

# **18" Premium Band Saw**

BBPBS18



User's Manual

General Shop Safety instructions	4	Resawing	31
Introduction / Contact us	5	Section 5: Accessories	32
Machine data sheet	7	Section 6: Maintenance	32
Controls and components	6	Scheduling	32
Section 1: Safety	8	Daily Maintenance Check:	32
General Shop Safety Instructions	8	Monthly Maintenance Check:	32
Self protection and personal Safety	8	Cleaning and protecting	33
Machine Safety Instructions	9	Cleaning the Bandsaw:	33
Band saw Specific Safety instructions.	10	Regular Maintenance Tips:	33
Section 2: Power Supply	11	Wheel Brushes:	33
Availability and Installation of Power Supply	11	Lubrication	34
Full-Load Current Rating	11	Cleaning Components Before Lubrication:	34
Power Supply Circuit Sizing	12	Applying Lubrication:	34
Machine Pre-Wiring and Circuit Requirements	12	Specific Maintenance for Band Saw	34
For 220V Operation and Grounding	12	Guidepost Rack	34
Safety Precautions	12	Section 7: Service	35
Use of Extension Cords	13	Tensioning/Replacing V-Belt	39
Electric Motor Information	13	Blade-Lead	40
Section 3: Unpacking and Set Up	13	Adjusting Wheel Brushes	40
Unboxing the Band Saw	13	Wheels Alignment	40
Hardware Packing List	14	Replacing Brake Shoe	41
Initial Cleanup	14	Section 8: Wiring and Electrical Diagram	35
Location Consideration	14	Wiring safety instruction	35
Lifting and Placing the Band Saw	14	Wiring Diagram	37
Assembly Instructions	15	Section 9: Machine Diagrams and Parts	38
Adjustment Instructions	17	Section 10: Troubleshooting Guide	42
Initial and Fine Tune Blade Tracking	17	Cabinet Frame Assembly	43
Adjusting Blade Support Bearings & guides	19	Parts List	44
Blade Tensioning	17	Wheel and Blade Assembly	47
Align Fence	20	Parts List	48
First Run	23	Table Assembly	49
Dust Collection	23	Parts List	50
Section 4: Operations	24	Blade Tension and Tracking Assembly	51
Overview	24	Parts List	52
Typical Machine Operation Procedure	24	Guidepost Assembly	53
Basic Functions of a Bandsaw	24	Parts List	54
Basic Cutting Tips	25	Fence Assembly	56
Inspecting the workpiece	25	Parts List	57
Blade Selection & selection Chart	25	Section 11: Warranty and Return Policy	58
Blade Care, Break-in, and Breakage	26	•	
Changing the Blade	26		
Changing Speed	27		
Tilting table	27		
Ripping	28		
Crosscutting	29		
Cutting Curves	29		
Stacked Cuts	30		







# **General Shop Safety Instructions**

Notice: Safety First! The paramount concern in operating this equipment is safety. It is imperative to adhere strictly to the following instructions. Neglecting any of the listed guidelines may lead to risks such as electric shock, fire hazards, or severe personal injury.

This tool is specifically designed for certain applications. We emphasize the importance of refraining from modifying or repurposing the tool for any other use beyond its designated application. If you have inquiries regarding its appropriate application, refrain from using the tool until you have communicated with us and received our guidance. Please refer to the below safety symbols



Implies an imminently hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

Please Note that this manual has some instructions and processes to help you maintain and prolong the life of your machine please perform all the recommended cleaning and maintaining processes diligently.

# Introduction

It is with distinct honor and excitement that we present to you the BBPBS18 Busy Bee Tools Professional Band Saw, a premier addition to our esteemed line of precision woodworking equipment. At Busy Bee Tools, we are committed to engineering excellence, and this machine exemplifies our dedication to providing craftsmen with superior tools for their trade.

This manual has been meticulously crafted to guide you through the setup, safe operation, and maintenance of your new BBPBS18 Professional Band Saw. By following the detailed instructions and recommendations contained within these pages, you can anticipate many years of dependable and satisfying performance. This commitment to quality underscores Busy Bee Tools' promise of enhancing customer satisfaction through innovation and reliability.

Included within this manual are precise specifications, illustrations, and photographs that represent the BBPBS18 in its current configuration. Please note, in our pursuit of continual improvement and to exceed industry standards, Busy Bee Tools reserves the right to make enhancements to this model without prior notice.

For your convenience, we continuously update all our product manuals which are available on our website at www. busybeetools.com . We encourage you to visit this site regularly to download the latest updates and ensure that you are always informed about the best practices for operating and maintaining your machine. At Busy Bee Tools, your safety and satisfaction are our utmost priority, and we are dedicated to ensuring that your experience with the BBPBS14 is exceptional. Welcome to the Busy Bee Tools family, where craftsmanship meets innovation.

Welcome to the Busy Bee Tools family, where craftsmanship meets innovation.

# **Contact us**

In case you require additional assistance or have any further questions, please do not hesitate to reach out to our dedicated Customer Service and Technical Support Department at:

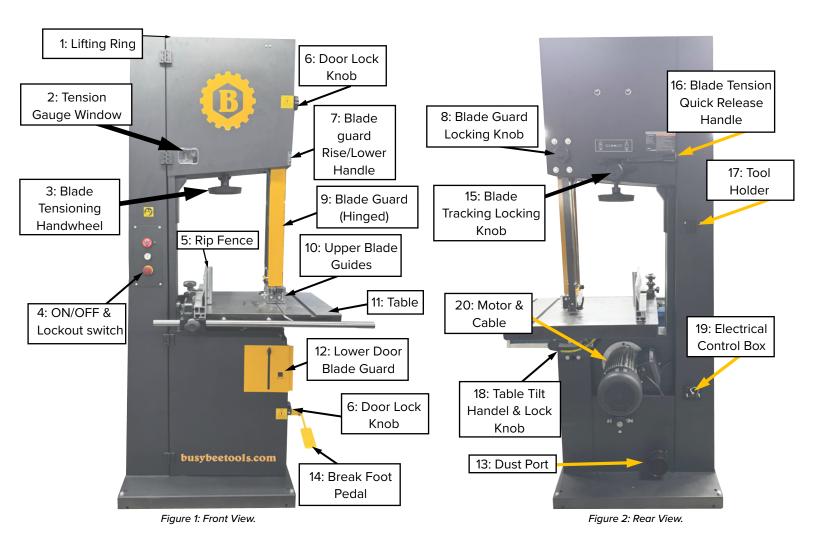
Busy Bee Tools Head Office 130 Great Gulf Drive Concord ON, L4K 5W1

Or at any of our stores across Canada. <u>Visit our website</u> for the latest deals and for more information.

Call us Toll Free: 1-800-461-2879.

Email us at: cs@busybeetools.com

Our team of experts is here to provide you with the guidance and support you need to ensure the safe and efficient operation of your machine. Your satisfaction and safety are our top priorities, and we are committed to assisting you in any way we can.



# **Controls and Components**

- 1 Lifting Ring
- 2 Tension Gauge Window
- 3 Blade Tensioning Handwheel
- 4 ON/OFF and Lockout Switch
- 5 Rip Fence
- 6 Door Lock Knob
- 7 Blade guard Rise/Lower Handle
- 8 Blade Guard Locking Knob
- 9 Blade Guard (Hinged)
- 10 Upper Blade Guides

- 11 Table
- 12 Lower Door Blade Guard
- 13 4" Dust ports (2)
- 14 Brake Foot Pedal
- 15 Blade Tracking Locking knob
- 16 Blade Tension Quick Release Handle
- 17 Tool Holder
- 18 Table Tilt handle and lock knob
- 19 Electrical Control Box
- 20 Motor and cable.

# **Machine Data Sheet**

Motor	4HP , TEFC
Motor Speed	2800 RPM
Volts	220-240 V
Amps, Hertz	18A, 50 Hz/16 A, 60 Hz
Blade Length	162" (4115 mm)
Blade Width	1/4" - 1-3/8" (6 - 35 mm)
Blade Speed	4100 ft/min(1250 m/min), 50 Hz 4920 ft/min(1500 m/min), 60 Hz
Table Size	25" x 19" (635 mm x 483 mm)
Table Tilt	Left -5° , Right 45°
	17-1/2" (444 mm)
Maximum Cutting Depth (height)	19" (483 mm)
Table Height	
	4" (100 mm)
	80" x 39" x 30" (2032 x 991 x 762 mm)
Base Size	30" x 18-1/8" (760 x 460 mm)
Net Weight	
Sound Pressure Level	≤80dB (no load) ≤ 90dB (load)
Sound Power Level	≤ 90dB (no load) ≤ 100dB (load)

The specifications, pictures, diagrams, and information in this manual represent the current model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Busy Bee Tools to modify previously delivered units. A lot of care has been taken to ensure that the information in this manual is correct, providing you with the guidelines for the proper safety, assembly, and operation of these machines. Manuals are periodically updated you can always download an updated version from our website: www.busybeetools.com.

# **Section 1: Safety**

#### **General Shop Safety instructions**

Your safety is of utmost importance. Prior to starting the assembly of this machine, it is imperative that you thoroughly read the instruction manual. Safety symbols and signal words have been incorporated into this manual to draw your attention to potentially hazardous conditions and to convey the significance of the safety messages. It is essential to remember that these safety messages alone cannot eliminate danger and should not replace the implementation of proper accident prevention measures.



Caution symbol (Minor or Moderate Injury): This symbol indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury. It may also serve as a warning against unsafe practices.



Warning symbol (Death or Serious Injury): The warning symbol signifies a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.



Danger symbool (Imminent Death or Serious Injury): The danger symbol is used to indicate an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.

In addition to these symbols, you will also come across a notice symbol, which is employed to alert the user to valuable information regarding the proper operation of the machine. By diligently adhering to these safety symbols and heeding the information in this manual, you can significantly enhance your safety while operating the equipment.

# Self protection and personal Safety GENERAL SAFETY

Familiarize Yourself with Your Power Tool: Carefully study the owner's manual to understand the tool's intended applications, capabilities, and potential hazards.

Pre-Use Checks: Before operating the machine, thoroughly read and adhere to all Safety and Operating Instructions to prevent serious injury and equipment damage.





- Hazardous Dust Awareness: Acknowledge that certain dust produced by power tools contains chemicals recognized by the State of California as potential causes of cancer, birth defects, or reproductive harm. Examples include lead, crystalline silica, arsenic, and chromium. Minimize exposure by working in well-ventilated areas and utilizing approved safety equipment such as dust masks designed to filter microscopic particles.
- Comprehensive Manual Reading: Fully acquaint yourself with the Owner's Manual to understand proper tool usage for its designated applications.
- Grounding Protocol: Ensure all tools are properly grounded by connecting to a 3-contact electrical receptacle as specified. Never remove the grounding prong to prevent accidental electric shock.
- 4. Environmental Considerations: Avoid using electrical tools in damp or rainy conditions, as well as in the presence of flammable substances.
- Workspace Organization: Maintain a clean, well-lit, and orderly work area, free from slippery surfaces or hazardous debris.
- 6. Restricted Access: Prohibit access to the immediate work area, especially during tool operation, to prevent accidents involving visitors or children.
- 7. Proper Tool Usage: Refrain from forcing tools to perform tasks beyond their designed capacity to ensure safety and optimal performance.
- 8. Personal Protective Equipment: Wear suitable attire, avoiding loose clothing or accessories that may become

- entangled in moving parts. Long hair should be covered to prevent contact with machinery.
- 9. Workshop Safety Measures: Implement childproofing measures such as removing switch keys and padlocking tools when not in use.
- 10. Electrical Safety: Always disconnect tools from power sources before adjusting, replacing parts, or performing maintenance.
- 11. Guard Maintenance: Ensure protective guards are in place and functioning correctly to prevent accidents.
- 12. Startup Precautions: Verify that power switches are in the "OFF" position before connecting to power sources to prevent accidental activation.
- 13. Clear Workspace: Remove all maintenance tools from the vicinity before initiating machine operation.
- 14. Correct Accessory Usage: Utilize only recommended accessories to prevent operator injury and tool damage.
- 15. Respiratory Protection: Wear appropriate dust masks in well-ventilated areas to avoid inhaling harmful particles, following the Canadian Center for Occupational Health and Safety CCOHS/OSHA guidelines for respiratory protection.
- 16. Supervision During Operation: Never leave tools running unattended; ensure they come to a complete stop before leaving them.
- 17. Tool Usage Caution: Avoid standing on tools to prevent tipping or accidental contact.
- 18. Safe Storage Practices: Do not store items above or near tools where they may tempt someone to stand on them to reach.
- 19. Balance Maintenance: Maintain balance and wear appropriate footwear to prevent slips or falls.
- Tool Maintenance: Keep tools clean and wellmaintained, sharpen blades regularly, and replace worn abrasive accessories promptly.
- 21. Inspection Protocol: Prior to use, thoroughly inspect tools for damaged parts, ensuring all guards are operational and aligned correctly.
- 22. Operating Conditions: Refrain from operating tools while fatigued or under the influence of drugs, medication, or alcohol.
- 23. Workpiece Securing: Always secure workpieces with clamps or jigs instead of relying on manual holding.
- 24. Vigilance During Operation: Stay alert, exercise caution, and use common sense when operating power tools to avoid accidents.
- 25. Correct Extension Cord Usage: Utilize appropriate extension cords in good condition, ensuring they can carry the necessary current without voltage drops or overheating. Only use 3-wire extension cords with proper grounding.
- 26. Additional Resources: Access further information regarding safe tool operation from authorized sources.

# **Machine Specific Safety Instructions**

- Thoroughly Review the Entire Manual Before Operating Machinery: It is crucial to read and understand the complete manual before commencing any machinery operations. Machinery can pose serious injury hazards to individuals who lack proper training and familiarity with its operation.
- Always utilize CSA Approved Safety Glasses During Machinery Operation: For your safety, it is imperative to wear safety glasses that meet ANSI (American National Standards Institute) standards when using machinery. Conventional eyeglasses are not equipped with impact-resistant lenses and should not be considered a substitute for proper safety glasses.
- 3. Always Wear a CSA Approved Respirator When Operating Dust-Producing Machinery: When operating machinery that generates dust, it is essential to wear a respirator that has been approved by NIOSH (National Institute for Occupational Safety and Health). Wood dust is classified as a carcinogen and can lead to cancer and severe respiratory illnesses. Your respiratory protection is paramount to your health and safety.
- 4. Utilize Hearing Protection When Operating Machinery: Always wear hearing protection when operating machinery. Prolonged exposure to machinery noise can result in permanent hearing damage, and protecting your hearing is vital for your long-term well-being.
- 5. Adhere to Proper Apparel Guidelines: Avoid wearing loose clothing, gloves, neckties, rings, or jewelry that could potentially become entangled in moving parts of the machinery. Additionally, wear a protective hair covering to confine long hair and ensure you have nonslip footwear to prevent accidents.
- 6. Do Not Operate Machinery When Fatigued, or Under the Influence of Substances: Never operate machinery when you are tired, or if you are under the influence of drugs or alcohol. It is crucial to be always mentally alert when running machinery to maintain your safety and the safety of those around you.
- 7. Authorize Trained and Supervised Personnel Only: Permit only individuals who have received proper training and supervision to operate machinery. Ensure that operational instructions are not only safe but also clearly understood by those using the equipment.
- 8. Keep Children and Visitors at a Safe Distance: Maintain a safe distance between all children and visitors and the work area where machinery is in use.
- Secure Your Workshop for Child Safety: Take measures to childproof your workshop, including the use of padlocks, master switches, and the removal of start switch keys to prevent unauthorized use by children.
- Never Leave Machinery Running Unattended: It is essential never to leave machinery unattended while it is still running. Turn off the power and allow all moving



- parts to come to a complete stop before leaving the machine unattended.
- Avoid Dangerous Environments: Refrain from using machinery in locations that are damp, wet, or where flammable or noxious fumes may be present. Always ensure a safe operating environment.
- Maintain a Clean and Well-Lit Work Area: Keep your work area clean and well-lit to prevent accidents. Clutter and dark shadows can pose significant safety risks.
- 13. Use Properly Rated Extension Cords: When necessary, use a grounded extension cord rated for the amperage of the machine. Undersized cords can overheat and lose power. Replace damaged extension cords promptly. Do not use extension cords with 220V machinery.
- 14. Disconnect from Power Source Before Servicing: Always disconnect the machinery from the power source before servicing it. Ensure the switch is in the OFF position before reconnecting.
- 15. Maintain Machinery with Care: To ensure the best and safest performance, maintain your machinery with care. Keep blades sharp and clean and follow the manufacturer's instructions for lubrication and changing accessories.
- 16. Verify Guards Are in Place and Functional: Before using machinery, confirm that all safety guards are in place and functioning correctly. Never operate machinery if guards are missing or not working as intended. Your safety relies on the proper functioning of these guards.
- 17. Remove Adjusting Keys and Wrenches: Prior to turning on the machinery, it's essential to cultivate the habit of checking for adjusting keys and wrenches and ensuring they are removed. Leaving such tools in place can result in accidents.
- 18. Inspect for Damaged Parts Before Use: Before using the machinery, conduct a thorough inspection for damaged parts. Check for any issues such as binding or misalignment of parts, broken components, improperly mounted parts, loose bolts, or any other conditions that might impact the safe operation of the machine. Any damaged parts should be promptly repaired or replaced.
- 19. Utilize Recommended Accessories: Consult the instruction manual to identify the recommended accessories for your machinery. Using improper accessories can pose a risk of injury, so it's essential to adhere to the manufacturer's recommendations.
- 20. Avoid Forcing Machinery: Operate the machinery at the speed for which it was designed and avoid forcing it beyond its intended capabilities.
- Secure the Workpiece: Whenever possible, use clamps or a vise to secure the workpiece. A properly secured workpiece not only protects your hands but also allows

- you to use both hands to operate the machine safely.
- 22. Avoid Overreaching: always Maintain proper footing and balance. Overreaching can compromise your stability and pose a risk of accidents.
- 23. Beware of Workpiece Ejection: Be aware that certain machines may eject the workpiece toward the operator. Take precautions and avoid conditions that could lead to workpiece "kickback."
- 24. Lock Mobile Bases (If Used) Before Operation: If your machinery is equipped with mobile bases, ensure they are locked securely before operating the equipment. This prevents unintended movement during use.
- 25. Understand Dust Hazards: Recognize that some dust types can be hazardous to respiratory systems, both for people and animals, particularly fine dust particles. Familiarize yourself with the hazards associated with the specific type of dust you will be exposed to and always wear a respirator approved for that specific type of dust to protect your respiratory health.

