

# Operating Instructions and Parts Manual 14-inch Woodworking Band Saw Model JWBS-14SFX-BLK





### 1.0 Safety Warnings

- 1. Read and understand the entire owner's manual before attempting assembly or operation.
- 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.
- Replace warning labels if they become obscured or removed.
- 4. This band saw 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 band saw, do not use until proper training and knowledge have been obtained.
- Do not use this band saw for anything other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- 6. This machine has an industrial-grade low-friction corrosion-resistant coating we call JET Black. This coating is on the table. While the JET Black coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance.
- Always wear approved safety glasses/face shield while using this machine. (Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.)
- Before operating band saw, 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.
- Keep work area clean. Keep floor around machine clean and free of scrap material, oil, and grease. Dirty floors and cluttered invite accidents.
- 10. Use proper extension cord. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Sect. 6.3, Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use

- the next heavier gage. The smaller the gage number, the heavier the cord.
- Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- 12. Disconnect tools from power before servicing; when changing accessories, such as blade, bits, cutters and the like.
- 13. Adjust upper blade guides to just clear workpiece (approximately 3/16").
- 14. Make sure blade tension, tracking, and blade guides are all properly adjusted.
- Make relief cuts where possible, when cutting curved stock.
- 16. When feeding small work pieces into blade, always use push stick, fixture, or similar device to keep hands at a safe distance.
- 17. Hold stock firmly and flat against table.
- 18. Wear ear protectors (plugs or muffs) during extended periods of operation.
- Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- 20. Make certain switch is in OFF position before connecting machine to power supply.
- 21. Make certain machine is properly grounded.
- 22. Do not back stock out of blade while blade is running.
- 23. Do not remove jammed cutoff pieces until the OFF button is pressed and the blade has stopped.
- 24. 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.
- 25. Keep safety guards in place at all times when machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after completion of maintenance.
- 26. Check damaged parts. Before further use of 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.
- 27. Keep visitors a safe distance from work area. Keep children away.

- 28. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- Give your work undivided attention. Looking around, carrying on a conversation and "horseplay" are careless acts that can result in serious injury.
- 30. Maintain a balanced stance at all times so that you do not fall into blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
- 31. 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 more safely.
- 32. Use recommended accessories; improper accessories may be hazardous.
- Maintain tools with care. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- Turn off machine before cleaning. Use a brush or compressed air to remove chips or debris not your hands.
- 35. Do not stand on machine. Serious injury could occur if machine tips over.

- 36. Never leave machine running unattended. Turn power off and do not leave band saw until blade comes to a complete stop.
- 37. Remove loose items and unnecessary work pieces from area before starting machine.
- 38. Keep hands out of path of saw blade. Do not reach around a moving saw blade.
- Don't use in dangerous environment. Do not expose machine to rain or use in wet or damp locations. Keep work area well lighted.
- 40. Make sure band saw is securely fastened to base.
- 41. Do not start the band saw with a workpiece in contact with the blade.
- 42. Allow blade to reach full speed before cutting.
- 43. Keep blades clean and sharp. Do not use blades that are cracked, poorly welded, or have missing or deformed teeth.

#### 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, or possibly even fatal, injury.

### SAVE THESE INSTRUCTIONS

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### 3.0 About this Manual

This manual is provided by JET covering the safe operation and maintenance procedures for a JET Model JWBS-14SFX-BLK 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 consistent, long-term 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 JET. You can also reach us at our web site: www.jettools.com.

Register your product using the mail-in card provided or register online:

www.jettools.com/product-registration

To quickly reach the product registration webpage, scan the QR code below.



**AWARNING**Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

## 4.0 Specifications

Table 1

Model number	JWBS-14SFX-BLK
Stock number	OHEO HOLK DEIX
Band Saw with Stand	JT1-1371
Motor and electrical	511 IST1
Motor type	Totally enclosed fan-cooled induction, capacitor run
Horsepower	1.75 HP (1.3 kW)
Motor phase	Single
Motor voltage	115/230 V (prewired 115 V)
Cycle	60 Hz
Listed FLA (full load amps)	15 / 7.5A
Start capacitor	100μF 275VAC
Run capacitor	40μF 450VAC
Motor speed	1720 RPM
Starting current	63 / 34 A
Running current (no load)	5.8 / 3.6 A
Power transfer	v-belt
On/off switch	Industrial-style push button
Power cord and plug	SJT 14AWGx3C, 6ft., 5-15P plug
Recommended circuit size <sup>1</sup>	20A (for 115V), 15A (for 230V)
Sound emission without load <sup>2</sup>	75 dB at 3 ft. (900mm) from blade
Capacities and speeds	
Band saw nominal size	14 in. (355 mm)
Wheel diameter	14 in. (355 mm)
Resaw capacity (cutting height)	13 in. (330 mm)
Throat capacity	13-1/2 in. (345 mm)
Blade length (blade not provided)	116 in. (2947 mm)
Minimum blade width	1/8 in. (3.175 mm)
Maximum blade width	3/4 in. (19 mm)
Blade speed	15.24 m/s (3000 FPM)
Wheel speed	765 RPM
Main Materials	
Table	Ground cast iron with JET Black coating
Table insert	Anodized aluminum
Trunnion	Engineered diecast and steel
Frame	Steel
Stand	Steel
Band wheels	Cast iron
Tires	Polyurethane
Blade guides	Ball bearings, aluminum block
Resaw fence	Extruded aluminum
Paint finish	Powder coating
Dust Collection	
Dust port outside diameter	4 in. (100mm)
Minimum extraction volume required	400 CFM

<sup>&</sup>lt;sup>1</sup> Subject to local/national electrical codes.

<sup>&</sup>lt;sup>2</sup> The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

Table and Fence	
Table dimensions L x W	21-1/2 x 17 in. (535 x 435 mm)
Table tilt	0 to 45° Right
Table height from floor	40 in. (1020 mm)
Miter T-slot (2), W x D	3/4 x 13/32 in. (19 x 10 mm)
Resaw fence size L x H	18-1/4 x 6 in. (463 x 155 mm)
General Dimensions	
Overall dimensions, assembled L x W x H (approx.)	37 x 27-1/2 x 75-3/8 in. (940 x 700 x 1915 mm)
Shipping dimensions – L x W x H (approx.)	63.375 x 26.75 x 24 in. (1610 x 680 x 610 mm)
Base (Footprint) L x W	24.4 x 19.7 in. (618 x 500 mm)
Weights	
Net weight (approx.)	272 lb. (122 kg)
Shipping weight (approx.)	316 lb. (142 kg)

L = length, W = width, H = height

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

AWARNING Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

### 5.0 Setup and Assembly

This machine has an industrial-grade low-friction corrosion-resistant coating on the table. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when unpacking and locating the machine and during all setup and assembly procedures.

### 5.1 Shipping Contents

See Figures 5-1 and 5-2.

- 1 Stand (not shown)
- 1 Band saw (not shown)
- 1 Table **A** with preinstalled items:
  - 1 Fence rail (preinstalled on table) G
    - 1 Hex cap screw M8x65 **HP8**
  - 1 Hex Nut M8 **HP6**
- 1 Table insert **B**
- 1 Handle C
- 1 Dust chute **D**
- 1 Fence body **E**
- 1 Resaw fence **F**
- 4 Rubber feet with hex nut (not shown)
- 5 Hex wrenches, 2.5/3/5/6/8mm (not shown)
- 1 Operating Instructions and Parts Manual
- 1 Product registration card
- 1 Hardware package (JWBS14SFX-HP):
  - 4 Socket hd cap screws M8x50 HP1
  - 8 Hex cap screws M8x16 **HP2**
  - 4 Socket hd button screws M8x20 HP3
  - 4 Socket hd button screws M5x8 **HP4**
  - 20 Flat washers 8mm HP5
  - 8 Hex nuts M8 **HP6**
  - 4 Lock washers 8mm **HP7**
  - 4 Large Flat Washers, 8mm HP9

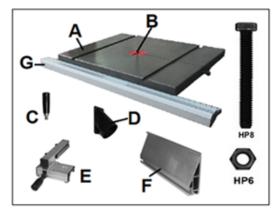


Figure 5-1: contents (not to scale)

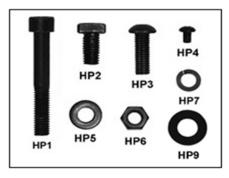


Figure 5-2: hardware package JWBS14SFX-HP

### 5.2 Tools Required for Assembly

(Note: Additional tools may be needed for adjustments.)

5mm, 6mm hex wrenches (provided)

10mm,14mm wrenches

Rubber mallet (or hammer and block of wood)

Straight edge

Measuring tape or gauge

Machinists square (or similar 90° measuring device)

### 5.3 Unpacking and Cleanup

Open boxes and inspect contents. Report any shipping damage or missing parts to your distributor. Do not discard packing material until machine is assembled and running satisfactorily.

The band saw should be located in a dry, well lit area, with enough room to handle long stock and servicing or adjustment of the machine from any side.

AWARNING Band saw must be disconnected from power source during assembly procedures. Failure to comply may cause serious injury.

### 5.4 Assembling Stand

Assemble stand according to the exploded view in sect. 13.1.3. Use fasteners HP2/5/6 and rubber feet, as shown.

