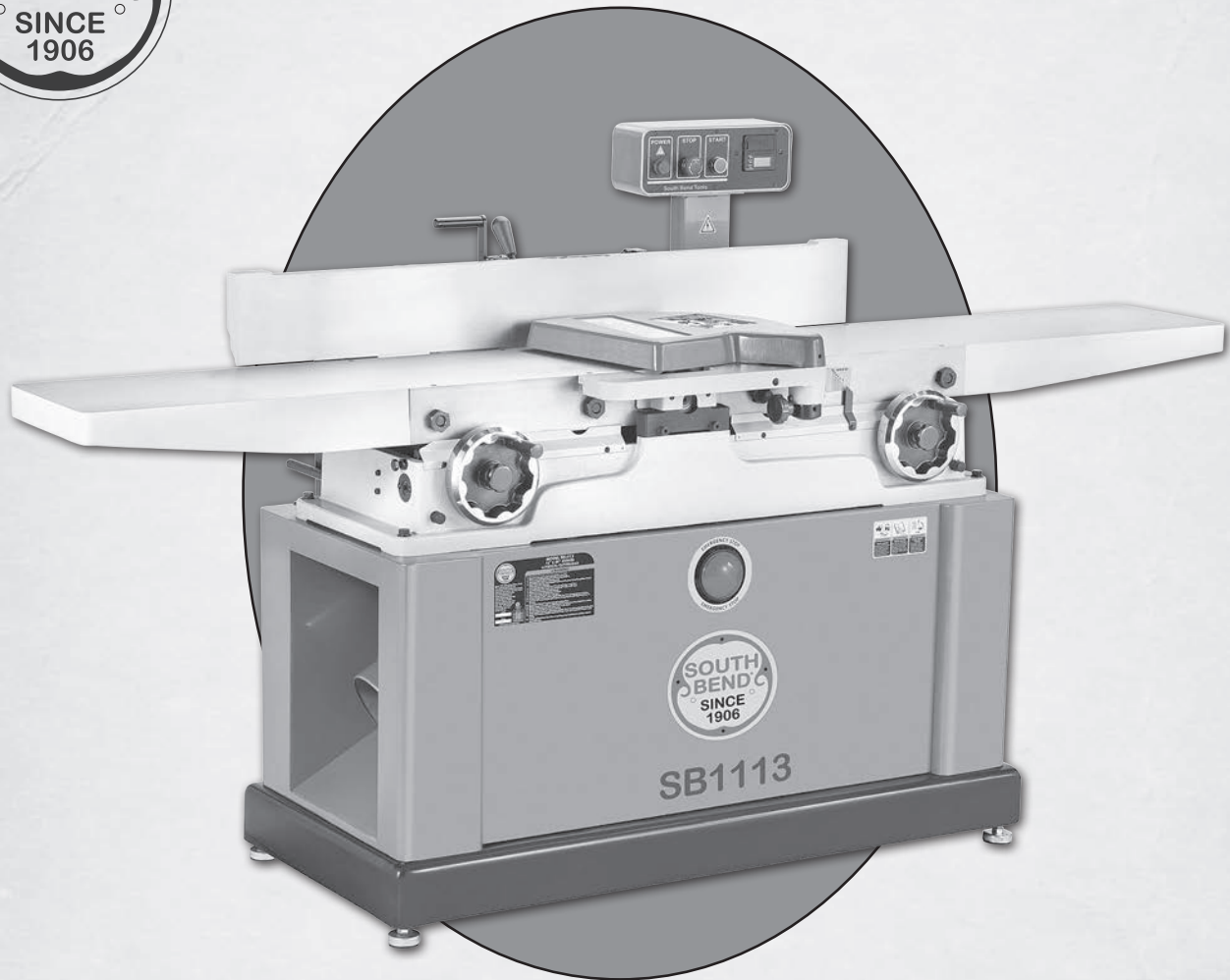


12" x 88" JOINTER W/HELICAL CUTTERHEAD

MODEL SB1113



****Keep for Future Reference****

OWNER'S MANUAL

South Bend Tools®

A Tradition of Excellence



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For Machines Mfd. Since 05/23 (V3.04.23)

Scope of Manual

This manual helps the reader understand the machine, how to prepare it for operation, how to control it during operation, and how to keep it in good working condition. We assume the reader has a basic understanding of how to operate this type of machine, but that the reader is not familiar with the controls and adjustments of this specific model. As with all machinery of this nature, learning the nuances of operation is a process that happens through training and experience. If you are not an experienced operator of this type of machinery, read through this entire manual, then learn more from an experienced operator, schooling, or research before attempting operations. Following this advice will help you avoid serious personal injury and get the best results from your work.

Manual Feedback

We've made every effort to be accurate when documenting this machine. However, errors sometimes happen or the machine design changes after the documentation process—so the manual may not exactly match your machine. If a difference between the manual and machine leaves you in doubt, contact our customer service for clarification.

We highly value customer feedback on our manuals. If you have a moment, please share your experience using this manual. What did you like about it? Is there anything you would change to make it better? Did it meet your expectations for clarity, professionalism, and ease-of-use?

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Updates

For your convenience, any updates to this manual will be available to download free of charge through our website at:

www.southbendtools.com

Customer Service

We stand behind our machines. If you have any service questions, parts requests or general questions about your purchase, feel free to contact us.

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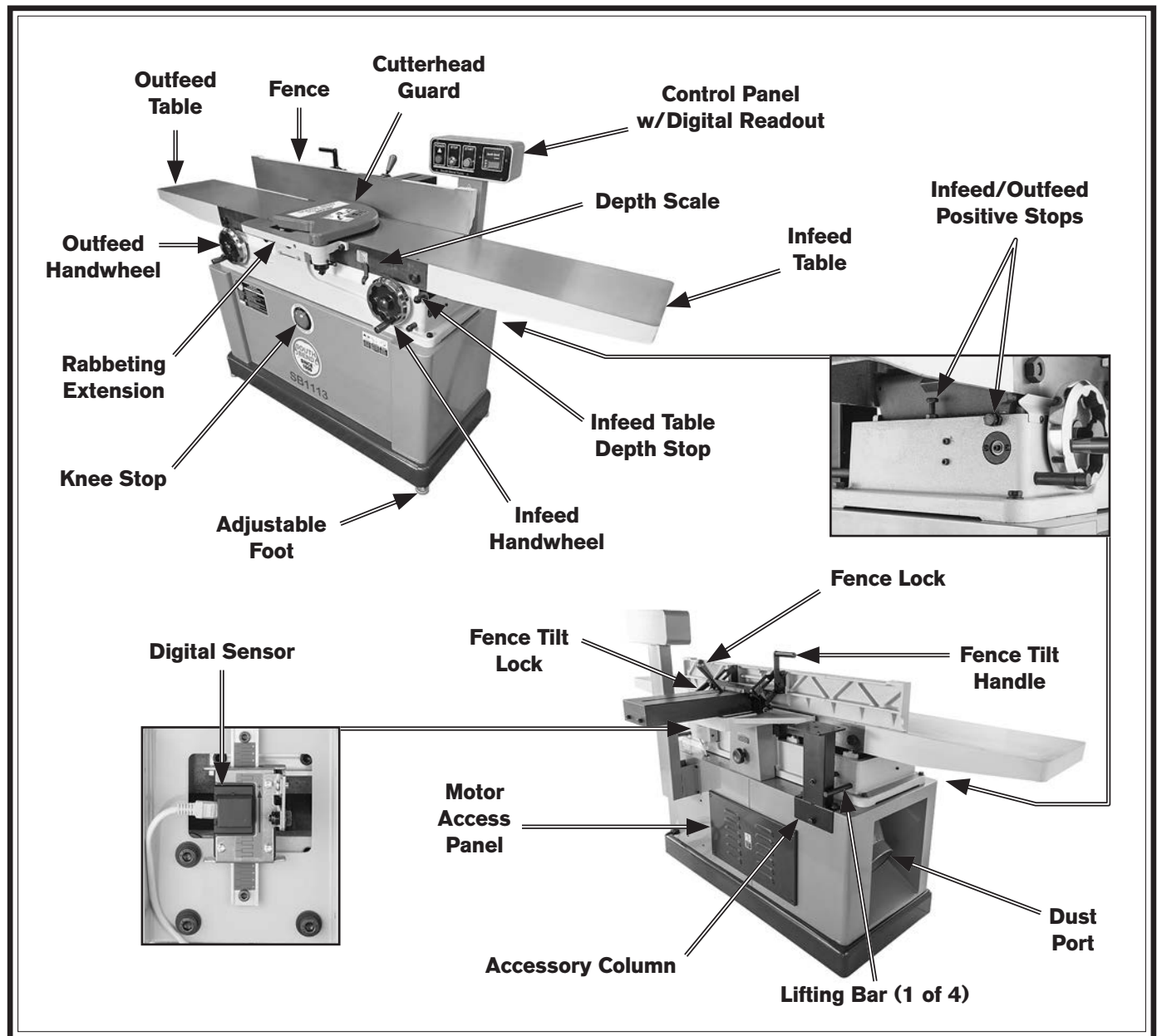
WARNING

Serious personal injury could occur if you connect the machine to power before completing the setup process. **DO NOT** connect power until instructed to do so later in this manual.

WARNING

Untrained users have an increased risk of seriously injuring themselves with this machine. Do not operate this machine until you have understood this entire manual and received proper training.

Identification



⚠ WARNING

For Your Own Safety Read Instruction Manual Before Operating Jointer

- a) Wear eye protection.
- b) Always keep cutterhead and drive guards in place and in proper operating condition. If removed, **ALWAYS** replace cutterhead guard immediately after rabbeting operations.
- c) Never make cuts deeper than $\frac{1}{8}$ " per pass.
- d) Always use hold-down or push blocks when jointing material narrower than 3" or planing material thinner than 3".
- e) Never perform jointing, planing, or rabbeting cuts on pieces shorter than 14" in length.

Description of Controls & Components

Refer to **Figures 1–6** and the following descriptions to become familiar with the basic controls and components used to operate this machine.

Control Panel

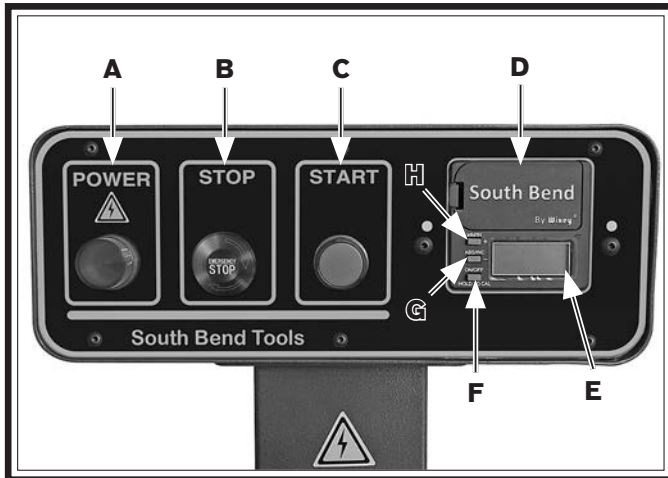


Figure 1. Model SB1113 control panel layout.

- A. **POWER Light:** Illuminates when jointer is connected to power supply.
- B. **EMERGENCY STOP Button:** Stops motor and disables START button while it remains depressed. Enable START button by turning EMERGENCY STOP button clockwise until it releases and pops out of depressed position.
- C. **START Button:** Starts motor only if the EMERGENCY STOP button is released.
- D. **Battery Compartment:** Provides power to digital display via two AAA batteries.
- E. **Digital Readout:** Shows current cutting depth measurement in millimeters or inches.
- F. **ON/OFF HOLD TO CAL Button:** Push to turn digital readout *ON* and *OFF*. Push and hold for 3–5 seconds to enter calibration mode.
- G. **ABS/INC Button:** Toggles between absolute and incremental modes.
- H. **MM/IN Button:** Toggles between millimeters and inches.

Tables & Fence

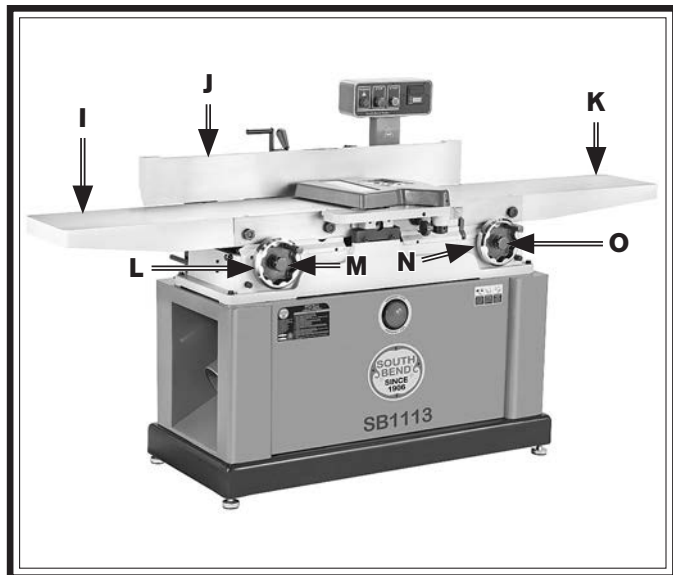


Figure 2. Tables and fence.

- I. Outfeed Table:** Supports workpiece after it passes over cutterhead. For optimum results, outfeed table must be adjusted evenly with highest point of cutterhead insert rotation or top dead center (TDC).
- J. Fence:** Supports workpiece laterally as it moves across cutterhead; determines angle of cut when edge or bevel jointing.
- K. Infeed Table:** Supports workpiece before it reaches cutterhead. Position of infeed table relative to cutterhead inserts determines depth of cut.
- L. Outfeed Handwheel:** Raises or lowers outfeed table.
- M. Outfeed Table Lock:** Tighten to secure outfeed table position; loosen for table adjustment.
- N. Infeed Handwheel:** Raises or lowers infeed table to control depth of cut.
- O. Infeed Table Lock:** Tighten to secure infeed table position; loosen for table adjustment.

Safety & Support

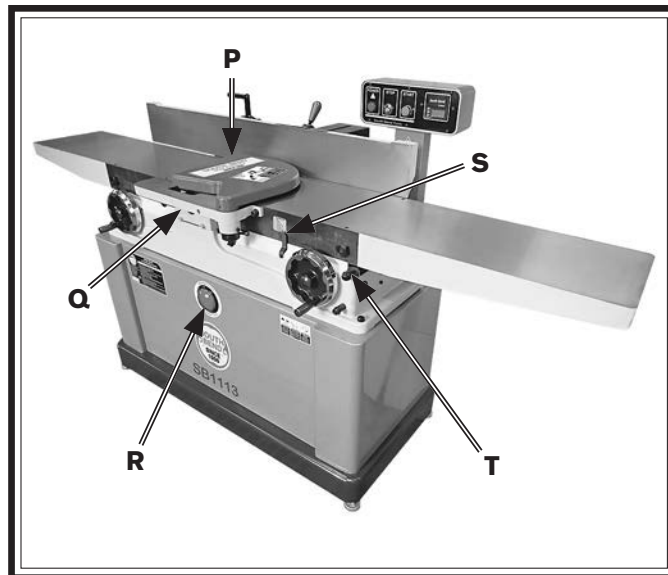


Figure 3. Safety and support features.

- P. Cutterhead Guard:** Covers cutterhead until workpiece pushes guard during operation. When workpiece leaves cutterhead, guard springs back to its starting position, keeping cutterhead covered to minimize risk of accidental contact.
- Q. Rabbeting Extension:** Provides workpiece support during rabbet cutting.
- R. Knee Stop:** Stops power to motor when pressed. Can be pressed with your knee if both hands are holding workpiece.
- S. Depth-of-Cut Scale:** Shows depth of cut setting (per pass).
- T. Infeed Table Depth Stop:** Restricts infeed table maximum depth-of-cut to $\frac{1}{8}$ ". Pull knob to set infeed table depth between $\frac{1}{8}$ "– $\frac{3}{4}$ ".

Fence Controls

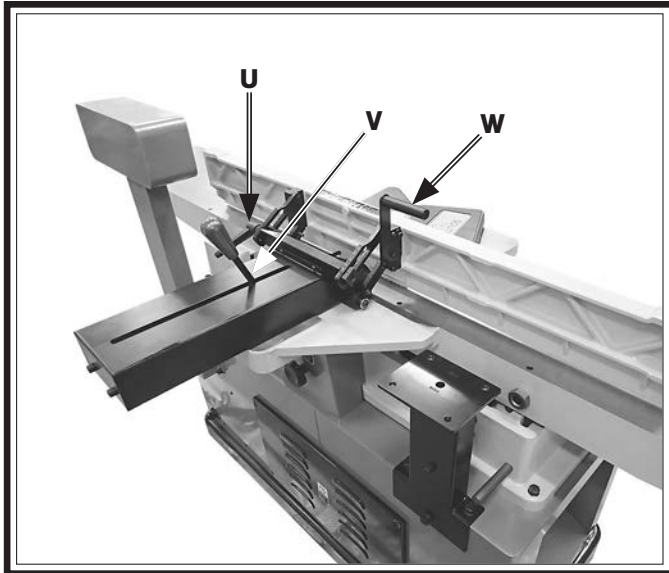


Figure 4. Fence controls.

- U. Fence Tilt Lock:** Tighten to secure fence at any position in available tilt range.

IMPORTANT: Always tighten tilt lock before starting machine—even when fence is resting against stops.

- V. Fence Lock:** Engage to secure fence position along width of tables; disengage for fence adjustment.
- W. Fence Tilt Handle:** Use to tilt fence throughout its range of motion from 90° to 45° outward (135°).

Note: Fence tilt lock must be unlocked before fence angle can be adjusted.