# **Bandsaw Specific Safety instructions:**

Operating a bandsaw carries inherent risks, including serious cuts, amputation, or even fatal injuries if proper precautions are not taken. To reduce these risks, anyone using this machine must diligently adhere to the following safety guidelines and warnings:

- Blade Control: To prevent injury from blade contact, always allow the blade to come to a complete stop on its own. Never attempt to stop or slow down the blade with your hand or the workpiece, use the foot brake pedal.
- Guards/Covers: Blade guards and covers serve as crucial protective barriers against the moving bandsaw blade. Wheel covers also shield operators from getting entangled with rotating wheels or other moving components. Operate the bandsaw only with the blade guard in the correct position and wheel covers fully
- 3. Blade Speed: Starting a cut before the blade has reached full speed can cause the blade to grab the workpiece and potentially pull your hands into the blade. Always allow the blade to reach full speed before commencing a cut. Never start the machine with the workpiece in contact with the blade.
- 4. Cutting Techniques: To prevent the blade from coming off the wheels or breaking and striking you, always turn off the bandsaw and wait for the blade to stop completely before retracting the workpiece from the blade. Do not attempt to withdraw the workpiece while the bandsaw is in operation, and avoid forcing or twisting the blade during cuts, especially when making small curves, as this can lead to blade damage or breakage.

- 5. Workpiece Support: Ensure proper support for long or large workpieces to maintain control and minimize the risk of blade contact or breakage. Always keep the workpiece flat and securely against the table or fence during cutting. If necessary, use a jig or other workholding device for added stability.
- 6. Hand Placement: Never position your hands or fingers in line with the blade during operation, as this could result in serious injury if your hands slip, or the workpiece unexpectedly moves. Avoid placing fingers or hands in the blade's path, and never reach under the table while the blade is in motion.
- 7. Small/Narrow Workpieces: When working with small or narrow workpieces, using your fingers to hold them during a cut poses a significant risk of personal injury if your grip slips. Always use push sticks, push blocks, jigs, vises, or clamping fixtures to support and feed small or narrow workpieces safely.
- 8. Upper Blade Guide Support: Keep the upper blade guides adjusted to provide maximum blade support while cutting. This helps reduce operator exposure to the blade.
- Feed Rate: To avoid the risk of workpiece slippage leading to operator injury, feed the stock evenly and smoothly into the blade.
- 10. Blade Condition: Dull or damaged blades require more effort to make cuts, increasing the risk of accidents. Never operate with dirty, dull, cracked, or severely worn blades. Inspect blades for cracks and missing teeth before each use and ensure proper blade tension and tracking during operation.
- 11. Clearing Jams and Cutoffs: Always stop the bandsaw and disconnect the power before clearing scrap pieces that become stuck between the blade and the table insert. Use a brush or a push stick, not your hands, to clean away chips or cutoff scraps from the table.
- 12. Pre-Operational Protocol: Prior to commencing operations, ensure thorough familiarity with all operational guidelines outlined herein.
- Personal Protective Equipment (PPE): It is imperative to consistently utilize approved safety equipment, including protective eyewear and hearing protection, during machine operation.
- 14. Dust Management and Ventilation: Always don a dust mask and implement effective dust collection mechanisms alongside appropriate ventilation to uphold occupational health standards.
- 15. Guideline Adjustment: Set the upper guides approximately 1/8" to 1/4" above the material to be cut, ensuring precise operational parameters.
- 16. Blade Specification Verification: Prior to operation, verify the suitability of the blade in terms of size and type relative to the material's thickness and composition to optimize cutting efficacy.

- 17. Blade Configuration Optimization: Ensure meticulous calibration of both blade tension and tracking mechanisms to align with operational requirements.
- 18. Pre-emptive Cutting Methodology: Execute "relief" cuts preceding curved cutting tasks to mitigate blade binding occurrences and enhance operational fluidity.
- Post-Operational Safety Protocol: Always await complete cessation of the bandsaw blade's motion prior to removing residual workpieces from the operational surface.
- 20. Jam Resolution Protocol: Refrain from dislodging jammed workpieces until both the machine and blade have ceased operation. Subsequently, disconnect the bandsaw from its power source before undertaking any jam-clearing procedures.
- Stability Augmentation Measures: Employ supplementary supports such as roller stands, sawhorses, or tables for sufficiently large workpieces to prevent accidental tipping during operational processes.
- 22. Tension Release Procedure: Decompress blade tension when the bandsaw is not operational for prolonged periods of inactivity to maintain equipment integrity and longevity.
- 23. Work Area Maintenance: Routinely eliminate material remnants and debris from the operational environment to uphold cleanliness standards and optimize workspace efficiency.

Self protection and safety instructions

# **Section 2: Power Supply**

# Availability and Installation of Power Supply

Before proceeding with the installation of this machine, it is crucial to assess the availability and proximity of the required power supply circuit. If an existing electrical circuit does not meet the specifications and requirements for this machine, the installation of a new circuit becomes necessary.

To minimize the potential risks of electrocution, fire, or equipment damage, it is imperative that all installation work and electrical wiring be carried out by a certified electrician or a qualified service personnel. The installation must fully comply with all applicable electrical codes and standards in your area.

This proactive approach ensures the safety, reliability, and proper functioning of the machine while also mitigating the risks associated with improper electrical work.

# **Full-Load Current Rating**

The full-load current rating is the amperage that a machine draws when it operates at 100% of its rated output power.



In machines equipped with multiple motors, this rating represents the amperage drawn by the largest motor or the cumulative amperage of all motors and electrical devices that may operate simultaneously during regular operations.

Full-Load Current Rating at 220V: 16 Amps

It is important to note that the full-load current rating does not represent the maximum amperage that the machine can draw. If the machine is subjected to an overload, it may draw additional amperage beyond its full-load rating.

Continued operation under overloaded conditions can lead to damage, overheating, or even fire, especially if the machine is connected to an undersized electrical circuit. To mitigate these potential hazards, it is imperative to avoid overloading the machine during operation and ensure that it is connected to a power supply circuit that meets the specified circuit requirements outlined in the machine's documentation.

# **Power Supply Circuit Rating**

The power supply circuit encompasses all electrical components between the building's breaker box or fuse panel and the machine itself. It is crucial that the power supply circuit employed for this machine is appropriately sized to safely accommodate the full-load current drawn from the machine over an extended duration.

If your machine is connected to a circuit protected by fuses, it is recommended to use a time delay fuse specifically marked with the letter "D." This type of fuse provides additional time delay before tripping, which can be beneficial when dealing with equipment that may experience momentary current spikes during startup.

Ensuring that the power supply circuit is properly sized and protected is vital for the safe and efficient operation of the machine while minimizing the risk of electrical issues or circuit overload.

Important Note: Dedicated Circuit vs. Shared Circuit The circuit requirements specified in this manual pertain to a dedicated circuit, which is designed for the exclusive use of a single machine at any given time. In this scenario, only one machine is intended to operate on the circuit.

However, if your machine is to be connected to a shared circuit where multiple machines may run simultaneously, it is imperative to seek the expertise of an electrician or a qualified service personnel. Their guidance is essential to ensure that the circuit is properly sized and configured to facilitate the safe operation of all machines concurrently.

The input and advice of professionals in such cases are crucial for preventing electrical overloads, ensuring safety, and promoting the efficient functioning of the machinery within a shared electrical system.

#### **Machine Pre-Wiring and Circuit Requirements**

This machine comes prewired for operation on a power supply circuit that meets the following specified requirements:

#### **Circuit Requirements for 220V:**

- Nominal Voltage: 208V to 240V

- Cycle: 60 Hz

- Phase: Single-Phase

- Power Supply Circuit: 30 Amps- Plug/Receptacle: NEMA 6-20P

This machine has the capability to be converted to operate on a power supply circuit that meets these requirements. Detailed instructions for voltage conversion can be found in the provided Voltage Conversion instructions. Ensuring that the power supply circuit aligns with these specifications is essential for safe and effective operation when operating at 220V.

These requirements are essential for the safe and optimal operation of the machine. It is crucial to ensure that the power supply circuit adheres to these specifications to prevent electrical issues and promote the efficient functioning of the equipment.

# For 220V Operation and Grounding

When operating this machine at 220V, it is crucial to ensure proper grounding and electrical connections. Here are the steps to follow:

- The plug specified in the "Circuit Requirements for 220V" section, which includes a grounding prong, must be attached to the equipment-grounding wire on the provided power cord.
- The plug should only be inserted into a matching receptacle, as described in the following figure. This receptacle must be correctly installed and grounded in strict accordance with all local electrical codes and ordinances.

By adhering to these grounding and electrical connection instructions, you can ensure the safe and reliable operation of the machine at 220V while complying with local regulations and safety standards.

#### **Safety Precautions**

It is of utmost importance to ensure the correct and safe connection of the equipment-grounding wire to prevent the risk of electric shock. Here are some crucial guidelines:

- Identify the Equipment-Grounding Wire: The wire with green insulation (with or without yellow stripes) is designated as the equipment-grounding wire.
- Power Cord or Plug Repair/Replacement: If repair, or replacement of the power cord or plug is necessary, it is essential not to connect the equipment-grounding wire to a live (current-carrying) terminal. Doing so could pose a severe electric shock hazard.
- 3. Seek Professional Assistance: If you have any doubts or uncertainties regarding these grounding requirements, or if you are unsure whether the tool is properly grounded, it is strongly recommended to consult with a qualified electrician or a service personnel for guidance and assistance.
- Monitor Cord and Plug Condition: Regularly inspect the power cord and plug for any signs of damage or wear. If you notice any issues, immediately disconnect the cord from power and replace it with a new one to maintain safety.

By following these safety precautions and ensuring the correct grounding of the equipment, you can significantly reduce the risk of electric shock and maintain the safe operation of the machine.

# **Use of Extension Cords**

While we strongly discourage the use of an extension cord with this machine, we understand that there may be situations where it is necessary and can only be used on a temporary basis.

It's important to note that extension cords can lead to voltage drop, which, in turn, can damage electrical components and reduce the motor's lifespan. The extent of voltage-drop increases with the length of the extension cord and decreases as the gauge size of the cord gets smaller (higher gauge numbers indicate smaller sizes). If you find it necessary to use an extension cord with this machine, please adhere to the following guidelines:

- Ensure the extension cord is in good condition and contains a ground wire, as well as a matching plug and receptacle.
- 2. Select an extension cord with a minimum gauge size of 12 AWG.
- Keep the length of the extension cord as short as possible. A shorter cord is preferable to minimize voltage drop.

By following these guidelines, you can help mitigate the potential negative effects of using an extension cord and maintain the safety and performance of the machine when it becomes necessary to use one.

#### **Electric Motor Information**

•	HP	4
•	RPM	2800
•	Amp	16
•	Phase	1
•	Class	B
•	Frequency	60HZ
•	Start Cap	300μF- 300VAC (Dim. 2"X4")
•	Run Cap	40µF- 450VAC (Dim. 1-3/4"X3-11/16")

# Section 3: Set-up and Assembly instructions

#### **Unboxing the Band Saw**

**Unpack and Inventory:** Carefully remove all contents from the shipping carton. Compare the contents with the provided list to ensure all items are accounted for before discarding any packing material. DO NOT turn on your machine if any items are missing, as this may cause injury or damage to the machine.

Report Damage: Report any shipping damage to your local distributor immediately. Take photographs for any potential insurance claims.

Set Aside Packing Material: Set the packing material and shipping carton aside. Do not discard them until the machine has been fully set up and is running properly.



Figure 3: Unboxing the bandsaw

### **Hardware Packing List:**

# Table and Rip Fence:

- Table
- Rip Fence Rail Hardware: M10 Hex nut (X4), M10 flat Washer (X4).
- Rip Fence
- Rip Fence Carrier
- Resaw Bar

#### **Bandsaw Accessories:**

- · Lifting Ring
- Cap Head Screw and Nut for push stick storage
- ON/OFF Lock out Keys
- Lower Door Blade Guard
- Hardware for Lower Blade Guard
- Push Stick
- 4" Dust Port and hardware (Hardware preinstalled on lower part of the machine)

#### **Tools for Assembly and Adjustments:**

- Allen keys 3mm, 4mm, 5mm, 6mm
- Wrench 10mm, 13mm
- Offset wrench for Table assembly
- Table Tilting Wrench
- #2 Philips Screwdriver (not included)



Figure 4: Accessories and Hardware

# **Unboxing the Machine and Location Choice Initial Cleanup**

**Clean Rust-Protected Surfaces:** Clean all rust-protected surfaces using ordinary household grease or spot remover. Avoid using gasoline, paint thinner, mineral spirits, or similar substances as they may damage painted surfaces.

**Apply Paste Wax:** Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean, dry cloth. Be cautious of the pre-installed bandsaw blade, as its sharp teeth may cause injury if touched.

# Location Consideration, Lifting and Placing the Band Saw

The bandsaw is heavy, nearly 500 lbs, so it is best to assemble the machine near its final location. When moving or positioning an assembled bandsaw, DO NOT use the table or upper blade guard assemblies, as this may damage the machine. Move the bandsaw by grasping the support column and lower frame, which are welded together for rigidity. Alternatively, the bandsaw can be moved by laying it down on the back/left side of the column to avoid compromising the table assembly.

**Remove from Carton:** Carefully remove the machine from the shipping carton. Refer to the instructions above for handling the saw.

**Position the Machine:** Place the machine on a solid, level foundation with ample space in front, to the right side, and behind the bandsaw for cutting large or long materials. For best power and safety, plug the bandsaw directly into a dedicated grounded electrical outlet within the supplied cord length of the machine. The use of an extension cord is not recommended.

**Align for Safety:** Align the machine so that during use, the material being cut will not face aisles, doorways, or other work areas where bystanders may be present. Do not locate or use the machine in damp or wet conditions.

**Level and Secure:** Once positioned in your shop, level the machine using spacers, and secure it to the floor with lag screws (not supplied) through the four holes in the saw's base.

#### **Assembly and Adjustment Instructions**

Please not that all part numbers mentioned below are from the diagrams of this machine. When you have any doubt please refer to the diagram section at the end of this manual.

#### Installing the worktable:

The worktable is extremely heavy and may require the assistance of two additional individuals for installation. Ensure safety by following these steps:

#### 1. Preparation:

- Keep the upper and lower band wheel doors closed during table installation.
- The bandsaw blade is installed at the factory. It is recommended to remove the blade prior to installing the table. Refer to "CHANGING THE SAW BLADE" on page (17).

