

Operating Instructions and Parts Manual **20-inch Woodworking Bandsaw**Model JWBS-20



WMH TOOL GROUP

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WARRANTY AND SERVICE

WMH Tool Group, Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these WMH Tool Group Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET_® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

WMH Tool Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local WMH Tool Group distributor, or visit jettools.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).



WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

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- 1. Read and understand the entire owners manual before attempting assembly or operation.
- 2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
- 3. Replace the warning labels if they become obscured or removed.
- 4. This bandsaw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a bandsaw, do not use until proper training and knowledge have been obtained.
- 5. Do not use this bandsaw for other than its intended use. If used for other purposes, WMH Tool Group disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- 6. Always wear approved safety glasses/face shields while using this bandsaw. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
- 7. Before operating this bandsaw, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves while operating the machine.
- 8. Wear ear protectors (plugs or muffs) during extended periods of operation.
- 9. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber.

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.

- 10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- 11. Make certain the switch is in the **OFF** position before connecting the machine to the power supply.
- 12. Make certain the machine is properly grounded.
- 13. Make all machine adjustments or maintenance with the machine unplugged from the power source.
- 14. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
- 16. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 18. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 19. Keep visitors a safe distance from the work area. **Keep children away.**



- 20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- 21. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
- 22. Adjust and position upper and lower blade guides before starting to cut. Upper blade guide should be adjusted to approximately 1/8" above material to be cut.
- 23. Adjust blade tension and tracking before starting to cut.
- 24. Saw teeth must point down toward table.
- 25. Maintain a balanced stance at all times so that you do not fall or lean against the blade or other moving parts. Do not overreach or use excessive force to perform any machine operation. Keep hands and fingers away from the blade while the machine is running.
- 26. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
- 27. Use recommended accessories; improper accessories may be hazardous.
- 28. Maintain tools with care. Keep blades sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
- 29. Hold material firmly against the table and fence.
- 30. Stop the machine and wait for blade to stop moving before removing scrap material from the table.
- 31. Turn off the machine and disconnect from power before cleaning. Use a brush or compressed air to remove chips or debris do not use your hands.
- 32. Do not stand on the machine. Serious injury could occur if the machine tips over.
- 33. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
- 34. Remove loose items and unnecessary work pieces from the area before starting the machine.

Familiarize yourself with the following safety notices used in this manual:

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

AWARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

- - SAVE THESE INSTRUCTIONS - -

Introduction

This manual is provided by WMH Tool Group covering the safe operation and maintenance procedures for a JET Model JWBS-20 Bandsaw. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or WMH Tool Group. WMH Tool Group can also be reached at our web site: www.wmhtoolgroup.com.

Specifications

		JWBS-20
Stock Number	708754	708755
Cutting Capacity (HxW)(in.)		
Maximum Rip Left of Blade w/Fence (in.)		
Maximum Rip Right of Blade w/Fence (in.).		
Blade Length (in.)	150	
Minimum Blade Width (in.)		
Maximum Blade Width (in.)	1-1/2	1-1/2
Table Size (in.)	21 x 21	21 x 21
Table Tilt (deg.)		
Table Height (in.)		
Front Table to Center of Blade (in.)		
Wheel Diameter (in.)		
Blade Speed (SFPM)	3,450	
Dust Chute Diameter (in.)	4	4
Overall Dimensions (HxWxD)(in.)		
Motor (TEFC)		
Net Weight, approx. (lbs.)		
Shipping Weight, approx. (lbs.)	612	613

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, WMH Tool Group reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Unpacking

Open shipping container and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Bandsaw is assembled and running properly.

Contents of Shipping Container

- 1 Bandsaw
- 1 Table
- 1 Fence and Rail Assembly
- 1 Resaw Guide and Knob
- 1 Miter Gauge
- 1 Owner's Manual
- 1 Warranty Card
- 1 Hardware Package, includes:
 - 2 Knobs
 - 1 Hex Wrench
 - 1 Handle
 - 1 Wrench, 10/12mm
- 1 Fence Hardware Bag, includes:
 - 4 Hex Cap Screws
 - 4 Flat Washers
 - 4 Lock Washers
- 1 Rail Hardware Bag, includes:
 - 9 Hex Cap Screws
 - 9 Flat Washers
 - 9 Lock Washers



Setup

- 1. Remove the crate and packing material from the saw except for the transport skid on the bottom.
- Move the saw to its permanent working location. The site should be dry, well lit, and have enough room to handle long stock and the service or adjustment of the machine from any side.
- 3. Move the bandsaw off the skid.
- Clean all rust protected surfaces with a mild solvent or diesel fuel and a soft cloth. Do not use lacquer thinner, paint thinner, or gasoline. These will damage painted surfaces.

Tools Included for Assembly

- 1 10/12mm Open End Wrench
- 1 Hex Wrench

Tools Required for Assembly and Adjustments

- 2 14mm Open End Wrenches
- 1 Cross Point Screwdriver
- 1 Combination Square

Assembly

- 1. Attach the handle (A, Fig. 1) to the handwheel (B, Fig. 1).
- Turn blade tension hand wheel (C, Fig. 1) counter-clockwise to tension blade and clockwise to loosen the tension. A gauge on the upper wheel slide bracket (D, Fig. 1) indicates the approximate tension according to the width of the blade. The JWBS-20 comes with a 1" blade so the tension should be set at 1".

Note: It is easier to adjust the bearing guides before mounting the table.

Upper Bearing Guide Adjustment

AWARNING Disconnect machine from the power source, unplug before making any adjustments. Blade teeth are sharp; use care when working near the saw blade. Failure to comply may cause serious injury.

- 1. Disconnect the machine from the power source, unplug.
- 2. Blade tension must be properly adjusted prior to bearing guide setup; see "Adjusting Blade Tension" page 15.
- 3. Loosen the thumb screw (F, Fig. 2) and slide the bearing and bearing post until the space between the back-up bearing (E, Fig. 2) and the back edge of the blade is approximately 1/64". A convenient way to achieve this spacing is by placing a dollar bill folded twice (four thicknesses) between blade and bearing four thicknesses of a dollar bill is approximately 1/64". Tighten thumbscrew.
- Loosen the socket head cap screw (G, Fig. 3) and slide the bearing assembly until the bearing guides rest just behind the gullet of the blade teeth. You may need to readjust the back-up bearing.
- 5. Loosen the wing nut (H, Fig. 3) and turn the adjusting screw (I, Fig. 3) clockwise or counter-clockwise until the bearing is approximately 1/64" away from the side of the blade (use the folded dollar bill for this measurement). Tighten wing nut.
- 6. Adjust the opposite side bearing.
- Check to make sure the adjustments have not changed during the tightening process, and that the bearing guides do not pinch the blade.

