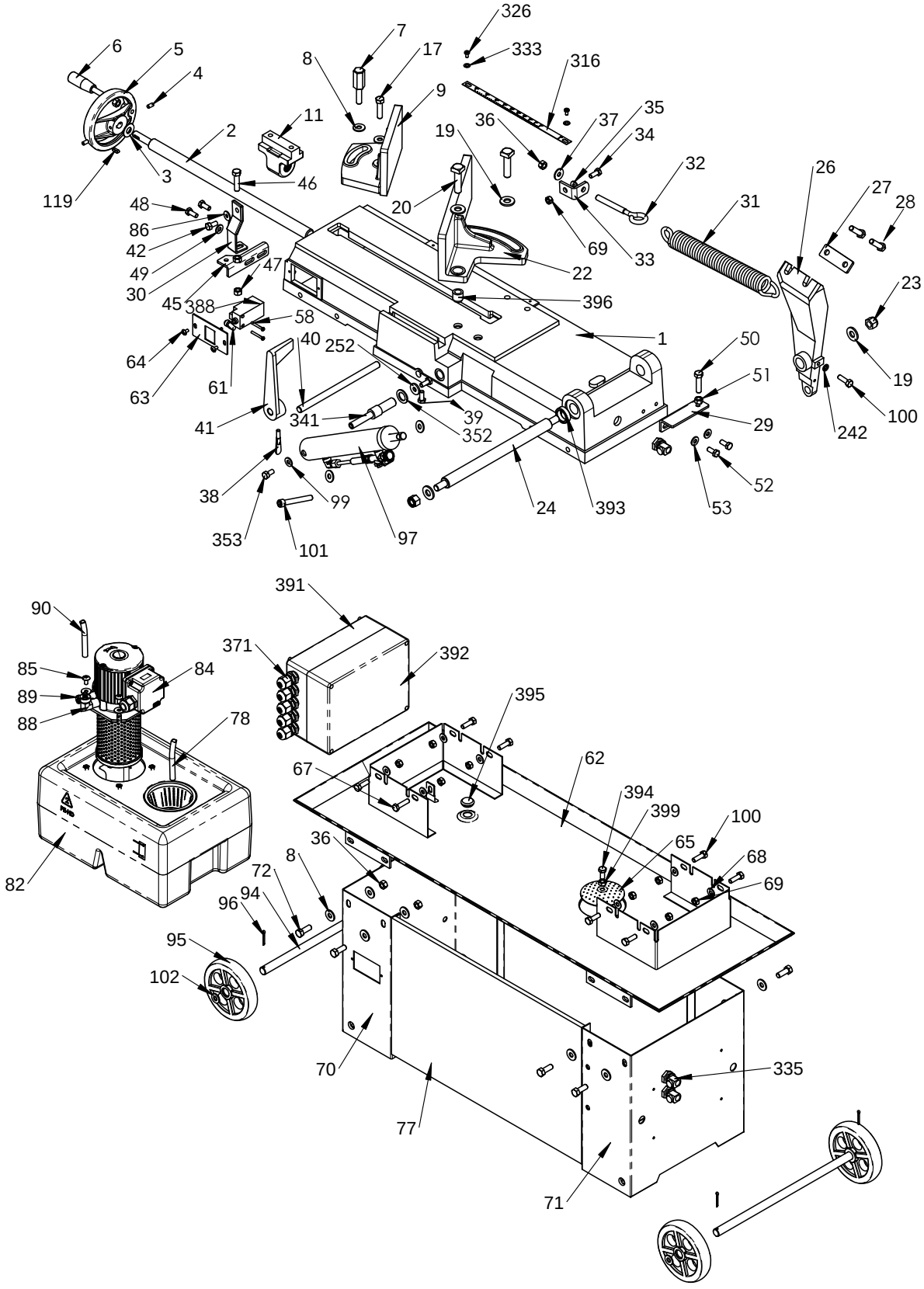
Part No.	Part Name	Qty
301461	Electrical box	1
301462	Connector 24 volt	1
301795	Overload	1
300828	Relay (orange)	1
302409	Motor reset button	1
73326011	Transformer	1