With the carton still on the pallet, cut down the carton and trim away a portion of the foam insert to expose the base of the saw. Secure the stand to the saw using screw and washer HP1/5/7. See Figure 5-3.

Carefully raise the assembled stand and saw using straps with a forklift or hoist.

Adjust the rubber feet as needed to level the band saw.

### 5.5 Installing Handle

Thread handle (C, Figure 5-1) into handwheel, and tighten with 10mm wrench on flats.

### 5.6 **Installing Dust Chute**

Mount dust chute (D, Figure 5-3) with four screws (HP4).

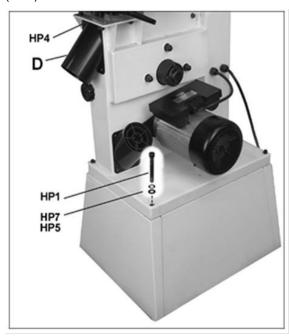


Figure 5-3

### 5.7 Installing Table

#### **ACAUTION** Table is heavy; an assistant is recommended.

Position table onto trunnion and line up table to trunnion slots. Insert screws and washers (HP3/9, Figure 5-4). Only hand tighten screws at this time blade must be installed and table aligned before fully tightening.

Follow all instructions concerning blade installation and adjustment, then proceed with table alignment in sect. 5.15.

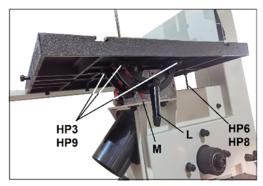


Figure 5-4: table installation

### 5.8 Installing Blade

Note: A blade is not provided with the saw. You may purchase one locally, or from your JET dealer. See sect. 4.0 for blade requirements of the JWBS-14SFX-BLK.

**A**WARNING

Disconnect machine from power source before installing blade.

**ACAUTION** Wear gloves when handling blades. New blades are usually packaged in coiled position; to prevent injury uncoil them slowly and carefully while wearing work gloves and safety glasses.

- Disconnect band saw from power source.
- Pull table pin (K, Figure 5-5) out of its slot, and remove table insert (B).

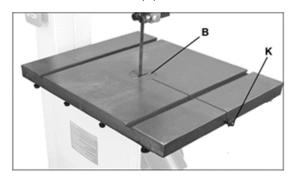


Figure 5-5: table and guide rail installation

- Open upper and lower doors by rotating door
- Swing the lower blade guard (M Figure 5-12) to the left.
- Back off upper and lower blade guides to allow gap for blade insertion (see sect. 5.12 through 5.14).
- Raise quick tension lever (see D, Figure 5-7) to release position. If needed, rotate tension handwheel (E, Figure 5-7) counterclockwise for further de-tensioning.
- Remove wood insert (Figure 5-6), if installed.

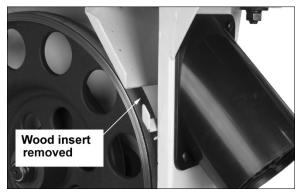


Figure 5-6

Guide blade through table slot. Place blade loosely in upper and lower blade guides. Make sure blade teeth point down toward table, and toward front of saw.

(If the teeth will not point down, no matter how the blade is oriented, then blade is inside-out. Twist it into correct orientation and re-install it.)

- Position blade at center of upper and lower wheels.
- Reinstall wood insert, table insert and table pin. (The table pin prevents deflection of table along blade slot.)
- 11. Before operating band saw, the new blade must be tensioned and tracked, in that order. Refer to sect. 5.9 and 5.10.
- 12. The blade guides must also be set properly according to instructions in sect. 7.7 through 7.10.

### 5.8.1 Replacing Wood Insert

The saw comes with a wood insert which is precut and slotted to fit the saw. Should the insert need to be replaced, the dimensions are as follows:

Size of wood insert: 70 L x 113 W x 7.5 Th mm (2-3/4 L x 4-3/16 W x 1/4 Th in.)

When replacing the wood insert, use the following procedure to cut the blade slot.

#### 1. Disconnect saw from power source.

 Open bottom door and slide the wood insert until it contacts the blade edge (see Figure 5-6a).

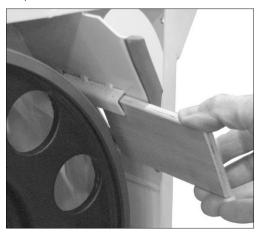


Figure 5-6a

- 3. Rotate bottom wheel by hand to cut a groove into the edge of the wood insert. This will be your cut angle reference.
- 4. Estimate the needed length of the cut when the insert will be installed all the way in. Mark this point on the wood insert.

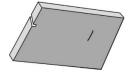


Figure 5-6b

5. The cut angle on the wood insert will be greater than the 45 degrees maximum tilt on the band

saw. Thus, either a jig of some kind must be used with the band saw, or another method of cutting must be used. Possibilities include clamping the insert in a vise and cutting it with a hand saw, or using another machine that accepts the cut angle.

Whatever method or machine is used, make sure all necessary safety measures are taken.

AWARNING Attempting to cut the wood insert while the saw is running poses a safety risk. Perform the above instructions with the saw unplugged from the power source.

### 5.9 Blade Tension

Refer to Figures 5-7 and 5-8.

Blade tension should be checked following blade replacement, and periodically as the blade stretches from use.

- Lower tension lever (D, Figure 5-7) to tension position.
- Set proper blade tension by rotating handwheel (E, Figure 5-7), clockwise to tighten, counterclockwise to loosen.
- 3. The gauge (F, Figure 5-8) indicates approximate tension according to blade width in inches. Initially, set blade tension to correspond to width of blade. As you become familiar with the saw, you may find it necessary to alter blade tension from the initial setting.

Keep in mind that too little or too much blade tension can cause blade breakage and/or poor cutting performance.

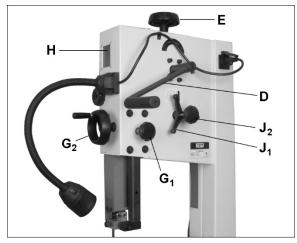


Figure 5-7 (shown with optional lamp)

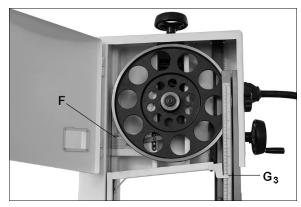


Figure 5-8

**Tip:** When the band saw is not being used, raise tension lever (D) to *release* position – this will prolong the life of blade and tires.

### 5.10 Blade Tracking

Refer to Figures 5-7 and 5-8.

After proper tensioning, the blade must be tracked. "Tracking" refers to position of blade on the wheels while machine is in operation. Tracking should be checked periodically and is mandatory after every blade change. Blade tracking is done initially by hand with machine disconnected from power.

- 1. Disconnect band saw from power source.
- 2. Blade must be correctly tensioned (sect. 5.9). Lower blade tension lever to tension position.
- 3. Back off blade guides so they will not interfere with blade movement.
- Loosen guide post locking knob (G<sub>1</sub>, Figure 5-7) and use handwheel (G<sub>2</sub>) to lower guide post until you can see blade through tracking window (H).
- 5. Open upper door to expose wheel.
- 6. Rotate wheel by hand, observing position of blade through tracking window. The blade should ride approximately at center of tire (Figure 5-9).

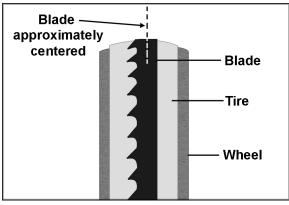


Figure 5-9

 If blade tends to migrate toward left or right edge of wheel, loosen locking handle (J<sub>1</sub>, Figure 5-7) counterclockwise, and rotate tracking knob (J<sub>2</sub>) with your right hand while continuing to rotate wheel with your left.

**IMPORTANT:** This adjustment is sensitive; perform in small increments and give blade time to react to changes.

- 8. When blade is tracking near approximate center of wheel, tighten locking handle (J<sub>1</sub>), and close upper door.
- Connect saw to power and turn it on to observe blade in action through tracking window. Make further adjustments as needed.

#### 5.11 Blade Guides Overview

Thrust (back support) bearings are located behind saw blade and provide support to back of blade when saw is in operation.

Guide bearings are located on either side of saw blade and provide stability for blade when saw is in operation. These bearings rotate on an eccentric shaft so distance from blade can be adjusted for optimal performance.

### 5.12 Upper Blade Guides

MCAUTION Blade teeth are sharp; use care when working near saw blade.

The guide bearings should be set so that contact between blade and guides will occur only when blade is under pressure from a workpiece. To adjust upper bearing guides for proper blade control, proceed as follows.

Refer to Figures 5-10 and 5-11.

- 1. Disconnect band saw from power source.
- Blade must already be tensioned and tracking correctly. See sect. 5.9 and 5.10.

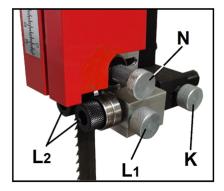


Figure 5-10: blade guide adjustment

- 3. Place quick tension handle in *tension* position.
- 4. Loosen the lock knob (K, Figure 5-10).
- 5. Slide entire guide bracket until front of guide bearings are about 0.015" (1/64") behind blade gullet (curved area at base of tooth). See Figure 5-11.
- 6. Tighten lock knob (K, Figure 5-10).