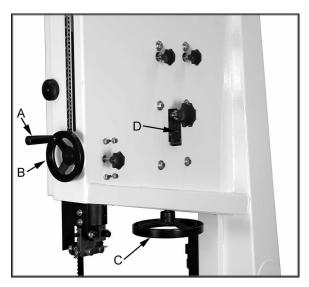


Figure 1

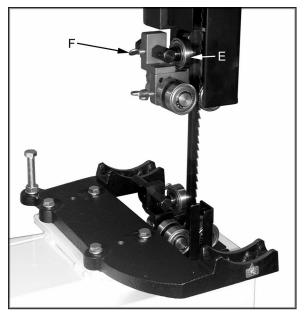


Figure 2

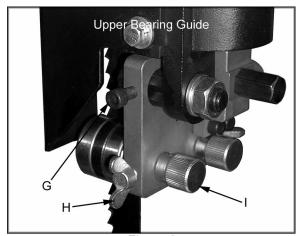


Figure 3

Lower Bearing Guide Adjustment

AWARNING Disconnect machine from the power source, unplug before making any adjustments. Blade teeth are sharp; use care when working near the saw blade. Failure to comply may cause serious injury.

- 1. Disconnect the machine from the power source, unplug.
- 2. Blade tension must be properly adjusted prior to bearing guide setup; see "Adjusting Blade Tension" page 15.
- Loosen the thumb screw (B, Fig. 4) and slide the bearing and bearing post until the space between the back-up bearing (A, Fig. 4) and the back edge of the blade is approximately 1/64". A convenient way to achieve this spacing is by placing a dollar bill folded twice (four thicknesses) between blade and bearing. Tighten thumbscrew.
- 4. Loosen the socket head cap screw (C, Fig. 4) and slide the bearing assembly until the bearing guides rest just behind the gullet of the blade teeth. You may need to readjust the back-up bearing. Tighten socket head cap screw.
- Loosen the thumb screw (D, Fig. 4) and turn adjusting screw (E, Fig. 4) clockwise or counter-clockwise until the bearing is approximately 1/64" away from the side of the blade.
- 6. Adjust the opposite side bearing.
- 7. Tighten thumbscrew (D, Fig. 4). Check to make sure the adjustments have not changed during the tightening process, and that the bearing guides do not pinch the blade.

Mounting the Table

- 1. With help from another person, mount the table. Remove the table insert (F, Fig. 5) and table pin (G, Fig. 5).
- Slide the saw blade through the slot in table where the table pin was located. Rotate the table 90 degrees so that the miter slot is parallel to the blade, and to the right of the blade when facing the bandsaw.
- Line up the trunnions so that the bolts feed through the trunnion support bracket.
 Secure the table with two lock knobs (H, Fig. 6). Re-install the table insert and table pin.

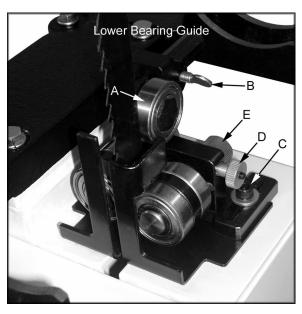


Figure 4

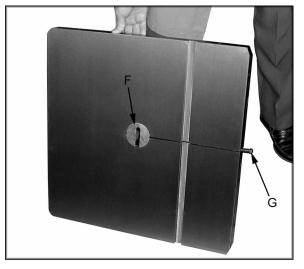


Figure 5

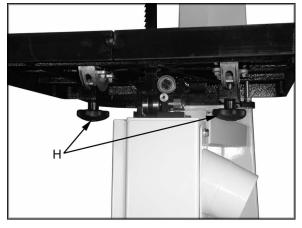


Figure 6

Adjusting 90 Degree Table Stop

- 1. Blade tension must be properly adjusted prior to adjusting 90 degree stop; see "Adjusting Blade Tension" page 15.
- 2. Loosen lock knobs (A, Fig. 7) and tilt table until it rests against table stop bolt (B, Fig. 7). Tighten knobs.
- 3. Use a square (E, Fig. 8) placed on the table and against the blade to see if the table is 90 degrees to the blade.
- 4. If an adjustment is necessary, loosen the lock knobs. Tilt the table until it is square to the blade, and tighten the lock knobs.
- Loosen lock nut (C, Fig. 7) and turn table stop bolt (B, Fig. 7) until it contacts the table. Tighten the nut (C, Fig. 7) to hold table stop in place. When tightening the nut hold the table stop bolt in place with a wrench to prevent movement.
- 6. If necessary, adjust pointer (D, Fig. 7) to zero.

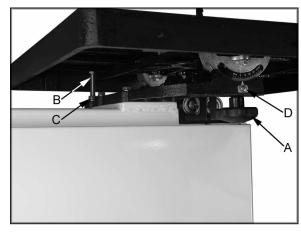


Figure 7

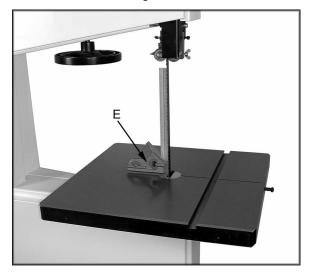


Figure 8

G F H

Figure 9

Rail Assembly

- 1. Attach the front rail (F, Fig. 9) to the cast iron table with two 1/4" x 5/8" hex cap bolts, two 1/4" lock washers, and two 1/4" flat washers. Bolts should be in approximately the center of the slot. Hand tighten only at this time.
- 2. Attach the rear rail (G, Fig. 9) to the table with two 1/4" x 5/8" hex cap bolts, two 1/4" lock washers, and two 1/4" flat washers. Bolts should be in approximately the center of the slot. Hand tighten only at this time.
- 3. Push the front and rear rails up as far as they will go.
- Tighten the four hex cap bolts holding the front and rear rails to the table. Do not over tighten the bolts.
- 5. Attach the guide tube (H, Fig. 9) to the front rail with five 1/4" x 5/8" hex cap bolts, five 1/4" lock washers, and five 1/4" flat washers. Bolts should be in approximately the center of the slot.