#### 2. Table Installation:

- With assistance, carefully lift and position the worktable onto the bandsaw. Use the four bolts, lock washers and flat washers provided in the hardware package see figure 4.
- Ensure that the table's miter gauge slot is parallel to the side of the saw blade. This alignment is crucial for achieving accurate cuts see figure 5.

#### 3. Alignment Procedure:

 Set a thin metal ruler against the side of the saw blade, ensuring it does not touch the saw's teeth, as this can angle the ruler incorrectly.





Figure 5: Installing and aligning the worktable.

- Measure the distance from one end of the ruler to the miter gauge slot figure 5.
- Repeat the measurement at the other end of the ruler to the miter gauge slot.
- Compare these two measurements. Adjust the table's angle until both distances are equal, ensuring the table is parallel to the blade.

#### 4. Secure the Table:

 Once the table is aligned parallel to the blade, tighten all four bolts to secure the table in place.

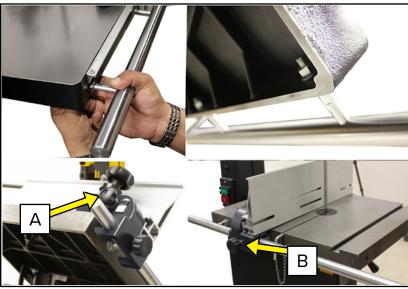


Figure 6: Installing the Rip Fence.

### Installing the Fence Guide Rail and Rip Fence:

#### 1. Mount the Fence Guide Rail:

- Locate the fence guide rail (#12F) and mount it onto the front table edge using two fence bar nuts and washers (#14F, #5F). Refer to Figure.
- Ensure the guide rail is parallel to the table surface and equidistant from the front edge at both the left and right sides of the table.

# 2. Install the Fence Carrier Assembly:

• Slide the fence carrier assembly (#9F) onto the fence's guide rail as shown in Figure 6.

#### 3. Attach the Rip Fence:

 Slide the rip fence (#18F) onto the fence carrier and secure it by tightening the fence lock knob (#7F), located on the carrier's side opposite the fence Figure 6 (A).

#### 4. Secure the Fence:

 Use the front locking handle (#10F) to lock the fence on the rail to prevent movement during assembly Figure 6 (B).



#### Installing the 4" Dust Port:

- 1. Find the Dust Port:
- The 4" dust port is installed under the table on the frame above the lower doorknob. Refer to page () for part numbers.
- 2. Install the Dust Port:
- Using a Phillips-head screwdriver, install the dust port with four 4mm pan head screws into the pre-drilled holes in the frame. See Figure 7.

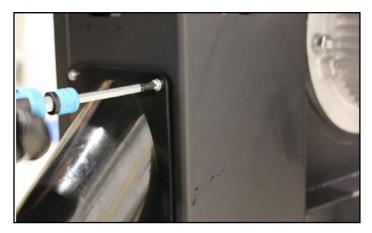


Figure 7: Installing the Dust Port.

#### Installing the Lower Door Blade Guard:

#### 1. Pre-Installation:

 Hardware for the lower door blade guard has been preinstalled at the factory. Locate the plastic wing nut (#16) and washer on the lower door and remove them.

### 2. Install the Blade Guard:

- Place the lower door blade guard (#18) over the threaded hole in the door, aligning it with the long adjustment slot.
- Insert the plastic wing nut and washer through the long adjustment slot and thread them into the door. See Figure 8.
- Adjust the guard as needed to cover the blade under the table.



#### Setting the Table Square to the Saw Blade

#### 1. Adjusting the Table Stop Screw:

- The table can be set at 90° to the saw blade sides by adjusting the table stop screw Fig.9 located under the table. This screw rests on the top of the quick-release adjustment stop Fig.9.
- Loosen the locking nut Fig.9.
- Place a square between the blade and the worktable.
- Adjust the table stop screw Fig.9 until the table and blade are set at 90°.
- Retighten the locking nut Fig.9, ensuring the setting is maintained.

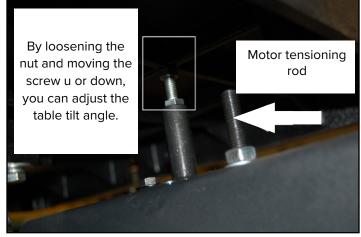


Figure 9: Adjusting the table Stop Screw.

#### **Tilting the Table**

### 1. Loosen the Table Trunnion:

Loosen the table trunnion to allow for tilting.

# 2. Adjusting the Table Angle:

- Install the Table Tilting Wrench Fig.10 onto the Gear Shaft Fig. 10.
- Turn the Table Tilting Wrench to adjust the table to the desired angle.
- Once the desired angle is achieved, retighten the lock handle to secure the table.

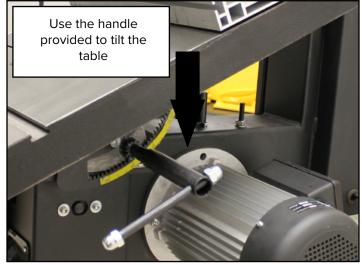


Figure 10: Table Tilt Stop Adjustment.



Figure 8: Installing the lower Blade Guard.

#### **Tracking the Bandsaw Blade**

#### 1. Initial Setup:

- A blade is provided and installed at the factory. It is recommended to check the blade tracking before use.
- Unplug the bandsaw.
- Ensure the upper and lower blade guides are adjusted away from the blade, and the tension scale corresponds to the blade width being used.

#### 2. Blade Tracking:

- Open both doors (lower and upper doors must be opened simultaneously all the time).
- Loosen the lock lever Fig.11 (A) by turning it counterclockwise.
- Turn the blade tracking knob Fig. 11 (B) clockwise or counterclockwise while manually rotating the upper wheel at least three rotations, or until the blade tracks centered on the wheel.
- Tighten the lock lever and close the doors

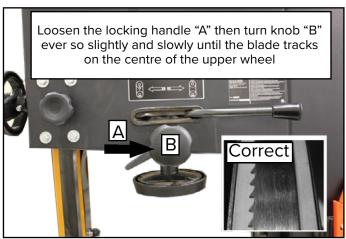


Figure 11: Blade Tracking.

### **Adjusting the Blade Tension**

#### 1. Quick Release Function:

 The bandsaw is equipped with a Quick Release blade function for fast blade changing and tensioning see to Figure 12.



Figure 12: Quick Release.

# 2. Blade Tension Adjustment:

- To loosen the blade tension, turn the blade tension hand wheel or lever Fig. 13 (A) counterclockwise.
- To tighten the blade tension, turn the blade tension hand wheel clockwise.
- Adjust the blade tension until the tension readings match the blade width, as indicated through the tension indicator window Fig. 13 (B).



Figure 13: Adjusting the Blade Tension.

#### 3. Final Tension Check:

- Ensure the blade is tensioned with the quick release lever in the "On" position. Failure to do so could result in insufficient blade tension or tension failure.
- If necessary, increase or decrease the tension by one size on the blade tension scale to achieve proper blade tension.



#### **Blade Tension Indicator Adjustment**

The Blade Tension Indicator should be checked whenever a new blade is installed and can be adjusted for blades from different manufacturers.

1. Adjust the Indicator:

- With moderate tension on the blade, loosen the two adjusting screws Fig.14 (A) using a Phillips-head screwdriver.
- Re-tighten the two adjusting screws.

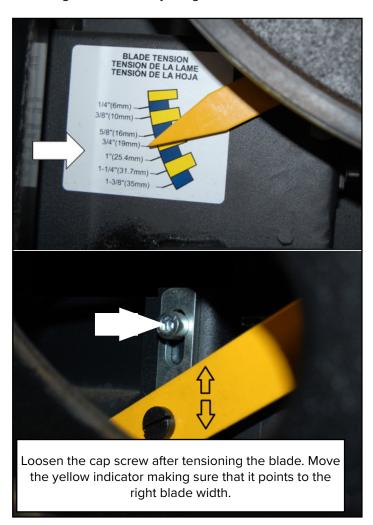


Figure 14: Adjusting the Indicator.

# Replacing the Bandsaw Blade

#### 1. Safety First:

- Unplug the machine from the electrical supply to prevent accidental start-up.
- Wear gloves for protection.

#### 2. Remove the Blade:

- Open the top and bottom wheel doors (in tandem) by turning the door locking knobs Fig. 15 (A &B).
- Release the blade tension by moving the quick release lever from right to left Fig. 12.
- Carefully remove the saw blade by feeding it through

the slot in the table, upper and lower blade guides, and the slot in the spine of the machine.



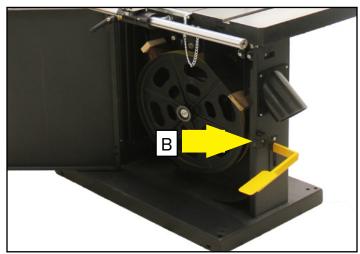


Figure 15: Opening the doors.

# 3. Install the New Blade:

- Ensure the blade teeth are pointing downwards and towards you at the position where the blade passes through the table.
- · Center the blade on both wheels.
- Re-tension the new blade by moving the quick release lever from left to right Fig.12.
- Check the blade tracking by manually spinning the upper wheel clockwise three times. The blade should run in the center of both wheels. Refer to "Tracking the Saw Blade" on pages (17) for more details.
- Set the blade guides as described in "Adjusting the Blade Guides" on page (19) close and lock both wheel doors before reconnecting the power supply.

### Adjusting the Spring-Loaded Blade Guides

# 1. Safety First:

• Unplug the machine from the electrical supply.

#### 2. Adjust the Blade Guides:

- Loosen the lock handle Fig.16 (A) and move the guide support assembly so that the side roller guides are approximately 1/16" behind the gullets of the blade. Retighten the lock handle.
- Set the roller guides to within 1/32" of the blade by releasing the lock handles Fig. 17 (A) and pushing the ends of the guide shafts Fig. 17 (B) towards the blade.

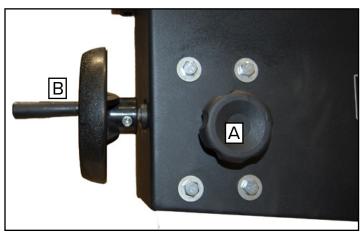


Figure 16: Upper Blade Guide Lock Lever.

#### 3. Final Check:

 Ensure the doors are closed, turn the bandsaw on, and inspect that the upper, lower, and thrust guides are not turning. The guides should only turn when pressure is applied to the blade by a workpiece. If guides are turning without pressure, repeat the steps above to correctly adjust the blade guides.

By carefully following these steps, you will ensure proper adjustment and maintenance of the bandsaw blade and guides, promoting safe and efficient operation.

#### **Adjusting the Cutting Height**

# 1. Adjust the Guidepost:

- Loosen the guidepost lock knob Fig. 18 (A).
- Turn the guidepost handwheel Fig. 18 (B) to raise or lower the guidepost/upper blade guide assembly to the desired height.
- Tighten the guidepost lock knob.
- Note: The bottom edge of the guides should be approximately 1/4" above the top surface of the workpiece Fig. 19.

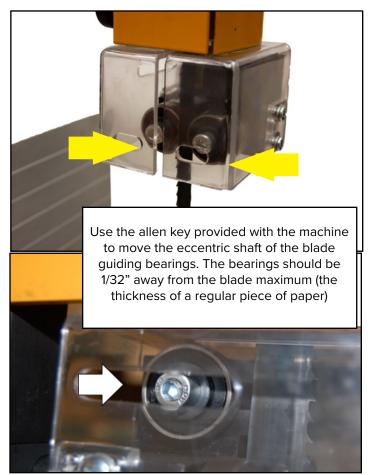


Figure 17: Adjusting upper Blade Guide.

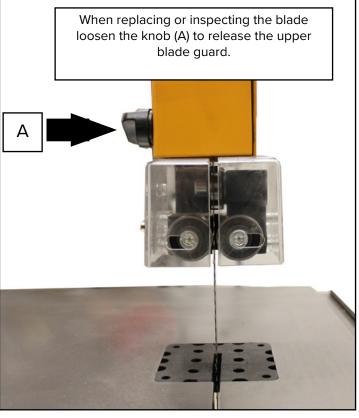


Figure 18: Blade Guard lock knob.

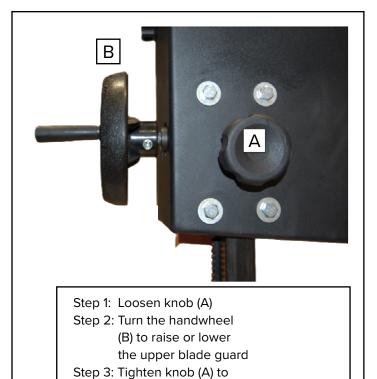


Figure 19: Blade Guard Height Control

secure the guard

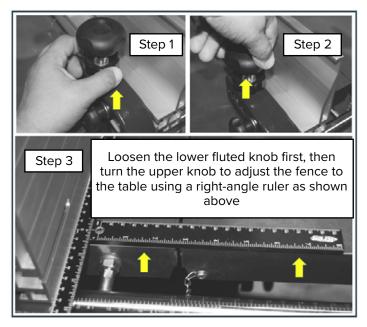


Figure 20: Rip Fence Adjustments.

# Adjusting the Rip Fence for Drift

The bandsaw features an innovative fence system that can adjust to eliminate drift, allowing the fence to be parallel to the blade and quickly change its position.

### 1. Loosen the Components:

- Loosen the side handle (#7F) Fig. 20, that holds the rip fence against the Fence Carrier (#9F).
- Loosen the locking knob (#2F) Fig. 20.

#### 2. Adjust the Fence:

 Turn the top adjusting handle (#1F) to position the fence left or right as needed to align it parallel to the blade and miter saw slots in the table. The handle turns a cam (#4F) that pivots the fence.

#### 3. Secure the Fence:

• Tighten the handle and knob that were loosened in steps 1 and 2.

#### Adjusting the Fence 90° to the Table

#### 1. Check and Adjust:

- Check that the fence is 90 degrees to the table using a suitable square.
- Raise or lower either side of the fence's guide rail until the fence body is 90 degrees to the table.
- Fully tighten the fence bar nuts once the fence is set at 90 degrees Fig.21.

#### Adjusting the Fence to the Table

### 1. Check the Gap:

- Ensure the gap between the table and the bottom of the fence is equal along the entire length of the fence.
- The rear, bottom of the fence includes a nylon plate (#25F) that aids in sliding the fence over the table. A small gap will result from this plate Fig. 22.

#### 2. Adjust if Needed:

 For adjusting mounting and re-positioning the front fence rail if there is a sizable gap refer to fence rail mounting section.

#### Adjusting the Fence on the Carrier

#### 1. Change the Position:

- Loosen the side handle (#7F) Fig.23 that holds the rip fence against the Fence Carrier (#9F).
- Slide the fence forward to remove it from the carrier's sliding block (#11F) Fig. 23.

#### 2. Switch to Horizontal:

 Turn the fence down to its horizontal position and slide it back onto the carrier. The bottom of the fence is slotted to mount on the sliding block, positioning itself on the small, raised key (Fig. 22)

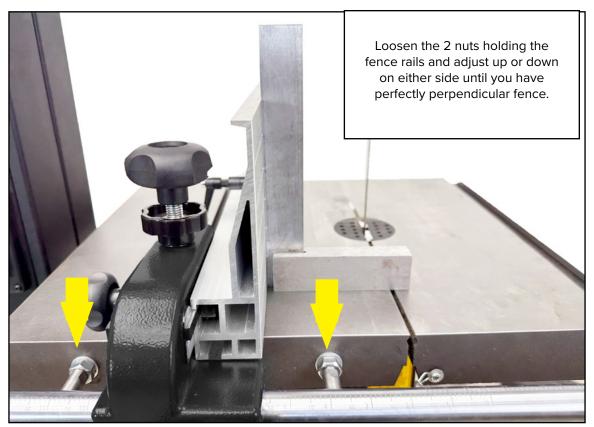


Figure 21: Adjusting the Fence to the Table.

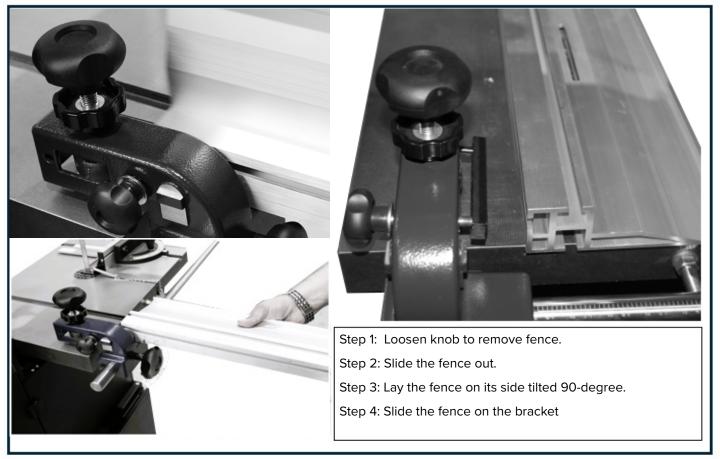


Figure 22: Switching to Horizontal.