 If thrust bearing does not line up with blade, lateral adjustment of the entire guide bracket can be made using the lock knob (K) and the 2 set screws on opposite side of the upper guide mount.

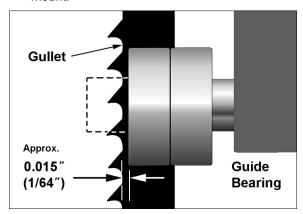


Figure 5-11: guide bearing position

- 8. Loosen lock knob  $(L_1)$  for either of the front guide bearings.
- The guide bearing rotates on an eccentric shaft.
   Adjust guide bearing by rotating knurled knob (L<sub>2</sub>) until guide bearing is almost touching blade.

**Tip:** This blade-to-bearing gap can be quickly set by inserting a business card, or dollar bill folded twice (4 thicknesses), between them then allowing the guide bearing to *lightly* contact the card/bill.

ACAUTION Do not force guide bearing against side of blade. Overtightening will reduce bearing life. Guide bearings should not rotate when saw is running without a workpiece; they will generally only make contact with blade when there is pressure from the cutting operation.

- 10. Tighten lock knob (L<sub>1</sub>).
- 11. Repeat process for opposite guide bearing.

### 5.13 Upper Thrust Bearing

MCAUTION Blade teeth are sharp; use care when working near saw blade.

Refer to Figure 5-10.

The thrust bearing prevents backward deflection of blade during cutting.

- 1. Disconnect band saw from power source.
- 2. Loosen the lock knob (N, Figure 5-10), and slide thrust bearing until it almost touches back of blade. (This blade-to-bearing gap can be set in similar fashion as the side guides, with business card or dollar bill.)

NOTE: On narrow blades, it may be preferable to set thrust bearing in actual contact with blade.

- 3. Tighten lock knob (N).
- Make sure all lock knobs on upper guide bearing assembly are tightened when adjustments are complete.

### 5.14 Lower Blade Guides

ACAUTION Blade teeth are sharp; use care when working near saw blade.

Refer to Figures 5-12 and 5-13.

- 1. Disconnect band saw from power source.
- 2. Open lower door and swing lower guard (M, Figure 5-12) out of the way.
- Adjust lower guide bearings and lower thrust bearing below table in similar manner to that of upper guide and thrust bearings.

Movement summary: Loosen lock knob (P) to move entire guide bearing assembly. Loosen lock knob (S) and rotate knob (R) to adjust guide bearing in relation to blade. Thrust bearing is controlled by locking knob (O).

 Make sure all knobs and screws are tightened after adjustments are complete.

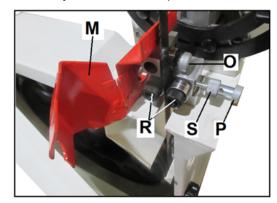


Figure 5-12: lower blade guides

### 5.15 Aligning Table

The table must be adjusted so that:

- Blade runs through center of table insert.
- Table is aligned with blade.
- Table is square to blade at 90° scale reading.
- 1. Disconnect band saw from power source.
- The table screws should still be only hand tight.
- 3. Lower blade tension lever (see D, Figure 5-7) to tension position.
- Install table insert (B, Figure 5-5). Blade should be positioned at center of insert opening. If it is not, nudge table left or right as needed to center it.

Table must now be aligned with blade, and surface set square to blade at 90° scale reading, as follows.

### 5.15.1 Table-to-Blade Alignment

 With blade tension lever in tension position, place a long straightedge flush against blade, making sure it evenly contacts both front and back of blade. See Figure 5-14. Do not deflect blade by pushing into it.

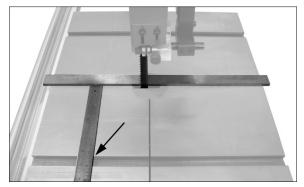


Figure 5-14

- Use a gauge (Figure 5-14) to carefully measure distance from miter slot edge to straight edge. Take measurements at both front and back of table – these should be identical.
- 3. If miter slot is not parallel to blade, nudge table with rubber mallet in the needed direction.
- 4. When parallelism is achieved (and blade is still centered through table insert), securely tighten the four trunnion screws (HP3, Figure 5-15).

# 5.15.2 **Table-to-Blade Squaring and 90° Stop**

- 1. Insert stop screw with nut (see HP6/8, Figure 5-15) into threaded hole in table.
- 2. Set a square on table top and against blade, as shown in Figure 5-16.
- Loosen lock handle (L) and manually tilt table until table and blade are square.
- 4. Tighten lock handle (L).

- 5. Turn stop screw (HP8) until it contacts saw frame, and tighten hex nut (HP6) against table.
- If needed, loosen screw and move pointer (M, Figure 5-15) to align with zero on scale. Retighten screw.

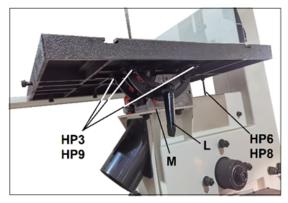


Figure 5-15: table alignments

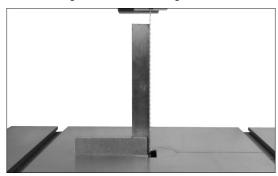


Figure 5-16 squaring table to blade

### 5.16 Installing Guide Rail and Fence

 Fence rail is preinstalled on the table from the factory as shown in figure 5-17.

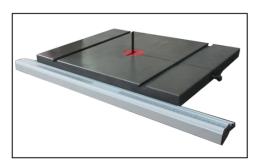


Figure 5-17

- Slide fence body onto end of guide rail (Figure 5-18) and push down handle to lock fence body to rail. There should be an even gap between table surface and the length of fence body.
- 3. If adjustment is needed, use the set screws which are located next to the fence body screws (E<sub>3</sub>, Figure 5-19). Loosen the four screws (E<sub>3</sub>) and turn any of the four adjoining set screws in or out as needed, until fence is flat against table.
- 4. Tighten screws (E<sub>3</sub>).

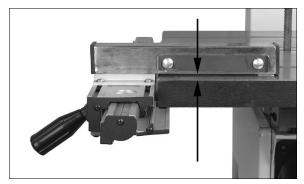


Figure 5-18

 Loosen handles (E1, Figure 5-19) and slide fence onto bar. Tighten handles (E1).

### 5.16.1 Fence to Miter Slot Alignment

- Slide fence against edge of miter slot (Figure 5-19) and push down handle (E<sub>2</sub>) to lock position. The fence should align parallel to miter slot along entire length of fence.
- 2. If adjustment is needed, loosen four screws (E<sub>3</sub>, Figure 5-19) and shift fence body as needed to align fence with miter slot.
- 3. Tighten screws (E<sub>3</sub>).

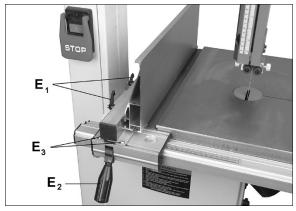


Figure 5-19

### 5.16.2 Fence to Blade Alignment

- 1. Set table at 90° to blade and lock in position.
- 2. Move fence against blade (do not deflect blade by pushing into it). See Figure 5-20.
- Verify that fence, top-to-bottom, lies flat against side of blade. If it does not, use the set screws which are located next to the fence body screws (E<sub>3</sub>, Figure 5-19). Loosen the four screws (E<sub>3</sub>) and turn any of the four adjoining set screws in or out as needed, until fence is flat against blade.
- 4. Tighten the four screws (E<sub>3</sub>).

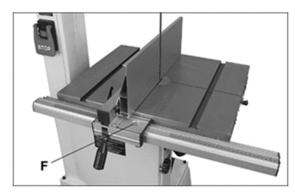


Figure 5-20

### 5.16.3 Cursor Alignment

- 1. With fence against blade, verify that cursor (F, Figure 5-20) aligns with zero on scale.
- If adjustment is needed, loosen the four screws (E<sub>3</sub>, Figure 5-19) on the fence body and nudge fence body left or right along the tracks in the fence guide, until cursor aligns with zero when fence is against blade.
- Tighten the four screws (E<sub>3</sub>).

#### 5.17 Dust Collection

The use of a dust collection system is strongly recommended. It will help keep the shop clean, as well as reduce potential health hazards caused by inhalation of wood dust. We recommend your dust collector has a minimum rating of 400 CFM.

JET has a full line of dust collection systems available. See your dealer or visit our website at www.jettools.com.

Connect the hose of your dust collection system to the 4-inch dust port on the saw. Secure hose tightly with a hose clamp.

### 6.0 Electrical Connections

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

Before connecting to power source, be sure OFF button is pressed.

It is recommended that this band saw be connected to a dedicated 20-amp circuit with a 20-amp circuit breaker or time-delay fuse marked "D". Local codes take precedence over recommendations.

### 6.1 **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. This tool is equipped with an electric cord having an equipment-grounding

conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation 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.

electrician or service person if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded. Failure to comply may cause serious or fatal injury.

### 115 Volt Operation

Referring to Figure 6-1:

This model is intended for use on a 115V circuit and has a grounded outlet that matches the machine's electrical cord plug, as shown in Figure 6-1.