Fence Assembly and Adjustment

- 1. Attach the fence (A, Fig. 10) to the fence body (B, Fig. 10) with four 5/16" x 3/4" hex cap bolts, four 5/16" lock washers, and four 5/16" flat washers.
- 2. Thread a hex nut (D, Fig. 11) onto the pad's threaded stud (E, Fig. 11) and insert through the fence and rear hook (F, Fig. 11). Secure in place using a hex nut, lock washer and flat washer (G, Fig. 11).

Note: The hook should be adjusted so that it overlaps the rear rail by approximately 1/8".

- 3. Place fence assembly onto the guide tube. The rear hook should engage the rear rail.
- 4. Check the clearance between the table and the fence. The gap should be the same at the front of the table as it is at the rear. If the gap width is different, adjust the foot at the rear of the fence until the gap width is the same, Figure 12.

Note: You can also adjust the front rail or rear rail, up or down to achieve the proper clearance.

- 5. With a square, verify the fence face is perpendicular to the table top. If it is not perpendicular, the front rail will need to be adjusted parallel to the table top. This can be accomplished by measuring from the top of the table to the top of the front rail. The measurement should be the same at both ends of the table.
- 6. Move the fence assembly so that it aligns parallel to the blade, and lock the fence by pushing the lock handle down, Figure 10.
- Loosen the four hex cap bolts that hold the fence to the fence body, and align the fence to the blade. Tighten the four hex cap bolts.
- 8. Check to see that the pointer (C, Fig. 10) is aligned with the zero mark on the guide rail. If adjustment is necessary loosen the screw that holds the pointer in place and line up to the zero mark. Tighten the screw.

Note: If you cannot get the pointer lined up with the zero mark, you can slide the guide tube and front rail left or right to achieve the proper setting.

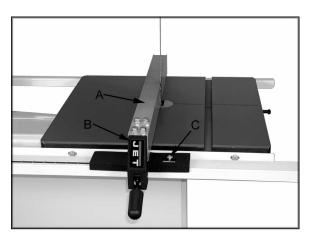


Figure 10

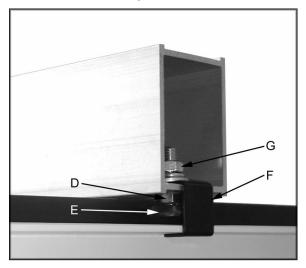


Figure 11

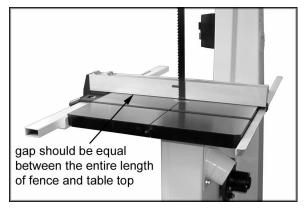


Figure 12

Electrical Connections

AWARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. The machine must be properly grounded to help prevent electrical shock and possible fatal injury.

The bandsaw is equipped with either a single phase, 230 volt motor; or a three phase, 230/460 volt motor. The **single phase** unit is factory wired for 230 volts and equipped with a 20 amp cord and plug set. The 230 volt plug requires a receptacle similar to the one shown in Figure 13. Use an outlet rated at least 20 amps. The circuit for the machine should be a dedicated circuit, and protected by at least a 20 amp circuit breaker or fuse.

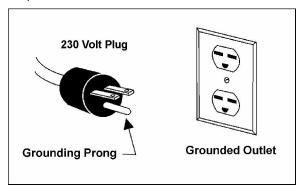


Figure 13

The *three phase* motor is pre-wired for 230 volt but is not equipped with a plug. It may be reconnected for 460 volts by changing the connections as illustrated in the diagram in the motor wiring box. You may either install a UL/CSA listed plug suitable for 460 volt operation, or "hard-wire" the bandsaw directly to a service panel.

If the bandsaw is to be hard-wired to a panel, make sure a disconnect is available for the operator. During hard-wiring of the machine, make sure the fuses have been removed or the breakers have been tripped in the circuit to which the bandsaw will be connected. Place a warning placard on the fuse holder or circuit breaker to prevent it being turned on while the machine is being wired.

Consult the electrical diagrams on pages 29-31 for further clarification of wiring.

Grounding Instructions

This machine must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded. Repair or replace a damaged or worn cord immediately.

Make sure the voltage of your power supply matches the specifications on the motor plate of the bandsaw.

Extension Cords

For circuits which are far away from the electrical service box, the wire size must be increased in order to deliver ample voltage to the motor. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.

The chart in Figure 14 shows the recommended size cord to use for branch circuits and extension cords. The smaller the gauge number the heavier the cord. If in doubt, use the next heavier wire gauge.

Recommended Gauges (AWG) of Extension Cords

		Extension Cord Length *				
Amps	25 feet	50 feet	75 feet	100 feet	150 feet	200 feet
< 5	16	16	16	14	12	12
5 to 8	16	16	14	12	10	NR
8 to 12	14	14	12	10	NR	NR
12 to 15	12	12	10	10	NR	NR
15 to 20	10	10	10	NR	NR	NR
21 to 30	10	NR	NR	NR	NR	NR

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.

NR: Not Recommended.

Figure 14

Resaw Guide

For resawing attach the post (A, Fig. 15) to fence with the lock knob (B, Fig. 15). There is a slotted hole in the fence that will accommodate the resaw kit. Position the post so that it is centered with the front edge of the blade.

Miter Gauge

- 1. Place the miter gauge in the table slot.
- 2. With a square verify the miter gauge face is square to the blade.
- 3. If the miter gauge is not square to the blade loosen the lock knob (C, Fig. 15) and adjust to the proper setting. Tighten the lock knob.
- 4. If the pointer is not at 90 degrees, loosen the screw (D, Fig. 15) holding the pointer and move the pointer to 90 degrees.

Tilting the Table

- 1. Disconnect the machine from the power source, unplug.
- 2. Loosen the lock knobs (E, Fig. 16).
- 3. Tilt table up to 45 degrees to the right, or up to 10 degrees to the left.
- 4. Tighten the lock knobs.

Note: Table stop bolt (F, Fig. 16) must be removed to tilt table to the left.

Height Scale Adjustment

- 1. Disconnect the machine from the power source, unplug.
- 2. The upper bearing guide should be set about 1/8" above the material to be cut.
- 3. Measure from the table top to the bottom of the bearing guides.
- 4. Set the indicator to this measurement on the height scale. Grasp the end of the indicator (G, Fig. 17) between your finger and thumb. Move the indicator into position.