Fence Stops

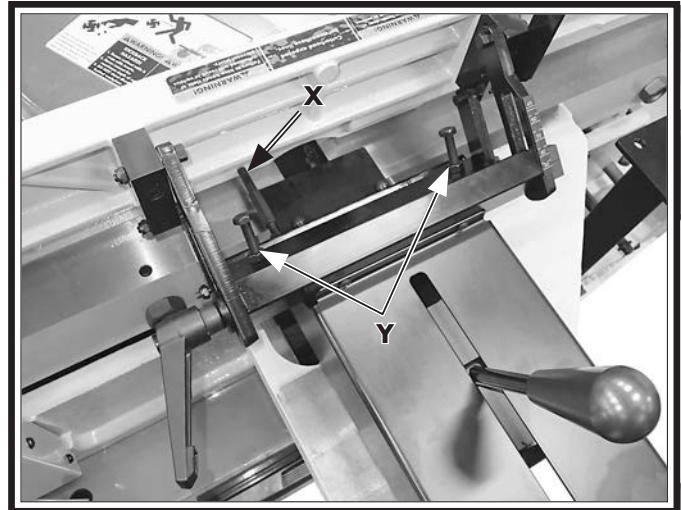


Figure 5. Fence stops.

- X. 90° Fence Stop:** Halts fence at 90°.
- Y. 45° Outward Fence Stops:** Halts fence at 45° outward (135°).

Rear Support

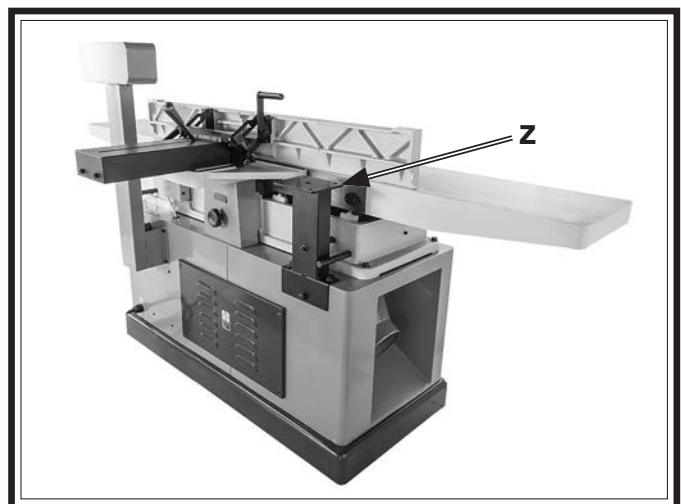


Figure 6. Accessory column.

- Z. Accessory Column:** Supports mounted power feeders or other accessories.

	<h2 style="margin: 0;">Product Specifications</h2> <p style="margin: 5px 0;">P.O. Box 2027, Bellingham, WA 98227 U.S.A. PHONE: (360) 734-1540 • © South Bend Tools www.southbendtools.com</p>	
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Model SB1113

12" x 87" Jointer with Helical Cutterhead

Product Dimensions

Weight..... 827 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 87-1/2 x 39 x 46 in.
 Footprint (Length x Width)..... 49-1/2 x 23 in.

Shipping Dimensions

Type..... Wood Crate
 Content..... Machine
 Weight..... 992 lbs.
 Length x Width x Height..... 91 x 32 x 50 in.
 Must Ship Upright..... Yes

Electrical

Power Requirement..... 230V, Single-Phase, 60 Hz
 Full-Load Current Rating..... 23A
 Minimum Circuit Size..... 30A
 Connection Type..... Cord & Plug
 Power Cord Included..... Yes
 Power Cord Length..... 72 in.
 Power Cord Gauge..... 12 AWG
 Plug Included..... No
 Recommended Plug Type..... L6-30
 Switch Type..... Control Panel w/Magnetic Switch Protection

Motors

Main

Horsepower..... 5 HP
 Phase..... Single-Phase
 Amps..... 23A
 Speed..... 3450 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer Belt
 Bearings..... Shielded & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... Internal

Main Specifications**Main Specifications**

Jointer Size.....	12 in.
Bevel Jointing.....	0 - 45 deg.
Maximum Width of Cut.....	12 in.
Maximum Depth of Cut.....	1/8 in.
Minimum Workpiece Length.....	14 in.
Minimum Workpiece Thickness.....	1/2 in.
Maximum Rabbeting Depth.....	3/4 in.
Number of Cuts Per Minute.....	22,000

Fence Information

Fence Length.....	47-1/2 in.
Fence Width.....	1-1/2 in.
Fence Height.....	6 in.
Fence Stops.....	90, 135 deg.

Cutterhead Information

Cutterhead Type.....	Helical
Cutterhead Diameter.....	4 in.
Number of Cutter Rows.....	4
Number of Indexable Cutters.....	56
Cutterhead Speed.....	5500 RPM

Cutter Insert Information

Cutter Insert Type.....	Indexable Carbide
Cutter Insert Length.....	15mm
Cutter Insert Width.....	15mm
Cutter Insert Thickness.....	2.5mm

Table Information

Table Length.....	87-1/2 in.
Table Width.....	12 in.
Table Thickness.....	3-1/2 in.
Floor to Table Height.....	34-5/16 in.
Table Adjustment Type.....	Handwheel
Table Movement Type.....	Parallelogram

Construction

Base.....	Cast Iron
Body Assembly.....	Cast Iron
Cabinet.....	Pre-formed Steel
Fence Assembly.....	Cast Iron
Guard.....	Die-Cast Aluminum
Table.....	Precision-Ground Cast Iron
Paint Type/Finish.....	Powder Coated

Other Information

Number of Dust Ports.....	1
Dust Port Size.....	6 in.

Other

Country of Origin	Taiwan
Warranty	2 Years
Approximate Assembly & Setup Time	45 Minutes
Serial Number Location	Machine ID Label
Sound Rating	82 - 84 dB
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

Features

Parallelogram Table Adjustment
 Handwheel-Adjusted Tables
 Pedestal-Mounted Switch Controls
 Heavy-Duty Center-Mounted Fence w/Rack and Pinion Adjustment
 Fence Stops at 90 and 135 Degrees
 V-Belt Drive
 6" Dust Port with Built-In Dust Chute
 Helical Cutterhead with 56 Indexable Carbide Inserts
 Precision-Ground Cast-Iron Table
 Two-Tone Powder-Coated Finish
 Sturdy Steel Cabinet Stand
 Rabbeting Table
 Accessory Column for Mounted Power Feeder
 Digital Readout for Infeed Table Height
 Magnetic Switch w/Thermal Overload Protection
 Easy-to-Reach Knee Stop for Hands-Free Emergency Shut Off
 Anodized Handwheels and Fence Handle

Included Accessories

Two Safety Push Blocks w/Rubber Bottoms
 Two Torx T-25 T-Handle Drivers
 Ten Replacement T-25 #10-32 x 1/2 Torx Screws
 Ten Replacement Cutterhead Inserts
 Hex Wrenches 5, 6, 8mm
 Open-End Wrench 17/19mm




Understanding Risks of Machinery

Operating all machinery and machining equipment can be dangerous or relatively safe depending on how it is installed and maintained, and the operator's experience, common sense, risk awareness, working conditions, and use of personal protective equipment (safety glasses, respirators, etc.).

The owner of this machinery or equipment is ultimately responsible for its safe use. This responsibility includes proper installation in a safe environment, personnel training and usage authorization, regular inspection and maintenance, manual availability and comprehension, application of safety devices, integrity of cutting tools or accessories, and the usage of approved personal protective equipment by all operators and bystanders.

The manufacturer of this machinery or equipment will not be held liable for injury or property damage from negligence, improper training, machine modifications, or misuse. Failure to read, understand, and follow the manual and safety labels may result in serious personal injury, including amputation, broken bones, electrocution, or death.

The signals used in this manual to identify hazard levels are as follows:

 DANGER	<i>Death or catastrophic harm WILL occur.</i>	 CAUTION	<i>Moderate injury or fire MAY occur.</i>
 WARNING	<i>Death or catastrophic harm COULD occur.</i>	NOTICE	<i>Machine or property damage may occur.</i>

Basic Machine Safety

Owner's Manual: All machinery and machining equipment presents serious injury hazards to untrained users. To reduce the risk of injury, anyone who uses THIS item MUST read and understand this entire manual before starting.

Personal Protective Equipment: Operating or servicing this item may expose the user to flying debris, dust, smoke, dangerous chemicals, or loud noises. These hazards can result in eye injury, blindness, long-term respiratory damage, poisoning, cancer, reproductive harm or hearing loss. Reduce your risks from these hazards by wearing approved eye protection, respirator, gloves, or hearing protection.

Trained/Supervised Operators Only: Untrained users can seriously injure themselves or bystanders. Only allow trained and properly supervised personnel to operate this item. Make sure safe operation instructions are clearly understood. If electrically powered, use padlocks and master switches, and remove start switch keys to prevent unauthorized use or accidental starting.

Guards/Covers: Accidental contact with moving parts during operation may cause severe entanglement, impact, cutting, or crushing injuries. Reduce this risk by keeping any included guards/covers/doors installed, fully functional, and positioned for maximum protection.

Entanglement: Loose clothing, gloves, neckties, jewelry or long hair may get caught in moving parts, causing entanglement, amputation, crushing, or strangulation. Reduce this risk by removing/securing these items so they cannot contact moving parts.

Mental Alertness: Operating this item with reduced mental alertness increases the risk of accidental injury. Do not let a temporary influence or distraction lead to a permanent disability! Never operate when under the influence of drugs/alcohol, when tired, or otherwise distracted.

Safe Environment: Operating electrically powered equipment in a wet environment may result in electrocution; operating near highly flammable materials may result in a fire or explosion. Only operate this item in a dry location that is free from flammable materials.

Electrical Connection: With electrically powered equipment, improper connections to the power source may result in electrocution or fire. Always adhere to all electrical requirements and applicable codes when connecting to the power source. Have all work inspected by a qualified electrician to minimize risk.

Disconnect Power: Adjusting or servicing electrically powered equipment while it is connected to the power source greatly increases the risk of injury from accidental startup. Always disconnect power **BEFORE** any service or adjustments, including changing blades or other tooling.

Secure Workpiece/Tooling: Loose workpieces, cutting tools, or rotating spindles can become dangerous projectiles if not secured or if they hit another object during operation. Reduce the risk of this hazard by verifying that all fastening devices are properly secured and items attached to spindles have enough clearance to safely rotate.

Chuck Keys or Adjusting Tools: Tools used to adjust spindles, chucks, or any moving/rotating parts will become dangerous projectiles if left in place when the machine is started. Reduce this risk by developing the habit of always removing these tools immediately after using them.

Work Area: Clutter and dark shadows increase the risks of accidental injury. Only operate this item in a clean, non-glaring, and well-lighted work area.

Properly Functioning Equipment: Poorly maintained, damaged, or malfunctioning equipment has higher risks of causing serious personal injury compared to those that are properly maintained. To reduce this risk, always maintain this item to the highest standards and promptly repair/service a damaged or malfunctioning component. Always follow the maintenance instructions included in this documentation.

Unattended Operation: Electrically powered equipment that is left unattended while running cannot be controlled and is dangerous to bystanders. Always turn the power **OFF** before walking away.

Health Hazards: Certain cutting fluids and lubricants, or dust/smoke created when cutting, may contain chemicals known to the State of California to cause cancer, respiratory problems, birth defects, or other reproductive harm. Minimize exposure to these chemicals by wearing approved personal protective equipment and operating in a well ventilated area.

Difficult Operations: Attempting difficult operations with which you are unfamiliar increases the risk of injury. If you experience difficulties performing the intended operation, **STOP!** Seek an alternative method to accomplish the same task, ask a qualified expert how the operation should be performed, or contact our Technical Support for assistance.

Additional Jointer Safety

WARNING

Serious cuts, amputation, entanglement, or death can occur from contact with rotating cutterhead or other moving components! Flying chips from cutting operations can cause eye injuries or blindness. Workpieces or inserts/knives thrown by cutterhead (kickback) can strike nearby operator or bystanders with deadly force. To reduce the risk of serious personal injury from these hazards, operator and bystanders MUST completely heed the hazards and warnings below.

Kickback: Occurs when workpiece is ejected from machine at a high rate of speed. Kickback injuries occur from getting struck by workpiece or hands being pulled into cutterhead. To reduce the risk of kickback, only use proper workpieces, safe feeding techniques, and proper machine setup or maintenance.

Guard Removal: Operating jointer without guards unnecessarily exposes operator to knives/inserts and other hazardous moving parts. Except when rabbeting, never operate jointer or allow it to be connected to power if any guards are removed. Turn jointer OFF and disconnect power before clearing any shavings or sawdust from around cutterhead. After rabbeting or maintenance is complete, immediately replace all guards and ensure they are properly installed/adjusted before resuming regular operations.

Dull or Damaged Knives/Inserts: Dull or damaged knives/inserts increase risk of kickback and cause poor workpiece finish. Only use sharp, undamaged knives/inserts.

Outfeed Table Alignment: Setting outfeed table too high can cause workpiece to hit table or get stuck while feeding. Setting outfeed table too low may cause workpiece to rock or shift while feeding. Both of these results will increase risk of kickback. Always keep outfeed table even with knives/inserts at highest point during rotation.

Inspecting Stock: Impact injuries or kickback may result from using improper workpieces. Thoroughly inspect and prepare workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or other foreign material. Always joint warped workpieces with cupped side facing down.

Maximum Cutting Depth: To reduce risk of kickback, never cut deeper than $\frac{1}{8}$ " per pass.

Grain Direction: Jointing against the grain or end grain can increase risk of kickback. It also requires more cutting force, which produces chatter or excessive chip out. Always joint or surface plane with the grain.

Cutting Limitations: Cutting workpieces that do not meet minimum dimension requirements can result in kickback or accidental contact with cutterhead. Never perform jointing, planing, or rabbeting cuts on pieces smaller than specified in machine data sheet.

Push Blocks: Push blocks reduce risk of accidental cutterhead contact with hands. Always use push blocks when planing materials less than 3" high or wide. Never pass your hands directly over cutterhead without a push block.

Workpiece Support: Poor workpiece support or loss of workpiece control while feeding will increase risk of kickback or accidental contact with cutterhead. Support workpiece with fence continuously during operation. Support long stock with auxiliary tables if necessary.

Feed Workpiece Properly: Kickback or accidental cutterhead contact may result if workpiece is fed into cutterhead the wrong way. Allow cutterhead to reach full speed before feeding. Never start jointer with workpiece touching cutterhead. Always feed workpiece from infeed side to outfeed side without stopping until cut is complete. Never move workpiece backwards while feeding.

Secure Knives/Inserts: Loose knives or improperly set inserts can be thrown from cutterhead with dangerous force. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than $\frac{1}{8}$ " (0.125") from cutterhead body.

Preparation Overview

The purpose of the preparation section is to help you prepare your machine for operation. The list below outlines the basic process. Specific steps for each of these points will be covered in detail later in this section.

The typical preparation process is as follows:

1. Unpack the machine and inventory the contents of the box/crate.
2. Clean the machine and its components.
3. Identify an acceptable location for the machine and move it to that location.
4. Level the machine and either bolt it to the floor or place it on mounts.
5. Assemble the loose components and make any necessary adjustments or inspections to ensure the machine is ready for operation.
6. Connect the machine to the power source.
7. Test run the machine to make sure it functions properly and is ready for operation.

WARNING

Serious personal injury could occur if you connect the machine to power before completing the setup process. DO NOT connect power until instructed to do so later in this manual.

Required for Setup

The items listed below are required to successfully set up and prepare this machine for operation.

For Lifting

- A forklift, hoist, boom crane, or other power lifting device rated for the weight of the machine.
- Lifting Strap or Chain (rated for at least 1200 lbs.)

For Power Connection

- A power source that meets the minimum circuit requirements for this machine. (Refer to **Power Supply Requirements** on **Page 13** for details.)

For Assembly

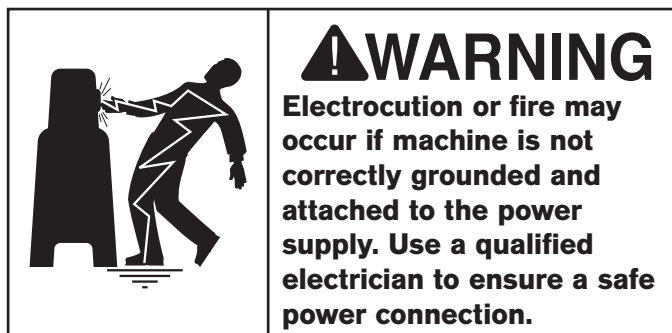
- Safety Glasses (for each person)
- Straightedge 48" (or longer)
- T-Handle T-25 Torx Driver
- Dust Collection System
- 6" Dust Hose (length as needed)
- 6" Hose Clamp

Power Supply Requirements

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed.

To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with applicable electrical codes and safety standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Rating at 230V 23 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

! WARNING

Serious injury could occur if you connect the machine to power before completing the setup process. **DO NOT** connect to power until instructed later in this manual.

Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Circuit Rating 30 Amps
Plug/Receptacle (included) L6-30

A power supply circuit includes all electrical equipment between the main breaker box or fuse panel in your building and the incoming power connections inside the machine. This circuit must be safely sized to handle the full-load current that may be drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

! CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or applicable electrical codes.

Note: The circuit requirements in this manual are for a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure the circuit is properly sized.

Grounding Requirements

This machine must be grounded! In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current in order to reduce the risk of electric shock.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (similar to the figure below). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.