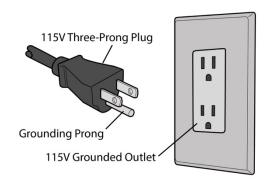


Figure 6-1: 115V Connection

If the outlet is not a properly grounded three-pole receptacle, do not use a temporary adaptor. Have a properly grounded three-pole receptacle installed by a qualified electrician.

### 230 Volt Operation

Referring to Figure 6-2:

If 230V, single-phase operation is desired, the machine must be rewired and a 230V plug and receptacle provided as shown in Figure 6-2. The following instructions must be followed:

### Disconnect the machine from the power source.

 Switch the lead wires inside motor junction box according to diagram affixed to inside of junction box cover.

- 2. Disconnect the 110V electrical outlet at the upper rear of saw frame. This socket will not be used when the band saw is drawing 230V power and the optional bandsaw light cannot be used. To disconnect, remove black and white wires from back of outlet. Completely insulate the exposed wire ends to protect against accidental human or machine contact.
- 3. The 5-15P attachment plug supplied with the band saw must be replaced with a UL/CSA listed plug suitable for 230V operation.

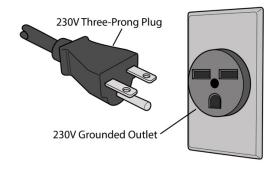


Figure 6-2

#### 6.2 Extension Cords

The use of extension cords is discouraged. If possible, position your machine within reach of the power supply. If an extension cord becomes necessary, use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. Make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

Do not use a damaged or worn extension cord. Repair or replace before use.

Use Table 1 as a general guide in choosing the correct size cord. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

#### Recommended Gauges (AWG) of Extension Cords

Amp Ra	ating	Volts	Total length of cord in feet			et	
More Not More	120 240	25 50	50 100	100 200	150 300		
Than Than			AWG				
0	6		18	16	16	14	
6	10		18	16	14	12	
10	12		16	16	14	12	
12	16		14	12	Not Recor	mmended	

Table 1

### 7.0 Adjustments

This machine has an industrial-grade low-friction corrosion-resistant coating on the table. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when making adjustments to this machine.

### 7.1 Resaw Fence

Refer to Figure 7-1.

The fence can be installed in one of two positions; vertical (resaw position) or horizontal. Horizontal position is useful for small or thin workpieces, and allows blade guide to be lowered without interference from fence. Zero setting of cursor cannot be used with horizontal fence position.

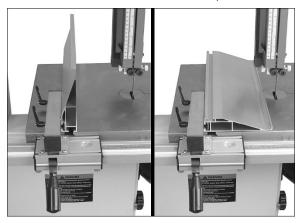


Figure 7-1: fence positions

### 7.2 Miter Gauge (optional accessory)

Refer to Figures 7-2 through 7-5.

The miter gauge has non-marring bottom surfaces to protect the table coating. To prevent damage to the table coating, only use the miter gauge supplied with this machine.

A miter gauge is provided for crosscutting operations. Install miter gauge by sliding end of miter gauge bar into table T-slot.

The miter gauge should fit snugly within miter slot while still sliding easily. The miter gauge bar has two slots, each with a set screw (Figure 7-2). Rotate one or both set screws with a 4mm hex key as needed, to eliminate any play between miter gauge bar and miter slot.

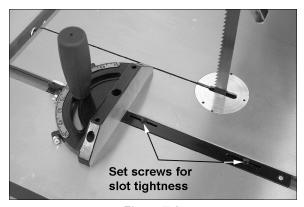


Figure 7-2

If table/miter slot is square to blade, the miter gauge will also be square to blade. Before operating, however, the 0° setting of miter gauge should be checked in relation to blade, as follows.

### **Squaring Miter Gauge:**

- Place a square against miter gauge face, and against flat of blade, as shown in Figure 7-3. (Place square against flat of blade, not against the teeth which are set wider than the blade body). A wide blade is preferred for this procedure.
- Loosen screws A and B as shown in Figure 7-4.
- 3. Adjust the miter gauge fence to make it square to the blade. Tighten screws A and B.
- 4. After squaring, if the red pointer (C) is not pointing at 0°, loosen the pointer setscrew (see Figure 7-5), rotate the pointer to 0°, and retighten the pointer setscrew.

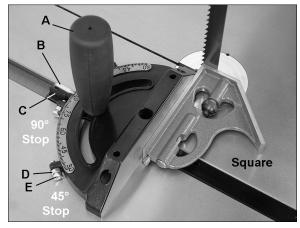


Figure 7-3

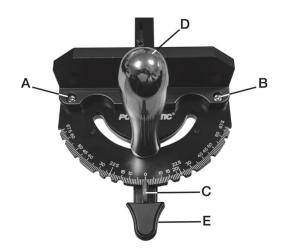


Figure 7-4

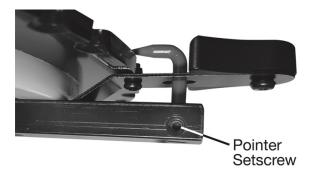


Figure 7-5

# Adjusting Miter Gauge Angle for Operations (refer to figure 7-4):

- 1. Unscrew handle (D) just enough to loosen it.
- 2. Press black tab (E) to release it from stop 0°.
- 3. Rotate gauge body until red pointer (C) lines up with desired angle on scale.
- 4. Tighten handle (D).
- 5. There are 13 stops at 0°, 15°, 22.5°, 30°, 45°, 60°, and 67.5° left and right. Each of these can be adjusted to by allowing the spring stop to lock into each location. Press black tab (E) to move past each stop location.

### 7.3 Table Tilt

Refer to Figure 7-6.

- 1. Loosen lock handle (B, Figure 7-6).
- Tilt table up to 45 degrees to right (as viewed from operator side).
- 3. Tighten lock handle (B).

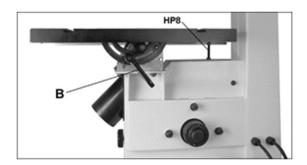


Figure 7-6: table tilt

#### 7.4 Guide Post

- Loosen lock knob (see G<sub>1</sub>, Figure 5-7) and raise or lower guide post using handwheel (G<sub>2</sub>, Figure 5-7).
- Position blade guide assembly so that bottom of guide bearing assembly is about 3/16-inch above material to be cut. The scale pointer (G<sub>3</sub>, Figure 5-8) indicates height of guide assembly from table. This provides minimal clearance between workpiece and bottom of guide bearings, which minimizes blade deflection and enhances operator safety.
- 3. Tighten lock knob (G<sub>1</sub>, Figure 5-7).

### 7.5 Drive Belt Adjustments

The drive belt and pulleys are properly adjusted by the manufacturer. However, belt tension should be occasionally checked when the band saw is new, as a new belt may stretch slightly during the breakingin process.

### 7.5.1 Drive Belt Tension

Check tension by pushing with moderate pressure on belt halfway between pulleys. An adequately tensioned belt will deflect about 1/2-inch.

### 7.5.2 Drive Belt Replacement

AWARNING Disconnect machine from power source before replacing drive belt.

If belt becomes worn, cracked, frayed or glazed, it should be replaced as follows:

- 1. Disconnect band saw from power source.
- 2. Open upper and lower doors and remove blade.
- Loosen motor plate screws (A, Figure 7-7). If needed, slightly loosen pivot screw (B). Lift motor upward to remove tension on belt and tighten screws (A) to hold motor in raised position.

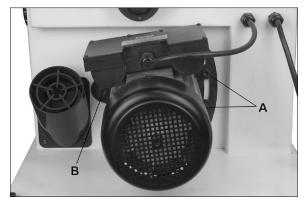


Figure 7-7

- 4. Open lower wheel door. Remove nut and washer and remove blade wheel, allowing the old belt to come off the blade wheel pulley. If lower wheel cannot be easily removed, you may need to use a wheel puller to remove it.
- 5. Remove old belt from machine and replace with the new belt.
- 6. Reinstall lower blade wheel, washer, and nut, and tighten securely.
- 7. Reinstall new belt onto blade wheel pulley and the motor pulley. Make sure the belt seats properly in the pulley grooves.
- 8. Check motor pulley alignment. To align, loosen set screws in motor pulley and slide to adjust. Retighten set screws.
- Loosen motor plate screws (A) and allow motor to lower, tensioning the belt. Tighten screws (A).
- 10. Install blade and verify blade tension and tracking before operating (sect 5.9 and 5.10).

#### 7.6 Wheel Brush

An adjustable brush is located in lower wheel housing. It should remain in constant contact with wheel to prevent buildup of gum and debris. Loosen nut on the back of saw body to adjust angle if needed.

### 8.0 Operating Controls

### 8.1 Start/Stop Switch

Press green button to start. Press red paddle button to stop.

**IMPORTANT:** Buttons must be pressed hard enough until an audible "click" is heard.

aw will resume action instantly upon power restoration. If outage occurs, immediately press stop button.

#### 8.1.1 **Switch lockout**

A hole near the start button will accept a safety padlock, as shown in Figure 8-1. To safeguard your machine from unauthorized operation and accidental starting by young children, the use of a padlock (not provided) is highly recommended. Place the key in a location that is inaccessible to children and others not qualified to use the tool.