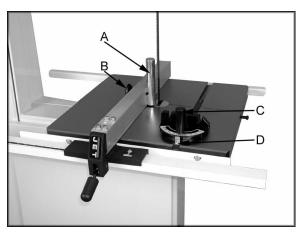


Figure 15

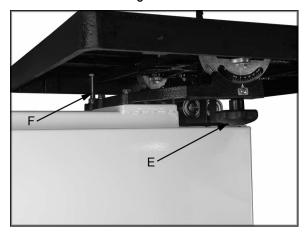


Figure 16

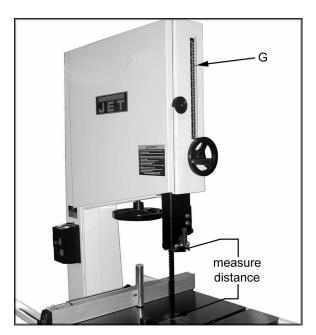


Figure 17

Changing Blades

AWARNING Disconnect machine from the power source, unplug. Blade teeth are sharp; use care when handling the saw blade. Failure to comply may cause serious injury.

This band saw is provided with a 1" x 3TPl x 150" blade. Many other blade styles are available from WMH Tool Group – see page 32.

- 1. Disconnect the machine from the power source, unplug.
- 2. Remove the table insert (A, Fig. 18), and table pin (B, Fig. 18).
- 3. Lower the upper blade guide assembly about half way by loosening the lock knob (F, Fig. 19) and turning the hand wheel (G, Fig. 19)
- Loosen socket head cap screw (C, Fig. 18) and slide the bearing assembly back as far as it will go.
- 5. Open both wheel covers (D, Fig. 18).
- 6. Loosen blade tension by turning blade tension hand wheel (E, Fig. 19) clockwise until it stops.

Note: You may want to wear leather work gloves while removing and handling the blade.

- 7. Carefully remove blade from upper and lower wheels. Remove the blade from between upper, and lower bearing guides. Turn blade and direct through slot in table.
- 8. Make sure blade teeth point down toward table and guide the new blade through table slot. Place blade in upper and lower bearing guides.
- 9. Position blade in the center of the upper and lower wheels.
- 10. Spin the upper wheel a number of revolutions and see where the blade lines up. Tension and track blade before operating saw. Find instructions for tensioning and tracking the blade on the next page under "Adjusting Blade Tension" and "Adjusting Blade Tracking".
- 11. Replace table insert and table pin.

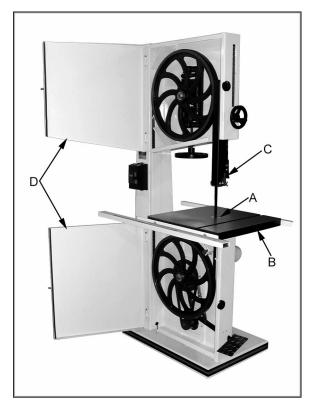


Figure 18



Figure 19

Adjusting Blade Tension

- 1. Disconnect machine from the power source, unplug.
- 2. Turn blade tension hand wheel (A, Fig. 20) counter-clockwise to tension blade, and clockwise to loosen the tension. A gauge on the upper wheel slide bracket (B, Fig. 20) indicates the approximate tension according to the width of the blade. The JWBS-20 comes with a 1" blade so the tension should be set at 1" when using this blade.
- 3. As you become familiar with the saw, you may find it necessary to change the blade tension from the initial setting. Changes in blade width, and the type of material being cut will have an effect on blade tension.
- 4. Keep in mind that too little, or too much blade tension can cause blade breakage and/or poor cutting performance.

Adjusting Blade Tracking

AWARNING Disconnect machine from the power source. Never adjust blade tracking with the machine running. Failure to comply may cause serious injury.

Note: Blade tracking has been adjusted at the factory. If, however, it is determined that blade tracking needs adjustment, make this adjustment with the knob (C, Fig. 21).

Do not use knobs (D, Fig. 21). These are used by the factory for wheel alignment, **not** tracking.

- Disconnect the machine from the power source, unplug.
- Blade must be properly tensioned before adjusting blade tracking. Make sure upper and lower bearing guides do not interfere with the blade while adjusting the tracking.
- 3. Open upper wheel door. Rotate the wheel forward and observe the position of the blade on the wheel. The blade should rest in approximately the center of the wheel.
- 4. If adjustment is necessary, loosen the wing nut (E, Fig. 21) at the top rear of the saw.
- 5. Adjust tracking by turning the knob (C, Fig. 21) in 1/4 turn increments. Rotate the wheel forward, and observe the position of the blade on the wheel. Rotating knob (C, Fig. 21) counter-clockwise should move the blade towards the front of the wheel. Rotating the knob (C, Fig. 21) clockwise should move the blade towards the back of the wheel.



Figure 20



Figure 21

- 6. Continue with adjustments until the blade is tracking properly.
- 7. Tighten the wing nut (E, Fig. 21) after blade is tracking in the center of the wheel.

Brake Pedal

Press the brake pedal (A, Fig. 22) while the saw is running to stop the saw. Re-start the saw by pressing the on switch.

Replacing Belt

- 1. Disconnect the machine from the power source, unplug.
- 2. Release blade tension by turning blade tension hand wheel clockwise.
- Release belt tension by loosening the hex cap bolt (B, Fig. 22). Raise the motor and place a block of wood under the motor to take the tension off the belt.
- 4. Open the lower wheel door and remove hex nut, and washer (C, Fig.23).
- 5. If the lower wheel does not come off easily you may need to use a pulley puller (D, Fig. 24) to remove the lower wheel.
- Remove the old belt (E, Fig. 24) and replace the belt.
- 7. Re-install the lower wheel and tighten the hex nut.
- 8. Set the blade tension. See "Adjusting Blade Tension" on the previous page.
- 9. Remove the wood block or support from below the motor and adjust the belt tension. See "Adjusting Belt Tension" below.
- 10. Check the blade tracking. See "Adjusting Blade Tracking" on the previous page.

Adjusting Belt Tension

The belt comes adjusted from the factory. If adjustment is needed:

- 1. Disconnect the machine from the power source, unplug.
- 2. Set the belt tension by lightly pressing down on the motor and tightening the hex cap screw (B, Fig. 22).
- 3. The weight of the motor should put enough tension on the belt. You just want to push down lightly to take up any slack.