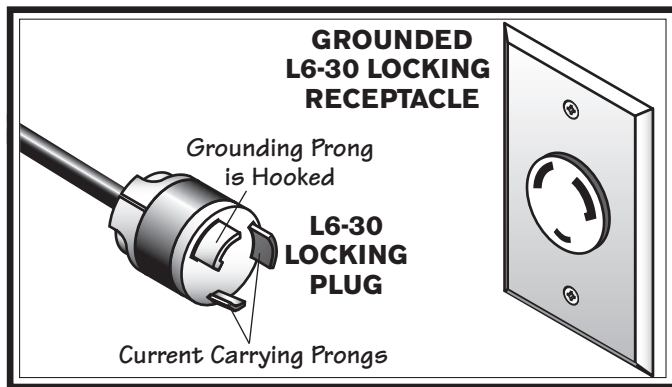


Figure 7. NEMA L6-30 plug and receptacle.

⚠ CAUTION

No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with an electrician or qualified service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded.

If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use one, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle listed in the **Circuit Requirements** for the applicable voltage, and meet the following requirements:

- Minimum Gauge Size.....10 AWG**
- Maximum Length (Shorter is Better)50 ft.**

Unpacking

This item was carefully packaged to prevent damage during transport. If you discover any damage, please immediately call Customer Service at (360) 734-1540 for advice. You may need to file a freight claim, so save the containers and all packing materials for possible inspection by the carrier or its agent.

Inventory

Wood Crate (Figures 8–10)	Qty
A. Jointer Assembly (not shown)	1
B. Hex Wrenches 5, 6, 8mm	1 Ea.
C. Open-End Wrench 17/19mm	1
D. Safety Push Blocks	2
E. T-Handle T-25 Torx Drivers	2
F. AAA Batteries	2
G. Indexable Inserts 15 x 15 x 2.5mm	10
H. Flat Head Torx Screws 10-32 x 1/2"	10
I. Cutterhead Guard Assembly	1

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

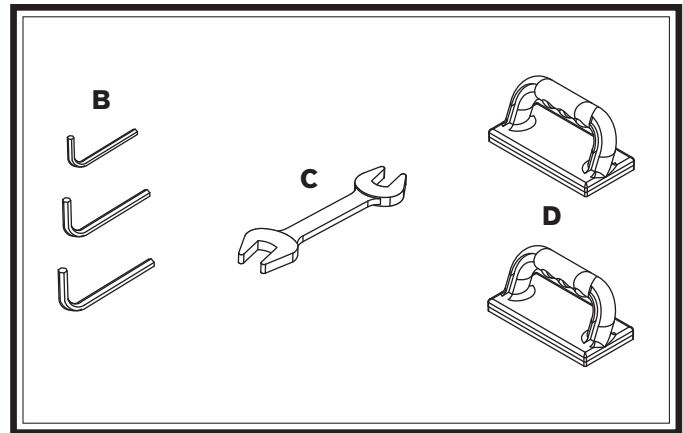


Figure 8. Tools inventory.

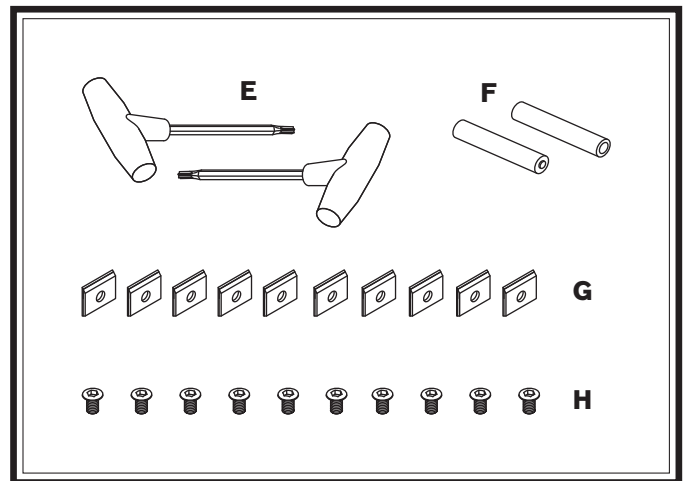


Figure 9. Helical cutterhead inventory.

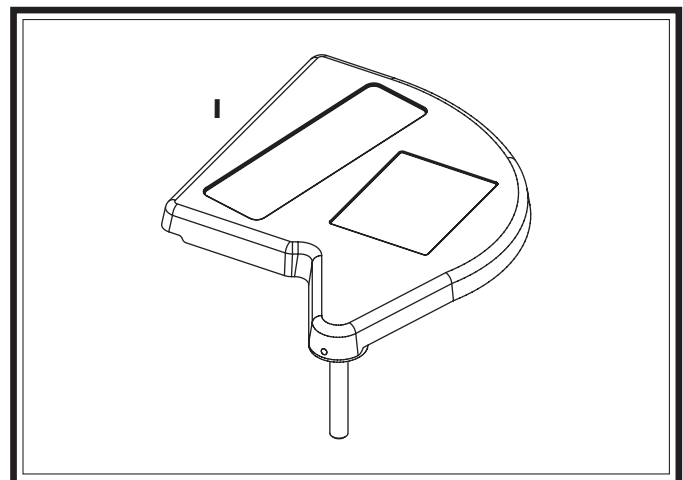


Figure 10. Cutterhead guard assembly.

Cleaning & Protecting

The unpainted surfaces are coated at the factory with a heavy-duty rust preventative that prevents corrosion during shipment and storage. The benefit of this rust preventative is that it works very well. The downside is that it can be time-consuming to thoroughly remove.

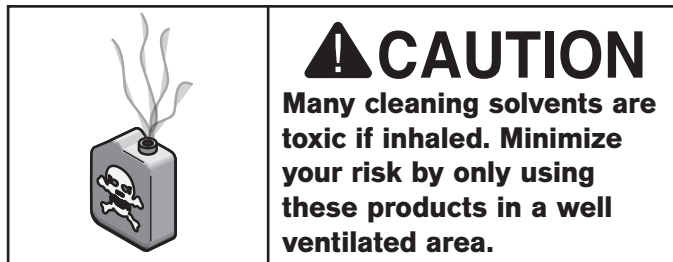
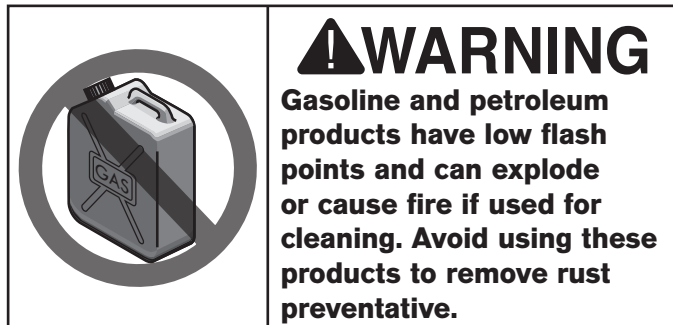
Be patient and do a careful job when cleaning and removing the rust preventative. The time you spend doing this will reward you with smooth-sliding parts and a better appreciation for the proper care of the unpainted surfaces.

Although there are many ways to successfully remove the rust preventative, the following process works well in most situations.

Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (certain citrus-based degreasers work extremely well and they have non-toxic fumes)
- Safety glasses & disposable gloves

Note: Automotive degreasers, mineral spirits, or WD•40 can be used to remove rust preventative. Before using these products, though, test them on an inconspicuous area of a painted surface to make sure they will not damage it.



NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.

Basic steps for removing rust preventative:

1. Put on safety glasses and disposable gloves.
 2. Coat all surfaces that have rust preventative with a liberal amount of your cleaner or degreaser and let them soak for a few minutes.
 3. Wipe off the surfaces. If your cleaner or degreaser is effective, the rust preventative will wipe off easily.
- Note:** To clean off thick coats of rust preventative on flat surfaces, such as beds or tables, use a PLASTIC paint scraper to scrape off the majority of the coating before wiping it off with your rag. (Do not use a metal scraper or it may scratch the surface.)
4. Repeat Steps 2–3 as necessary until clean, then coat all unpainted surfaces with a quality metal protectant or light oil to prevent rust.

T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from the *non-painted* parts of the machine during clean up.



Figure 11. T23692 Orange Power Degreaser.

Location

Physical Environment

The physical environment where your machine is operated is important for safe operation and longevity of parts. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous or flammable chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature is outside the range of 41°–104°F; the relative humidity is outside the range of 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device.

Lighting

Lighting around the machine must be adequate enough to perform operations safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

Weight Load

Refer to the **Machine Specifications** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual.

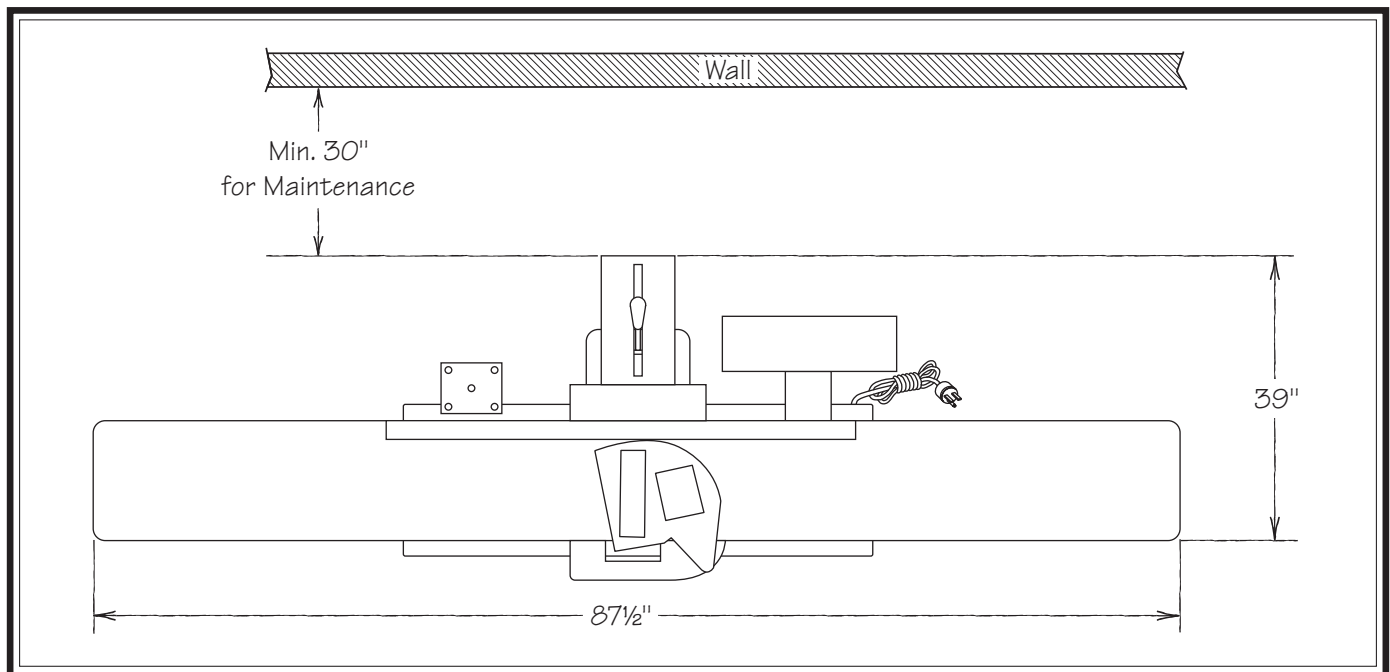
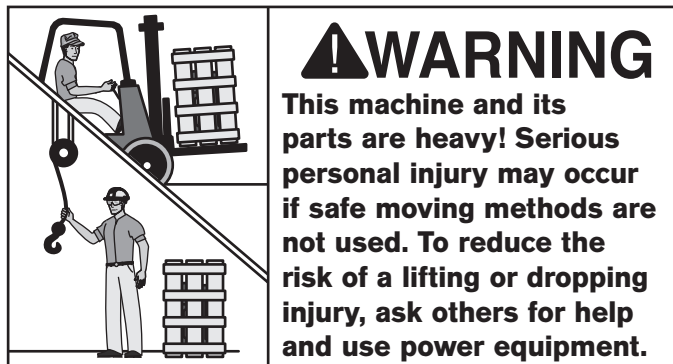


Figure 12. Minimum working clearances.

Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Required for Setup** on **Page 12** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).



NOTICE

DO NOT lift this jointer by the tables. Doing so may affect factory-set table parallelism. Attach lifting straps to lifting bars.

The Model SB1113 requires the use of lifting equipment such as a forklift, engine hoist, or boom crane. **DO NOT** attempt to lift or move jointer without necessary assistance from other people. Each piece of lifting equipment must be rated for **at least 1200 lbs.** to support dynamic loads that may be applied while lifting.

Review **Power Supply Requirements** on **Page 13**, then prepare a permanent location for the jointer.

To assemble jointer:

1. Move jointer to desired location.
2. Remove crate top and sides, then remove any blocks around machine base.
3. Remove any plastic wrap around machine and components.
4. Set fence to 90° and move it all the way forward.

5. Remove (4) cap screws, flat washers, and lock washers securing control panel column, rotate column vertically, then re-install fasteners (see **Figure 13**).

Note: Be careful not to damage control panel cord during installation.

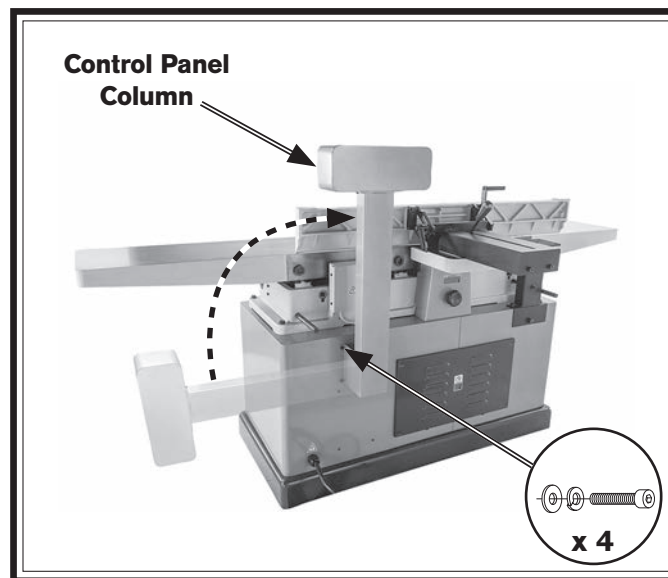


Figure 13. Rotating control panel column.

6. Unbolt jointer from pallet.
7. Wrap lifting straps around lifting bars, as shown in **Figure 14**.

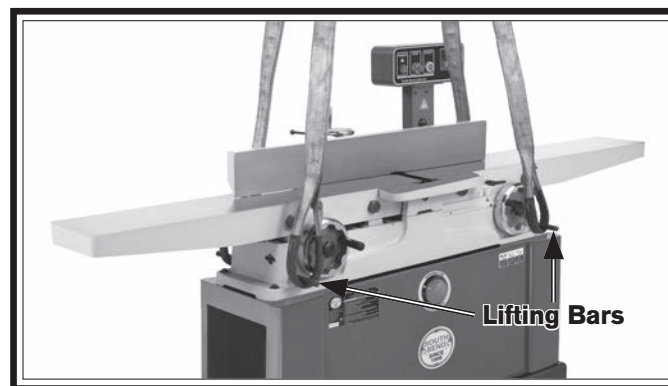


Figure 14. Example of jointer supported evenly at lifting bars by lifting straps.

8. With lifting straps positioned evenly on forks or crane, lift jointer off of pallet and place it in desired location.
9. Verify all indexable inserts are securely tightened on cutterhead.

10. Verify outfeed table height is set correctly with inserts at top dead center (TDC) as shown in **Setting Outfeed Table Height** on **Page 40**.
11. Set fence to 90° and move it all the way back.
12. Loosen shaft lock and insert guard shaft into mounting hole, positioned so guard rests against fence (see **Figure 15**).

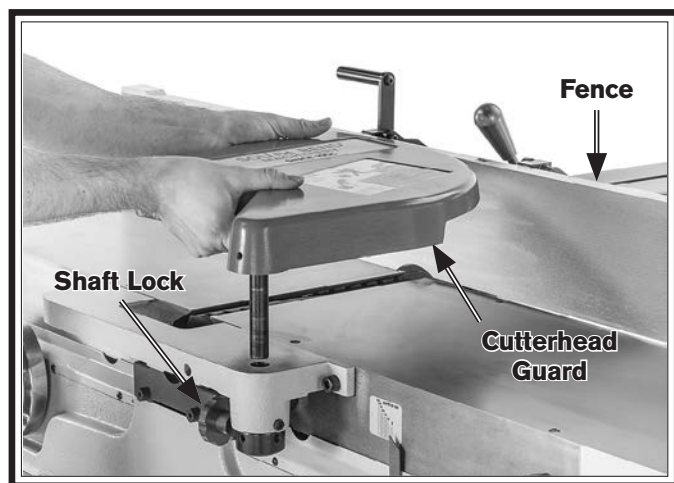


Figure 15. Installing cutterhead guard.

13. Position guard height as low as possible without dragging on infeed table/rabbeting ledge (approximately $\frac{1}{16}$ " above infeed table), then tighten shaft lock.

⚠ WARNING

The cutterhead guard is a critical safety feature of this jointer. You **MUST** verify its operation before using the jointer! Failure to properly install this guard will greatly increase risk of serious personal injury.

14. Verify proper operation of cutterhead guard by setting fence to 90°, moving fence to rear of table, then pulling cutterhead guard back and letting it go. It should spring back over cutterhead and contact fence without dragging across outfeed table.

— If cutterhead guard DOES NOT spring back over cutterhead and contact fence, or if it drags across outfeed table, then it must be adjusted (refer to **Checking/Adjusting Cutterhead Guard** on **Page 41** for instructions).