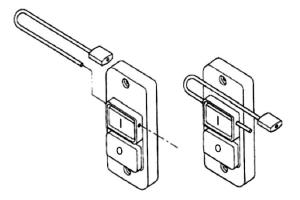


Figure 8-1: switch lockout

### 9.0 Operation

This machine has an industrialgrade low-friction corrosion-resistant coating on the table. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when operating this machine.

The following section contains basic information and is not intended to cover all possible applications or techniques using the band saw. Consult published sources of information, acquire formal training, and/or talk to experienced band saw users to gain proficiency and knowledge of band saw operations.

The following figures are general in nature and may not show your specific model.

#### 9.1 General Procedure

- Make sure the blade and upper and lower bearings are properly adjusted for tension and tracking.
- 2. Adjust blade guide assembly so that the guide bearings are just above workpiece (about 3/16") allowing minimum exposure to blade. See Figure 9-1.
- If using the fence, move it into position and lock it to the guide rail. If you are using the miter gauge for a crosscut, the fence should be moved safely out of the way.
- 4. Turn on band saw and allow a few seconds for the machine to reach full speed.

AWARNING Whenever possible, use a push stick, hold-down, power feeder, jig, or similar device while feeding stock, to prevent your hands getting too close to the blade.

 Place the straightest edge of the workpiece against the fence and push the workpiece slowly into the blade. Do not force the workpiece into the blade.

the blade; overfeeding will cause poor cutting performance, reduce blade life, and may cause the blade to break.

6. When cutting long stock, the operator should use roller stands, support tables, or an assistant to help stabilize the workpiece.

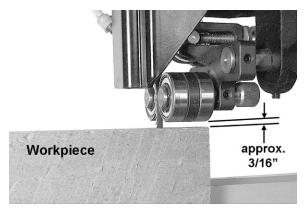


Figure 9-1

### 9.2 Ripping

Ripping is cutting lengthwise through the workpiece, along the grain (of wood stock). See Figure 9-2.

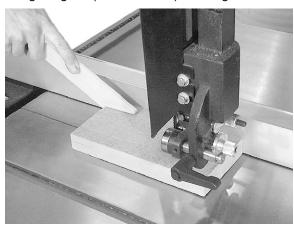


Figure 9-2: ripping

### 9.3 Crosscutting

Crosscutting is cutting across the grain of the workpiece, while using the miter gauge to feed the workpiece into the blade.

Slide the bar of the miter gauge into the end of the slot on the table.

The right hand should hold the workpiece steady against the miter gauge, while the left hand pushes the miter gauge past the blade, as shown in Figure 9-3.

Do not use the fence in conjunction with the miter gauge. The offcut of the workpiece must not be constrained during or after the cutting process.

With the miter gauge can cause binding and possible damage to the blade.

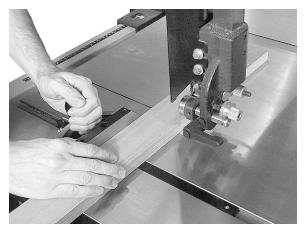


Figure 9-3: crosscutting

### 9.4 Resawing

Resawing is the process of slicing stock to reduce its thickness, or to produce boards that are thinner than the original workpiece. See Figure 9-4.

The ideal blade for resawing is the widest one the machine can handle, as the wider the blade the better it can hold a straight line.



Figure 9-4: resawing

When resawing thin stock, use a push block, push stick, or similar device to keep your hands away from the blade.

### 9.5 Blade Lead

Blade lead, or drift, is when the blade begins to wander off the cutting line even when the band saw fence is being used.

Figure 9-5 shows an example of blade lead. It is more common with small, narrow blades, and is almost always attributable to poor blade quality, or lack of proper adjustments. Inspect the band saw for the following:

- Fence not parallel to miter slot and blade.
- Blade not tensioned correctly.
- Blade is dull.
- Teeth have excessive "set" on one side of blade.
- Workpiece being fed too quickly.

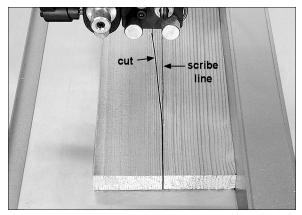


Figure 9-5: blade lead

### 9.6 Saw Blade Selection

Using the proper blade for the job will increase the operating efficiency of your band saw, help reduce necessary saw maintenance, and improve your productivity. Thus, it is important to follow certain guidelines when selecting a saw blade.

Here are factors to consider when selecting a blade:

- The type of material you will be cutting.
- The thickness of the material.
- ☐ The features of the material, such as bends or curves with small radii.

These factors are important because they involve basic concepts of saw blade design. There are five (5) blade features that are normally changed to meet certain sawing requirements. They are:

- 1. width
- 2. pitch (number of teeth per inch)
- 3. tooth form (or shape)
- 4. the "set" of the teeth
- 5. the blade material itself.

#### 9.7 **Width**

Band saw blades come in different standard widths, measured from the back of the blade to the tip of the tooth. Generally, wider blades are used for ripping or making straight cuts; narrower blades are often used when the part being cut has curves with small radii. When cutting straight lines with a narrow blade, the blade may have a tendency to wander, causing *blade lead*. (refer to *sect.* 9.5).

### 9.8 Pitch

Pitch is measured in "teeth per inch" (TPI). Figure 9-6 shows blades with different pitches. A fine pitch (more teeth per inch) will cut more slowly but smoother. A coarse pitch (fewer teeth per inch) will cut rougher but faster. As a rule of thumb, the thicker the workpiece, the coarser will be the blade pitch. If you cut a hard or very brittle material, you may want to use a blade with a finer pitch in order to get clean cuts.

**General rule:** Use a blade that will have no fewer than 6 and no more than 12 teeth in the workpiece at any given time.

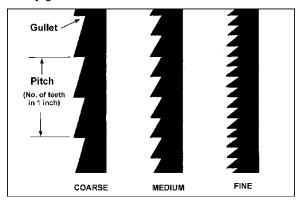


Figure 9-6: blade pitch

### 9.9 **Shape**

Figure 9-7 shows common types of tooth shape. Tooth shape has an effect on cutting rate, and with few exceptions, the Skip and Hook types are used to obtain higher feed rates when cutting thick workpieces. Variable-tooth blades are also available, which combine features of the other styles.

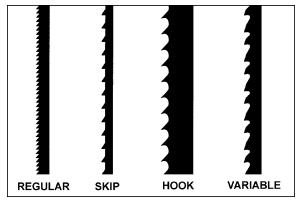


Figure 9-7: blade shape

### 9.10 **Set**

The term "set" refers to the way in which the saw teeth are bent or positioned. Set patterns are usually selected depending on the type of material that needs to be cut. Three common set patterns are shown in Figure 9-8.

Generally, the *Raker* set is used for cutting metal workpieces; the *Wave* set, when the thickness of the workpiece changes, such as cutting hollow tubing or structurals. The *Straight* set is most often preferred when cutting wood or plastics.

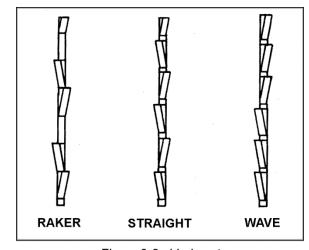


Figure 9-8: blade set

### 9.11 Material

Band saw blades can be made from different types of materials. Some of the most common include spring steel, carbon steel, carbon steel equipped with a high speed or welded edge (bi-metal), or carbide tips. A special type of saw blade is made from "high speed steel"; these should not be used on band saws with low rates of speed.

Because of the importance of blade selection, it is recommended that you use the *Blade Selection Guide* in sect. 11.0.

### 9.12 Blade Breakage

Band saw blades are subject to high stresses and breakage may sometimes be unavoidable. However, many factors can be controlled to help prevent most blade breakage. Here are some common causes for breakage:

- 1. Misalignment of blade guides
- 2. Feeding work too fast
- 3. Using a wide blade to cut a short radius curve
- 4. Excessive tension
- 5. Teeth are dull or improperly set
- 6. Upper guides are set too high off workpiece
- 7. Faulty weld on blade
- 8. Blade too thick

### 10.0 User Maintenance

AWARNING

Before any intervention on the machine, disconnect it from electrical supply by pulling out the plug. Failure to comply may cause serious injury.

This machine has an industrialgrade low-friction corrosion-resistant coating on the table. While the coating is durable, it can be damaged if metal or other hard and/or sharp objects strike, gouge, or scratch the surface. Significant damage to the coating may affect its performance. Use care when performing maintenance on this machine.

Clean band saw regularly to remove any resinous deposits and sawdust.

Keep miter slot and guide bearings clean and free of resin.

Keep blade clean and sharp. Check it periodically for cracks or other signs of wear.

The drive belt should be checked periodically. If it looks worn, frayed, glazed or otherwise damaged, replace it.

Check that the cleaning brush over the band wheel is working properly and remove any deposits from the band wheels to avoid vibration and blade breakage.

Do not allow saw dust to build up in the upper and lower wheel housings. Vacuum or blow out dust from inside cabinet. (Use proper dust mask equipment).

If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

Connect the band saw to a dust collection system of appropriate capacity. (See our website for a full line of JET dust collectors.)

Periodically vacuum out the motor fan cover.

### 10.1 Lubrication Points

- 1. Periodically apply a light, multi-purpose grease to the following:
  - Rack and pinion system of guide post.
  - Sliding surfaces of table trunnions.
- 2. Oil any pins, shafts, and joints. (Do not get oil on pulleys or belts.)
- 3. Clean and oil the blade tension mechanism if it becomes difficult to adjust.