#### 3. Secure the Fence:

- Retighten the side handle to secure the fence in position on the carrier.
- Check the fence for drift and make corrections as needed per instructions on page ().

#### 4. Switch Sides:

- To change the fence from the left side of the carrier to the right:
- Loosen the side handle (#7F) Fig. 23 (A) and slide the fence forward to remove it from the carrier's sliding block (#11F, C).
- Move the carrier on the front rail to the right side of the table and blade.

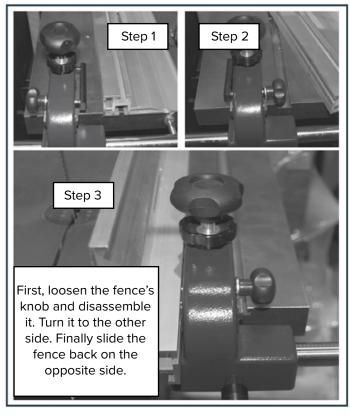


Figure 23: Switching Sides.

- Fully unscrew the side handle from the sliding block and reassemble the parts on the opposite, left side of the carrier.
- Rotate the fence 180° end-to-end and slide it back onto the carrier Fig. 23. Retighten the side handle to secure the fence in position on the carrier Fig. 23.
- Check the fence for drift and make corrections as needed per instructions on page ().

Note: The machine must not be plugged in, and the power switch must be in the off position until all adjustments are complete.

#### **Adjusting the Drive Belt Tension**

- 1. Check the Belt Tension:
- The drive belt (#87A) FIG 24 (A) should give no more than 3/8" in the center when pressed with finger pressure Fig. 27.

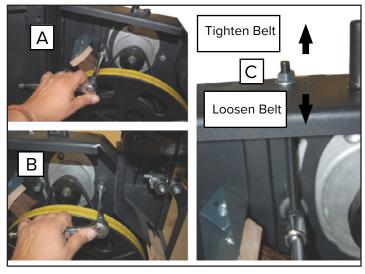


Figure 24: Belt Tensioning Mechanism.

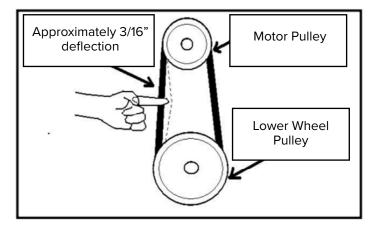


Figure 25: Proper Belt Tension.

#### 2. Adjust the Tension:

- Loosen the two hex bolts Fig. 24 (B) securing the motor to the frame.
- Loosen the hex nut on the top of the motor pulling rod Fig. 24 (C).
- Adjust the motor position:
- Push the motor downward for less tension.
- Lift the motor upwards for more tension (ensure the second hex nut on the motor pulling rod under the frame is loosened to allow upward movement).

#### 3. Secure the Motor:

Tighten all the motor mounting nuts after adjusting the tension.

Note: Refer to instructions on changing the drive belt.

#### **Leveling the Table Insert**

- 1. Adjust the Insert:
- Turn the hex screws counterclockwise to lower the insert if it rests above the table.
- Turn the hex screws clockwise to raise the insert level with the table surface Fig. 26.
- Caution: An insert below the table surface can cause the workpiece to get stuck, stopping your cut.

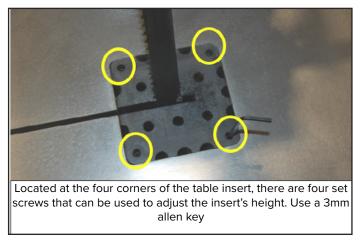


Figure 26: Leveling the Table Insert.

# First Run

# **First Run Inspection**

After completing the assembly and adjustments, follow these steps for the first run of the bandsaw:

# 1. Prepare the Bandsaw:

- · Plug the bandsaw into a grounded electrical outlet.
- Ensure the worktable and saw are clear of all tools and objects.

### 2. Start the Bandsaw:

- Unlock the lock-out button Fig. 27.
- Press the ON button Fig. 27.

#### 3. Inspect During Operation:

- Listen for Noises: Pay attention to any strange or unusual sounds.
- Check Blade Position: Look through the window to ensure the blade is running in the center of the wheel.
- Verify Blade Guides: Ensure the blade guides are properly positioned and not interfering with the blade's movement.
- Check Fastenings: Ensure all parts are securely tightened.

#### 4. Complete the Inspection:

- Turn off the saw Fig. 27.
- Lock out the saw for safety Fig. 27.

Your first run inspection is now complete, and the bandsaw is ready for use.

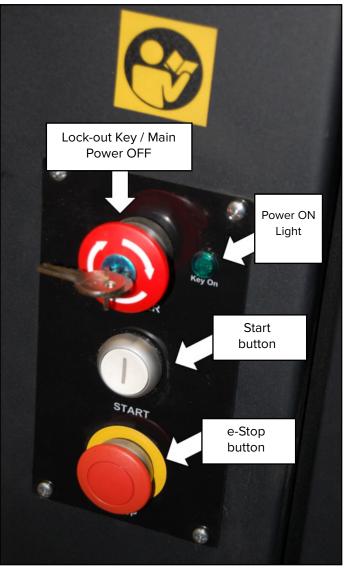


Figure 27: Main Switch box Assembly.

# **Dust Collection**

For optimal dust collection on the BBPBS18 18" band saw, a system with a minimum capacity of 650 CFM (cubic feet per minute) at port is recommended. This ensures efficient removal of sawdust and debris generated during operation, maintaining a clean work environment and reducing airborne particles. A dust collection system with a 4-inch hose connection is suitable, as it can easily handle the airflow requirements for this machine. To further enhance performance, ensure that the collection system has a high-efficiency filtration method, such as a pleated filter or HEPA filter, to capture fine dust particles.

# **Section 4: Operations**

#### Overview

This overview serves as a foundational introduction for novice machine operators, offering a fundamental understanding of how the machine is used during operation. The goal is to facilitate a clearer comprehension of the machine's controls and components discussed in subsequent sections of this manual.

It is important to note that this overview is generic in nature and does not constitute a comprehensive instructional guide. To gain a more in-depth understanding of specific machine operations, it is strongly advised to:

- Read the Entire Manual: Thoroughly review the entirety of this manual to gain detailed insights into the machine's operation, safety guidelines, and maintenance procedures.
- Seek Additional Training: Seek guidance and training from experienced machine operators who can provide hands-on instruction and insights into practical operation.
- Conduct Additional Research: Expand your knowledge by conducting further research through "how-to" books, trade magazines, and reputable websites dedicated to the subject matter.

# **Typical Machine Operation Procedure**

To operate the machine safely and accurately, follow these steps:

Workpiece Examination: Examine the workpiece to ensure its suitability for cutting, considering factors such as material type, foreign objects, knots, moisture content, and warping.

- 1. Table Tilt Adjustment: If necessary, adjust the table tilt to achieve the desired cutting angle.
- Fence or Miter Gauge Setup: Depending on the cutting requirements, set up and adjust the fence for the width of the cut, or configure the miter gauge to the desired angle. Ensure that the fence or miter gauge is securely locked in place.
- 3. Upper Blade Guide Height: Loosen the guidepost lock knob and adjust the upper blade guide height to provide clearance, typically no more than 1/4", just above the workpiece. Retighten the guidepost lock knob.
- 4. Clear Workpiece Path: Confirm that the workpiece can safely pass through the blade without encountering any obstructions or interference from other objects.
- Safety Gear Preparation: Prior to operation, put on safety glasses and a respirator if necessary, especially

- when cutting materials that produce fine dust.
- 6. Machine Startup: Begin by starting the dust collector to manage dust and then activate the bandsaw itself.
- 7. Workpiece Handling: Hold the workpiece securely and keep it flat against both the table and the fence (or miter gauge). Gradually push the workpiece into the blade at a consistent and controlled rate until the cut is completed. Be cautious to keep fingers away from the blade and use a push stick when handling narrow workpieces.
- 8. Shutdown: After completing the cut, stop the bandsaw

Adhering to this procedure ensures a safe and efficient machine operation, minimizing the risk of accidents and producing accurate cuts. Always prioritize safety and precision when working with machinery.

#### **Basic Functions of a Bandsaw**

A properly adjusted bandsaw is a versatile and safe tool that can perform a variety of cuts with precision. It excels in the following types of cuts:

**Straight Cuts:** Bandsaws can make accurate and straight cuts with ease.

Miters: It can be adjusted to cut at different miter angles.

**Angles:** Bandsaws can cut at various angles to accommodate specific project requirements.

**Compound Angles:** Complex angled cuts can be achieved using the bandsaw.

**Resawing:** Resawing involves cutting a thick workpiece into thinner sections, which a bandsaw can accomplish effectively.

**Ripping:** Bandsaws can rip boards, meaning they can cut along the length of the wood grain.

**Crosscutting:** This refers to cutting wood across the grain, and bandsaws can handle this task.

**Irregular Cuts:** Bandsaws are excellent for cutting irregular shapes, curves, duplicate parts, circles, and beveled curves.

### **Foot Brake Operation**

The foot brake Fig. 28 provides an essential safety feature by allowing you to slow and stop the blade without having to reach the main "STOP" button. This feature is particularly useful when handling large workpieces. The foot brake functions as follows:

#### **Engaging the Foot Brake:**

- Depress the foot brake lever.
- This action pivots the brake pad (B-Fig. 28) against the brake disc on the motor pulley.
- The blade will slow and come to a stop simultaneously.

This mechanism ensures safe operation by allowing immediate stopping of the blade, facilitating safer handling of materials and reducing the need to reach for the switch control station.



Figure 28: Foot Brake.

**Note:** Regular maintenance and inspection of the foot brake mechanism are recommended to ensure proper functionality and safety.

#### **Basic Cutting Tips**

Here are some fundamental tips to keep in mind when operating a bandsaw:

- Blade Maintenance: Regularly replace, sharpen, and clean the blades to maintain optimal performance.
   Periodically check and adjust the guides, tension, and alignment settings to ensure the bandsaw operates smoothly.
- 2. Even Pressure: Use light and consistent pressure when cutting. Applying excessive force can lead to poor cuts and place undue stress on the bandsaw and blade.
- Corner Cutting: When cutting around tight corners, avoid twisting the blade. Instead, allow the blade to naturally follow the corner's path. Consider using relief cuts when feasible to facilitate smoother cutting.
- 4. Safe Techniques: Always follow safe operating

techniques. Misusing the bandsaw or employing incorrect techniques, such as twisting the blade or using the wrong feed rate, can compromise safety and result in subpar cuts.

By following these basic tips and understanding the versatility of a bandsaw, operators can utilize this tool effectively and achieve precise cutting results while ensuring safety throughout the cutting process.

#### Inspecting the workpiece

Before initiating any cutting operations, it is essential to thoroughly inspect all workpieces to ensure both the safety of the operator and the proper functioning of the machine. Here are key considerations when inspecting workpieces:

- Material Type: This machine is specifically designed for cutting natural and man-made wood products, including laminate-covered wood products and certain plastics. It is not suitable for cutting materials such as metal, glass, stone, or tile. Attempting to cut these materials with a bandsaw can lead to injury.
- Foreign Objects: Prior to cutting, carefully examine
  workpieces for any embedded foreign objects, such as
  nails, staples, rocks, or dirt. These objects can become
  dislodged during cutting, potentially causing harm to
  the operator, kickback, or blade damage. If such objects
  cannot be removed, refrain from cutting the workpiece.
- 3. Large/Loose Knots: Be cautious of workpieces with large or loose knots. These can be dislodged during cutting, potentially leading to kickback or machine damage. Choose workpieces that do not have such knots or plan your cuts to avoid them.
- Wet or "Green" Stock: Avoid cutting wood with a moisture content exceeding 20%. Cutting wet or "green" stock can result in premature blade wear, increased risk of kickback, and suboptimal cutting results.
- Excessive Warping: Workpieces exhibiting significant cupping, bowing, or twisting are hazardous to cut, as they are unstable and unpredictable during cutting. Do not use workpieces with these characteristics.
- 6. Minor Warping: Workpieces with slight cupping can be safely cut if the cupped side is placed against the table or fence for support. Conversely, placing a workpiece with a bowed side against the table can cause instability during the cut, potentially resulting in kickback or serious injury.

Adhering to these workpiece inspection and safety guidelines is vital to ensure a safe and productive cutting environment while using the bandsaw machine.

# **Blade Selection & Selection Chart**

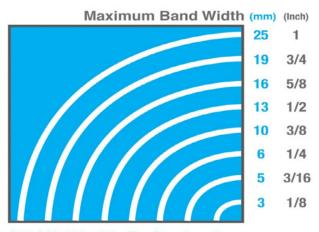
Selecting the correct blade size for a woodworking bandsaw is critical to achieving optimal performance and



precision. The size of the blade affects the type of cuts you can make, particularly when cutting curves. Wider blades provide stability for straight cuts but are limited when it comes to making tight radius curve cuts, where a narrower blade is more suitable. Additionally, the number of teeth per inch (TPI) plays a crucial role in determining how well the blade can handle different workpiece thicknesses. Blades with a higher TPI are ideal for thinner materials, as they produce smoother cuts, while lower TPI blades are better suited for thicker workpieces, allowing for faster material removal without clogging the teeth. Ensuring the right balance between blade size and TPI based on the workpiece and the type of cut will significantly impact the quality and efficiency of your woodworking project.

Please see the figures blow to determine what type of blade and how many TPIs are suitable for the application you are trying to accomplish.

TPI	MIN. MATERIAL THICKNESS
32	3/32"
24	1/8"
18	5/32"
14	1/4"
10	5/16"
8	3/8"
6	1/2"
4	3/4"
3	1"
2	1-1/2"



(mm) 175 140 100 65 40 15 8 3 (lnch) 7 5<sup>1</sup>/<sub>2</sub> 4 2<sup>1</sup>/<sub>2</sub> 1<sup>1</sup>/<sub>2</sub> 5/8 5/16 3/16 Minimum Radius

# Changing the Blade

To Change the Band Saw Blade please follow the Step-by-Step Instructions below

Changing the blade on a band saw requires attention to detail and safety. Follow the steps below to properly replace your blade.

Tools & Materials Needed:

- Replacement band saw blade
- Safety gloves
- Safety glasses
- Wrench (if needed for wheel adjustment)
- User manual for reference.

#### **Step 1: Safety First**

- Turn off and unplug the band saw: Always disconnect the power before performing any maintenance on the machine.
- Wear safety gloves and glasses: This protects your hands from sharp teeth and eyes from debris.

### **Step 2: Release Blade Tension**

- Locate the blade tension lever, located at the top rear
  of the saw (this can be used only if the blade width is
  identical the previous blade.). In case the blade width is
  changed, the knob located at the top of the saw must
  be loosed as well (this will allow for proper tension
  adjustment see blade tensioning section) Turn it to
  release tension on the current blade.
- Confirm the blade is loose enough by lightly pulling it from the wheels.

# Step 3: Remove the Table Insert and Blade Guard

- Remove the table insert (the small plate surrounding the blade). The insert simply lifts out.
- Unscrew the knob that locks the guard and open the front part of the guard (it swings open).

# Step 4: Remove the Old Blade

- Open both top and bottom doors (they only open in tandem).
- Carefully slide the old blade off the upper and lower wheels. It should easily come free once the tension is released.
- Be mindful of the sharp edges and teeth as you remove the blade.

#### **Step 5: Install the New Blade**

- Position the new blade around both the upper and lower wheels. Ensure the blade's teeth are pointing downward toward the table.
- Thread the blade through the table slot, the left-side spine of the saw, all guides and guard.

#### Step 6: Re-tension the Blade

- Use the tension knob at the top to apply the correct tension for your new blade. Check the blade tensioning section and follow the instruction for the appropriate tension setting based on the blade size.
- This bandsaw have a tension gauge located on the inside next to top wheel see tensioning section to help you set the blade tension accurately.

#### Step 7: Align the Blade

 Adjust the tracking knob (located on the back of the saw) to ensure the blade is centered on the wheels.
 Turn the upper wheel by hand and watch the blade's position. Fine-tune the tracking until the blade stays aligned.

### Step 8: Adjust the Blade Guides

- The blade guides (above and below the table) should be set just behind the blade's teeth. Loosen the guide screws, adjust them to lightly touch the blade without causing deflection, and then tighten the screws.
- Do the same for the thrust bearing, which supports the back of the blade.