Dust Collection

⚠ CAUTION

DO NOT operate the Model SB1113 without an adequate dust collection system. This jointer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 850 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect machine to a dust collector:

1. Fit a 6" dust hose that is connected to a dust collector over dust port, and secure in place with a hose clamp (see **Figure 16**).

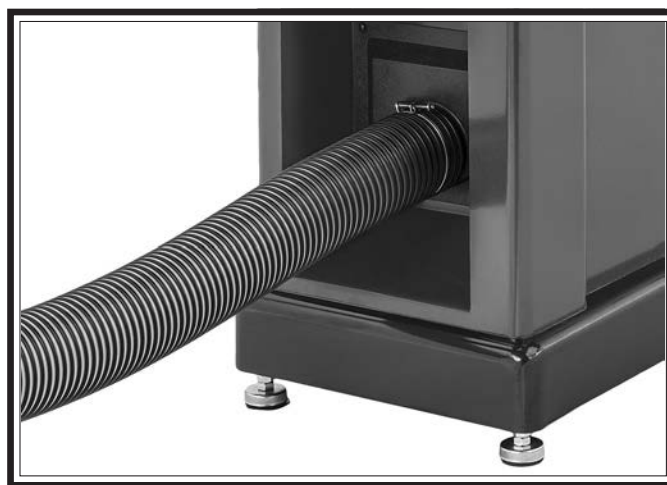


Figure 16. Example of dust hose attached to dust port.

2. Tug hose to make sure it does not come off.

Note: A tight fit is necessary and ensures proper performance during operation.

Digital Readout Batteries

You must install two AAA batteries in the battery compartment for the digital readout (DRO) to function.

To install AAA batteries in digital readout:

1. Remove cover on battery compartment (see **Figure 17**).

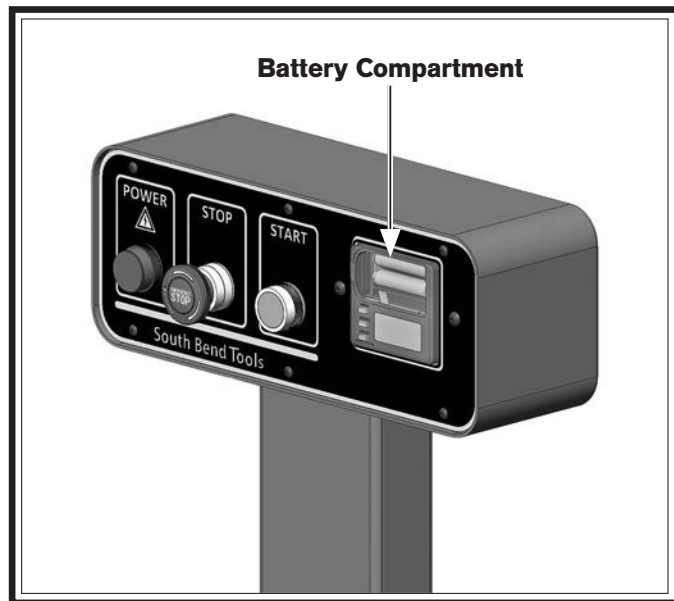


Figure 17. Digital readout battery compartment.

2. Insert included AAA batteries, then re-install cover.

Test Run

After all preparation steps have been completed, the machine and its safety features must be tested to ensure correct operation. If you discover a problem with the operation of the machine or its safety components, do not operate it further until you have resolved the problem.

Note: Refer to **Troubleshooting** on **Page 46** for solutions to common problems that occur with all jointers. If you need additional help, contact our Tech Support at (360) 734-1540.

The test run consists of verifying the following:

- Motor powers up and runs correctly.
- Emergency Stop and Knee Stop buttons work correctly.

!WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

!WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear away all tools and objects used during assembly and preparation.
2. Connect machine to power source. POWER light should illuminate,
 - If light *does not* illuminate, check power connection.

3. Push EMERGENCY STOP button in, then twist it clockwise so it pops out. When EMERGENCY STOP button pops out, button is reset and ready for operation (see Figure 18).



Figure 18. Resetting EMERGENCY STOP button.

4. Push START button to turn machine *ON*. Verify machine operates smoothly without unusual problems or noises.
- When operating correctly, machine runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating machine further. **ALWAYS** disconnect machine from power when investigating or correcting potential problems.
5. Press EMERGENCY STOP button to stop machine.
6. **WITHOUT** resetting EMERGENCY STOP button, press START button. Machine should not start.
- If machine *does not* start, EMERGENCY STOP button safety feature is working correctly.
 - If machine *does* start (with EMERGENCY STOP button pushed in), immediately disconnect power to machine. The EMERGENCY STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.
7. Reset EMERGENCY STOP button, and push START button.
8. Press Knee Stop button to stop machine.
- If machine *does* stop, Knee Stop button safety feature is working correctly.
 - If machine *does not* stop, (with Knee Stop button pushed in), immediately disconnect power to machine. The Knee Stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Inspections & Adjustments

The following list of adjustments were performed at the factory before your machine was shipped:

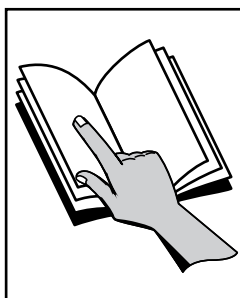
- **Table Parallelism.....(Page 35)**
- **Calibrating Depth Scale.....(Page 39)**
- **Outfeed Table Adjustment(Page 40)**
- **Fence Stop Settings(Page 42)**
- **V-Belt Tension Adjustment(Page 44)**

Be aware that machine components can shift during the shipping process. Pay careful attention to these adjustments as you test run your machine. If you find that the adjustments are not set according to the procedures in this manual or your personal preferences, re-adjust them.

Operation Overview

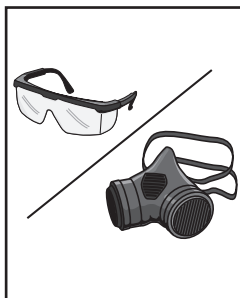
The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so they can more easily understand the controls discussed later in this manual.

Note: Due to the generic nature of this overview, it is not intended to be an instructional guide for performing actual machine operations. To learn more about specific operations and machining techniques, seek training from people experienced with this type of machine, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



!WARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.



!WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.

To complete a typical operation, the operator does the following:

1. Examines workpiece to verify it is safe and suitable for cutting.
2. Adjusts fence for width of workpiece and locks it in place.
3. Adjusts fence tilt, if necessary.
4. Adjusts infeed table height to set depth of cut per pass.
5. Puts on safety glasses, respirator, and any other required protective equipment.
6. Starts jointer.
7. Using push blocks as needed, holds workpiece firmly against infeed table and fence, and feeds workpiece into cutterhead at a steady and controlled rate until entire length of workpiece has been cut and it clears the cutterhead on the outfeed table side.
8. Repeats cutting process described above until desired results are achieved.
9. Stops jointer.

Stock Inspection & Requirements

Follow these rules when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains large or loose knots.** Injury to the operator or damage to the workpiece can occur if a knot becomes dislodged during the cutting operation.
- **DO NOT joint or surface plane against the grain direction.** Cutting against the grain increases the likelihood of kickback, as well as tear-out on the workpiece.
- **Jointing and surface planing with the grain produces a better finish and is safer for the operator.** Cutting with the grain is described as feeding the stock on the jointer so the grain points down and toward you as viewed on the edge of the stock (see **Figure 19**).

Note: If the grain changes direction along the edge of the board, decrease the cutting depth and make additional passes.

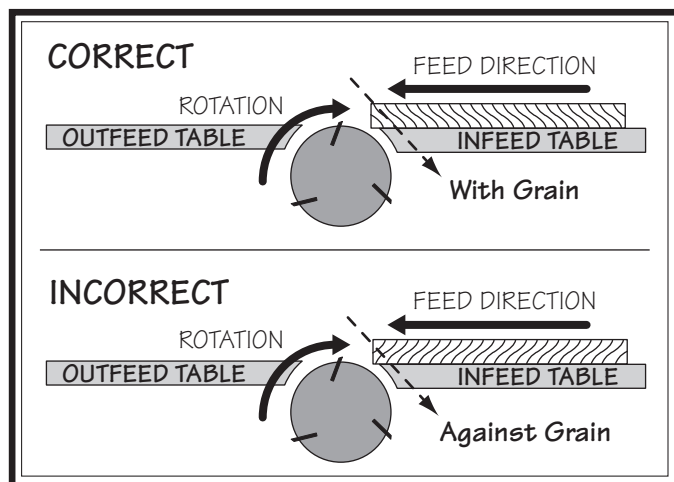


Figure 19. Proper grain alignment with cutterhead.

- **Only cut natural wood.** This jointer is only designed for cutting natural wood stock. Never use it to cut MDF, particle board, plywood, laminates, drywall, backer board, metals, glass, stone, tile, products with lead-based paint, or products that contain asbestos. Cutting these may lead to injury or machine damage.

- **Scrape all glue off the workpiece before jointing.** Glue deposits on the workpiece, hard or soft, will gum up the cutterhead and produce poor results.
- **Remove foreign objects from the workpiece.** Make sure that any stock you process with the jointer is clean and free of dirt, nails, staples, tiny rocks or any other foreign objects that could damage the cutterhead. These particles could also cause a spark as they strike the cutterhead and create a fire hazard.

IMPORTANT: Wood stacked on a concrete or dirt surface can have small pieces of concrete or stone pressed into the surface.

- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the cutters and poor cutting results. Excess moisture can also hasten rust and corrosion.

⚠ WARNING

Make sure your workpiece exceeds the minimum dimension requirements shown below before processing it through the jointer, or the workpiece may break or kick back during the operation.

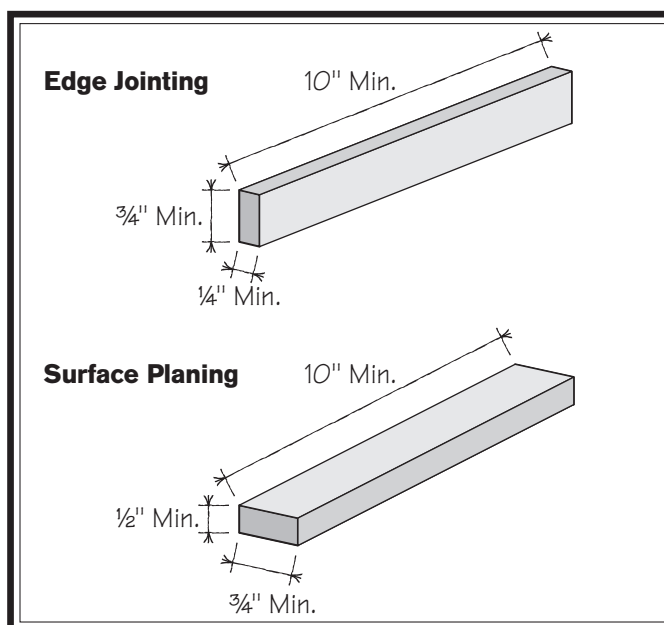


Figure 20. Minimum stock dimensions for jointer.

Squaring Stock

Squaring stock means making it flat and parallel along both length and width, and making the length and width perpendicular to one another.

The purpose of squaring stock is to prepare it for accurate cuts and construction later on.

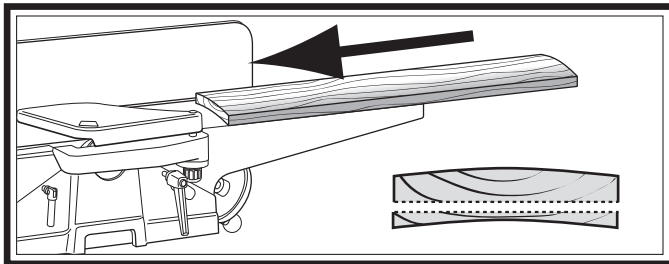
A properly "squared up" workpiece is essential for tasks such as accurate table saw cuts, glue-ups/laminations, cutting accurate bevels on a bandsaw, and many other applications where one surface of a workpiece is used to reference another.

Items Needed

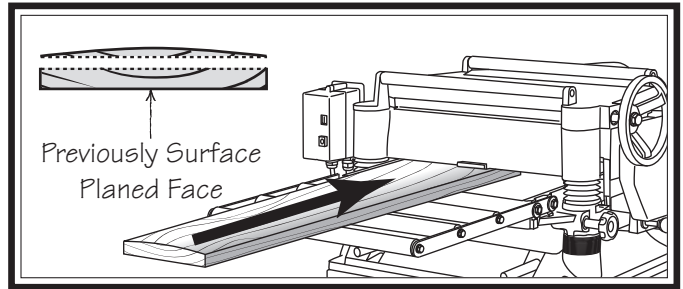
	Qty
Table Saw	1
Jointer.....	1
Planer	1

Squaring stock involves four steps performed in the order below:

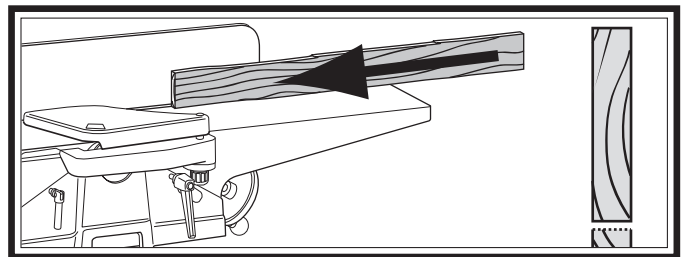
- 1. Surface Plane on Jointer**—Concave face of workpiece is surface planed flat with jointer.



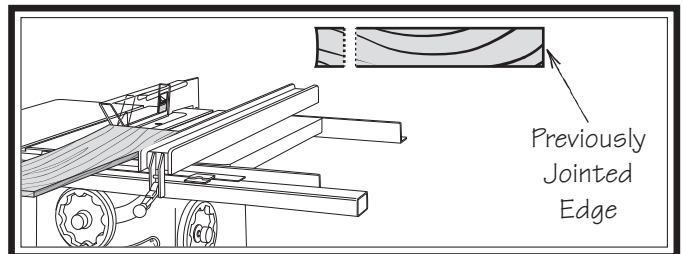
- 2. Surface Plane on a Thickness Planer**—Opposite face of workpiece is surface planed flat with a thickness planer.



- 3. Edge Joint on Jointer**—Concave edge of workpiece is jointed flat with jointer.



- 4. Rip Cut on a Table Saw**—Jointed edge of workpiece is placed against a table saw fence and opposite edge cut off.



Surface Planing

The purpose of surface planing (see example **Figures** below) on the jointer is to make one flat face on a piece of stock to prepare it for thickness planing on a planer.

⚠ WARNING

Failure to use push blocks when surface planing could result in your hands contacting rotating cutterhead, which will cause serious personal injury. Always use push blocks when surface planing on jointer!

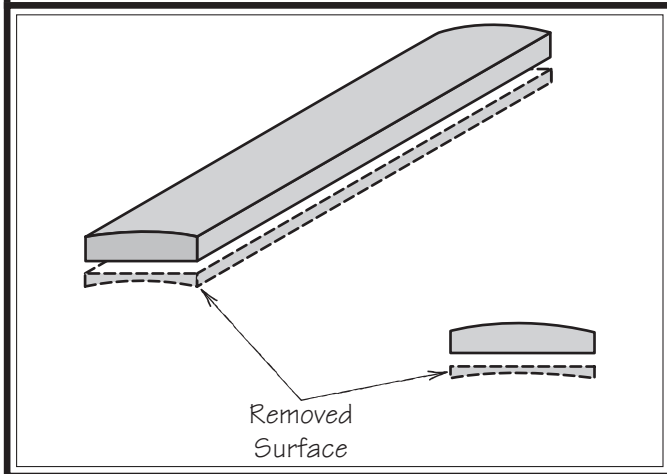
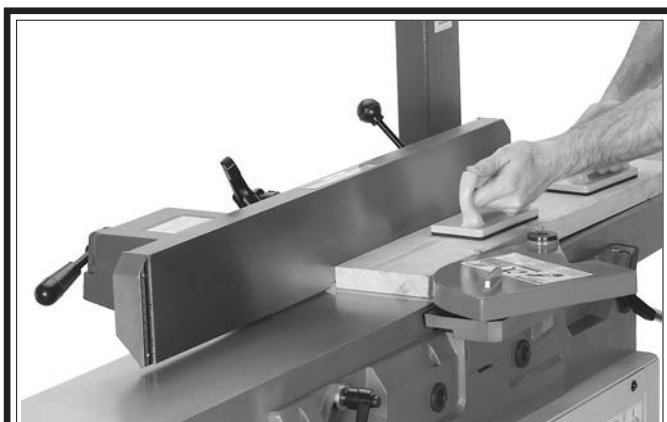


Figure 21. Example of a surface planing operation.

To surface plane on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** on **Page 23**).

2. Set infeed table height to desired cutting depth for each pass.

⚠ CAUTION: To minimize risk of kickback, do not exceed a cutting depth of $\frac{1}{16}$ " per pass when surface planing.

3. Set fence to 90°.

4. Start jointer.

5. Place workpiece firmly against fence and infeed table.

⚠ CAUTION: To ensure workpiece remains stable during cut, concave sides of workpiece must face toward table and fence.

6. Feed workpiece completely across cutterhead while keeping it firmly against fence and tables during the entire cut.

⚠ CAUTION: Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce risk of accidental hand contact with cutterhead.

7. Repeat **Step 6** until entire surface is flat.

Tip: When squaring up stock, cut opposite side of workpiece with a planer instead of the jointer to ensure both sides are parallel.

Edge Jointing

Edge jointing (see example **Figures** below) produces a flat and true surface along the side of a workpiece by removing uneven areas. It is an essential step for squaring up warped or rough stock and when preparing a workpiece for joinery or finishing.