Note: Bearings on the band saw are pre-lubricated and sealed, and do not require attention.

### 10.2 Additional Servicing

Any other servicing should be performed by an authorized service representative.

### 11.0 Blade Selection Guide

#### Table 3

Identify the material and thickness of your workpiece. The chart will show the recommended PITCH, blade TYPE, and FEED RATE.

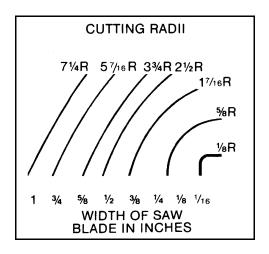
Key: H - Hook L - Low S - Skip M - Medium R - Regular H - High

Example: 10/H/M means 10 teeth per inch / Hook Type Blade / Medium Feed

Material/s		Workpiece Thickness			
		1/2"	1"	3"	6+"
Woods	Hardwood	10/R/L	8/R/L	3/H/M	3/H/M
VVOOds	Softwood	10/R/L	8/R/L	3/H/M	3/H/M
	Carbon	10/R/L	6/R/L	3/S/M	3/S/M
Non-	Mica	32/R/L			
Metals	Asbestos	8/R/L	6/R/L	3/S/M	3/S/M
	Hard Rubber	10/R/L	8/R/L	6/R/M	2/S/H
	Formica	14/R/M	10/R/M	4/H/H	4/H/H
	Masonite	10/R/L	4/S/L	3/S/M	3/H/M
Plastics	Micarta	14/R/M	10/R/M	4/H/H	3/H/H
	Plexiglas	10/R/L	6/R/L	3/S/M	3/S/M
	Paper	14/R/L	10/R/L	4/S/L	3/S/M

Study the part drawing or prototype, or actually measure the smallest cutting radius required, and locate this radius (in inches) on the chart at the right. Follow the curve to where the approximate blade width is specified. If a radius falls between two of the curves, select the widest blade that will saw this radius.

This procedure should be used for making initial blade selections. These recommendations can, of course, be adjusted to meet specific requirements of a cutting job. Compromises may be necessary if you cannot find all needed specifications in a single blade.



# 12.0 Troubleshooting JWBS-14SFX-BLK Band Saw

### 12.1 **Operational Problems**

Table 4

Symptom	Probable Cause	Correction
Table tilt does not hold	Lock handle not tight.	Tighten lock handle.
position under load.	Trunnion locking mechanism is broken or worn.	Replace trunnion locking mechanism.
Table will not tilt.	Trunnion not lubricated.	Lubricate trunnion.
	Trunnion jammed.	Disassemble and replace jammed parts.
Table vibration while sawing.	Band saw on uneven floor.	Place machine on level surface; use shims if needed.
	Loose fasteners.	Inspect and tighten screws, nuts, etc.
	Drive belt too slack.	Increase tension on drive belt. Replace belt if worn.
	Incorrect choice of saw blade pitch.	Check blade selection chart and use correct blade.
	Saw dust or debris on band wheel. Or tire is worn/damaged.	Keep band wheels clean. Replace tires if necessary.
Surface finish on	Blade pitch too coarse.	Change to finer pitch blade.
workpiece is rough.	Workpiece being fed too strongly.	Reduce feed force.
Blade cutting	Gum or pitch on blade.	Clean blade.
inaccurately. Cuts not	Worn blade teeth or damaged blade.	Replace blade.
straight.	Fence not parallel to blade.	Align fence properly.
	Incorrect adjustment of blade guides.	Adjust blade guides properly.
	Workpiece being fed too strongly.	Reduce feed force.
	Upper blade guides not located close enough to workpiece.	Position guides about 3/16" above workpiece.
	Incorrect choice of saw blade for that particular operation.	Install correct blade.
	Blade tension too light.	Increase tension.
Blade cannot be tensioned properly.	Tension spring is fatigued.	Replace tension spring (contact JET service representative).
Blade binds in workpiece.	Incorrect blade tension or damaged blade.	Correct accordingly.
	Blade too wide for desired radius.	Select narrower blade.
Blade forms cracks at base of teeth.	Teeth not suitable for operation, or incorrectly set.	Replace with proper blade.
	Blade thickness not suitable for band wheel diameter.	Replace with proper thickness blade.
	Blade sharpened incorrectly, becomes overheated.	Sharpen blade properly or replace.
	Band wheels have become misaligned.	Contact JET service representative.
Cracks on back edge of blade.	Workpiece being fed too quickly.	Reduce feed speed to lessen strain on blade.
	Welding on blade not perfectly aligned.	Eliminate welded part, and re-weld properly; or acquire a new blade. Round (i.e. "stone") the back edge of a new blade.
	Thrust bearing is worn; caused by constant contact with back of blade.	Replace thrust bearing. Adjust new bearing according to instructions.

Symptom	Probable Cause	Correction	
Blade breaks	Feed force too great.	Reduce feed force.	
prematurely.	Blade pitch too coarse.	Refer to blade selection chart; use finer pitch blade.	
	Guide bearings not properly supporting blade.	Check guide bearings for correct position and signs of wear. Adjust or replace as needed.	
	Blade tensioned too tightly.	Reduce tension.	
Blade breaks close to weld.	Blade overheated during welding.	Have blade annealed or eliminate brittle part and weld correctly.	
	Blade cooled too rapidly after welding.	Have blade annealed or eliminate brittle part and weld correctly.	
Premature dulling of saw teeth.	Blade pitch too fine.	Refer to blade selection chart. Use blade with coarser pitch.	
	Feed pressure too light.	Increase feed pressure.	
	Cutting rate too low.	Increase feed pressure and cutting rate.	
	Incorrect choice of blade.	Re-examine material. Select proper blade from chart.	
	Chipped tooth or foreign object lodged in cut.	Stop saw and remove lodged particle. Replace blade if damaged.	

### 12.2 Mechanical and Electrical Problems

Table 5

Symptom	Probable Cause	Correction *
Machine will not	No incoming power.	Verify machine connections.
start/restart or	Cord damaged.	Replace cord.
repeatedly trips circuit breaker or blows fuses.	Building circuit breaker trips or fuse blows.	Verify that band saw is on a circuit of correct size. If circuit size is correct, there is probably a loose electrical lead.
	Switch or motor failure (how to distinguish).	If you have access to a voltmeter, you can separate a switch failure from a motor failure by first, verifying incoming voltage at 115 +/-10% (or 230+/-10%) and second, checking the voltage between switch and motor at 115 +/-10% (or 230+/-10%). If incoming voltage is incorrect, you have a power supply problem. If voltage between switch and motor is incorrect, you have a switch problem. If voltage between switch and motor is correct, you have a motor problem.
	Motor overheated.	Clean motor of dust or debris to allow proper air circulation. Allow motor to cool down before restarting.
	Motor failure.	Have a qualified electrician or motor repair shop test the motor for function.
	Miswiring of unit.	Double check to confirm all electrical connections are correct. Refer to wiring diagram to make needed corrections.
	Switch failure.	If the start/stop switch is suspect, you have two options: Have a qualified electrician test the switch for function or purchase a new start/stop switch and establish if that was the problem on change-out.
Band Saw does not attain full speed.	Extension cord too light or too long.	Replace with adequate size and length cord.
	Low current.	Contact a qualified electrician.
	Motor failure.	Have a qualified electrician or motor repair shop test the motor for function.

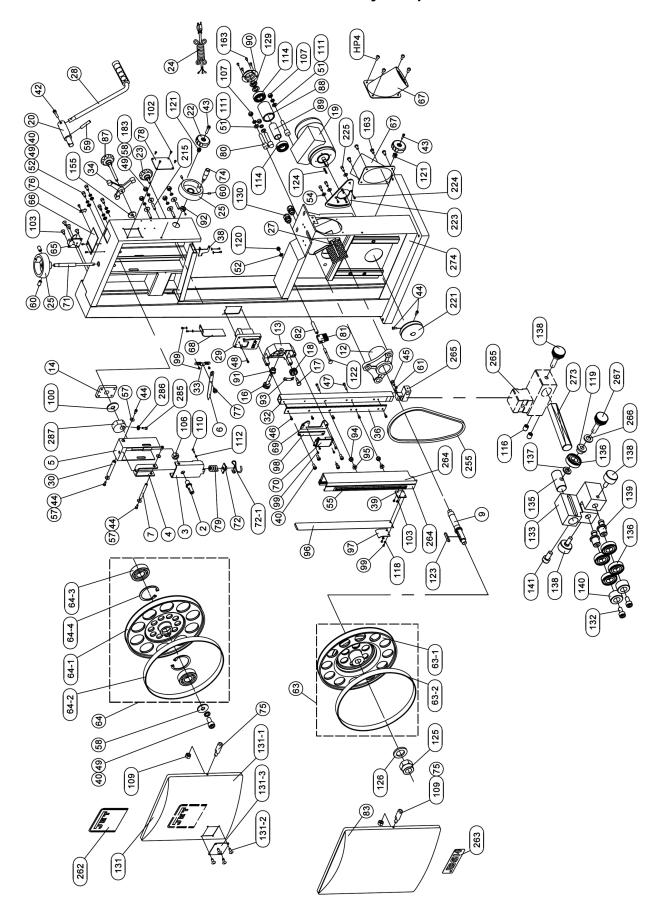
<sup>\*</sup> WARNING: Some corrections may require a qualified electrician.