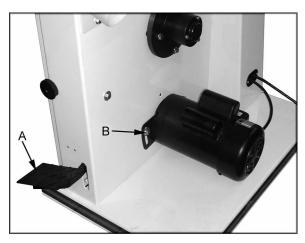


Figure 22

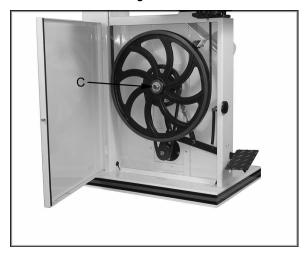


Figure 23

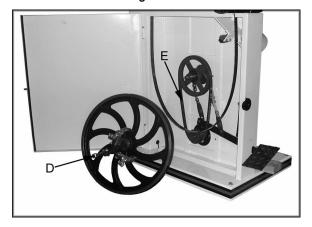


Figure 24

Operation

AWARNING

All electrical connections must be made by a qualified electrician in compliance with all relevant codes.

A plug needs to be purchased for the bandsaw that matches the outlet you intend to use (A, Fig. 25).

Confirm that power at the site matches the specifications of the before making any electrical connections. Review the wiring diagrams on pages 29-31 and the information on page 12.

The on/off switch (B, Fig. 26) is thermally protected. If the saw motor is overloaded, or a momentary interruption of electrical current is sensed, the saw will shut off. Allow a few minutes for the saw to cool down, then **reset by pushing the off button**.

Maintenance

AWARNING Before doing maintenance on the machine, disconnect it from the electrical supply by pulling out the plug or switching off the main switch. Failure to comply may cause serious injury.

Keep bearing guides clean and free of build up.

Do not let saw dust build up in the upper and lower wheel housings. Vacuum out frequently.

Keep the brake switch, located in the lower wheel housing, clean and free of saw dust.

Connect the bandsaw to a JET dust collection system.

Clean and grease the raising/lowering rack for the upper bearing guides if it becomes difficult to raise or lower.

Clean and oil the tensioning mechanism if it becomes difficult to adjust.

Vacuum out the motor fan cover.

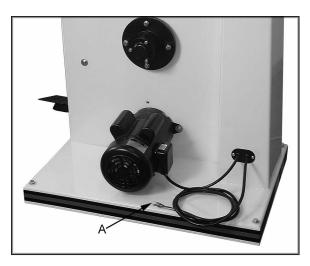


Figure 25

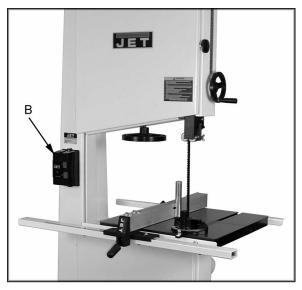


Figure 26

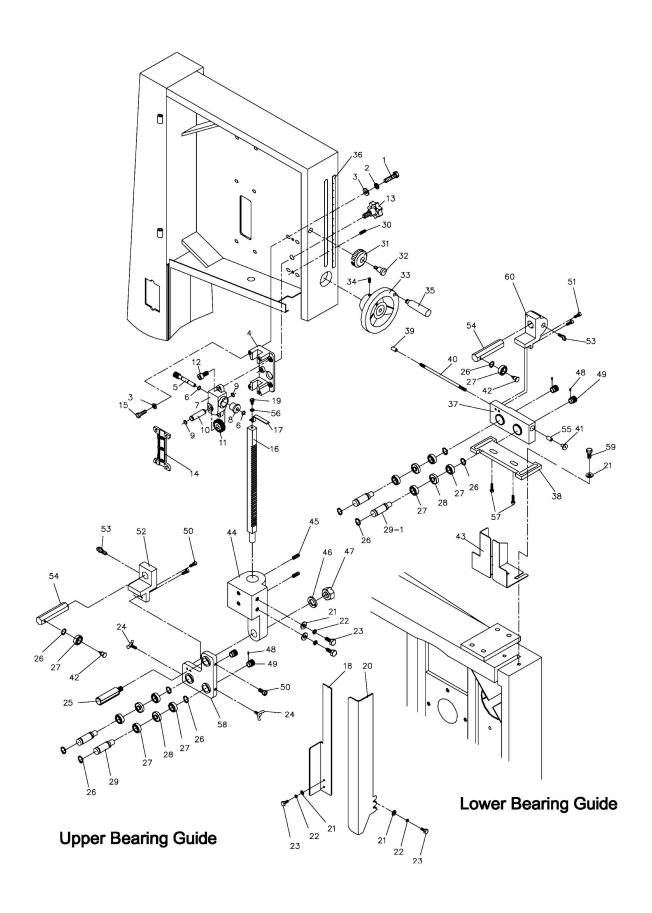
Troubleshooting

Trouble	Probable Cause	Remedy
	Overload tripped.	Allow motor to cool, then reset by pressing the OFF switch.
Saw stops or will not start.	Saw unplugged.	Check plug connections.
Start.	Fuse blown or circuit breaker tripped.	Replace fuse or reset circuit breaker.
	Cord damaged.	Replace cord.
Does not make	Stop not adjusted correctly.	Check blade with square and adjust stop.
accurate 45° or 90° cuts.	Angle pointer not set accurately.	Check blade with square and adjust pointer.
	Miter gauge out of adjustment.	Adjust miter gauge.
	Fence not aligned with blade.	Check and adjust fence.
Blade wanders during	Warped wood.	Select another piece of wood.
cut.	Excessive feed rate.	Reduce feed rate.
	Incorrect blade for cut.	Change blade to correct type.
	Dull blade.	Replace blade.
	Blade mounted incorrectly.	Teeth should point down.
Saw makes unsatisfactory cuts.	Gum or pitch on blade.	Remove blade and clean.
	Incorrect blade for cut.	Change blade to correct type.
	Gum or pitch on table.	Clean table.
Blade does not come	Extension cord too light or too long.	Replace with adequate size cord.
up to speed.	Low shop voltage.	Contact your local electric company.
	Base on uneven floor.	Reposition on flat, level surface.
	Bad v-belt.	Replace v-belt.
Saw vibrates excessively.	Bent pulley.	Replace pulley.
	Improper motor mounting.	Check and adjust motor.
	Loose hardware.	Tighten hardware.

Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 between 7:30 a.m. and 6:00 p.m. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Blade Guides Assembly

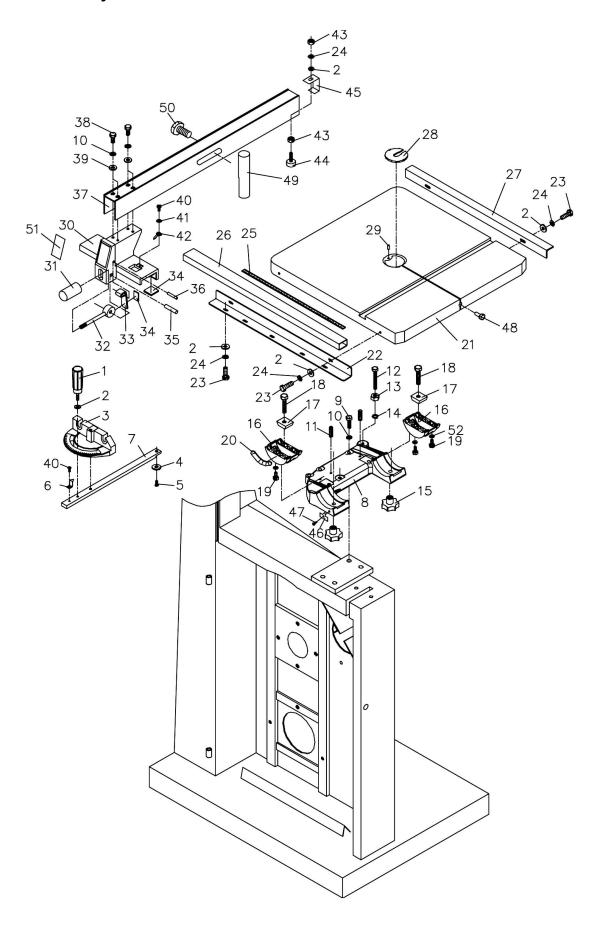


Parts List: Blade Guides Assembly

Index No.	Part No.	Description	Size	Qty
		Hex Cap Screw		
		Lock Washer		
		Flat Washer		
4	. JWBS20-304	Guide Bar Bracket		1
		Worm		
		E-Ring		
7	. JWBS18-307	Gear Base		1
8	. JWBS18-308	Bushing		1
9	. JWBS18-309	C-Ring	S-12	2
10	. JWBS18-310	Shaft		1
11	. JWBS18-311	Gear		1
12	. TS-0208071	Socket Head Cap Screw	5/16-18 x 1-1/4	2
		Lock Knob		
14	. JWBS20-314	Plate		1
15	. TS-0051011	Hex Cap Screw	5/16-18 x 1/2	4
		Guide Bar		
		Pointer		
		Inner Blade Guard		
		Hex Cap Screw		
		.Blade Guard		
		.Flat Washer		
		Lock Washer		
		Hex Cap Screw		
		Wing Bolt		
		Bracket Shaft		
		C-Ring		
		Ball Bearing		
		Spacer		
		Upper Guide Shaft		
29-1	.IWBS20-329A	Lower Guide Shaft		2
		Set Screw		
		Lock Knob		
		Screw		
		Hand Wheel		
		.Set Screw		
		.Handle		
36		Cutting Height Scale		1
37		Bracket		1
-		Base		
		Threaded Lock Bushing		
		Bolt		
		Lock Knob		
42	.JWBS20-342	.Screw		2
		Lower Blade Guard		
		Guide Bar Bracket		
		Set Screw		
		Lock Washer		
		.Hex Nut		
		Set Screw		
		Knob		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Bracket		
		.Thumb Screw		
		Bearing Support		
		Lock Bushing		
		Lock Washer		
JJ	5 0. 200, 1			

57	JWBS20-357	Hex Socket Cap Screw	3/16 x 3/8	2
		•		
			1/4-20 x 5/8	
		•		

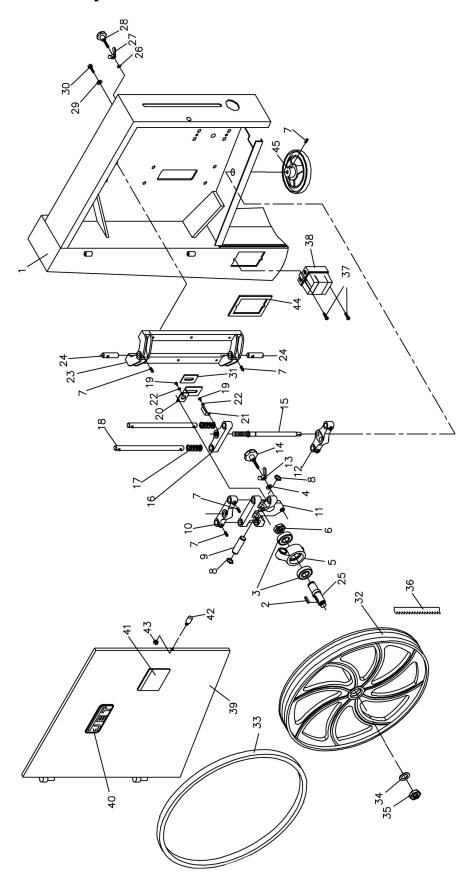
Table Assembly



Parts List: Table Assembly

Index No.	Part No.	Description	Size	Qty
1	JWBS18-401	Locking Handle		1
2	TS-0680021	Flat Washer	1/4	11
3	JWBS18-403	Miter Gauge Body		1
		Guide Disc		
		Screw		
		Pointer		
		Guide Bar		
		Trunnion Support Bracket		
		Hex Cap Screw		
		Lock Washer		
		Set Screw		
		Hex Cap Screw		
		Hex Nut		
		Lock Washer		
		Lock Knob		
-		Trunnion		
		Trunnion Clamp Shoe		
18	TS-1491081	Hex Cap Screw	M10 x 50	2
19	TS-1503041	Socket Head Cap Screw	M6 x 16	6
		Scale		
21	JWBS20-421	Table		1
		Front Rail		
		Hex Cap Screw		
		Lock Washer		
		Scale		
		Guide Tube		
		Rear Rail		
		Table Insert		
		Roll Pin		
		Fence Body		
		Knob		
		Lock Handle		
		Lock Plate		
		Pad		
		Pin		
36	JWBS18-436	Pin		1
37	JWBS20-437	Fence		1
38	TS-0081031	Hex Cap Screw	5/16-18 x 3/4	4
		Flat Washer		
		Screw		
		External Tooth Lock Washer		
		Pointer	_	
		Hex Nut		
		Sliding Pad		
		Rear Hook		
		Pointer		
		Screw		
		Table Pin		
		Resaw Guide		
		Lock Knob		
		Miter Gauge Assembly		
	JWBS20-FCPW	Fence Assembly		1
51	JWBS18-451	JET Fence Label		1
52	TS-1550041	Flat Washer	M6	6