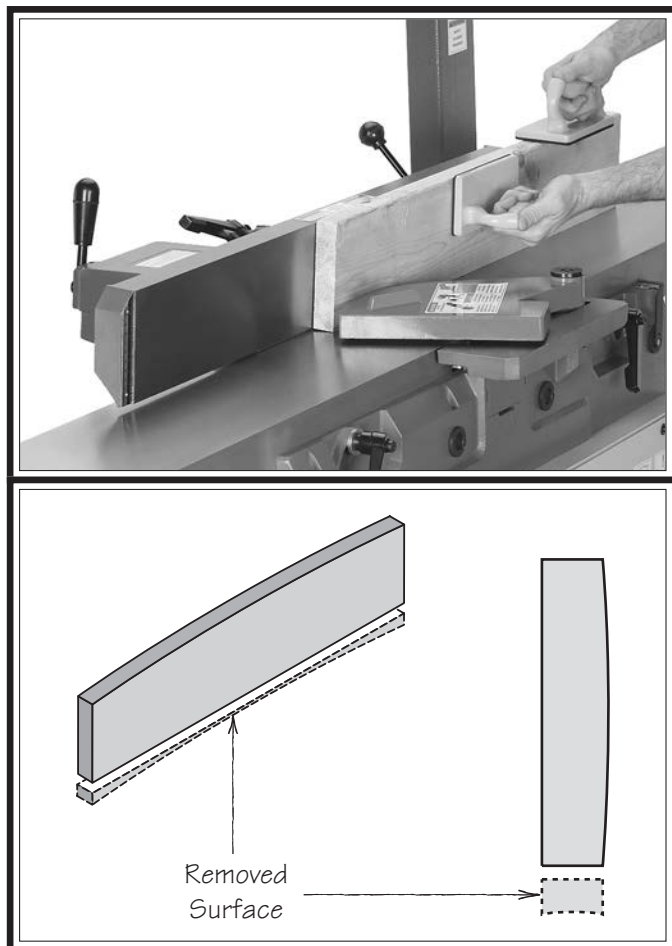


Figure 22. Example of an edge jointing operation.

To edge joint on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** on **Page 23**).

2. Set infeed table height to desired cutting depth for each pass.

▲ CAUTION: To minimize risk of kickback, do not exceed a cutting depth of $\frac{1}{8}$ " per pass.

3. Set fence to 90° .

4. Start jointer.

5. Place workpiece firmly against fence and infeed table.

▲ CAUTION: To ensure workpiece remains stable during cut, concave sides of workpiece must face toward table and fence.

6. Feed workpiece completely across cutterhead while keeping it firmly against fence and tables during the entire cut.

▲ CAUTION: Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce risk of accidental hand contact with cutterhead.

7. Repeat **Step 6** until the entire edge is flat.

Tip: When squaring up stock, cut opposite edge of workpiece with a table saw instead of the jointer—otherwise, both edges of workpiece will not be parallel with each other.

Bevel Cutting

Bevel cuts (see example **Figures** below) can be made by setting the fence at the desired angle and feeding the workpiece firmly along the fence face, with the bottom inside corner firmly against the table. The cutting process typically requires multiple passes or cuts to bevel the entire edge of a workpiece.

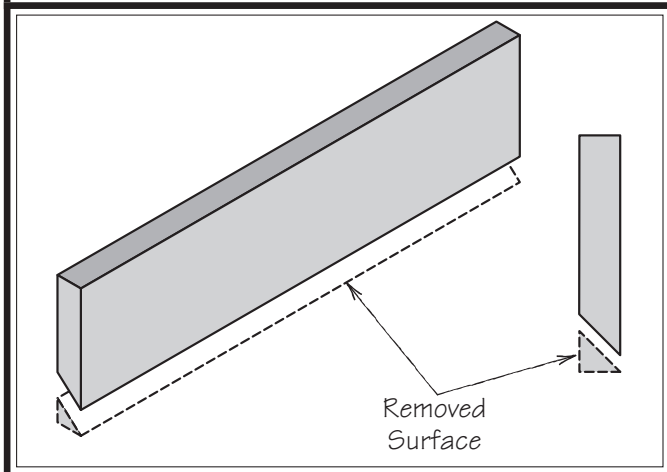
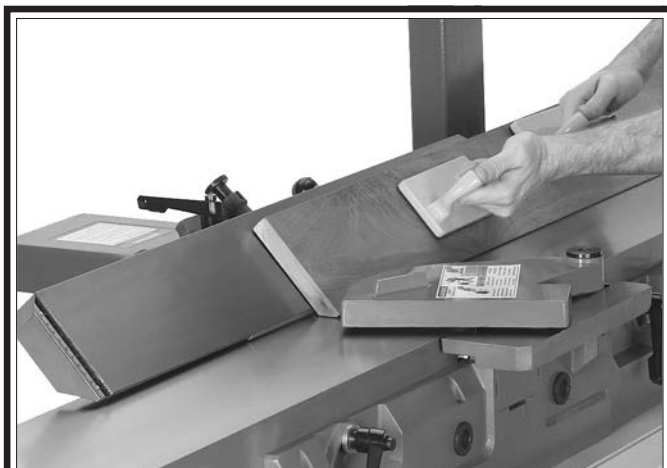


Figure 23. Example of fence set up for a bevel cut of 45° outward (135°).

To bevel cut on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** on **Page 23**).
2. Set infeed table height to cutting depth desired for each pass.
 - ▲ **CAUTION:** Cutting depth for bevel cuts is typically between $\frac{1}{16}$ " and $\frac{1}{8}$ ", depending on hardness and width of stock.
3. Set fence tilt to desired angle of cut.
4. Place workpiece against fence and infeed table with concave side face down.
5. Start jointer.
6. With a push block in your leading hand, press workpiece against table and fence with firm pressure, and feed workpiece over cutterhead with a push block in your trailing hand.

▲ **CAUTION:** When your leading hand gets within 4" of the cutterhead, lift it up and over cutterhead, and place push block on portion of the workpiece once it is 4" past cutterhead. Now, focus your pressure on outfeed end of the workpiece while feeding, and repeat same action with your trailing hand when it gets within 4" of cutterhead. To help keep your hands safe, **DO NOT** let them get closer than 4" from moving cutterhead at any time during operation!

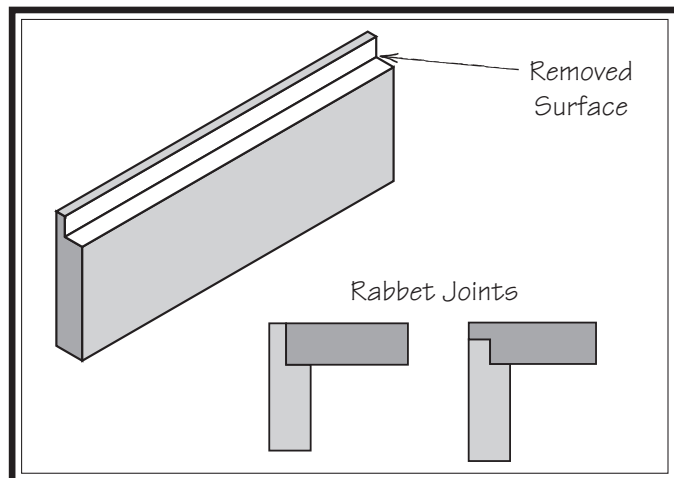
7. Repeat cutting process, as necessary, until you are satisfied with the results.

Rabbet Cutting

⚠ WARNING

When cutterhead guard is removed, attempting any other cut besides a rabbet directly exposes operator to moving cutterhead. To minimize risk of injury, always keep cutterhead guard installed when possible, and ALWAYS immediately replace it after performing rabbet cuts.

A rabbet cut removes a portion of a workpiece edge, so it fits together with an opposing, equally sized rabbet cut on another workpiece (see example **Figure** below). This is a classic method of joining two workpieces that is simple, yet strong.



This jointer can be used to make high-quality rabbet cuts, but there are some situations—whether it is due to an excessively large/small workpiece size or rabbet cutting width/depth—when it will not be safe or appropriate for making the rabbet cut on this jointer. In these cases, you need to use another tool or method for rabbet cutting that will be a safer alternative.

Typically, rabbet cutting with a jointer requires the cutterhead guard to be removed first, so the workpiece can slide along the rabbeting ledge during the cut. However, it is possible to make rabbet cuts with workpieces up to 1" thick without removing the cutterhead guard. This is done by performing the rabbet cut with the workpiece on end (similar to when you are edge jointing).

To rabbet cut on jointer:

1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** on **Page 23**).
2. Set infeed table height to desired cutting depth for each pass.

⚠ CAUTION: Infeed table depth stop restricts infeed table maximum depth-of-cut to $\frac{1}{8}$ ". Pull knob (see **Figure 24**) to set infeed table depth-of-cut between $\frac{1}{8}$ "– $\frac{3}{4}$ ".

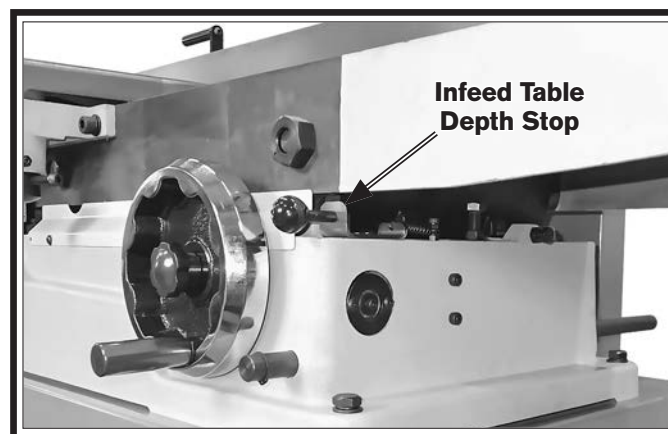


Figure 24. Location of infeed table depth stop.

3. Remove cutterhead guard if necessary to perform operation (see **Figure 25**).

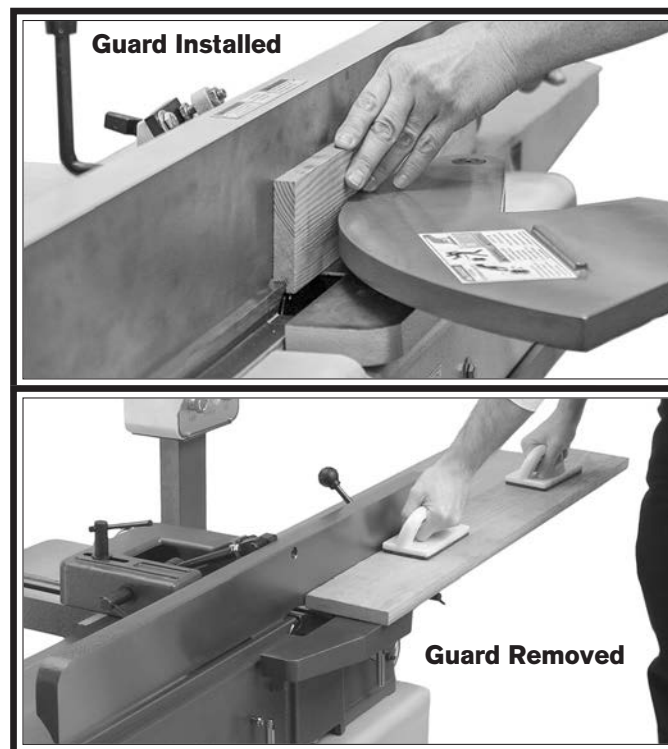


Figure 25. Example of rabbet cutting operations.

4. Set fence to 90° and near front of jointer, so amount of exposed cutterhead in front of fence matches size of desired rabbet.
5. Start jointer.
6. Place workpiece firmly against fence and infeed table.

▲ CAUTION: To ensure workpiece remains stable during cut, concave sides of workpiece must face toward table and fence.

7. Feed workpiece completely across cutterhead while keeping it firmly against fence and tables during entire cut.

▲ CAUTION: Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce risk of accidental hand contact with cutterhead.

8. Repeat **Step 7** until rabbet is cut to depth.
9. Re-install cutterhead guard if removed in **Step 3**.

Setting Depth of Cut

The depth of cut on a jointer affects the amount of material removed from the bottom of the workpiece as it passes over the cutterhead.

The depth of cut is set by adjusting the height of the infeed table relative to the outfeed table and cutterhead inserts at top dead center (TDC).

▲ WARNING

DO NOT exceed 1/8" cut per pass on this machine or the risk of kickback and serious injury will be greatly increased!

To set depth of cut on jointer:

1. Loosen infeed table lock and rotate handwheel until depth scale on front of jointer (see **Figure 26**) indicates desired depth of cut.

Note: *The depth scale can be calibrated or "zeroed" if it is not accurate (refer to **Calibrating Infeed Table Depth Scale** on **Page 39**).*

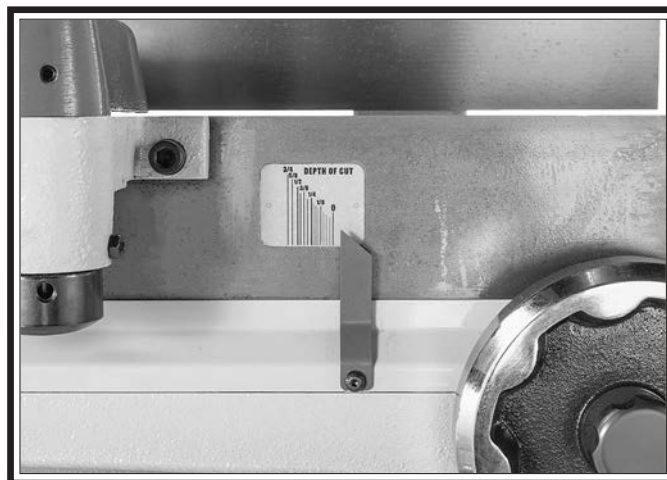


Figure 26. Model SB1113 depth scale.

2. Set infeed table positive stops (refer to **Setting Infeed Table Positive Stops** on **Page 39**).
3. Tighten infeed table lock before beginning jointer operations.

Accessories

This section includes the most common accessories available for your machine, which are available through our exclusive dealer, Grizzly Industrial, Inc., at grizzly.com.

⚠ WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended by South Bend or Grizzly.

NOTICE

Refer to Grizzly's website or latest catalog for additional recommended accessories.

T28206—GRR-RIP Block Smart Pushblock

The GRR-RIP Block features auto-retracting heel technology that hooks to the tail end of your board. The green GRR-RIP provides an unparalleled hold on your work piece. The ergonomic handle exerts directional pressure against the fence, so it stays right where you need it to.

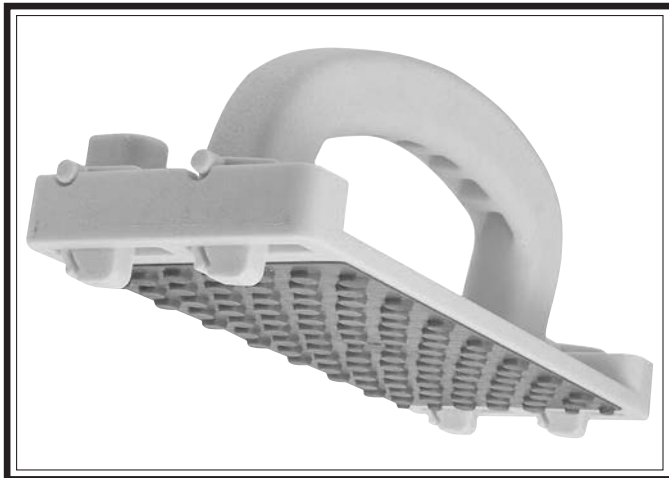


Figure 27. Model T28206 GRR-RIP Block.

- W1036—Clear Flexible Hose 6" x 10'**
- H7217—Rigid Flex Industrial Hose 6" x 5'**
- G7367—45° Industrial Elbow 6"**
- G7369—90° Industrial Elbow 6"**
- H5297—6" Industrial Dust Collection Starter Kit**
- T26508—6" Industrial Joist Hanger**
- W1319—Wire Hose Clamp 6"**
- W1009—Plastic Blast Gate 6"**
- G7358—Industrial Blast Gate 6"**
- W1053—Anti-Static Grounding Kit**

We've hand picked a selection of commonly used dust collection components for machines with 6" dust ports.



Figure 28. Dust collection accessories.

H9893—10 Pk. Carbide Inserts 15 x 15 x 2.5mm

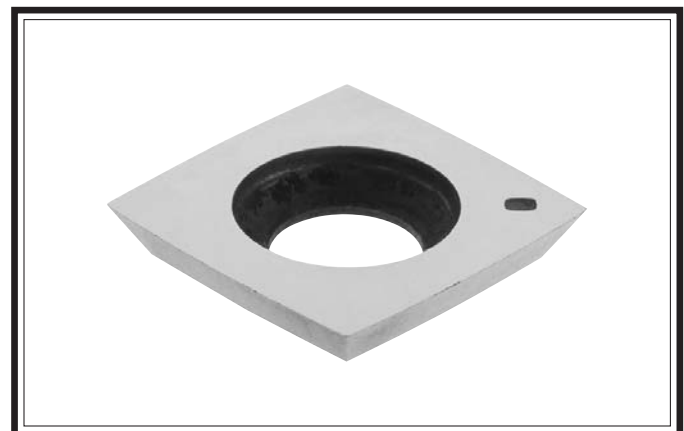


Figure 29. H9893 Replacement Carbide Inserts.

order online at www.grizzly.com or call 1-800-523-4777

T30024—Powered Respirator Kit

Breathing wood dust could cause severe respiratory illnesses. This kit is a lightweight, comfortable, and easy-to-carry device for protecting the airway from small particulates.