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

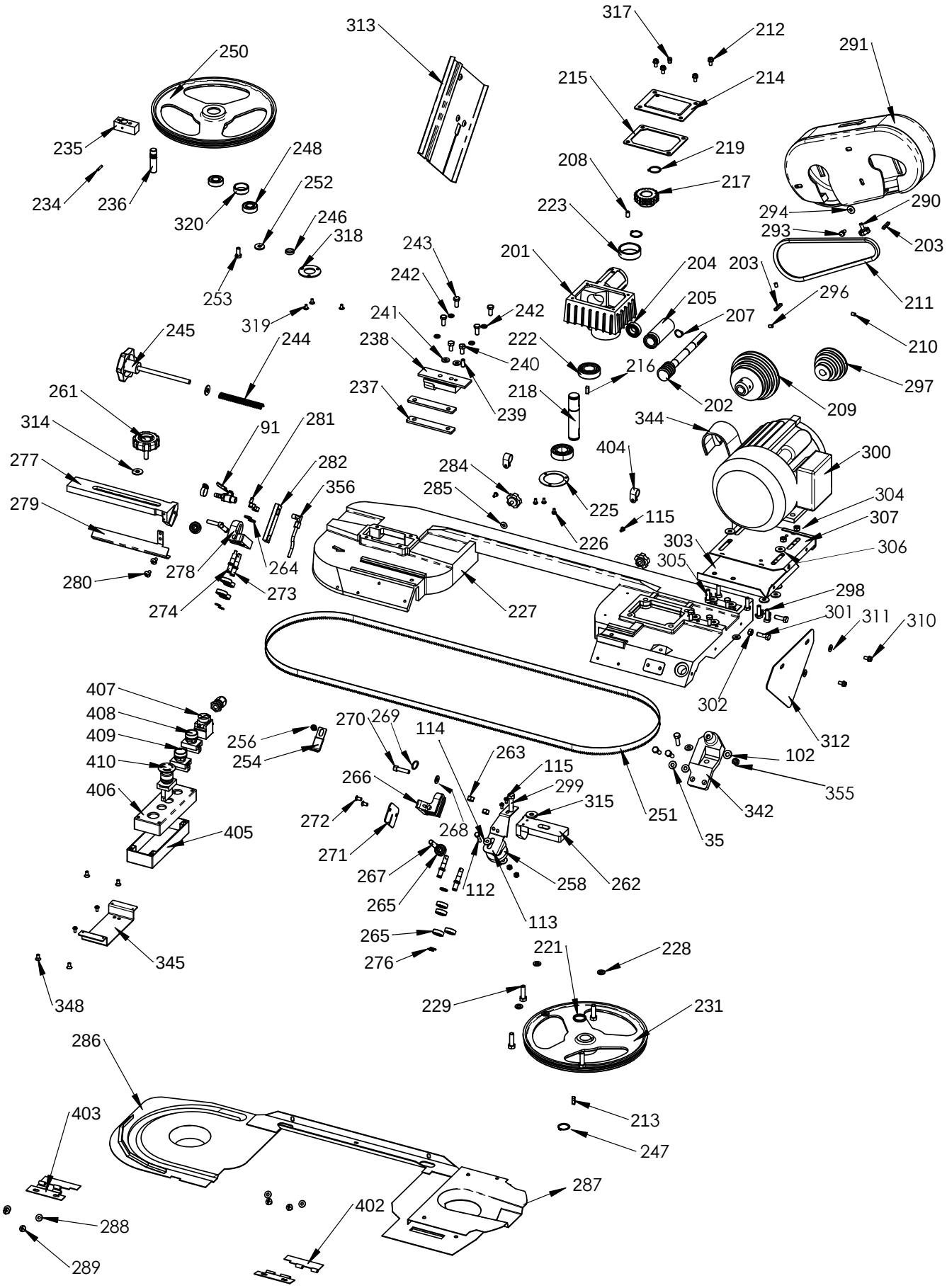
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EXPLODED VIEW & PARTS LIST