#### Step 9: Reinstall the Table Insert and Blade Guard

 Replace the table insert and blade guard. Tighten any screws or clips securing these components.

#### Step 10: Test the New Blade

- Once everything is reinstalled, manually rotate the upper wheel to check that the blade moves smoothly without obstruction, and that the blade is tracking well on the wheel.
- Plug in the saw and run it at a low speed to test the tracking and tension. Make any final adjustments as needed.

By following these steps carefully, you can safely and efficiently change the blade on your 18" band saw, ensuring optimal performance for your cutting tasks.

# **Changing Speed**

To change the speed on this band saw a pulley change is needed; to accomplish that please follow these steps:

Step1: Loosen bolts (A & B) to release the motor.

Step 2: Tighten nut C (the lead screw will go up) this will release the belt.

Step 3: move the blet to the desired position on both the motor and the wheel pulleys.

Step 4: Loosen nut C (the lead screw will go down) this will

increase the tension on the blet.

Step 5: Tighten the motor bolts and secure it.

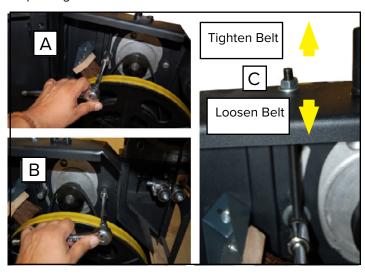


Figure 29: Changing the speed.

#### Tilting table

The bandsaw table offers a versatile range of tilt adjustments to accommodate various cutting needs. It can be tilted within the following range:

5° Left to 45° Right: To facilitate easy and precise adjustments, the bandsaw is equipped with the following features:

Table Tilt Scale: The trunnion features a scale with a pointer that allows operators to set and monitor the desired table tilt angle accurately see figure 30

Positive Stop: A positive stop is integrated into the design, enabling users to return the table quickly and conveniently to its 0° position when transitioning from a right-tilt setting. This feature simplifies the process of setting the table for different cutting angles, enhancing efficiency and accuracy during operations.

To adjust the table tilt angle on the bandsaw, follow these steps carefully:

- Disconnect Machine from Power: Prior to making any adjustments, ensure the machine is completely disconnected from its power source to guarantee safety during the procedure.
- 2. Loosen Table Tilt Lock Lever: Locate the table tilt lock lever, as indicated in Figure 30 (if provided). Loosen this lever to allow for table movement.
- Rotate Table Tilt Adjustment Lever: Using the table tilt adjustment lever, carefully rotate the table to the desired angle. Ensure that the table is positioned accurately to match the angle required for your specific cutting task.

Retighten Lock Lever: Once the table is set to the desired angle, securely retighten the table tilt lock lever. This step is crucial to lock the table in place and prevent any unintended movement during operation. Figure 30: Tilting the Table.

By following these steps, you can effectively adjust the table tilt angle on the bandsaw, allowing you to make precise beveled cuts as needed for your woodworking projects. Always prioritize safety and proper adjustment when operating the machine.

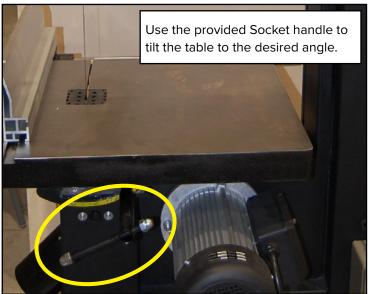


Figure 30: Tilting the Table

Ripping

Ripping on a bandsaw refers to cutting wood stock along the grain or down the length of the workpiece. This process is straightforward and can also be adapted for beveled rip cuts by tilting the table. Here's how to perform a rip cut on a bandsaw:

- Fence Adjustment: Begin by adjusting the fence to match the width of the cut required for your workpiece.
   Once set, securely lock the fence in place to maintain the desired width throughout the cut.
- 2. Blade Guide Height: Adjust the blade guide assembly

- to the appropriate height above the workpiece. This ensures that the blade is positioned correctly for the cut you intend to make.
- Safety Precautions: Prior to starting the bandsaw, ensure that all safety precautions have been met. This includes wearing appropriate safety gear, such as safety glasses and hearing protection. Verify that the workpiece is properly positioned and secured for the cut.
- 4. Machine Startup: Turn the bandsaw ON and wait for it to reach full speed. It's important to allow the blade to achieve full speed before beginning the cut.
- Feed the Workpiece: With all safety measures in place, slowly and steadily feed the workpiece into the blade.
   Continue to push the workpiece until the blade has completely passed through it see figure 31



Figure 31: Ripping Cuts

#### Crosscutting

Crosscutting on a bandsaw involves cutting wood stock across the grain or, in the case of plywood and other processed wood, cutting across the width of the material. These crosscuts can be made at 90° angles or at various angles using the miter gauge. Compound crosscuts are those where both the miter gauge is angled, and the table is tilted. Here's how to make a crosscut on a bandsaw:

- Marking the Workpiece: Begin by marking the workpiece on the edge where you want to start the cut. This mark will serve as a reference point for lining up the cut.
- 2. Blade Guide Height: Adjust the blade guide assembly to the correct height above the workpiece. This ensures that the blade is positioned correctly for the crosscut.
- 3. Miter Gauge Angle: Adjust the miter gauge to the desired angle needed for the cut. This step allows you to achieve crosscuts at specific angles, whether they are 90° or angled cuts.
- Positioning the Workpiece: Move the fence out of the way if it's in use. Place the workpiece evenly against the miter gauge, aligning the marked reference point with the blade.

- 5. Safety Precautions: Before starting the bandsaw, ensure that all safety precautions are in place. This includes wearing safety gear like safety glasses and hearing protection. Verify that the workpiece is properly positioned and secured for the cut.
- 6. Machine Startup: Turn the bandsaw ON and allow it to reach full speed before proceeding.
- Feed the Workpiece: With the safety measures in place, slowly and steadily feed the workpiece into the blade.
   Continue to advance the workpiece until the blade has completely cut through it see figure 32.

By following these steps, you can safely and accurately perform crosscuts on your bandsaw, whether they are straight crosscuts at 90° or angled crosscuts using the miter gauge. Always prioritize safety and precision during the cutting process.

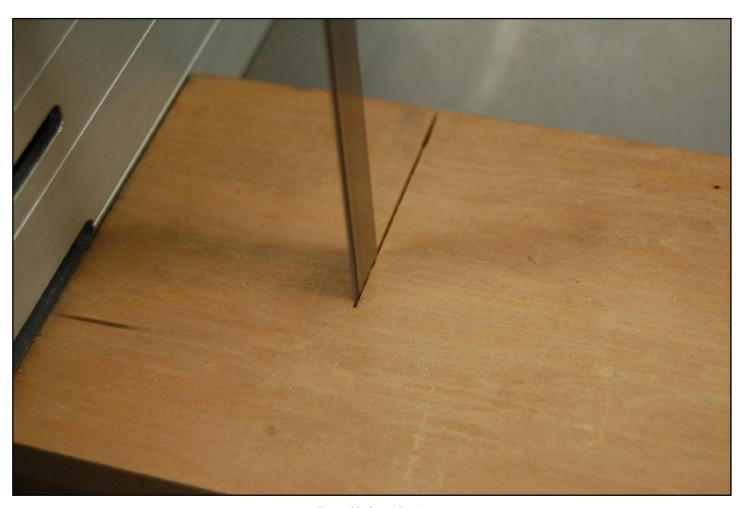


Figure 32: Cross Cutting



Figure 33: Curve Cutting

#### **Cutting Curves**

Cutting curves on a bandsaw requires a careful and precise technique to ensure the blade follows the desired layout line without twisting or binding. Here are the steps and tips to follow when cutting curves on a bandsaw:

- Choose the Right Blade: Select a blade that is appropriate for the curve you intend to cut. For sharp or tight curves, use a narrower blade with a higher TPI (teeth per inch). This type of blade allows for more intricate and precise cuts.
- 2. Layout Line: Mark the layout line on your workpiece to guide the cut. This line represents the desired shape of the curve.
- 3. Relief Cuts: For sharp or tight curves, consider making relief cuts. Relief cuts are short cuts made through the waste portion of the workpiece. These cuts are stopped at the layout line. Relief cuts serve several purposes:
  - They prevent the blade from being pinched or twisted during the cut.
  - They release waste wood from the workpiece, reducing pressure on the back of the blade.
  - They make it easier to back the workpiece out once the saw blade has come to a stop, if necessary.

- Short Cuts First: Start by making short cuts along the curve, gradually working your way along the layout line.
   This approach helps reduce the chances of the blade binding or twisting during the cut.
- Turning the Stock: As you feed the workpiece into the blade, simultaneously turn the stock carefully to follow the layout line. Maintain a steady and controlled feed rate to ensure the blade accurately follows the curve.
- Longer Cuts: After completing the short cuts, proceed to the longer cuts along the layout line. By this point, the relief cuts should have alleviated pressure on the back of the blade, allowing for smoother and more controlled cutting.
- Safety Precautions: Always prioritize safety when cutting curves on the bandsaw. Wear appropriate safety gear, such as safety glasses and hearing protection, and ensure the workpiece is securely positioned and supported.

By following these steps and using relief cuts as needed, you can achieve accurate and smooth curve cuts on your bandsaw. Proper technique and patience are essential for successful curve cutting operations.

#### Resawing

Resawing on a bandsaw is the process of cutting the thickness of a board into two or more thinner boards. This technique allows you to maximize the use of your wood stock and create thinner boards for various projects. Here's how to perform resawing on a bandsaw effectively:

- Blade Selection: The choice of the right blade is crucial for successful resawing. Opt for a wide blade as it cuts straighter and is less likely to exhibit "blade lead," which can result in uneven cuts. Blades with fewer teeth per inch (TPI) are ideal, typically ranging from 3 to 6 TPI. These blades have larger gullet capacities for clearing sawdust efficiently, reducing heat buildup and strain on the motor.
- Prepare the Workpiece: Begin by selecting the board you want to resaw. Ensure that the board is flat and free of defects, as any irregularities can affect the quality of the resawn pieces. If needed, joint and plane the board to achieve a smooth, even surface.

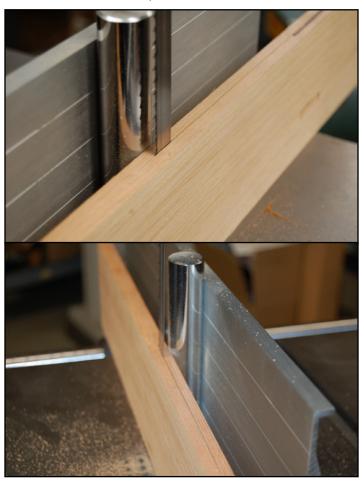


Figure 35: Using the Resaw Bar.

- Set Up the Bandsaw: Adjust the bandsaw's blade guide assembly to the proper height above the workpiece.
   The blade guide should be as close to the workpiece as necessary for stability but not so close that it causes unnecessary friction.
- Blade Tension: Ensure that the bandsaw blade is properly tensioned. A well-tensioned blade will cut more accurately and reduce the risk of blade deflection during the cut.
- Fence or Rip Fence: If your bandsaw has a fence or rip fence, set it to the desired width for the resaw cut. The fence helps maintain a straight cut by guiding the workpiece parallel to the blade.
- 6. Safety Gear: Prioritize safety by wearing safety glasses, hearing protection, and any other necessary safety equipment. Respiratory protection may also be required depending on the type of wood being cut.
- Start the Bandsaw: Turn on the bandsaw and allow it to come to full speed before starting the cut. Always wait for the machine to reach its maximum speed to ensure a clean, efficient cut.
- 8. Resaw the Board: Carefully feed the workpiece into the blade, making sure it is flat against the table and the fence (if used). Maintain a steady and controlled feed rate to achieve an even cut. Keep your hands and fingers a safe distance from the blade.
- 9. Monitor the Cut: Pay close attention to the cut as it progresses. If you notice any deviations or irregularities in the cut, adjust as needed.
- 10. Complete the Cut: Once the entire length of the board has been resawn, turn off the bandsaw and wait for the blade to come to a complete stop before removing the resawn pieces.
- Inspect and Plane: Examine the resawn pieces for any imperfections or rough surfaces. If necessary, use a planer to achieve a smooth, even thickness across the newly created boards.

Resawing on a bandsaw can significantly expand your woodworking capabilities and allow you to make the most of your lumber resources. With the right blade and proper technique, you can achieve precise and consistent results.

# **Section 5: Accessories**

 Mobility Kit: This saw has the optional mobility kit (sold separately). Model BBPBMB18



Figure 36: Mobiity Kit.

# **Section 6: Maintenance**

# **Scheduling**

Proper maintenance is essential to ensure the longevity and reliable performance of your bandsaw. Follow this maintenance schedule to keep your machine in top condition. Be sure to consult the specific maintenance instructions provided in your bandsaw's manual for any additional guidance or manufacturer recommendations.

#### **Daily Maintenance Check:**

- Loose Mounting Bolts: Inspect all mounting bolts and fasteners to ensure they are properly tightened. Pay particular attention to the bolts securing the table and fence
- Saw Blade: Examine the bandsaw blade for signs of wear, damage, or dullness. Replace the blade if it shows any visible defects or if it has become dull and less effective.
- Wires: Inspect the electrical wires and cables for any wear, damage, or exposed wiring. Replace any damaged wires immediately to prevent electrical hazards.
- 4. Wheel Brush: Check the condition of the wheel brush, which is responsible for cleaning debris from the blade.

- Clean or replace the brush if it is worn or clogged.
- 5. Table Surface: Clean and protect the table surface. Ensure it is free from sawdust, debris, and any residue from cutting operations. Apply a suitable protectant to prevent corrosion.
- Lubrication Points: Lubricate any specified lubrication points as recommended in your bandsaw's manual.
   Proper lubrication helps maintain smooth operation and prevents excessive wear.
- General Safety Check: Inspect for any other unsafe conditions or anomalies that may affect the safe operation of the bandsaw. Address any identified issues promptly.

#### **Monthly Maintenance Check:**

- V-Belt Tension: Check the tension of the V-belt that drives the bandsaw. The belt should have the correct tension to ensure efficient power transmission. Adjust the tension if necessary and inspect the belt for damage or wear.
- Dust Build-Up: Clean the interior of the bandsaw cabinet and the motor components. Remove accumulated sawdust and debris to prevent overheating and maintain optimal airflow.

Regular and routine maintenance is crucial to the safe and efficient operation of your bandsaw. Following this schedule and addressing any issues promptly will help extend the lifespan of your machine and reduce the risk of breakdowns or accidents. Additionally, always refer to your bandsaw's specific manual for manufacturerrecommended maintenance practices and intervals.

#### Cleaning and protecting

Cleaning your bandsaw is a straightforward process, and regular maintenance helps ensure its optimal performance and longevity. Here are the steps to clean your bandsaw:

Cleaning the Bandsaw:

- Vacuum Excess Debris: Begin by using a vacuum cleaner equipped with a nozzle attachment to remove excess wood chips, sawdust, and debris from the bandsaw's interior. Pay close attention to areas around the blade, wheels, and motor housing.
- Wipe Off Remaining Dust: After vacuuming, use a dry cloth or a dusting brush to wipe off any remaining dust and residue from the bandsaw's surfaces. Ensure that you remove dust from the table, fence, and other accessible areas.
- 3. Removing Resin Build-Up: If you notice any resin build-up on the bandsaw's components, use a resindissolving cleaner specifically designed for this purpose. Follow the manufacturer's instructions for safe and effective resin removal. Resin build-up can occur from cutting resinous woods, and it's essential to keep the blade and components clean for smooth operation.
- 4. Protecting Cast Iron Surfaces: To prevent rust on unpainted cast iron surfaces, such as the table, it's crucial to keep them dry and free from moisture. After cleaning, wipe down the cast iron surfaces with a cloth to remove any remaining moisture or wood dust.

By following these cleaning and maintenance steps, you'll keep your bandsaw in optimal condition, reducing the risk of breakdowns and ensuring safe and precise cutting operations. Always refer to your bandsaw's manual for specific maintenance instructions provided by the manufacturer.