### 13.0 Replacement Parts

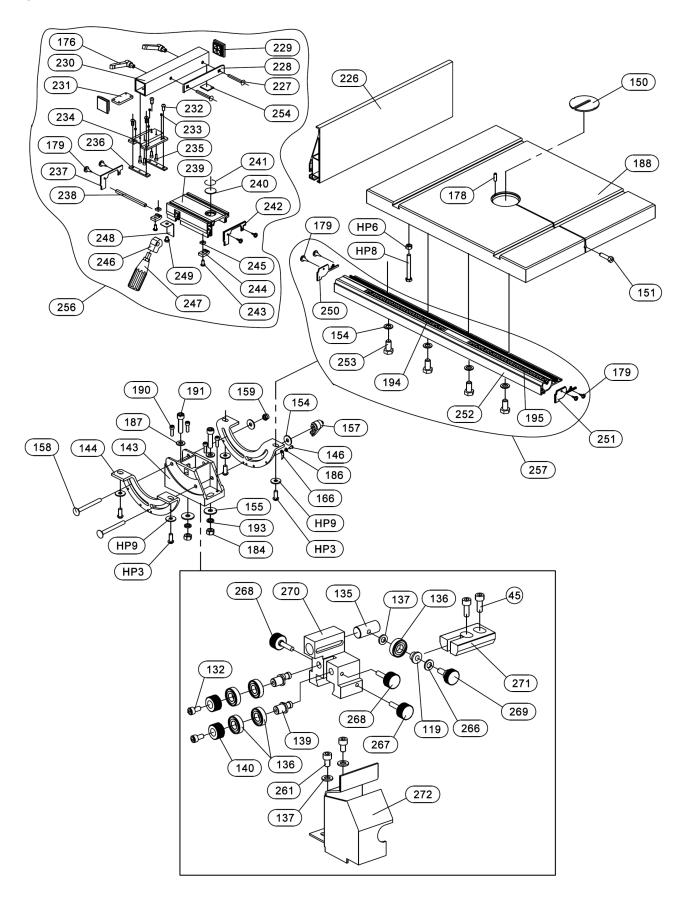
Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET. Some parts are shown for reference only and may not be available individually.

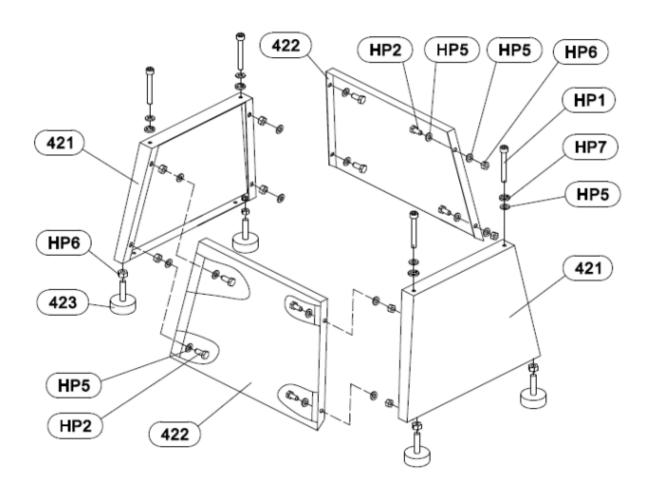
### 13.1.1 JWBS-14SFX-BLK - Band Saw Assembly - Exploded View



# 13.1.2 JWBS-14SFX-BLK – Table, Fence, Lower Blade Guide Assembly – Exploded View



### 13.1.3 JWBS-14SFX-BLK - Band Saw Stand Assembly - Exploded View



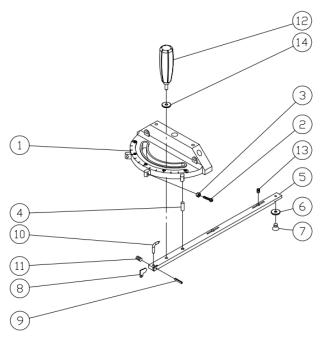
### 13.1.4 JWBS-14LIT (#714403) - Band Saw Light Kit \* - Exploded View



<sup>\*</sup> Optional Accessory – see your dealer to order.

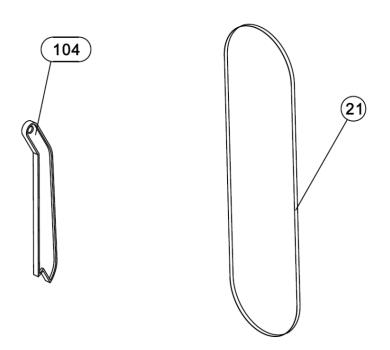
### 13.1.5 JWBS-14SFX-BLK - Miter Gauge Assembly\* - Exploded View

Part Assembly No.: PM1500-109



<sup>\*</sup> Optional Accessory – see your dealer to order.

### 13.1.6 JWBS-14SFX-BLK - Push and Blade\* - Exploded View



<sup>\*</sup> Optional Accessory – see your dealer to order.

### 13.1.7 JWBS-14SFX-BLK Band Saw – Parts List

Index No	Part No	Description	Size	Qty
002	JWBS14SFX-002	Upper Wheel Shaft		1
003	JWBS14SFX-003	Upper Wheel Axis Seat		1
004	JWBS14SFX-004	U-Bracket		1
		Guide Plate		
006	JWBS14SFX-006	Tension Pointer		1
007	JWBS14SFX-007	Shaft		1
009	JWBS14SFX-009	Lower Wheel Shaft		1
012	JWBS14SFX-012	Lower Wheel Bracket		1
013	JWBS14SFX-013	Upper Guide Mount		1
014	JWBS14SFX-014	Eccentric Base		1
		Worm		
		Gear Shaft		
018	JWBS14SFX-018	Gear		1
019	JWBS14SFX-019	Motor Assembly	1.75HP, 115V/230V	1
		Wiring Diagram (not shown)		
		Motor Label, JWBS-14SFX-BLK (not shown)		
		Motor Fan (not shown)		
	JWBS14SFX-019MFC.	Motor Fan Cover (not shown)		1
		Running Capacitor (not shown)		
	JWBS14SFX-019SC	Start Capacitor (not shown)	100µF, 275V AC	1
	JWBS14SFX-019JB	Junction Box (not shown)		1
	JWBS14SFX-019JBC	Junction Box Cover (not shown)		1
		Shaft		
		Door Lock Knob		
		Knob		
		Power Cord		
		Handwheel		
		Wood Insert		
		Tension Handle and Grip		
		Switch Assembly		
		. Shaft		
032	JWBS14SFX-032	Upper Guide Square Tube		1
		Tension Indicator Plate		
		Handle		
		Upper Guide Rack		
		. Guide Pointer		
		Plate		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Socket Head Button Screw		
		Lock Washer		
		Lock wasner		
		Flat Washer		
		Cutting Height Scale		
		Cutting neight Scale		
		Flat Washer		
050 050	10-100001 F010422	Socket Set Screw, CPP	oniin	ر 1
		Socket Set Screw		
		Socket Set Screw		
		Lower Wheel Assembly (#63-1 thru 63-2)		
		Lower Wheel		
		. Tire		
300 Z				1

Index No	Part No	Description	Size	Qty
064	.JWBS14SFX-064	. Upper Wheel Assembly (#64-1 thru 64-4)		1
064-1	.JWBS14SFX-064-1	. Upper Wheel		1
		. Tire		
		. Bearing		
063-4	.F006035	. C-Retaining Ring, Internal	40mm	2
		. Electrical Socket		
		. Hinge Plate		
		. Dust Chute		
		Protective Bending Plate		
		. Plate for Gear Box		
		. Gear Box Cover		
		. Blade Tension Shaft		
		. Connector Nut		
		. Cotter Pin (not shown)		
		KnobShaft		
		. Cord Clip		
		Slotted Head Screw		
		. Sight Glass		
		. Spring		
		. Bolt		
		Brush		
		Spacer Bushing		
		Lower Door		
		Lock Handle		
		. Sleeve A		
		. Sleeve B		
		. Cover		
		. Thread Tube		
092	.JWBS14SFX-092	. Collar		1
093	.JWBS14SFX-093	. Upper Guide Insert		1
		. Washer A		
		. Washer B		
		. Plate		
		. Spring Plate		
		. Cover A		
		. Socket Head Button Screw		
		. Socket Head Button Screw		
		. Rivet		
		. Pan Head Machine Screw		
		. Hex Nut		
		. Hex Nut . Hex Nut.		
		Pan Head Machine Screw		
		. Flat Washer		
		. Hex Nut		
		Ball Bearing		
		Socket Set Screw		
		. Flat Washer		
		Sleeve		
		. Nylon Lock Hex Nut		
		. Nylon Lock Hex Nut		
		. Carriage Bolt		
		. Key, Dbl Rd Hd		
124	.6294761	. Key, Dbl Rd Hd	6x45mm	1
125	.JWBS14SFX-125	. Nylon Lock Hex Nut, LH thds	M18 Left	1
		. Flat Washer		
		. Hex Nut		
		. Strain Relief		
		. Upper Door Assembly (#131-1 thru 131-3)		
131-1	.JWBS14SFX-131-1	. Upper Door		1