EXPLODED PARTS VIEW



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PARTS LIST

Item	Part No.	Ref No.	Part Name	Qty
1	300935	181107-2	Swivel Base	1
	300935V2	181107-4	Swivel Base	1
2	300757	181108E	Acme Screw	1
3	300907	W002	Washer (1/2”)	1
4	300860	S601	Hex. Socket Headless Screw (1/4"-20 x 1/2")	1
5	300758	181606A	Wheel-hand	1
6	300752	6027-1	Handle	1
			Hand Wheel (Assembly of parts 4,5,6)	1
7	301269	181266	Fixed Bolt	1
8	43633	W014	Flat washer (3/8”)	2
9	300936	181114	Vise Jaw Bracket (Front)	1
	300936V2	181114TA	Vise Jaw Bracket (Front)	1
11	300938	181136A	Bracket	1
	300938V2	181138B	Bracket	1
17	43331	S012	Hex. Socket Head Screw (3/8”-16 x 1-1/2”L)	1
19	300907	W023	Washer (1/2”)	2
20	302492	S506	Carriage Screw (1/2”-12 x 2”L)	1
22	300939	181113-4	Vise Jaw Bracket (Rear)	1
	300939V2	181113-6	Vise Jaw Bracket (Rear)	1
23	300940	181121	Bushing	1
	300940V2	MN203	Lock Nut	1
24	300941	181122-1	Support Rod	1
	300941V2	181122-2	Support Rod	1
25	43314	S035	Hex. Head Screw (5/16”-18 x 1"L)	1
26	300942	181123	Pivot Bracket	1
27	301296	181270	Retaining Plate	1
	301296V2	181270A	Retaining Plate	1
28	43331	S012	Hex. Head Screw (3/8”-16 x 1-1/2”)	2
29	301686	181133	Support Plate	1
30	-	181134	Fixed Plate For Transportation	1
31	300943	181117-1	Spring or 301290	1
32	301291	181118	Spring Adjusting Screw	1
33	301687	181115	Spring Handle Bracket	1
34	43314	S022	Hex. Head Screw (5/16”-18 x 3/4")	1
35	43632	W040	Flat Washer (5/16”x18x2t)	1
36	43912	N005	Hex. Nut (3/8”-16)	1

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Item	Part No.	Ref No.	Part Name	Qty
37	43633	W016	Flat Washer (5/16"x23x2t)	1
38	301688	181130	Thumb Screw	1
39	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	1
40	300944	3021	Stock Stop Rod	1
41	300945	181125	Distance Set Bracket	1
42	43317	S019	Hex. Head Screw (5/16"-18 x 5/8"L)	1
45	-	181112	Support Plate	1
46	43332	S014	Hex. Head Screw (3/8"-16 x 1-3/4")	1
47	43912	N005	Hex. Nut (3/8”-16)	2
48	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	2
49	43632	W017	Washer (5/16”)	2
50	43332	S014	Hex. Head Screw (3/8"-16 x 1-3/4")	1
51	43912	N005	Hex. Nut (3/8”-16)	1
52	43314	S022	Hex. Head Screw (5/16"-18 x 3/4")	2
53	43632	W017	Washer (5/16”)	2
55	301689	181431A	Gear Box Gasket - Not Shown (option)	1
56	301690	181420B	Cover - Not Shown (option)	1
58	43881	HS513	Cross Round Head Screw (M4-0.7Px30L)	2
61	300733	MET1622	Limit Switch	1
62	301537	181106T	Coolant Pan	1
63	303706	181989-1	Switch Bracket (For CE Only)	1
64	43881	S325	Cross Round Head Screw (3/16"X3/8"L)	4
65	301404	191106	Filter	1
	301404V2	191106B	Filter With #394 Bolt、#399 Nut Can be interchangeable	1
67	43330	S023	Hex. Socket Head Screw (5/16"-18x1-1/4"L)	1
68	43632	W017	Washer (5/16”)	7
69	43912	N007	Hex. Nut (5/16”-18)	8
70	301691	181101-1	Leg of Stand (Left)	1
71	301405	181102	Leg of Stand (Right)	1
72	79147	S010	Hex. Head Screw (3/8"-16X1"L)	8
73	43633	W014	Washer (3/8”)	8
74	43912	N005	Hex. Nut (3/8”-16)	8
77	301406	181103	Panel	1
78	301454	MHD846-310	Hose (OD 16mm x ID 13mm x 260mm)	1
82	300962	181256	Coolant Tank With Filter	1
84	300754	MMBA101-13	Pump	1
85	301484	S701	Cross Round Head Screw (1/4”-20 x 1/2"L)	4