Maintaining the lower wheel brushes on your bandsaw is essential for preventing sawdust buildup on the tire and ensuring smooth operation. Here are the steps for checking and cleaning the lower wheel brushes:

#### **Wheel Brushes:**

#### Daily Check and Cleaning of Lower Wheel Brushes:

- Inspect Brushes: Start by visually inspecting the lower wheel brushes to check for dirt, sawdust accumulation, and bristle wear. The brushes are designed to help keep the tire clean, so it's crucial to ensure they are in good condition.
- Cleaning Brushes: If you notice that the brushes have
  accumulated sawdust or debris, use a stiff brush or a
  vacuum cleaner with a nozzle attachment to clean them.
  Brush away or vacuum the sawdust and dirt to ensure
  the brushes can continue to perform their function
  effectively.
- 3. Adjustment for Bristle Wear: As part of your daily inspection, check the adjustment brackets for the lower wheel brushes. These brackets allow you to adjust the brushes for bristle wear. If the bristles are significantly worn, consider adjusting the brushes to ensure they maintain proper contact with the tire.

#### **Regular Maintenance Tips:**

- Blade Maintenance: Regularly inspect the bandsaw blade for sharpness, wear, and damage. Replace the blade as needed to ensure clean and precise cuts.
- Lubrication: Follow the manufacturer's recommendations for lubricating specific points on your bandsaw. Proper lubrication helps maintain smooth operation.
- 3. Belt Tension: Check and adjust the tension of the V-belt that drives the bandsaw according to the manufacturer's guidelines.
- Safety Checks: Routinely inspect safety features, such as blade guards and safety switches, to ensure they are functioning correctly.
- Blade Tracking: Monitor and adjust the blade tracking as necessary to ensure it runs smoothly and stays on the wheels
- Motor Cooling: Keep the motor and surrounding components free from dust and debris to prevent overheating.

#### **Adjusting Wheel Brushes for Bristle Wear**

- Disconnect Machine from Power: Ensure that the bandsaw is disconnected from the power source before making any adjustments or maintenance.
- Access Adjustment Brackets: Locate the adjustment brackets for the lower wheel brushes. These brackets allow you to move the brushes closer to the tire as the bristles wear down.
- 3. Loosen Fasteners: Loosen the fasteners (usually screws or bolts) on the adjustment brackets. This will allow you to make the necessary adjustments.
- 4. Adjust Brush Position: Carefully adjust the position of the brushes so that they make proper contact with the tire. The goal is to ensure that the bristles touch the tire without excessive pressure.
- Tighten Fasteners: Once you've made the adjustments, tighten the fasteners on the adjustment brackets securely but not overly tight. Ensure that the brushes are properly aligned with the tire.

6. Reconnect Power: After completing the adjustments, reconnect the bandsaw to the power source.

By regularly checking, cleaning, and adjusting the lower wheel brushes as needed, you'll help maintain the effectiveness of the tire cleaning system on your bandsaw. This simple maintenance task contributes to smoother and safer bandsaw operation. Always refer to your bandsaw's manual for specific instructions provided by the manufacturer.

#### Lubrication

Proper cleaning and lubrication of your bandsaw components are essential for maintaining its performance and extending its lifespan. Here are the steps for cleaning and lubricating the components:

#### **Cleaning Components Before Lubrication:**

- Disconnect Machine from Power: Ensure that the bandsaw is disconnected from the power source before performing any maintenance or cleaning.
- 2. Identify Components: Identify the components that require cleaning and lubrication. These may include moving parts, sliding surfaces, and pivot points.
- Use the Right Cleaner: Select an appropriate oil/ grease solvent cleaner or mineral spirit for cleaning the components. Make sure the cleaner is safe to use on the materials of your bandsaw.
- 4. Apply Cleaner: Apply the cleaning solution to a clean cloth or rag. Do not apply it directly to the machine. Use the cloth to wipe down the components, removing any built-up dust, dirt, and grease. Pay special attention to areas where moving parts contact each other.
- Thorough Cleaning: Continue wiping down the components until they are free from dirt and grime. You may need to use multiple clean cloths or rags to ensure thorough cleaning.
- 6. Inspect for Damage: While cleaning, inspect the components for any signs of damage, excessive wear, or corrosion. If you discover any damaged parts, they may require repair or replacement.

# **Applying Lubrication:**

- Select Lubricant: Choose an appropriate lubricant for your bandsaw components such as Splitz for the blade lubrication and regular machine grease for the table tilting mechanism. Follow the manual's recommendations for the type of lubricant to use on specific parts. DO NOT lubricate the bearing or the cast iron trunnion assembly.
- 2. Apply Lubricant: Apply the selected lubricant to the cleaned components. Use a small brush, oiler, or a cloth

- to apply the lubricant precisely to the areas that require it. Avoid over-lubricating, as excess lubricant can attract dust and debris.
- 3. Operate the Machine: After lubricating the components, operate the bandsaw briefly to allow the lubricant to distribute evenly across the moving parts.
- 4. Wipe Off Excess: After the lubrication has been distributed, use a clean cloth to wipe off any excess lubricant. This prevents the accumulation of dust and debris on the lubricated surfaces.
- Reconnect Power: Once you have completed the cleaning and lubrication process, reconnect the bandsaw to the power source.

By following these steps, you can ensure that your bandsaw components are clean and properly lubricated, promoting smooth and safe operation. Regular maintenance and cleaning will help keep your bandsaw in excellent working condition. Always refer to your bandsaw's manual for specific lubrication recommendations provided by the manufacturer.

#### **Lubricating Guidepost Rack and Pinion:**

- DISCONNECT MACHINE FROM POWER: Safety is a priority. Ensure the bandsaw is disconnected from the power source before starting any maintenance tasks.
- 2. Lower Guidepost: Lower the guide post all the way down. This will expose the rack and pinion components that require lubrication.
- Prepare Cleaning Rag: Use a clean rag or cloth and mineral spirits to wipe off any existing grease and sawdust buildup on the rack and pinion components. Make sure to remove all dirt and debris to ensure proper lubrication.
- 4. Apply Lubricant: Once the components are clean, apply an appropriate lubricant to the rack and pinion. The lubricant should be specifically designed for this purpose and should not attract dust or debris. Follow the manufacturer's recommendations for the type of lubricant to use.
- Distribute Lubricant: Move the guide post up and down a few times to help distribute the lubricant evenly across the rack and pinion. This will ensure that the lubricant reaches all the contact points.
- Wipe Off Excess: After distributing the lubricant, use a clean cloth to wipe off any excess lubricant. This step helps prevent the accumulation of dust and debris on the lubricated surfaces.
- Reconnect Power: Once you have completed the lubrication process and wiped off any excess lubricant, you can safely reconnect the bandsaw to the power source.

Regularly lubricating the guidepost rack and pinion will help maintain smooth and precise adjustments on your bandsaw. This contributes to the overall performance and longevity of the machine. Always follow the manufacturer's recommendations for lubricants and maintenance intervals provided in your bandsaw's manual for the best results.

# Specific Maintenance for Band Saw Guidepost Rack

Lubricating the guidepost rack and pinion on your bandsaw is an important maintenance task to ensure smooth and precise adjustments, a regular machine grease is the best to use for this job. Here are the steps to lubricate the guidepost rack and pinion:

# **Section 7: Service**

Certainly, if you encounter any issues with your machine, it's essential to troubleshoot the problem to identify the root cause and determine the appropriate solution. Here are some general troubleshooting procedures to follow:

#### **Check for Power Supply Issues:**

- Ensure that the machine is properly connected to a functional power source.
- Verify that circuit breakers or fuses are not tripped or blown.

#### **Examine Blade and Blade Tension:**

- Inspect the condition of the blade. Replace it if it's damaged, dull, or worn out.
- Check the blade tension to make sure it's correctly adjusted according to the manufacturer's guidelines.

#### **Verify Proper Blade Tracking:**

 Ensure that the blade is correctly aligned on the wheels and that it is tracking properly. Misaligned or poorly tracked blades can lead to issues.

#### **Review Safety Features:**

 Check if any safety mechanisms are engaged or malfunctioning. Ensure all safety guards, covers, and switches are in their correct positions.

#### **Inspect Table and Fence Alignment:**

 Verify that the table and fence are correctly aligned to ensure accurate cuts.

### **Check for Loose or Damaged Components:**

 Inspect the machine for loose or damaged parts, such as bolts, nuts, or belts. Tighten or replace them as needed.

#### **Review the User Manual:**

 Consult your machine's user manual for troubleshooting guidance specific to your model. The manual may contain a troubleshooting section with common issues and solutions.

#### **Contact Technical Support:**

 If you cannot identify or resolve the issue on your own, contact the manufacturer's technical support. Provide them with the serial number and manufacture date of your machine for assistance.

Remember to prioritize safety when troubleshooting and performing any maintenance or repairs on your machine. Always disconnect it from the power source before inspecting or adjusting. If you're unsure about a particular issue or procedure, it's best to seek professional assistance to avoid potential risks or damage to the machine.

# Section 8: Wiring and Electrical Diagram

### Wiring safety instruction

t's essential to take note of the manufacturer's advice regarding potential changes or updates to the electrical systems of your machine. Here are some key steps to follow if you suspect differences between your machine and the information provided in the manual:

- 1. Check the Manufacture Date: As mentioned in the manual, verify the manufacture date of your machine, which can be found on the main machine label.
- Compare the Manual and Your Machine: Carefully compare the information and wiring diagrams provided in the manual with the actual components and wiring of your machine.
- Contact Technical Support: If you identify any differences or have concerns about the electrical systems of your machine, reach out to the manufacturer's Technical Support team. They can provide guidance and updated wiring diagrams if necessary.
- 4. Provide Serial Number:\*\* Be prepared to provide the serial number of your machine when contacting Technical Support. This information helps them identify the specific model and configuration of your machine.
- Do Not Make Unauthorized Changes: As a precaution, avoid making any unauthorized changes or modifications to the wiring of your machine until you have received guidance from Technical Support.
- Prioritize Safety: Always prioritize safety when dealing with electrical systems. Ensure that the machine is disconnected from the power source before inspecting or making any changes.

By following these steps and seeking assistance from Technical Support when needed, you can ensure that your machine operates safely and effectively, even if there have been updates or changes to its electrical systems since the manual was printed.

The warnings and guidelines provided in the manual are crucial for ensuring your safety and the proper functioning of your machine's electrical systems. Here's a summary of the key points to keep in mind:

- Shock Hazard: Working on wiring connected to a
  power source can be extremely dangerous and may
  result in severe burns, electrocution, or even death.
  Always disconnect the power from the machine before
  servicing electrical components to prevent any electrical
  accidents.
- Modifications: Avoid making unauthorized modifications to the wiring of your machine. Modifying the wiring beyond what is shown in the manufacturer's diagrams can lead to unpredictable and potentially hazardous results, including serious injury or fire. Additionally, the installation of unapproved aftermarket parts is discouraged.
- Wire Connections: Ensure that all wire connections are tight and secure. Loose connections can pose a safety risk and may lead to electrical problems during machine operation. After any wiring task, double-check all connections to confirm they are properly tightened.
- 4. Circuit Requirements: Adhere to the circuit requirements outlined at the beginning of the manual when connecting your machine to a power source. This includes using the appropriate voltage, phase, and circuit amperage to ensure safe and reliable operation.
- 5. Wire/Component Damage: Damaged wires or components can increase the risk of personal injury, fire, or machine damage. If you identify any wires or components that are damaged while performing a wiring task, it is crucial to replace them promptly to ensure safety and prevent further issues.
- Motor Wiring: The motor wiring diagrams provided in the manual may not exactly match your machine's configuration. If you find discrepancies, consult the wiring diagram inside the motor junction box for accurate information.
- Capacitors/Inverters: Some capacitors and power inverters can store an electrical charge for a significant duration (up to 10 minutes) after being disconnected from the power source. To reduce the risk of electrical shock, wait for at least this duration before working on capacitors.
- 8. Experiencing Difficulties: If you encounter difficulties understanding the information presented in this section or require assistance with your machine's wiring, don't hesitate to contact Technical Support for guidance and clarification.

Following these additional warnings and guidelines will help ensure that you work safely with your machine's electrical components and effectively address any wiring-related issues that may arise. Prioritize safety when handling electrical systems and components.

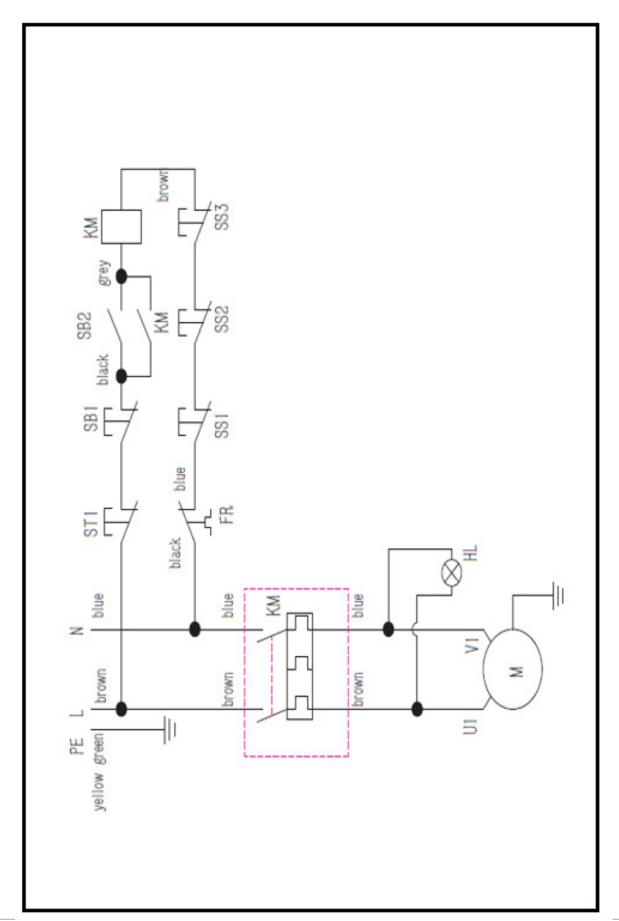


Figure 37: Electrical Diagram.

### **Section 9: Troubleshooting**

Issue	Possible Cause	Solution
The machine doesn't turn ON when switched ON	<ol> <li>The power supply is OFF.</li> <li>The ON/OFF switch is defective</li> </ol>	Check the power source.     Contact customer service for repairs and replacement of defective switch
The Blade will not run while the motor is moving.	<ol> <li>The quick release lever or the tensioning mechanism is not tight.</li> <li>The blade is off the wheel.</li> <li>The blade has broken.</li> <li>The drive belt is damaged.</li> </ol>	<ol> <li>Turn the machine OFF tighten the quick release/ tensioning mechanism.</li> <li>Open door, replace the blade if it is broken or reinstall it is off the wheel.</li> <li>Replace the bad belt.</li> </ol>
The blade isn't cutting in a straight line	<ol> <li>The fence isn't used.</li> <li>The feed rate is too fast.</li> <li>The blade is dull and damaged.</li> <li>The blade guide needs adjustments.</li> </ol>	<ol> <li>Reinstall the fence.</li> <li>Reduce the feed rate.</li> <li>Replace the blade if damaged.</li> <li>The blade guide should be ¼" above the workpiece.</li> </ol>
The blade isn't cutting or it's cutting very slowly	<ol> <li>The blade is dull.</li> <li>The teeth direction on the blade is oriented upside down.</li> </ol>	<ol> <li>Replace the blade, use 6TPI for soft wood and material, use 14TPI for harder woods and material.</li> <li>Inspect the teeth's direction and reverse it if necessary</li> </ol>
There's buildup of saw dust inside the machine	1. This is normal	A periodic clean up must be performed at least on weekly basis.
Excessive sawdust buildup inside the motor housing.	This is due to excessive buildup on the exterior of the machine's components	A periodic clean up must be performed at least on weekly basis. This is a must to maintain the machine working properly.
The table will not cut at 45° or 90°	<ol> <li>The table adjustment isn't done correctly.</li> <li>The blade is dull, and it is bending and twisting under pressure.</li> </ol>	<ol> <li>Follow the angle adjustment steps in the setup section of the manual.</li> <li>Replace the dull blade immediately.</li> </ol>
You are unable to place the blade on the band wheels.	<ol> <li>The blade tracking was changed.</li> <li>The blade's quality is not acceptable.</li> <li>The wheel alignment is off.</li> </ol>	<ol> <li>Readjust the tracking of the blade.</li> <li>Replace the lower quality blade with a new high-quality blade.</li> <li>Adjust the lower wheel see page 40.</li> </ol>

#### **Changing the Motor Drive Belt**

The procedure for replacing the motor's drive belt. Before proceeding with the replacement of the motor drive belt, ensure the bandsaw is disconnected from the power source to prevent any potential electrical hazards. Release the tension on the saw blade by activating the quick release blade tension lever.