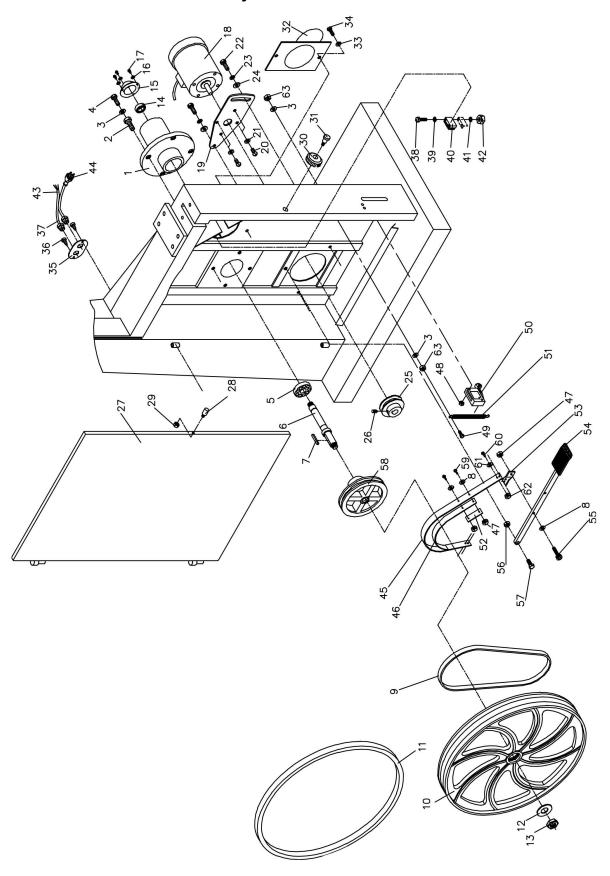
Upper Wheel Assembly



Parts List: Upper Wheel Assembly

Index No.	Part No.	Description	Size	Qty
1	. JWBS20-501	Saw Body	3HP	1
	. JWBS20X-501A	Saw Body	5HP	1
2	. JWBS20-49	Key	7 x 7 x 25	1
3	. BB-6205VV	Ball Bearing	6205	2
		Lock Washer		
5	. JWBS20-44	Upper Wheel Bearing Bracket		1
6	. JWBS20-506	Lock Nut	3/4-16 UNF R.H	1
7	. TS-0270051	Socket Set Screw	5/16-18 x 1/2	5
		C-Ring		
		Lever Shaft		
		Upper Adjustment Bracket		
		Upper Wheel Guide Bracket		
		Adjustment Bracket		
		Wing Nut		
		Lock Knob		
		Adjustment Screw		
		Elevator Bracket		
		Spring		
		Guide Bar		
		Screw		
		Bracket		
-		Pointer		
		External Tooth Lock Washer		
		Upper Wheel Bracket Base		
		Bracket Shaft		
		Upper Wheel Shaft		
		Lock Washer		
		Wing Nut		
		Lock Knob		
		Flat Washer		
		Hex Cap Screw		
		Blade Width Gauge		
		Wheel		
		Tire		
		Flat Washer		
		Hex Nut		
		Blade (see page 32)		
		.Screw		
		On/Off Switch		
		On/Off Switch		
39	. JWBS20-539	Upper Front Door		1
		JÉT Plaque		
		Warning Label		
		Door Stud		
		Hex Nut		
		Switch Plate		
		Switch Plate		
45	. JWBS20-50	Hand Wheel		1