Item	Part No.	Ref No.	Part Name	Qty
			(1/4”-20 x 1/2"L)	
86	43631	W004	Washer (1/4”)	5
88	301694	181852A	Coupler (3/8” PT)	1
89	-	181601	Hose Clip (Ø5)	2
90	301456	MHD842-22	Hose (OD 12mm x ID 8mm x 200mm)	1
91	301455	181856	Valve (1/8” PT)	1
Not Shown	302219	181308	Adjustable feet (optional)	2
94	301535	181128	Wheel Rod	2
95	300742	181129	Wheel	4
96	301536	HP210	Cotter Pin (Ø3 x 25mm)	4
97	300730	181304B	Cylinder Complete Set	1
99	43632	W040	Flat Washer (5/16”x18x2t)	3
100	43315	S017	Hex. Head Screw (5/16-18 x 1”L)	9
101	43334	S412	Hex. Socket Head Screw (3/8"X2-1/4"L)	1
102	43633	W013	Washer (3/8”)	3
112	-	HS036	Hex. Head Screw (1/4” x 1-3/16"L)	1
113	300952	181242B	Brush Support	1
114	43627	W007	Washer (3/16”-12)	2
115	43881	S708	Cross Round Head Screw (3/16"x3/8"L)	2
116	301695	192029	Bearing Spacer - Not Shown	1
117	301696	181307	Bushing - Not Shown	1
118	78744	HS422	Hex. Socket Headless Screw (M6 x 10mm) - Not Shown	1
118S	301619	181242BS	Brush Assembly, items 112-118,120, & 258	1
119	300906	HK120	Key (5mm x 5mm x 15mm)	1
120	300951	192030	Spring for brush - Not Shown	1
130	N/A	181306	Bracket (for CE only) - Not Shown	1
131	N/A	HS508	Cross Round Head Screw (For CE only) (M4 x 5) - Not Shown	4
132	N/A	181305	Switch Base (For CE only) - Not Shown	1
133	N/A	HW003	Washer (For CE only) (M5) - Not Shown	2
134	N/A	HW509	Cross Round Head Screw - Not Shown (For CE only) (M4 x 10)	1
201	300749	181216A	Gear Box (Painted RAL7016)	1
	300749R	-	Rebuilt Gear Box	1
202	301473	181223	Worm Shaft	1
203	300957	HK110	Key (5mm x 5mm x 30mm)	1
204	300853	CA6003LLU	Bearing	3
205	301476	181224	Bearing Bushing	1
207	300495	HCS06	C-Retainer ring (17mm)	1
208	70256	S607	Socket Set Screw (3/8"X5/8"L)	1