Figure 30. T30024 Powered Respirator Kit.

T23246—The Missing Shop Manual: Jointer

Dedicated to providing integral information about woodworking tools and techniques that other manuals overlook, the books in this series contain safety facts, explanations about basic project set-up, and tips for best performance.

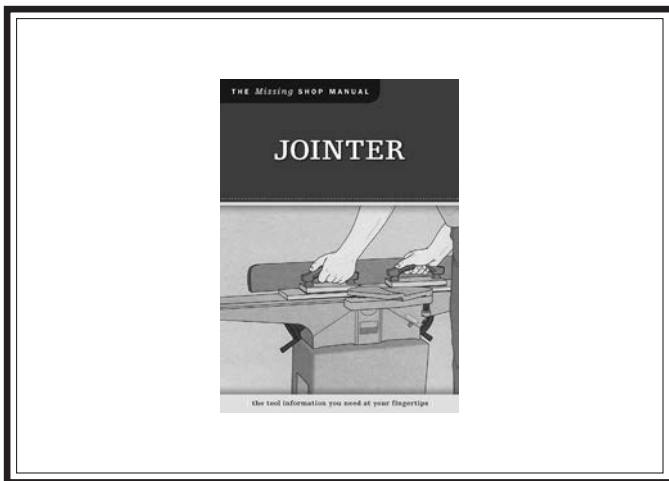


Figure 31. T23246 Missing Shop Manual.

T32323—Woodturners Face Shield**T32401—EDGE Brazeau Safety Glasses, Clear****T32402—EDGE Khor G2 Safety Glasses, Tint****T32404—EDGE Mazeno Safety Glasses, Clear**

Figure 32. Assortment of basic eye protection.

W1050—Dust Collection Basics Book

This incisive book skillfully guides the woodworker through all the steps necessary in the design and construction of an efficient central dust collection system and tells you what you need to know for easy installation. The text offers practical hints and techniques and takes the mystery, misery and hype away from a subject that should be as clear as the air you breathe. 64 pages of concise, carefully illustrated text.

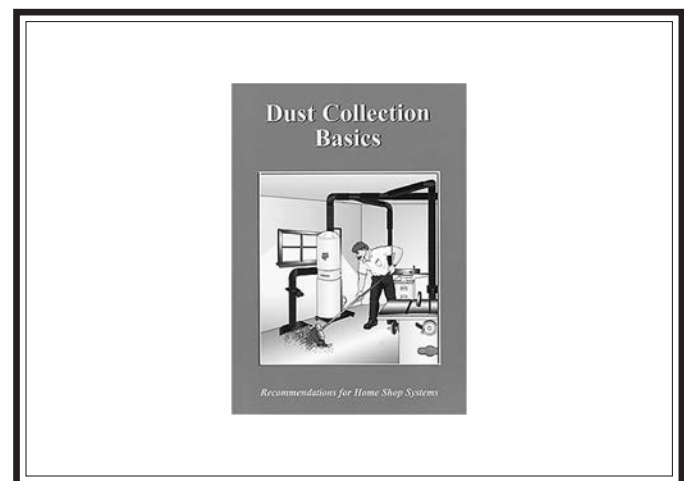


Figure 33. W1050 Dust Collection Basics.

order online at www.grizzly.com or call 1-800-523-4777

SB1365—South Bend Way Oil-ISO 68

Engineered for the high pressure exerted on horizontal or vertical ways and slides. Protects against rust and corrosion. Ensures stick-free, smooth motion which maximizes finishes and extends the life of your machine. Won't gum up! 12 oz. AMGA#2 (ISO 68 Equivalent).



Figure 34. SB1365 Way Oil.

G0826—Easy Feeder Power Feeder

This all-purpose, heavy-duty power feeder is perfect for use with jointers and shapers, and has a 2/3 HP BLDC motor that provides energy-efficiency, high-torque, and variable-speed feed control from a single-phase power supply.

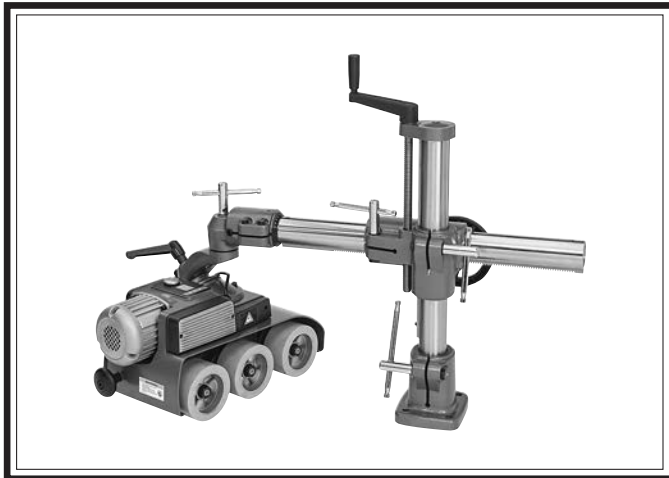


Figure 35. Model G0826 Power Feeder.

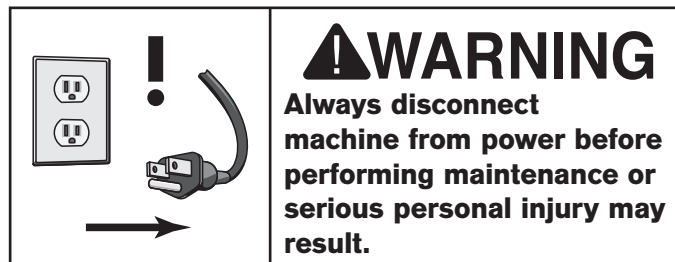
SB1099—3 HP Cyclone Dust Collector

The Model SB1099 features a 3 HP motor, a whopping 1860 CFM of airflow capacity, and a 52-gallon collection capacity. It's packed with features like a built-in sound muffler, an automatic filter paddle brush for easy cleaning, a remote-controlled magnetic switch, and a quick-release lift handle for easy sawdust disposal.



Figure 36. Model SB1099 3 HP Cyclone Dust Collector.

Maintenance Schedule Unpainted Cast Iron



For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

To minimize your risk of injury and maintain proper machine operation, shut down the machine immediately if you ever observe any of the items below, and fix the problem before continuing operations:

Ongoing

- Check/correct loose mounting bolts.
- Check/correct damaged or dull cutterhead inserts.
- Check/correct worn or damaged wires.
- Check/correct proper height adjustment and function of cutterhead guard.
- Clean/protect unprotected cast-iron surfaces.
- Clean dust or debris around machine.
- Correct any other unsafe condition.

Monthly

- Clean and lubricate fence pivot points.
- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside stand and off of motor.
- Replace batteries in control panel digital readout as needed.

Cleaning

Cleaning the Model SB1113 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep tables rust-free with regular applications of products like South Bend SB1365 Way Oil (see **Page 32**).

Bare metal surfaces can quickly develop surface rust if not coated. Machinery stored near windows in direct sunlight or where paints, thinners, or certain gasses are open to the air can experience bleaching, discoloring of paint or yellowing of clear plastic guards.

Lubrication

Since all bearings on the Model SB1113 are sealed and permanently lubricated, simply leave them alone until they need to be replaced. **DO NOT** lubricate them.

Below is a list of components that require periodic lubrication. Be careful not to over-lubricate these components. Large amounts of lubricant will attract sawdust, causing the metal components to gum up and bind.

Fence: Place 1–2 drops of light machine oil on the fence pivot points (see **Figure 37**) as needed.

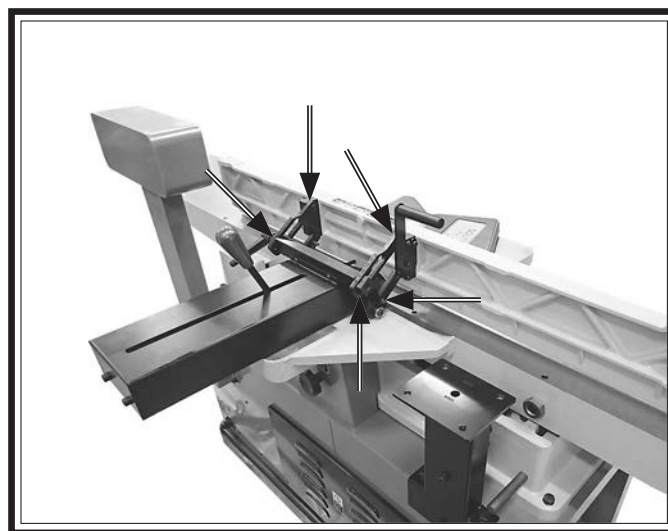


Figure 37. Fence lubrication locations.

Fence Pistons: Place 1–2 drops of light machine oil on a clean, cloth rag, then wipe exposed surface of fence pistons (see **Figure 38**). Unlock fence and move back-and-forth through entire range of motion as needed.

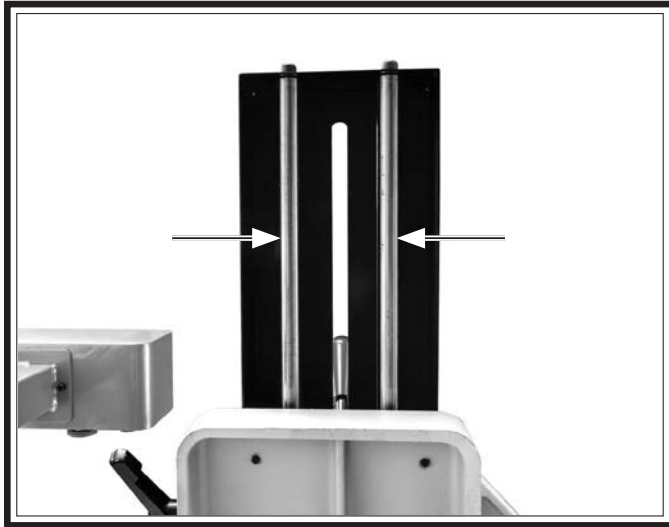


Figure 38. Fence pistons lubrication locations.

Gears: Use a small brush to apply multi-purpose grease to handwheel worm gear shafts and gears.

Machine Storage

All machinery will develop serious rust problems and corrosion damage if it is not properly prepared for storage. If decommissioning this machine, use the steps in this section to ensure that it remains in good condition.

To prepare your machine for storage or decommission it from service:

1. DISCONNECT MACHINE FROM POWER!
2. Thoroughly clean all unpainted, bare metal surfaces, then coat them with a lightweight grease or rust preventative. Take care to ensure these surfaces are completely covered but that the grease or rust preventative is kept off of painted surfaces.

Note: *If the machine will be out of service for only a short period of time, use way oil or a good grade of medium-weight machine oil (not auto engine oil) in place of the grease or rust preventative.*
3. If the machine has belts, loosen or remove them so they do not become stretched while the machine is not in use.
4. Completely cover the machine with a tarp or plastic sheet that will keep out dust and resist liquid or moisture. If machine will be stored in/near direct sunlight, use a cover that will block the sun's rays.

Checking/Adjusting Table Parallelism

If the tables are not parallel with the cutterhead or each other, then poor cutting results and kickback can occur.

Tools Needed:	Qty
Heavy Leather Gloves.....	1 Pair
Straightedge 36".....	1
Wrench or Socket 12mm	1
Wrench or Socket 32mm.....	1
Adjustable Wrench 10"	1
Hex Wrench 4mm	1
Duct Tape	1
Electrical Parts Cleaner	1

Checking Outfeed Table

1. DISCONNECT MACHINE FROM POWER!
2. Put on heavy leather gloves.
3. Remove cutterhead guard and fence.
4. Loosen outfeed table lock located at front of machine, then loosen jam nuts and positive stop bolts located under outfeed table (see **Figure 39**).

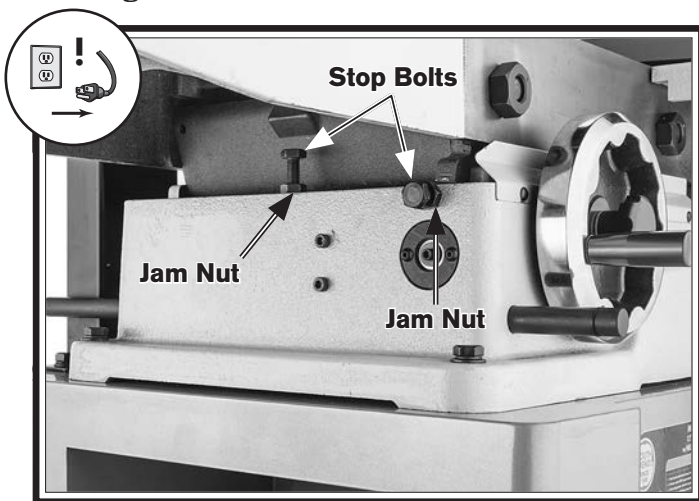


Figure 39. Outfeed table positive stop bolts.

5. Place straightedge on outfeed table so it hangs over cutterhead, then lower outfeed table until straightedge just touches cutterhead body, as shown in **Figure 40** (rotate cutterhead if necessary).

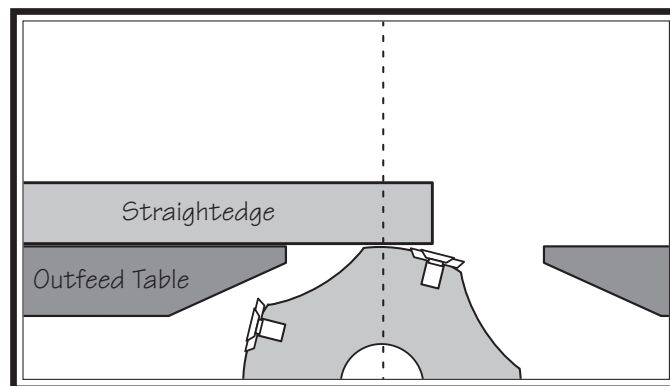


Figure 40. Adjusting outfeed table even with cutterhead body.

6. Place straightedge in positions shown in **Figure 41**. In each position, straightedge should touch cutterhead body and sit flat on outfeed table.

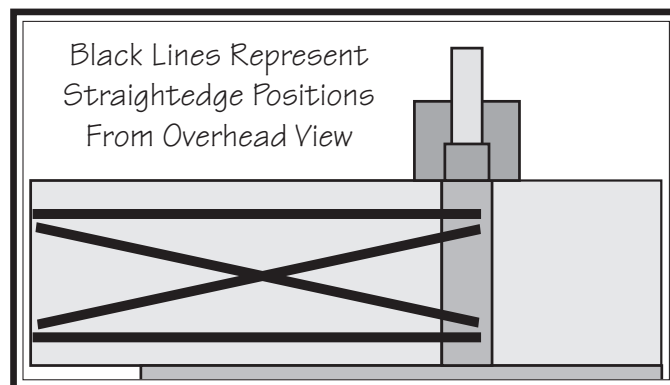


Figure 41. Straightedge positions for verifying if outfeed table is parallel with cutterhead.

- If straightedge *touches* cutterhead and sits flat across outfeed table in each position, then outfeed table is already parallel with cutterhead. Check infeed table to make sure that it is parallel with outfeed table.
- If straightedge *does not* touch cutterhead and sit flat on outfeed table in any positions, then outfeed table is not parallel with cutterhead. Correct outfeed table parallelism, then correct infeed table parallelism.

Checking Infeed Table

1. Follow all steps for checking outfeed table parallelism to make sure that outfeed table is parallel with cutterhead.
2. Raise outfeed table higher than cutterhead.
3. Loosen infeed table jam nuts and positive stop bolts shown in **Figure 42**.

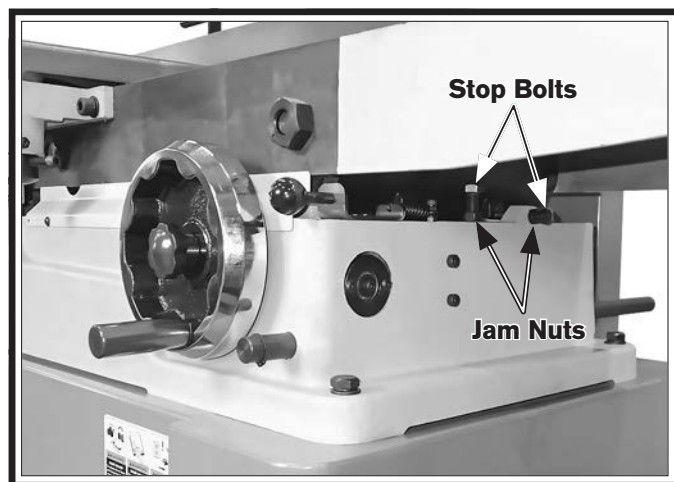


Figure 42. Infeed table positive stop bolts.

4. Place straightedge halfway across infeed table and halfway over outfeed table, and adjust infeed table even with outfeed table, as shown in **Figure 43**.

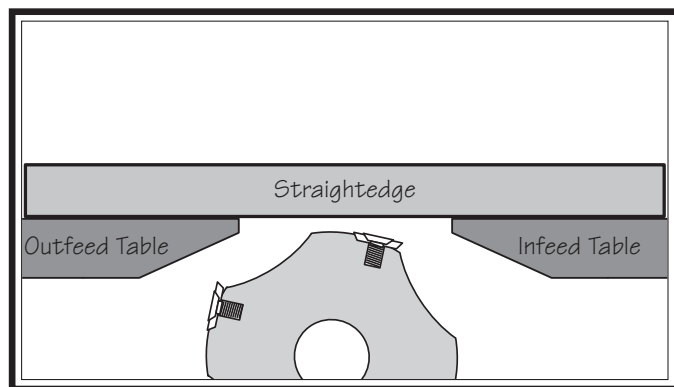


Figure 43. Infeed and outfeed tables set evenly.