Index No		Description	Size	Qty
		Rivet		
		Sight Glass		
		Socket Head Cap Screw		
		Upper Guide Base		
		Bearing Nut		
		Ball Bearing		
		Flat Washer		
		Lock Knob		
		Eccentric Shaft		
		Socket Head Cap Screw		
		Lower Table Trunnion		
		Upper Table Trunnion		
		Socket Head Button Screw		
		Table Insert		
		Table Pin		
		Flat Washer		
		Flat Washer		
		Lock Handle		
		Carriage Bolt		
		Nylon Lock Hex Nut		
166	JWBS14SFX-166	Pointer		1
176	JWBS14SFX-176	Adjustable Handle		2
178	JWBS14SFX-178	Pin		1
		Self-Tapping Screw		
		Hex Nut		
		Hex Nut		
		Flat Washer		
		Flat Washer		
		Table		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Lock Washer		
		Scale A		
		Scale B		
		Adjust Screw		
		Motor Plate		
		Socket Head Flat Screw		
		Socket Head Cap Screw		
		Fence		
		Carriage Bolt		
		Lock Bar		
		Cap for Fence Body		
230	JWBS14SFX-230	Fence Body		1
231	JWBS14SFX-231	Guide Plate, Screw		1
		Socket Head Button Screw		
		Socket Set Screw		
		Connecting Plate		
		Socket Head Cap Screw		
		Connecting Long Plate		
		Left Cap for Fence Guide		
		Lock Shaft		
		Fence Guide		
		Cursor Stop		
		Cursor		
		Right Cap for Fence Guide		
		Pan Head Machine Screw		
		Insert Plate		
		Eccentric Locking Rod		
		Lock Handle		
	X Z=1	LOOK FIGHTAIO		

Index No	Part No	Description	Size	Qty
		. Eccentric Locking Spring		
249	TS-2284082	. Pan Head Machine Screw	. M4x8	1
250	JWBS14SFX-250	. Left Cap for Fence Rail		1
		. Right Cap for Fence Rail		
		. Fence Rail Extrusion		
253	TS-1490021	. Hex Cap Screw	. M8x16	4
		. Plate		
255	VB-A860	. V-Belt	A-860La	1
256	JWBS14SFX-256	. Fence Body Assembly (includes #176,179,227~24	9,254)	1
257	JWBS14SFX-257	. Rail Assembly (includes #179,194,195,250~252)	· · · · · · · · · · · · · · · · · · ·	1
261	TS-1503021	. Socket Head Cap Screw	. M6x10	2
262	JWBS14SFX-262	. JET Logo with Adhesive	. 8.6"x8"	1
263	JWBS14SFX-263	. JBS14 Model Logo with Adhesive		1
264	JWBS14SFX-264	. Blade Guard		1
265	JWBS14SFX-265	. Upper Guide Mount		1
266	JWBS14SFX-266	. Wave Washer	. 6mm	2
		. Knurled Lock Knob A		
268	JWBS14SFX-268	. Knurled Lock Knob B		2
269	JWBS14SFX-269	. Knurled Lock Knob C		1
		. Guide Base, Lower Guide		
		. Wedge Way Guide		
		. Lower Blade Guard		
273	JWBS14SFX-273	. Bearing Guide Rod		1
		. Saw Body		
285	TS-1503071	. Socket Head Cap Screw	M6x30	1
		. Lock Washer		
		. Eccentric Shaft		
	IMPC14CEVELY 1	ID Label IMPC 14CEV DLK (not aboum)		1
	JVVDS14SFXDLN-1	. ID Label, JWBS-14SFX-BLK (not shown)		l
		. Warning Label, JWBS-14SFX-BLK (not shown)		
		. Hex wrench (not shown)		
		. Ball End Hex wrench (not shown)		
		. Hex wrench (not shown)		
		. Hex wrench (not shown)		
		. Hex Wrench (not shown)		
		. Quick Release Label, JWBS-14SFX-BLK (not sho	wn)	1
	JVVBS14SFX-HP	. Hardware Package (see sect. 5-1 for contents)	140 50	
		. Socket Head Cap Screw		
		. Hex Cap Screw		
		. Socket Head Button Screw		
		. Socket Head Button Screw		
		. Flat Washer		
		. Hex Nut		
		. Lock Washer		
		. Hex Cap Screw		
HP9	JWBS14SFXHP9	. Large Flat Washer	24x8x2mm	4

### 13.1.8 JWBS-14SFX-BLK Stand - Parts List

Index No Part No	Description	Size	Qty
421JWBS14SFX-421	Stand Base		2
422JWBS14SFX-422	Stand Plate		2
423JWBS14SFX-423	Rubber Foot		4
HP1TS-1504101	Socket Head Cap Screw	M8x50	4
HP2TS-2228161	Hex Cap Screw	M8x16	8
HP5TS-1550061	Flat Washer	8mm	20
HP6TS-2311081	Hex Nut	M8	12
HP7TS-2361081	Lock Washer	8mm	4
JWBS14SFX-429	JET Stripe, JWBS-14SFX-BLK (not shown)		1

### 13.1.9 JWBS-14LIT Light Kit\* (#714403) – Parts List (Optional Accessory)

Index No	Part No	Description	Size	Qty
	714403	. Band Saw Light Kit (#501 thru 503)		1
		. Light Kit (110V—230V)		
502	TS-1502041	. Socket Head Cap Screw	M5x16	4
		. Hex Wrench		
	LM000338	. ID Label, JWBS-14LIT (not shown)		1

### 13.1.10 Miter Gauge Assembly (Optional Accessory)

Index No Part No	Description	Size	Qty
16295167	Miter Gauge Body		1
2TS-1533062	Pan Head Screw	M5 x 0.8 x 20	3
3TS-1540031	Hex Nut	M5	3
46295168	Steel Pin	6.2 x 16	1
5PM1500-109-05	Guide Bar		1
66295163	Guide Disc		1
7PM1800-461	Flat Head Screw	M6 x 8	1
86295171	Stop Tab		1
9PM1800-462	Spring Pin	ø3 x 6mm	1
106295169	Pointer		1
11SS050100	Socket Set Screw	M5 x 0.8 x 5	1
		M8 x 20	
13PM2000-343	Socket Set Screw	M8 x 1.25 x 6	2
14TS-0680031	Flat Washer	M8 x ø18	1

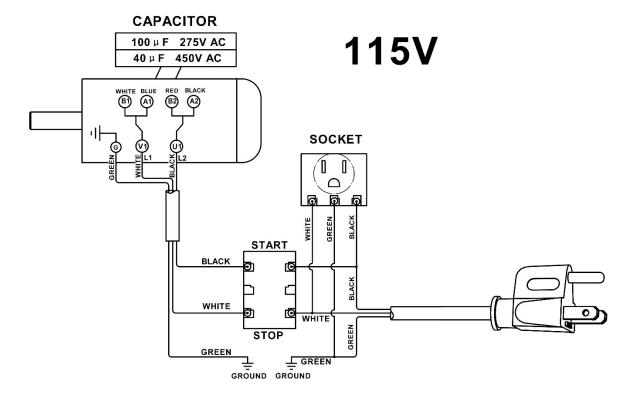
### 13.1.11 Optional Accessory\* – Blade & Push Stick

Index No	Part No	Description	Size	Qty
104	JWBS14SFX-104	. Push Stick, Red		1
<b>021</b>	IMR\$14\$EY_021	Rlade	116 25" v 5/8" v 0 025" v / TDI	1

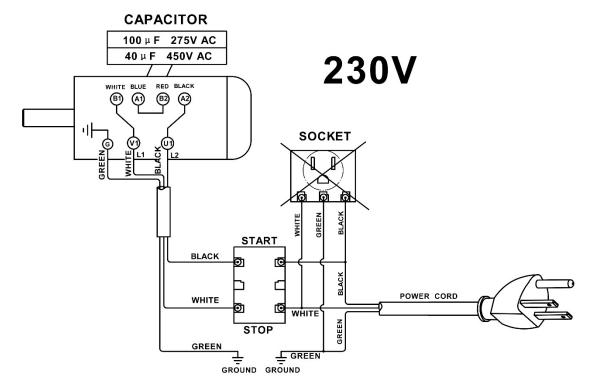
<sup>\*</sup> Optional Accessory – see your dealer to order.

### 14.0 Electrical Connections

### 14.1 Electrical Connections for 115V



### 14.2 Electrical Connections for 230V



### 15.0 Warranty and Service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

#### **Warranty Period**

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

#### Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

#### What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

#### **Warranty Limitations**

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

#### **How to Get Technical Support**

Please contact Technical Service by calling 1-800-274-6846. Please note that you will be asked to provide proof of initial purchase when calling. If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

#### More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

#### **How State Law Applies**

This warranty gives you specific legal rights, subject to applicable state law.

#### **Limitations on This Warranty**

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

### Product Listing with Warranty Period

90 Days – Parts; Consumable items

1 Year - Motors; Machine Accessories

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

5 Year – Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc., References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

16.0 <b>Notes</b>		
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