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Item	Part No.	Ref No.	Part Name	Qty
209	300958	181226	Spindle Pulley	1
210	301451	S604	Hex. Socket Headless Screw (1/4"-20x3/8"L)	2
211	300747	181874	Belt	1
212	43303	MP501	Cross Socket Hex. Head Screw (1/4"-20*1/2"L)	4
213	301451	S604	Hex. Socket Headless Screw (1/4"-20x3/8"L)	2
214	301697	181222-1	Gear Box Cover	1
215	301698	181221	Gear Box Gasket	1
216	301468	HK025	Key	2
217	302424	181220M	Worm Gear	1
218	301467	181219-1	Transmission Wheel Shaft	1
219	76827	HCS13	C-Retainer Ring (Ø1”)	1
221	301471	181218-1	Bushing	1
222	300693	CA6205LU-H	Bearing	2
223	301699	181217-1	Bushing	1
225	301700	181246	Bearing Cover	1
226	300905	S708	Cross Round Head Screw (3/16"x3/8"L)	3
227	300946	181203-1	Body Frame	1
228	43633	W204	Spring Washer (3/8”)	4
229	43330	S013	Hex. Socket Head Screw (3/8”-16 x 1-1/4”L)	4
Not Shown	-	-	C-Retainer ring (26 PT)	
231	300947	181214-2	Drive Wheel	1
234 - 236	301730	-	Wheel Shaft Assembly (234, 235, & 236)	
234	-	HP013	Pin (Ø4mm x 22mm)	1
235	-	181208	Sliding Plate Draw Block	1
236	-	181209	Blade Wheel Shaft	1
237	300934	181210	Sliding Plate OR 300737	2
238	300933	181211	Blade Tension Sliding Block	1
239	43433	S608	Hex. Socket Headless Screw (5/16”-18 x 3/4"L)	1
240	43317	S019	Hex. Head Screw (5/16”-18 x 1-1/2”)	2
241	43632	W015	Washer (5/16”)	2
242	43644	W205	Lock Washer (5/16”)	2
243	43315	S020	Hex. Head Screw (5/16-18 x 1”)	2
244	301703	181212	Spring	1
245	301704	181213A	Blade Adjustable Knob	1
246	301705	181207-1	Bushing	1
247	302799	HCR04	C-Retainer ring (35 PT)	1
248	300734	CA6202ZZ	Bearing	2
250	300948	181205-2	Idler Wheel	1

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Item	Part No.	Ref No.	Part Name	Qty
251	300732	181894-2L	Blade (0.032"x3/4"x93"x6/10T)	1
252	43632	W017	Washer (5/16”)	1
253	43314	S022	Hex. Head Screw (5/16”-18 x 3/4”)	1
254	301350	181240	Switch Cut Off Tip	1
255	43631	W005	Washer (1/4”) - Not Shown	1
256	301484	S201	Cross Round Head Screw (1/4”-20 x 1/2”)	1
258	300736	181241C	Brush	1
261	301685	3066-3	Blade Adjustable Knob	1
262	300949	181228A	Adjustable Bracket (Rear)	1
263	300504	N006	Hex. Nut (3/8”-16)	4
264	43645	W204	Spring Washer (3/8”)	4
265	10026-01	CA6000ZZ	Bearing for 10mm I.D. on current version	2
265	300744		Bearing for 8mm ID, old version	2
266	300950	3067S	Blade Adjustable (Rear)	1
267	301445	3063	Bearing Pin	2
268	43632	W040	Washer (5/16”)	1
269	43644	W205	Lock Washer (5/16”)	1
270	43316	S416	Hex. Socket Head Screw (5/16”-18 x 1-1/4”)	1
271	301602	3069	Deflector Plate	1
272	43798	S301	Flat Cross Head Screw (1/4”-20 x 1/2")	2
273	300746	181243	Bearing Shaft	2
274	300745	181244	Guide Pivot (Right)	2
276	301447 301593	HCS01 -	C-Retainer Ring (8mm)/ C-Retainer Ring (10mm)	4
277	300956	181230-1	Adjustable Bracket (Front)	1
278	300954	3068S	Blade Adjustable (Front)	1
279	300955	181231-Y	Blade Cover (Front-Yellow)	1
280	303639	S326	Cross Round Head Screw (1/4"x1/2"L)	2
281	301451	S601	Hex. Socket Headless Screw (1/4"-20x1/2"L)	1
282	301706	0162	Nozzle Cock Support	1
283	43316	S416	Hex. Socket Head Screw (5/16”-18 x 1-1/4”) - Not Shown	1
284	301534	195083	Knob	2
	-	181202-1	Knob (For CE only) - Not Shown	2
285	43641	W005	Washer (1/4”)	10
286	300739	181201	Blade Back Cover	1
287	300737	181238	Wheel Cover	1
288	43641	W005	Washer (1/4”)	4