5. Place straightedge in positions shown in **Figure 44**. In each position, straightedge should sit flat against both outfeed table and infeed table.

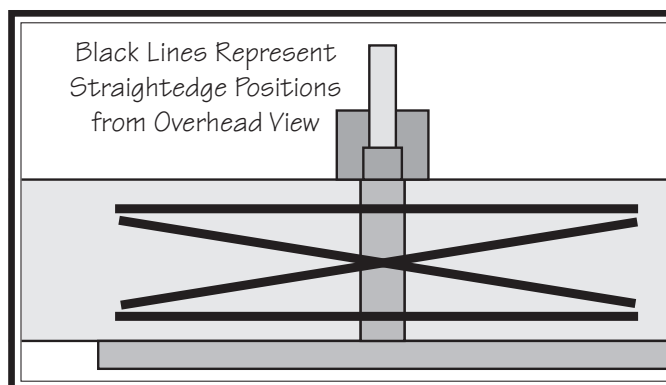


Figure 44. Straightedge positions for checking infeed/outfeed table parallelism.

- If straightedge sits flat against both infeed and outfeed table in each positions, then tables are parallel. Set both table heights (**Pages 39–40**) and replace cutterhead guard.
- If straightedge *does not* sit flat against both infeed and outfeed table in any positions, then follow **Adjusting Table Parallelism**.

Adjusting Table Parallelism

For safe and proper cutting results, tables must be parallel to cutterhead. Adjusting them to be parallel is a task of precision and patience, and may take up to one hour to complete. This is a permanent adjustment and should not need to be repeated for the life of the machine.

Due to the complex nature of this task, we recommend that you double check current table positions to verify that they need to be adjusted before starting.

The tables have four eccentric bushings under each corner that allow the tables to be adjusted parallel. These eccentric bushings are locked in place by set screws and adjust when rotated.

The correct order for adjusting the table parallelism is to first adjust the outfeed table parallel with the cutterhead to within 0.010"-0.012", then adjust the infeed table parallel with the outfeed table.

When setting the outfeed table, all measurements must be made from the cutterhead body—NOT the inserts.

IMPORTANT: The steps below are intended to be performed in succession with the steps involved in checking the outfeed table. **DO NOT** proceed until those steps are followed.

To adjust table parallelism:

1. Place straightedge on outfeed table so it hangs over cutterhead, then lower outfeed table until straightedge just touches cutterhead body, as shown in **Figure 40** on **Page 35** (rotate cutterhead if necessary).

2. Remove screw cover (see **Figure 45**) covering each set screw on outfeed table.

Note: It may help to clean screw covers with electrical parts cleaner. Push duct tape firmly against cover, then pull straight up.

3. Loosen each set screw (see **Figure 45**) two turns.

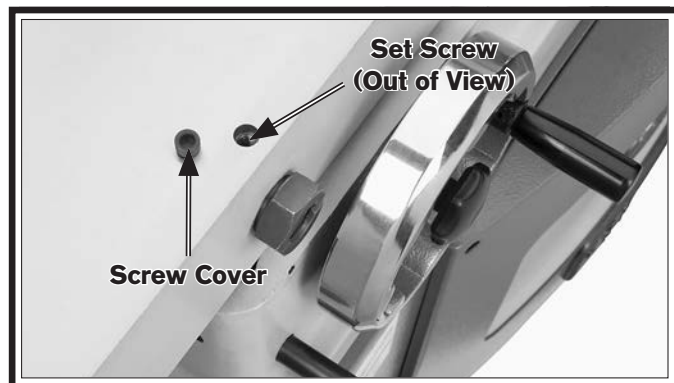


Figure 45. Screw cover and set screw location.

4. Place straightedge in one of the positions shown in **Figure 44** on **Page 36**, and adjust table by turning eccentric bushings (**Figures 46–47**) as needed with an adjustable wrench so that straightedge touches cutterhead while lying flat across outfeed table. Repeat this step with each remaining straightedge positions as many times as necessary until outfeed table is parallel with cutterhead to within 0.010"-0.012".

Note: Setting the outfeed table parallel to the cutterhead within 0.010"-0.012" will produce high quality results. Going lower than this number will produce minimal gain.



Figure 46. Front eccentric bushings.



Figure 47. Rear eccentric bushings.

5. Tighten set screws and re-install screw covers on outfeed table.
6. Remove (4) screw covers on infeed table, and loosen set screws underneath two turns.
7. Place straightedge halfway across infeed table and halfway over outfeed table, then adjust infeed table even with outfeed table, as shown in **Figure 48**.

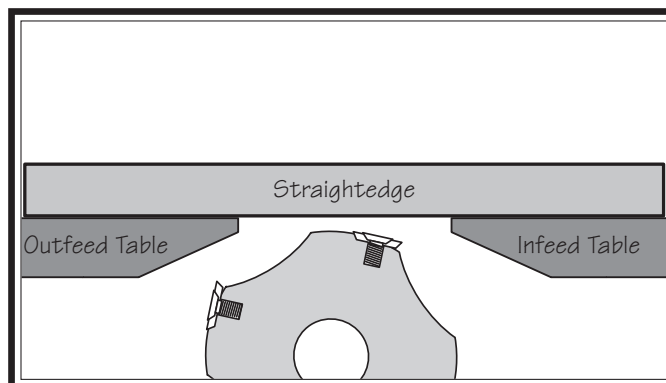


Figure 48. Infeed and outfeed tables set evenly.

8. Place straightedge in one of the positions shown in **Figure 44** on **Page 36**, and adjust eccentric bushings under infeed table so straightedge lies flat against both tables. Repeat this step with each remaining straightedge position as many times as necessary until infeed table is parallel with outfeed table.
9. Tighten set screws and re-install covers on infeed table.
10. Set outfeed table height (refer to **Setting Outfeed Table Height** on **Page 40**).
11. Install fence and move it all the way back.
12. Install cutterhead guard, tighten shaft lock, then refer to **Checking/Adjusting Cutterhead Guard** on **Page 41**.

! CAUTION

The indexable inserts are very sharp and can easily cut your hands. ALWAYS use caution when handling these parts to reduce risk of personal injury.

Item(s) Needed:	Qty
Heavy Leather Gloves.....	1 Pair
Indexable Inserts 15 x 15 x 2.5mm	As Needed
Torx Head Screws T-25 #10-32 x 1/2"	As Needed
T-Handle Torx Driver T-25.....	1
Light Machine Oil	As Needed
Clean Shop Rags	As Needed

To rotate or change a carbide insert:

1. DISCONNECT MACHINE FROM POWER!
2. Set fence to 90° and move it all the way back.
3. Loosen cutterhead guard shaft lock and remove cutterhead guard.
4. Remove any sawdust from head of insert Torx screw.
5. Remove Torx screw and insert.
6. Clean all dust and dirt off insert and cutterhead pocket from which insert was removed, and replace insert so a fresh, sharp edge is facing outward.
7. Lubricate Torx screw threads with a light machine oil, wipe excess oil off threads, and torque Torx screw to 48–50 in.-lbs.

Note: *Proper cleaning is critical to achieving a smooth finish. Dirt or dust trapped between the insert and cutterhead will slightly raise the insert, and make noticeable marks on your workpieces the next time you cut.*

Note: *Excess oil may squeeze between the insert and cutterhead or in the screw hole, thereby lifting the insert or screw slightly and affecting workpiece finishes.*

8. Install cutterhead guard, tighten shaft lock, then refer to **Checking/Adjusting Cutterhead Guard** on **Page 41**.

Replacing Indexable Inserts

The helical-style cutterhead is equipped with 4-sided indexable carbide inserts. Each insert can be removed, rotated, and re-installed to use either of its four cutting edges. If one cutting edge becomes dull or damaged, simply rotate it 90° (see **Figure 49**) to use a sharp cutting edge.

The inserts have a reference dot on one corner. The position of the reference dot on installed inserts can be used to track which edges are sharp/unused and which edges are dull or damaged. Replace inserts once the reference dot has been rotated back to its original position.

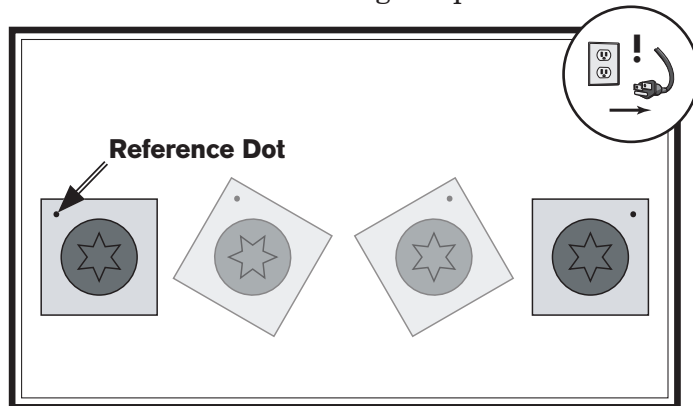


Figure 49. Insert rotating sequence.

Setting Infeed/Outfeed Table Positive Stops

The infeed and outfeed tables on the Model SB1113 have positive stop bolts that, when properly set up, allow the operator to quickly adjust table height between finish/final cuts and shaping/heavy cuts.

We recommend setting the minimum depth of cut to $\frac{1}{32}$ " and the maximum depth of cut to $\frac{1}{8}$ " for most operations.

⚠ WARNING

DO NOT exceed $\frac{1}{8}$ " cut per pass on this machine or the risk of kickback and serious injury will be greatly increased!

Each positive stop bolt (see **Figure 50**) controls the top or bottom range of the table movement. The jam nuts lock the positive stop bolts in position so they won't move during operation.

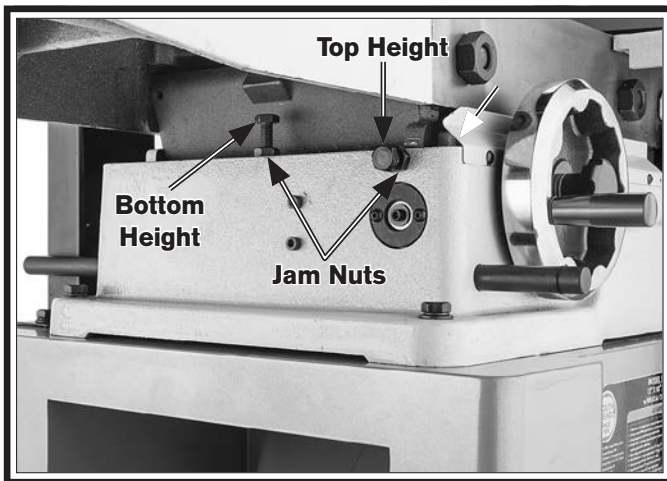


Figure 50. Infeed/outfeed table positive stop bolts.

Calibrating Infeed Table Depth Scale

The depth scale on the infeed table can be calibrated or "zeroed" if it is not correct.

Tools Needed:	Qty
Straightedge 36".....	1

To calibrate depth scale on infeed table:

1. Set outfeed table height (refer to **Setting Outfeed Table Height** on **Page 40**).
2. Move cutterhead guard out of the way.
3. Place a straightedge across infeed and outfeed tables.
4. Adjust infeed table until it is level with outfeed table, as illustrated in **Figure 51**.

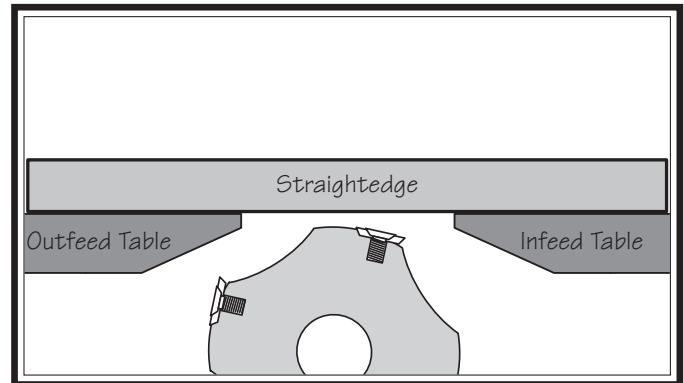


Figure 51. Infeed and outfeed tables set evenly.

Setting Outfeed Table Height

The outfeed table height **MUST** be level with the carbide inserts when they are at top-dead-center. If the outfeed table is set too low, the workpiece will be tapered from front to back. If the outfeed table is set too high, the workpiece will hit the edge of the outfeed table during operation, increasing the chance of kickback.

To set outfeed table height:

1. DISCONNECT MACHINE FROM POWER!
2. Move cutterhead guard out of the way or remove it, then remove belt guard.
3. Place a straightedge on outfeed table so it extends over cutterhead, and rotate cutterhead pulley until one of the carbide inserts is at top-dead-center (TDC), as shown in **Figure 52**.
4. When correctly set, carbide insert will just touch straightedge when insert is at its highest point of rotation (see **Figure 52**).

— If your outfeed table is correctly set, no adjustments are necessary.

— If insert lifts straightedge off table, or table is below straightedge, loosen outfeed table lock and outfeed table positive stop bolts and jam nuts, and adjust outfeed table height.

Tip: Some advanced woodworkers have found that they can virtually eliminate snipe by setting the outfeed table in the following manner: Repeat **Steps 1–4** using a freshly exposed insert. Then lower the outfeed table slightly so the insert lifts the straightedge off the table. Place a ruler next to the straightedge and rotate the cutterhead, watching how far the carbide insert pulls the straightedge. Adjust outfeed table and recheck until the straightedge only moves $\frac{5}{32}$ ".

5. Lock outfeed table, lock outfeed table positive stop bolts, and re-install the cutterhead guard and V-belt guards.
6. Verify proper operation of cutterhead guard by moving fence to rear of table, then pulling cutterhead guard back and letting it go. It should spring back over cutterhead and contact fence without dragging across outfeed table.
 - If cutterhead guard *does not* spring back over cutterhead and contact fence, or it drags across outfeed table, then it must be adjusted (refer to **Checking/Adjusting Cutterhead Guard** on Page 41 for instructions).

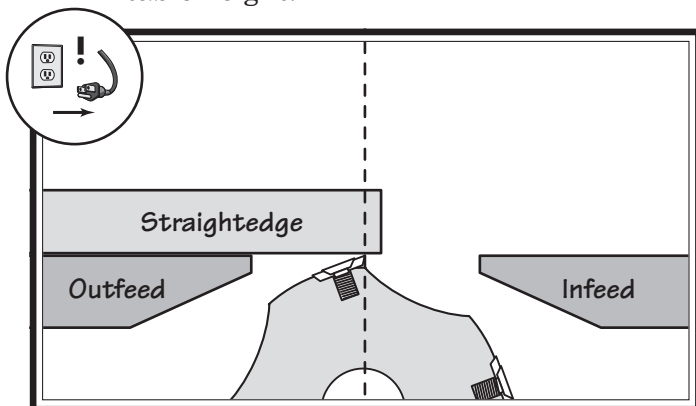


Figure 52. Cutterhead insert at top-dead-center.

⚠ WARNING

The cutterhead guard is a critical safety feature of this jointer. You **MUST** verify its operation before using the jointer! Failure to properly install this guard will greatly increase risk of serious personal injury.

Checking/Adjusting Cutterhead Guard

⚠ WARNING

The cutterhead guard is a critical safety feature of this jointer. You **MUST** verify its operation before using the jointer! Failure to properly install this guard will greatly increase risk of serious personal injury.

The cutterhead guard is designed to reduce the risk of accidental contact with hands or fingers with the spinning cutterhead. When properly installed and functioning correctly, the guard automatically rotates clear of the cutterhead during the cutting operation and then springs back over the cutterhead as soon as the operation is complete.

In order to function as intended, the guard must be installed as low as possible over the infeed table without actually touching it (approximately $\frac{1}{16}$ " above infeed table), and it must have enough spring tension at the mounting shaft to quickly reposition itself against the fence after it is rotated away from the cutterhead and released. Before performing rabbeting operations, adjust guard height to just clear outfeed table.

To check/adjust cutterhead guard for proper operation:

1. DISCONNECT MACHINE FROM POWER!
2. Set fence to 90° and move it all the way back, then pull cutterhead guard (see **Figure 53**) and let it go.
 - If cutterhead guard *springs* back over cutterhead, *contacts* fence, and *does not drag* across infeed table, then it is properly adjusted.
 - If cutterhead guard *does not spring* back over cutterhead, *does contact* fence, or *drags* across infeed table, then proceed to **Step 3**.
3. Loosen shaft lock (see **Figure 53**), then move guard so it is resting against fence, and $\frac{1}{16}$ " above infeed table.
4. Holding guard height in place, rotate shaft lock clockwise until knob is centered (see **Figure 53**), and tighten to secure setting.

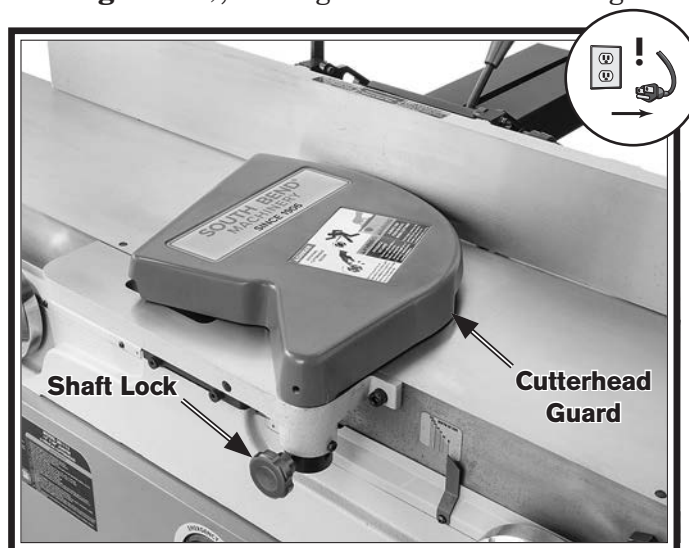


Figure 53. Cutterhead guard components.