- Loosening Motor Fasteners: Access the internal components of the machine and proceed to loosen the two Hex Bolts (Part #92, see Fig. 38 (A) that secure the motor to the frame. Additionally, loosen the Hex Nut (Part #54, see Fig. 38, B) situated on the top of the Motor Adjusting Rod. This action will allow the motor to be maneuvered downward for belt adjustment purposes.
- Lower Wheel Removal: Remove the lower wheel (Part #9B) from the Wheel Assembly by disengaging the hex head bolt (Part #1, see Fig. 38, A) and washer located at the center of the wheel's hub. Carefully slide the lower wheel off the lower wheel shaft while simultaneously removing the saw blade from the wheel.
- Drive Belt Replacement: Extract the old drive belt from the wheel's pulley and proceed to install the new belt.
   Ensure proper alignment of the ribs in the drive belt with the pulley grooves before proceeding with reassembly.
- 4. Reassembly Process: Reinstall the lower wheel onto the lower wheel shaft and reattach the saw blade to the wheel. Reverse the disassembly procedure to reassemble the various components of the saw.
- 5. Belt Tensioning: Tension the drive belt until achieving a deflection of 3/8". Adjust the tension by either pushing the motor downward for reduced tension or lifting the motor upwards for increased tension. Refer to page (22) for detailed instructions on Adjusting the Drive Belt Tension.

NOTE: Beneath the frame, there exists a secondary hex nut (Part #54, see Fig.38 (B) on the motor pulling rod. This nut must also be loosened to facilitate upward movement of the motor for tension adjustment. Once the desired belt tension is achieved, securely tighten the motor mounting nuts that were previously loosened during the initial steps.

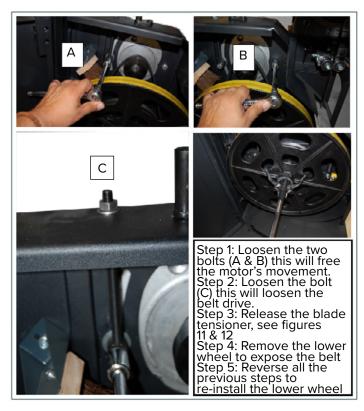


Figure 38: Changing the Motor Belts.

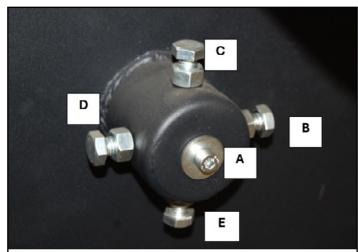
#### **Lower Wheel Adjustment**

The lower wheel adjustment serves well in the blade alignment. The following instructions outline the corrective measures for common blade alignment issues related to the lower wheel's positioning concerning the upper wheel. These adjustments aim to rectify the blade's placement on the lower wheel and optimize the performance of the bandsaw.



Please carefully review and comprehend these steps before proceeding with any adjustments. Failure to do so may result in damage to the machine.

- Release Blade Tension: Before initiating any adjustments to the lower wheel, ensure that the blade tension is completely released. This step is essential to facilitate proper adjustments and prevent potential damage to the machine.
- Identify Alignment Issue: If the blade is not running true or is not centered on the lower wheel while it is correctly positioned on the upper wheel, an adjustment to the wheel hub at the rear of the bandsaw is necessary.
- Wheel Hub Adjustment: The numbers depicted on the rear hub photo correspond to positions on a clock face.
   To aid in identifying the extent of rotation on a bolt, mark a black dot on the edge of the bolt as a visual indicator.



Screw (A) pushes the wheel in when tightened, and out when loosened. Screw (B, C, D & E) will tilt the wheel on its axel, up, down, left or right. This wheel is preset at the factory DO NOT do any adjustments unless absolutely needed, use expert technician always.

Figure 39: Lower Wheel Adjustment

#### **Correction Steps for Forward Tracking Blade:**

- De-tension the saw blade.
- Loosen the shaft bolt located at the 12 o'clock position by rotating it one half turn.
- Tighten the shaft bolt positioned at 6 o'clock until the shaft makes contact with the 12 o'clock adjusting bolt.
- Securely lock all three shaft bolts.
- Re-tension the saw blade and adjust the upper wheel to plumb by manipulating the tracking knob. Rotate the upper wheel manually and observe the blade tracking.
- Repeat the adjustment process if further corrections are deemed necessary.

By meticulously following these steps, you can effectively address blade alignment issues and ensure optimal performance of the bandsaw.

#### **Changing the Band Saw Tires**

To remove the tire from the wheel, utilize a putty knife to gently insert it underneath the tire and gradually lift it away from the wheel. Employ the putty knife to maneuver around the entire circumference of the wheel, loosening the tire. Subsequently, utilize the putty knife as a lever to flip the tire over and detach it from the wheel. Ensure thorough cleaning of the wheel groove, eliminating any dirt, debris, or cement residue using lacquer thinner.

Prepare the replacement tire by soaking it in warm water to enhance its flexibility. Once dried, while still warm, position the tire onto the wheel. Initiate the placement process by inserting the tire into the wheel groove at the top. Utilize a putty knife to carefully maneuver the new tire around the wheel, ensuring to avoid causing any damage to the tire surface. If employing rubber cement as a binding agent, ensure uniform distribution across the wheel and tire interface. Uneven surfaces between the wheel and tire can result in vibrations and adversely affect blade tracking.

#### **Adjusting Wheel Brush**

To adjust the lower wheel brush, first, loosen the screw (A) securing the bracket to the band saw's body. Adjust the brush position by moving it vertically as required. Once the brush is positioned correctly, retighten the screw. Refer to Figure 38 for detailed guidance. To replace a damaged brush, remove the two screws (B) fastening the brush to the bracket and install the new brush.

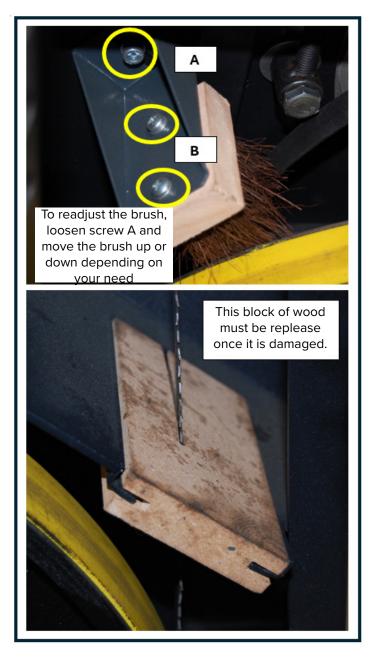


Figure 40: Lower Wheel Adjustment.

#### Replacing the Brake Shoe

When it is time to change the break bad will, the lower wheel must be removed see figure 41, and the two blots highlighted below should be loosed and the new brake pad is installed, see the figure below.

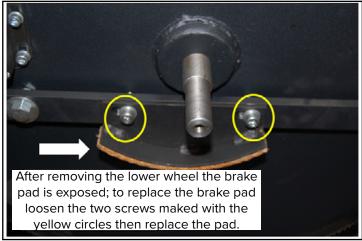
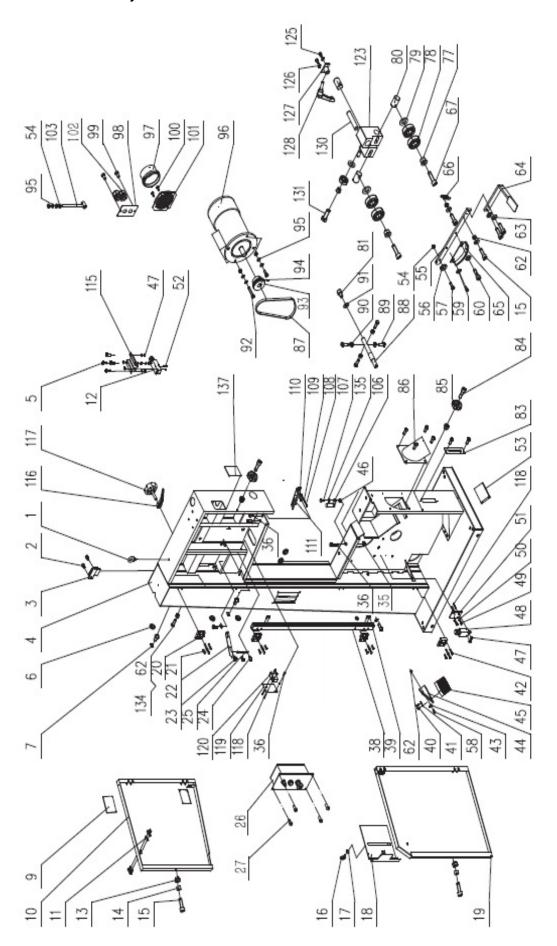


Figure 41: Replacing the brake pad

## **Section 10: Machine Diagrams and Parts**

While we strive to maintain a comprehensive inventory of replacement parts, it's important to note that availability may vary. We cannot guarantee that all the parts depicted in our inventory are always available for purchase. To ensure you can acquire the specific parts you need, we recommend reaching out to our customer service or technical support team for the most up-to-date information on part availability. Your satisfaction is our priority, and we are here to assist you in every way possible.

#### **Cabinet Frame Assembly**

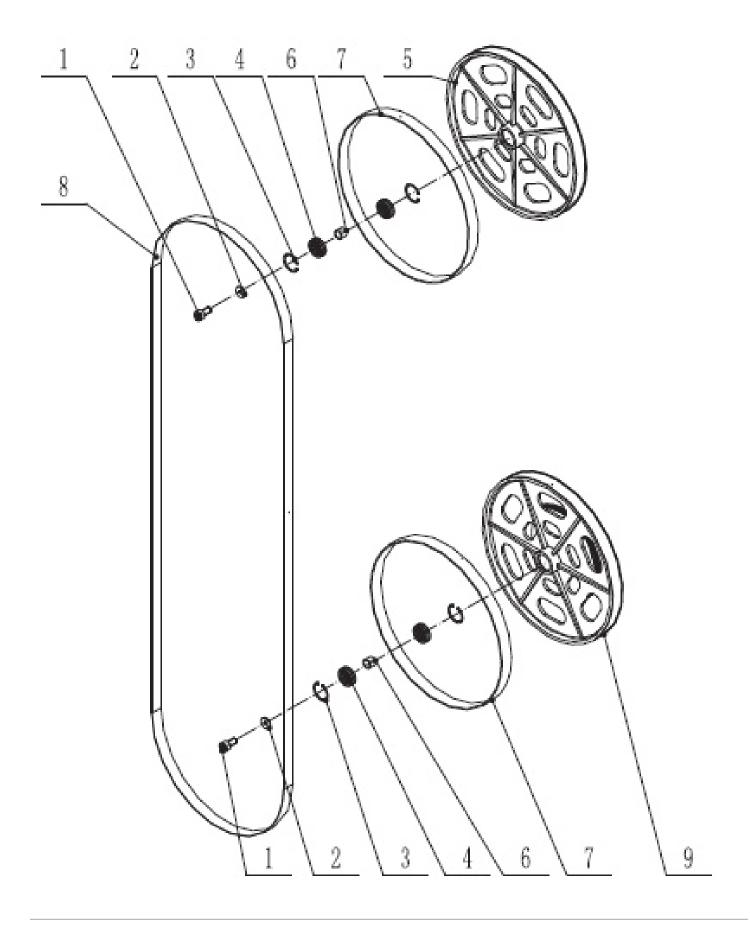


#### Parts List

Item #	Part Number	Description	Qty.
1	PBBPBS18001	Support Ring	1
2	ZPASM0508010	Screw Pan HD M5-0.8X10mm Cross Recess	2
3	PBBPBS18003	Tool holder	1
4	PBBPBS18004	Frame	1
5	ZPASM407010	Screw Pan HD M4-0.7X10mm Cross Recess	13
6	PBBPBS18006	Bushing Protective	3
7	PBBPBS18007	Pressing Plate	3
9	PBBPBS18009	Clear Plastic Window	2
10	PBBPBS18010	Upper Door	1
11	PBBPBS18011	Plate Threaded	1
12	PBBPBS18012	Microswitch	1
13	PBBPBS18013	Nut Lock	4
14	PBBPBS18014	Bushing	2
15	ZCHSM610020	Screw Cap M6-1.0X20mm	2
16	ZBFNM610000	Nut Wing M6-1.00	1
17	ZFWM6 LRG00	Washer Flat M6 (large)	1
18	PBBPBS18018	Cover Protective	1
19	PBBPBS18019	Lower Door	1
20	PBBPBS18020	Hinge Plastic	4
21	ZCTSM610020	Screw Hex Countersunk HD M6-1.0X20mm	12
22	PBBPBS18022	Indicator	1
23	ZBHSM610000	Screw Cheese HD M6-1.00	1
24	ZPASM508010	Screw Pan HD M5-0.8X10mm Cross Recess	2
25	PBBPBS18025	Batter Board	1
26	PBBPBS18026	Switch box Assembly	1
27	ZPASM508012	Screw Pan HD M5-0.8X12mm Cross Recess	4
35	ZHXNM508000	Nut Hex M5-0.8	1
36	ZCHSM508010	Screw Cap M5-0.8X10mm	1
38	PBBPBS18038	Pin Joint	1
39	ZPHSM610030	Screw PH HD M6-1.0X30mm	4
40	PBBPBS18040	Screw Tapping	2
41	PBBPBS18041	Washer Flat	6
42	ZCTSM610030	Screw Hex Countersunk HD M6-1.0X30mm	4
43	ZFWM6LRG00	Washer flat M6 Large	3
44	PBBPBS18044	Sawdust Brush Holder	1
45	PBBPBS18045	Brush	1
46	ZHXNM0812500	Nut Hex M8-1.25	2

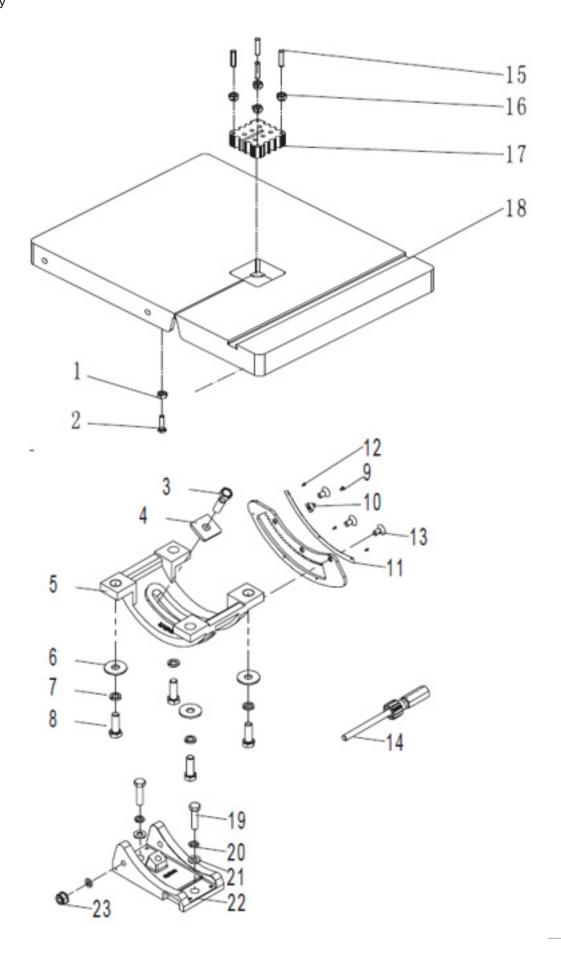
Item #	Part Number	Description	Qty.
47	ZHXNM4070000	Nut Hex M4-0.7	8
48	PBBPBS1848	Microswitch	1
49	ZCHSM610012	Screw Cap M6-1.0X12mm	2
50	ZFWM06000000	Washer Flat M6	2
51	PBBPBS18051	Switch Plate	1
52	ZPASM0407000	Screw Pan HD M4-0.7X30mm Cross Recess	3
53	PBBPBS18053	Dust Collection Plate	1
54	PBBPBS18054	Nut Hex	3
55	PBBPBS18055	Connection Rod	1
56	PBBPBS18056	Washer flat	1
57	ZHXBM1015035	Bolt Hex M10-1.5X35mm	1
58	ZCHSM610012	Screw Cap HD M6-1.0X12mm	1
59	ZFWM6000000	Washer Flat M6	2
60	ZCHSM812516	Screw Cap HD M8-1.25X16mm	2
62	ZHXNM8125000	Nut Hex M8-125	2
63	ZFWM8000000	Washer Flat M8	4
64	PBBPBS18064	Pedal	1
65	PBBPBS18065	Skate Brake	1
66	PBBPBS18066	Tension Spring	1
67	ZCHSM812540	Screw Cap HD M8-1.25X40mm	2
77	PBBPBS18077	Bearing Brush	3
78	PBBPBS18078	Bearing	5
79	PBBPBS18079	Washer Flat	3
80	PBBPBS18080	Guide Shaft	1
81	ZCHSM812520	Screw Cap HD M8-1.25X20mm	1
83	PBBPBS18083	Side Cover	2
84	ZCHSM610025	Screw Cap HD M6-1.0X25mm	2
85	PBBPBS18085	Handle	1
86	PBBPBS18086	Suction Inlet	1
87	PBBPBS18087	V-Belt Micro	1
88	PBBPBS18088	Lower Guide Wheel	4
89	ZHXBM1217540	Bolt Hex M12-1.75X40mm	4
90	ZHXNM1217500	Nut Hex M12-1.75	1
91	ZFWM1200000	Washer Flat M12	1
92	ZHXBM1015060	Bolt Hex M10-1.5X60mm	1
93	PBBPBS18093	Motor Pulley	1
94	ZSTSM812512	Screw Set M8-1.25X12mm	4