Lower Wheel and Motor Assembly

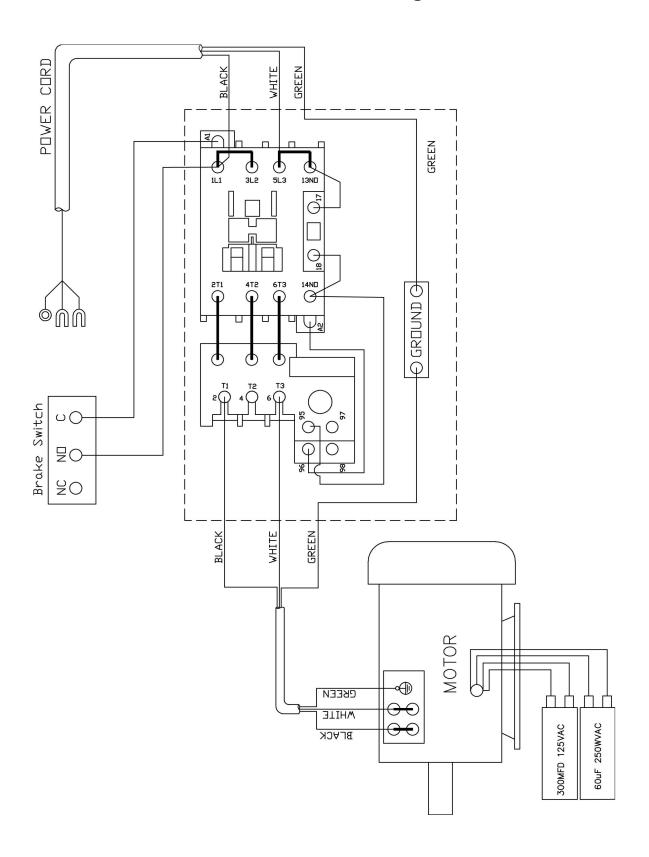


Parts List: Lower Wheel and Motor Assembly

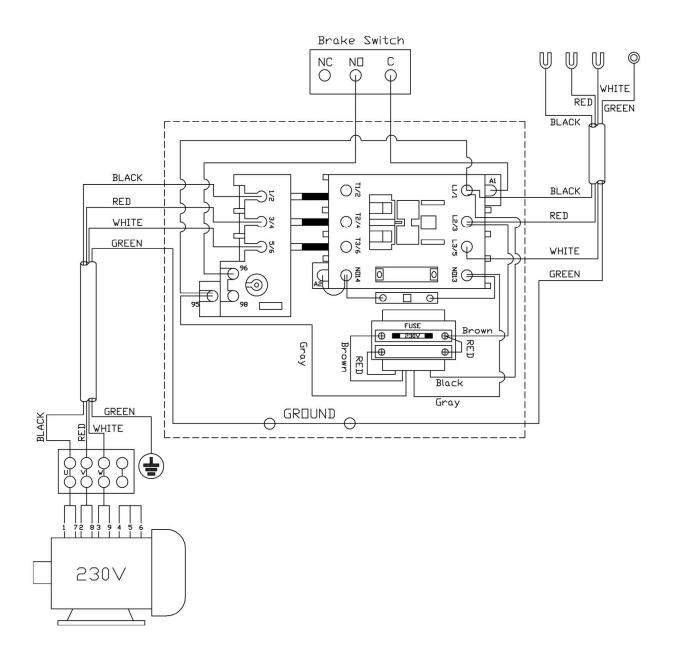
Index No. Part No.	Description	Size	Qty
1JWBS20-201	Bearing Base		1
2JWBS20-62	Adjusting Bolt		4
3TS-0720091	Lock Washer	3/8	6
4TS-0060111	Hex Cap Screw	3/8-16 x 2-1/2	4
5BB-6205ZZ	Ball Bearing	6205ZZ	2
6JWBS20-206	Spindle		1
7JWBS20-49	Key	7 x 7 x 25	1
	Flat Washer		
	V-Belt		
	Wheel		
	Tire		
	Flat Washer		
	Hex Nut		
	Hex Nut		
	Bearing Cover		
16 TS-0720071	Lock Washer	1/4	3
	Screw		
	AMotor		
1/1/RC18DY 210	ASCStarting Capacitor (not shown)	300MED 125\/^C	11 y 1
	ARCRunning Capacitor (not shown)		
	ACCCapacitor Cover (not shown)		
	IBJunction Box (not shown)		
	BCJunction Box Cover (not shown)		
	Motor Fan (not shown)		
	Motor Fan Cover (not shown)		
	Centrifugal Switch (not shown)		
	Motor		
JVVB52U-218E	Motor Fan (not shown)	•••••	I
JVVD52U-210F	Motor Fan Cover (not shown)	•••••	I
	Hex Cap Screw		
	Flat Washer		
	Hex Cap Screw		
	Lock Washer		
	Flat Washer		
	Motor Pulley		
27 \(\Delta \Delta \De	Lower Front Door		2
	Door Stud		
	Hex Nut		
	Lock Knob		
	Screw		
	Dust Chute		
	Flat Washer		
	Hex Cap Screw		
	Cord Plate		
	Cord Plate		
	Screw		
	Strain Relief Bushing		
	Strain Relief Bushing		
	Screw		
	Flat Washer		
	Brush		
	Lock Washer		
	Hex Nut		
	AMotor Cord		
	Motor Cord		
			'

44JWBS18DX-244A	Power Cord	3HP	1
JWBS20X-244A	Power Cord	5HP	1
45JWBS20-81	Brake Band		1
46JWBS20-93	Brake Belt		1
47TS-0561011	Hex Nut	1/4-20	11
48TS-1540021	Hex Nut	M4	2
49TS-0060111	Hex Cap Screw	3/8-16 x 2-1/2	1
50JWBS20-88	Brake Switch		1
51JWBS20-84	Spring		1
52JWBS24-81A	Plate		2
53JWBS20-82	Brake Locking Bracket		2
54JWBS20-254	Brake Pedal		1
55TS-0207061	Socket Head Cap Screw	1/4-20 x 1	1
56TS-0561031	Hex Nut	3/8-16	1
57TS-0060081	Hex Cap Screw	3/8-16 x 1-3/4	1
58JWBS20-258	Spindle Pulley		1
59TS-0050021	Hex Cap Screw	1/4-20 x 5/8	2
60TS-081C032	Screw	#10-24 x 1/2	4
61TS-069204	Washer	#10	4
62TS-0560071	Hex Nut	#10-24	6
63TS-0561031	Hex Nut	3/8-16	2
64JWBS20-264	Brake Switch Cord (not shown)		1

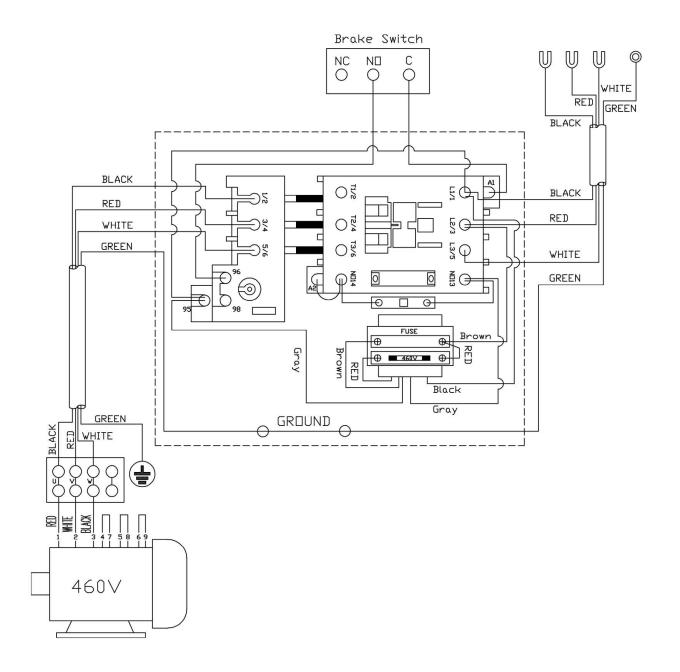
Electrical Connections – 3HP, 230V, Single Phase



Electrical Connections – 5HP, 230V, Three Phase



Electrical Connections – 5HP, 460V, Three Phase



Optional Accessory Blades

Stock Number	Blade Size and Type
709482	1/4" x 0.025" x 150", 6 TPI, Skip (BandPlus)
709483	3/8" x 0.025" x 150", 4 TPI, Hook (BandPlus)
709484	1/2" x 0.025 x 150", 3 TPI, Hook (BandPlus)
709485	3/4" x 0.032 x 150", 3 TPI, Hook (BandPlus)
709486	1" x 0.035 x 150", 2 TPI, Hook (BandPlus)
709487	1-1/4" x 0.035 x 150", 1.3 Hook (BandPlus)
709616	3/16" x 0.025 x 150", 10 TPI, Raker (Silicon Steel)
709617	3/8" x 0.025 x 150", 6 TPI, Hook (Silicon Steel)
709618	3/8" x 0.025 x 150", 10 TPI, Raker (Silicon Steel)
709620	1/2" x 0.025 x 150", 4 TPI, Hook (Silicon Steel)
709621	1/2" x 0.025 x 150", 6 TPI, Hook (Silicon Steel)
709622	3/4" x 0.032 x 150", 3 TPI, Hook (Silicon Steel)



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