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Item	Part No.	Ref No.	Part Name	Qty
289	301484	S701	Cross Round Head Screw (1/4"-20 x 1/2")	4
		18137	Blade Cover Assembly (286-289, 402-403-Only offer a set)	1
290	303640	3058	Plum Screw	1
291	300960	181237I	Motor Pulley Cover	1
293	43301	S008	Hex. Head Screw (1/4"-20x2"L)	2
294	43631	W004	Washer (1/4")	2
295	300957	K110	Key (5mm x 5mm x 30mm)	1
296	301451	S604	Hex. Socket Headless Screw ((1/4"-20x3/8"L))	1
297	300959	181235	Motor Pulley	1
298	70320	S503	Carriage Screw (5/16" x 1"L)	4
299	43330	S012	Hex. Head Screw (3/8"-16 x 1-1/2"L)	1
300	300741	M301	Motor 12.5 amps	1
	-	-	Motor Fan - Not Shown	1
	301375	ET1952	Motor Cover	1
301	43319	S017	Hex. Head Screw (5/16-18 x 1"L)	2
302	43911	N007	Hex. Nut (5/16"-18)	2
303	301708	181233A	Motor Mount Plate	1
304	43911	N007	Hex. Nut (5/16"-18)	4
305	43314	S022	Hex. Head Screw (5/16"-18 x 3/4"L)	4
306	43632	W016	Flat Washer (5/16")	8
307	301709	181234A	Motor Mount Bracket	1
310	301484	S201	Cross Round Head Screw (1/4"-20 x 1/2")	2
311	43631	W005	Washer (1/4")	2
312	301802	181232-1	Support Plate	1
313	301486	3055A	Vertical Saw Table	1
314	43633	W008	Flat washer (3/8")	3
315		W011	Flat washer (3/8"x27xt3)	1
316	301289	181012	Scale	1
	301289V2	181012B	Scale	1
317	302952	3149	Vent Plug (M8 x P1)	1
318	301766	3072-2	Bearing Cover	1
319	-	S325	Cross Round Head Screw (3/16"X3/8"L)	3
320	301710	181245	Bushing	1
326	43881	S708	Cross Round Head Screw (3/16"x3/8"L)	2
330	-	181980	Fitting (3/8" x 5/16" PT) - Not Shown	1
330-1	-	181602	Pipe Jointer (Ø6mm) - Not Shown	1
330-2	-	181603	Pipe Nut (10mm) - Not Shown	1
333	43627	W007	Washer (3/16")	2
335	-	ET2107	Wire Nipple (5/8")	1
341	301299	181301C	Cylinder Lower Support	1

Item	Part No.	Ref No.	Part Name	Qty
342	301191	181302-2	Cylinder Upper Support	1
343	43631	W005	Flat Washer (1/4") (For CE Only) - Not Shown	1
344	N/A	181237D	Gear Box Protector (For CE Only)	1
345	N/A	181991	Emergency Switch Bracket (For CE Only)	
348	NA	S727	Cross Round Head Screw (M6 x 12) (For CE Only)	4
349	80502	-	Screw, Soc. Cap (M6 x 10mm L) - Not Shown	2
352	43632	W016	Flat Washer (5/16")	1
353	43313	S018	Hex. Head Screw (5/16"-18 x 1/2"L)	1
354	N/A	S407	Hex Socket Head Screw - Not Shown (For CE Only) (3/16" x 3/8")	2
355	43912	N005	Hex. Nut (3/8"-16)	1
356	-	181979	Hose Bib	1
371	-	ET2110	Cable Gland (1/2"-PG11)	2
375	43881	S708	Cross Round Head Screw (#10-24 x 3/8") - Not Shown	2
388	300733	ET1622	Limit Switch	1
391	301461	ET1923	Electrical Box	1
392		ET1922	Electrical Cover	
393		181121	Spacer Ring (Ø32x Ø23x10.5)	1
394		HS159	Hex. Head Bolt (M8x18L) Start from 2024/10/1	1
395		195108	Snap Bushing	1
396		181116	Bushing	1
399		HN005	Hex. Nut (M8)	2
402		181201-4	Blade Back Cover bracket (Right)	1
403		181201-5	Blade Back Cover bracket (Left)	1
405		HI105	Wire Clamp	1
406		1910-1	Switch box	1
407		1910-2	Switch box cover	
408		ET1222	Selector Switches	1
409		ET1216	Push-Button (Green/ NPB22-F10G)	1
410		ET1217	Push-Button (Red / NPB-R1b)	1
411		ET1245	Emergency Stop (HY-57B)	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.