Item #	Part Number	Description	Qty.
95	ZFWM1000000	Washer Flat	1
96	BBPBS18MOT	Motor	1
97	PBBPBS18097	Suction Port	1
98	PBBPBS18098	Cable Board	1
99	ZPASM610010	Screw Pan HD M6-1.0X10mm	2
100	PBBPBS18100	Screw Tapping Pan HD Cross Recessed	2
101	PBBPBS18101	Suction Grill	1
102	PBBPBS18102	Strain Relief M20	2
103	PBBPBS18103	Pull Rod	1
106	PBBPBS18106	Heel Block	1
107	PBBPBS18107	Stud Shaft	1
108	PBBPBS18108	Plastic Pipe	1
109	PBBPBS18109	Screw Set	1
110	ZCHSM508012	Screw Cap HD M5-0.8X12mm	1
111	PBBPBS18111	Adjustment Panel	1
115	PBBPBS18115	Switch Base	1
116	PBBPBS18116	Handle Locking	1
117	PBBPBS18117	Adjust lever	1
118	PBBPBS18118	Screw Countersunk M4-0.7X30mm Cross Recessed	4
119	PBBPBS18119	Switch Plate	1
120	PBBPBS18120	Microswitch	1
122	PBBPBS1812	Nut Hex	1
123	PBBPBS18123	Lower Guide	1
125	ZCHSM610012	Screw Cap HD M6-1.0X12mm	2
126	ZFWM600000	Washer Flat M6	2
127	PBBPBS18127	Lower Guide Seat	1
128	PBBPBS18128	Clamp Handle	1
130	PBBPBS18130	Guide Shaft	1
131	ZCHSM812530	Screw Cap HD M8-1.25X30mm	1
134	PBBPBS18134	Screw	1
135	PBBPBS18135	Washer	1
137	PBBPBS18137	Pressing Plate	1



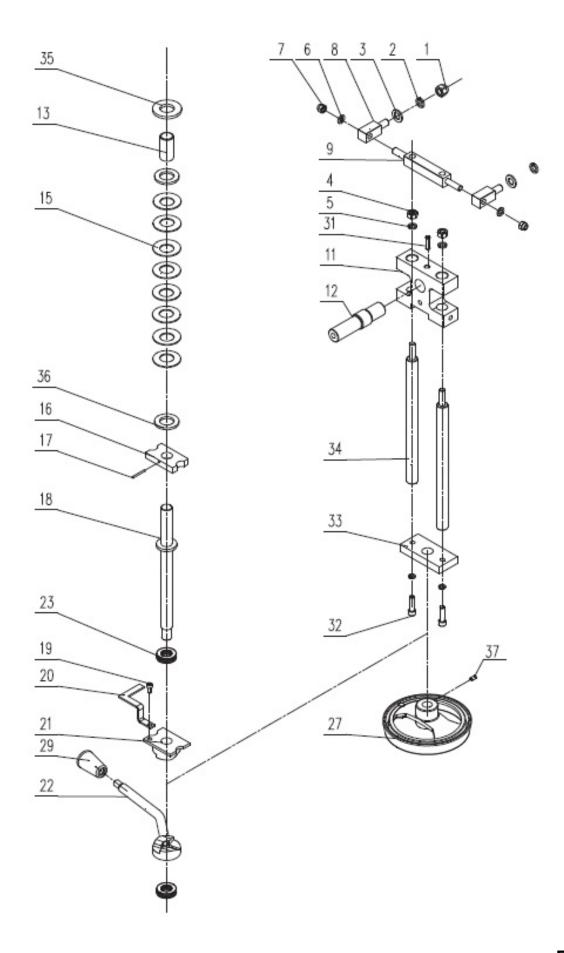
#### Parts List

Item #	Part Number	Description	Qty.
Item #	Part Number	Description	Qty.
1	PBBPBS18201	Cap Screw M8-1.25X16mm	2
2	PBBPBS18202	Washer M8	2
3	PBBPBS18203	C-Clip	4
4	PBBPBS18204	Bearing	4
5	PBBPBS18205	Upper Wheel	1
6	PBBPBS18206	Spacer Bushing	2
7	PBBPBS18207	Rubber Tire	2
8	PBBPBS18208	Blade	1
9	PBBPBS18209	Lower Wheel	1



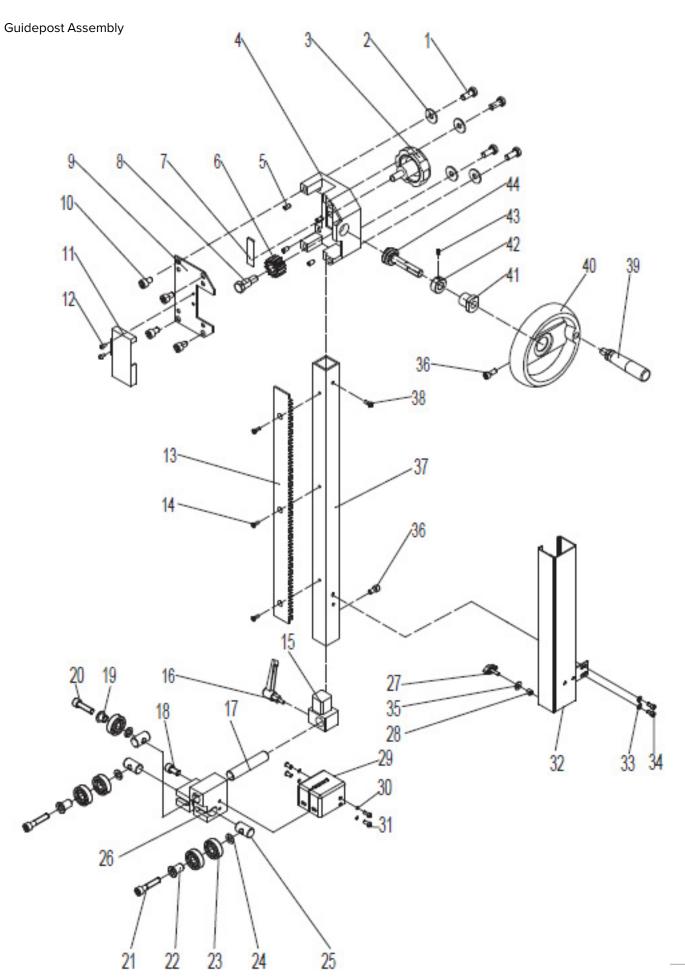
#### Table Assembly Parts List

Item #	Part Number	Description	Qty.
1	PBBPBS18301	Nut Hex M8-1.25	1
2	PBBPBS18302	Bolt Hex M8-1.25X30mm	1
3	PBBPBS18303	Bolt Hex	1
4	PBBPBS18304	Washer Square (Pad)	1
5	PBBPBS18305	Sliding Block	1
6	PBBPBS18306	Washer Large	4
7	PBBPBS18307	Washer Spring	4
8	PBBPBS18308	Bolt Hex	4
9	PBBPBS18309	Screw	1
10	PBBPBS18310	Indicator	1
11	PBBPBS18311	Scale	1
12	PBBPBS18312	Rivet	3
13	PBBPBS18313	Screw	3
14	PBBPBS18314	Gear shaft	1
15	PBBPBS18315	Screw Set M5-0.8X30mm	4
16	PBBPBS18316	Nut Lock M5-0.8	4
17	PBBPBS18317	Table Isert	1
18	PBBPBS18318	Table	1
19	PBBPBS18319	Bolt Hex M10-1.5X30mm	2
20	PBBPBS18320	Washer Spring M10	2
21	PBBPBS18321	Washer Flat M10	2
22	PBBPBS18322		1
23	PBBPBS18323	Nut Lock M10-1.5	1



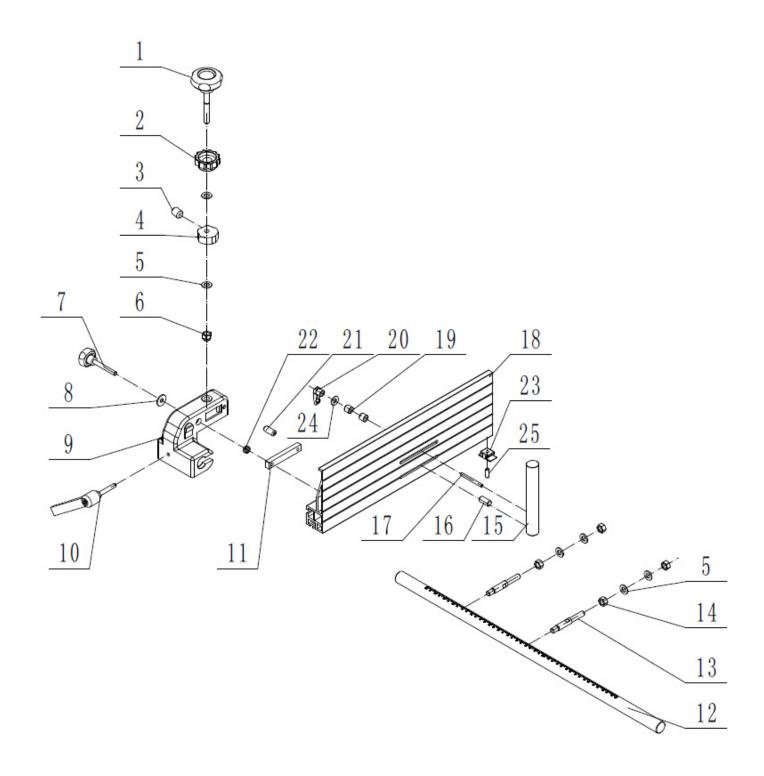
#### **Blade Tension and Tracking Assembly Parts List**

Item #	Part Number	Description	Qty.
1	PBBPBS18401	Nut A-Corn M10-1.5	2
2	PBBPBS18402	Washer Spring	2
3	PBBPBS18403	Washer Flat Large	2
4	PBBPBS18404	Nut Hex M10-1.5	2
5	PBBPBS18405	Washer Spring M10	4
6	PBBPBS18406	Washer Flat M10	2
7	PBBPBS18407	Nut Lock M10-1.5	2
8	PBBPBS18408	Bolt Hex	2
9	PBBPBS18409	Screw Double Thread	1
11	PBBPBS18411	Sliding Bracket	1
12	PBBPBS18412	Upper Wheel Shaft	1
13	PBBPBS18413	Tube	1
15	PBBPBS18415	Spring Belleville	8
16	PBBPBS18416	Plate Threaded	1
17	PBBPBS18417	Pin Roll	1
18	PBBPBS18418	Treaded Rod	1
19	PBBPBS18419	Screw Cap M5-0.8X8mm	1
20	PBBPBS18420	Plate Pressing	1
21	PBBPBS18421	Upper Tension Lock Plate	1
22	PBBPBS18422	Lower Tension Lock Plate	1
23	PBBPBS18423	Bearing	1
27	PBBPBS18427	Locking Handle	1
29	PBBPBS18429	Knob	2
31	PBBPBS18531	Screw M8-1.25X20mm	1
32	PBBPBS18432	Screw Cap M10-1.5X30mm	2
33	PBBPBS18433	Support Plate	1
34	PBBPBS18434	Slide Bar	2
35	PBBPBS18435	Spacer	1
36	PBBPBS18436	Washer	2
37	PBBPBS18437	Screw Set M6-1.0X12mm	1



Item #	Part Number	Description	Qty.
1	PBBPBS18501	Bolt Hex M8-1.25X20mm	4
2	PBBPBS1852	Washer Flat M8	4
3	PBBPBS1853	Lock Handle	1
4	PBBPBS1854	Bracket	1
5	PBBPBS1855	Screw Set M6-1.0X12mm	4
6	PBBPBS1856	Gear	1
7	PBBPBS1857	Plate	1
8	PBBPBS18558	Screw	1
9	PBBPBS1859	Cover	1
10	PBBPBS18510	Screw PH HD M8-1.25X16mm	4
11	PBBPBS18511	Cover	1
12	PBBPBS18512	Screw Pan HD M4-0.7X4mm	2
13	PBBPBS18513	Rack	1
14	PBBPBS18514	Screw PH HD M4-0.7X10mm	3
15	PBBPBS18515	Bracket	1
16	PBBPBS18516	Handle	1
17	PBBPBS18517	Guidepost	1
18	PBBPBS18518	Screw PH HD M8-1.25X16mm	1
19	PBBPBS18519	Tube	1
20	PBBPBS18520	Screw PH HD M8-1.25X30mm	1
21	PBBPBS18521	Screw PH HD M8-1.25X40mm	2
22	PBBPBS18522	Tube	2
23	PBBPBS18523	Bearing	5
24	PBBPBS18524	Washer Flat M8	3
25	PBBPBS18525	Guide Shaft	2
26	PBBPBS18526	Upper Guide	1
27	PBBPBS18527	Bolt Composite	1
28	PBBPBS18528	Nut Hex	1
29	PBBPBS18529	Protective Cover	1
30	PBBPBS18530	Washer Flat M5	1
31	PBBPBS18531	Screw PH HD M5-0.8X16mm	1
32	PBBPBS18532	Blade Guard	4
33	PBBPBS18533	Washer M5 Large	4
34	PBBPBS18534	Screw PH HD M5-0.8X10mm	1
35	PBBPBS18535	Washer M6 Large	2
36	PBBPBS18536	Screw PH HD M6-1.0X30mm	2
37	PBBPBS18537	Guidepost	1

Item #	Part Number	Description	Qty.
38	PBBPBS18538	Screw Pan HD M5-0.8X10mm	1
39	PBBPBS18539	Handle	1
40	PBBPBS18540	Hand Wheel Large	1
41	PBBPBS18541	Tube	1
42	PBBPBS18542	Locking ring	1
43	PBBPBS18543	Screw Set M5-0.8X8mm	1
44	PBBPBS18544	Worm	1



#### Fence Assembly Parts List

	BPBS18601	Adjusting handle	
		Adjusting number	1
2 PB	BPBS18602	Locking knob	1
3 PB	BPTS18603	Cap screw M8x10	1
4 PB	BPBS18604	Cam	1
5 PB	BPBS18605	Flat washer	6
6 PB	BPBS18606	Nut M10	1
7 PB	BPBS18607	Handle	1
8 PB	BPBS18608	Big washer	1
9 PB	BPBS18609	Rip fence carrier	1
10 PB	BPBS18610	Locking handle	1
11 PB	BPBS18611	Sliding block	1
12 PB	BPBS18612	Front guide rail	1
13 PB	BPBS18613	Connecting rod	2
14 PB	BPBS18614	Hex nut M10	1
15 PB	BPBS18615	Re-saw bar	1
16 PB	BPBS18616	Screw	1
17 PB	BPBS18617	Bolt	1
18 PB	BPBS18618	Rip Fence	1
19 PB	BPBS18619	Tube	2
20 PB	BPBS18620	Locking Handle	1
21 PB	BPBS18621	Roll Pin	1
22 PB	BPBS18622	Spring	1
23 PB	BPBS18623	Nylon Plate	1
24 PB	BPBS18624	Washer	1
25 PB	BPBS18625	Set Screw	1

# Busy Bee Tools

#### **BUSY BEE TOOLS 2 YEARS LIMITED WARRANTY**

Busy Bee Tools warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers <u>two years</u> for parts and 90 days for labor (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

#### Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Busy Bee Tools reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etc.

Busy Bee Tools shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

#### IF THE MACHINE IS ALTERED IN ANY WAY, THE WARRANTY SHALL BE NULL AND VOID.

#### RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Busy Bee Tools product, you must visit the appropriate Busy Bee Tools showroom or call 1-800-461-BUSY.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY (2879), and have your model number and part number & payment option ready.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- We do not accept collect shipments.
- · Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee Tools are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