5. Repeat **Step 2** and, if necessary, repeat **Steps 3–4** until cutterhead guard is properly adjusted.

Setting Fence Stops

The fence stops simplify the task of adjusting the fence to 90° and 45° outward (135°).

Tools Needed:	Qty
Square 90°	1
Sliding Bevel	1
Open-End Wrenches 10, 13mm.....	1 Ea.

Setting 90° Stop

1. DISCONNECT MACHINE FROM POWER!
2. Loosen fence tilt lock (see **Figure 54**).

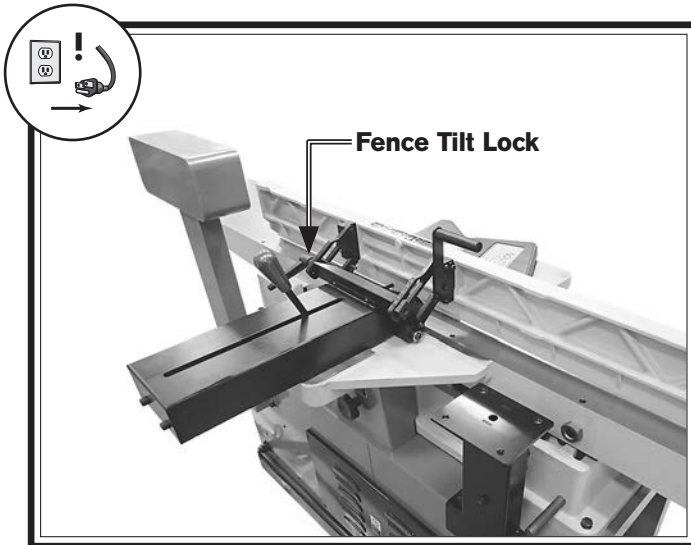


Figure 54. Fence tilt lock location.

3. Using a 90° square, adjust fence to 90° position (see **Figure 55**), then tighten fence tilt lock.



Figure 55. Example of adjusting fence to 90°.

4. Loosen jam nut on 90° fence stop (see **Figure 56**).

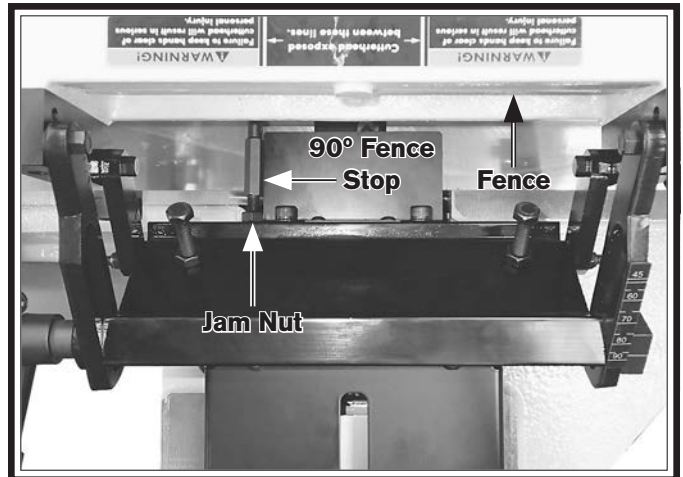


Figure 56. 90° fence stop engaged.

5. Adjust 90° fence stop until it makes contact with fence.
6. Tighten jam nut loosened in **Step 4**.

Setting 45° Outward (135°) Stop

1. DISCONNECT MACHINE FROM POWER!

2. Loosen fence tilt lock (see **Figure 57**).

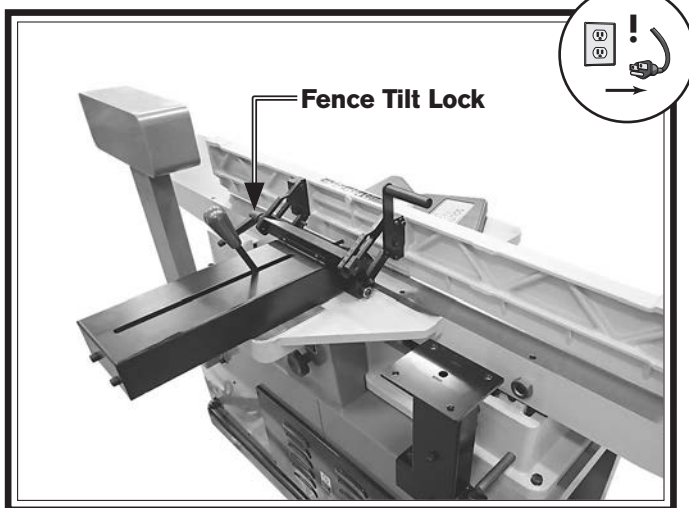


Figure 57. Fence tilt lock location.

3. Using a sliding bevel set to 135°, adjust the fence to 135° (45° outward) position (see **Figure 58**), then tighten fence tilt lock.

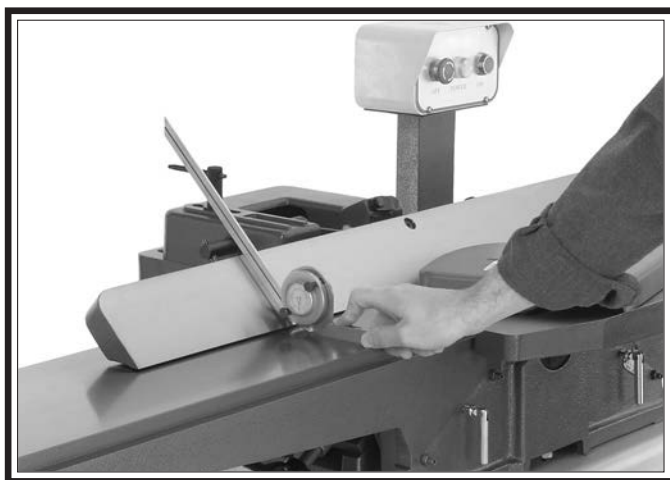


Figure 58. Example of adjusting fence 45° outward.

4. Loosen jam nuts on 45° outward fence stop bolts (see **Figure 59**).



Figure 59. 45° outward fence stop components.

5. Adjust 45° outward fence stop bolts until they make contact with back of fence.

6. Tighten jam nuts loosened in **Step 4**.

Replacing/Tensioning V-Belt

To ensure optimum power transmission from the motor to the cutterhead, the belt must be in good condition (free from cracks, fraying, and wear) and properly tensioned.

Item(s) Needed:	Qty
Replacement V-Belt (PSB1113172).....	1
Open-End Wrench 17/19mm	1
Phillips Head Screwdriver #2.....	1

Replacing V-Belt

1. DISCONNECT MACHINE FROM POWER!
2. Remove rear access panel and belt guard.
3. Loosen adjustment nuts on tension rod (see **Figure 60**) to allow motor to raise or lower.

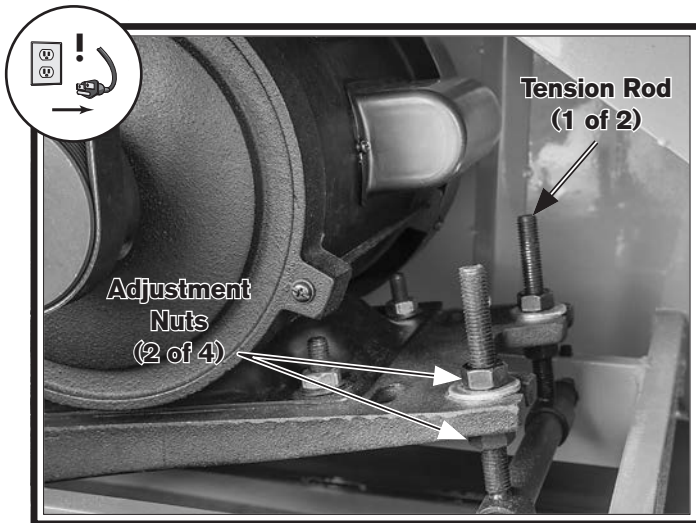


Figure 60. V-belt tension adjustment components.

4. Lift motor up, slide belt off motor and cutterhead pulleys, and replace with a new one.
5. Proceed to **Step 3** of **Tensioning V-Belt**.

Tensioning V-Belt

1. DISCONNECT MACHINE FROM POWER!
2. Perform **Steps 2–3** in **Replacing V-Belt**.
3. Lower motor and adjust belt tension with tension rod adjustment nuts so there is approximately 1/2" deflection when belt is pushed with moderate pressure, as shown in **Figure 61**.

— Rotate adjustment nuts clockwise to allow motor to drop and apply tension to belt.

— Rotate adjustment nuts counterclockwise to raise motor and release belt tension.

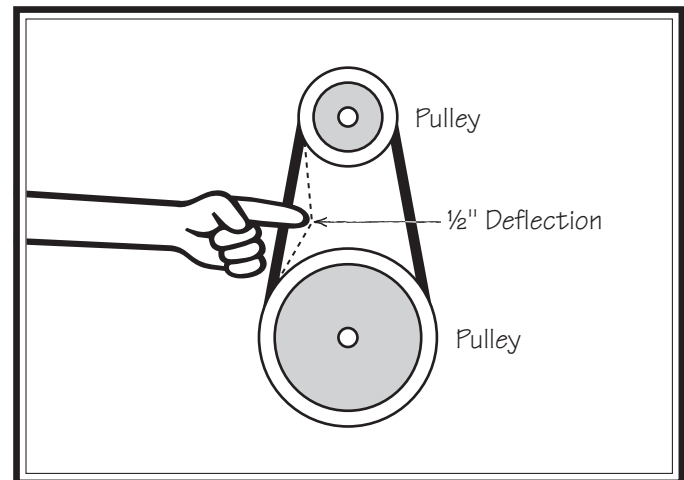


Figure 61. Checking V-belt tension.

4. Replace rear access panel and belt guard removed in **Step 2** of **Replacing V-Belt**.

Pulley Alignment

Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplaner) for optimum performance.

The motor pulley can be adjusted by loosening the motor mount adjustment nuts, sliding the motor in or out, and retightening the adjustment nuts to lock the motor in place.

Tools Needed:	Qty
Straightedge 48"	1
Open-End Wrench 17/19mm	1
Phillips Head Screwdriver #2.....	1

To align pulleys:

1. DISCONNECT MACHINE FROM POWER!
2. Remove rear access cover, V-belt guard, and fence assembly.
3. Place a straightedge against both pulleys (see **Figure 62**) and check to make sure they are aligned and that V-belt is straight up and down (see **Figure 63**).

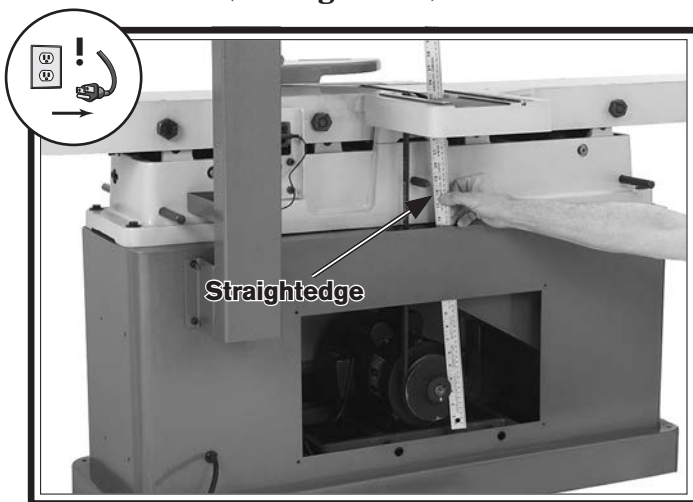


Figure 62. Example of checking belt alignment.

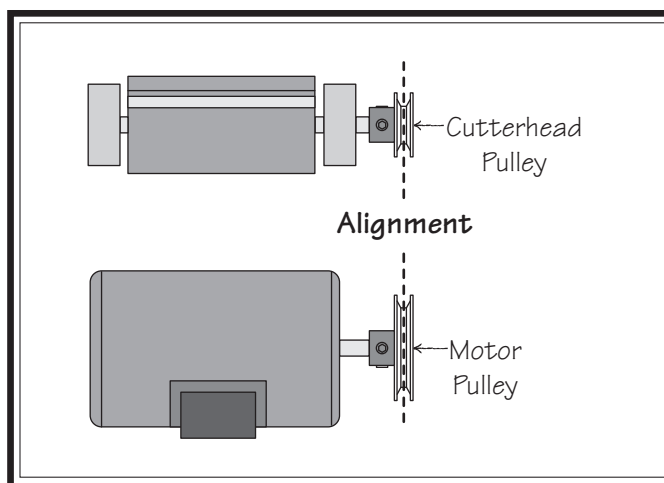


Figure 63. Example of V-belt aligned with pulleys.

— If pulleys are aligned, go to **Step 7**.

— If pulleys are NOT aligned, perform **Steps 4–7**.

4. Loosen motor mount adjustment nuts shown in **Figure 64**.

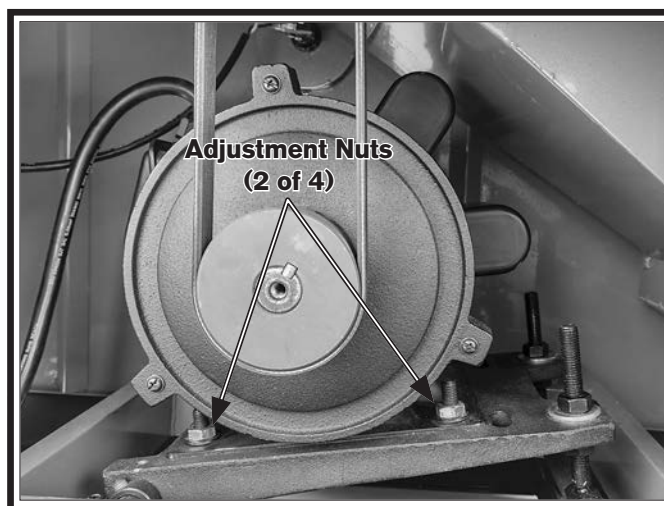


Figure 64. Motor mount adjustment nuts.

5. Shift motor horizontally as needed to align motor pulley with cutterhead pulley.
6. Tighten motor mount adjustment nuts. V-belt should be parallel and aligned as shown in **Figure 63**.
7. Re-install fence assembly, rear access panel, and V-belt guard.

If you need replacement parts, or if you are unsure how to do any of the solutions given here, feel free to call us at (360) 734-1540.

Symptom	Possible Cause	Possible Solution
Machine does not start, or power supply breaker trips immediately after startup.	<ol style="list-style-type: none"> 1. Emergency Stop button depressed/ at fault. 2. Knee Stop button is engaged/at fault. 3. Incorrect power supply voltage or circuit size. 4. Power supply circuit breaker tripped or fuse blown. 5. Motor wires connected incorrectly. 6. Thermal overload relay has tripped/ at fault. 7. Start capacitor is at fault. 8. Centrifugal switch adjustment/ contact points at fault. 9. Contactor not energized/at fault. 10. Wiring broken, disconnected, or corroded. 11. START switch at fault. 12. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Rotate Emergency Stop Button head to reset. Replace if at fault. 2. Cycle machine power/replace knee stop button if at fault. 3. Ensure correct power supply voltage and circuit size. 4. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 5. Correct motor wiring connections (Page 50). 6. Reset. Adjust or replace if at fault. 7. Test/replace if at fault. 8. Adjust centrifugal switch/clean contact points. Replace either if at fault. 9. Test all legs for power; replace if necessary. 10. Fix broken wires or disconnected/corroded connections (Page 50). 11. Replace switch. 12. Replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Workpiece material unsuitable for machine. 2. Feed rate/cutting speed too fast. 3. Excessive depth of cut. 4. Dust collection ducting problem. 5. Machine undersized for task. 6. Inserts dull or wrong inserts installed. 7. Belt(s) slipping/pulleys misaligned. 8. Motor wired incorrectly. 9. Pulley/sprocket slipping on shaft. 10. Motor overheated. 11. Run capacitor at fault. 12. Extension cord too long. 13. Contactor not energized/at fault. 14. Centrifugal switch/contact points at fault. 15. Motor or motor bearings at fault. 	<ol style="list-style-type: none"> 1. Only cut wood/ensure moisture content is below 20% (Page 23). 2. Decrease feed rate/cutting speed. 3. Decrease depth of cut (Page 29). 4. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches. 5. Use correct/sharp inserts (Page 38). Reduce feed rate or depth of cut (Page 29). 6. Use correct/sharp inserts (Page 38). 7. Clean/tension/replace belt(s); ensure pulleys are aligned (Page 45). 8. Wire motor correctly. 9. Tighten/replace loose pulley/shaft. 10. Clean motor, let cool, and reduce workload. 11. Test/repair/replace. 12. Move machine closer to power supply; use shorter extension cord. 13. Test all legs for power; repair/replace if at fault. 14. Adjust centrifugal switch/clean contact points. Replace either if at fault. 15. Replace motor.

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Stand feet not adjusted properly. 3. V-belt(s) worn, loose, pulleys misaligned or belt slapping cover. 4. Insert(s) are at fault. 5. Pulley loose. 6. Motor mount loose/broken. 7. Motor fan rubbing on fan cover. 8. Cutterhead bearings at fault. 9. Centrifugal switch. 10. Motor bearings at fault. 	<ol style="list-style-type: none"> 1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Adjust stand feet to stabilize machine. 3. Inspect/replace belts with a new matched set. Realign pulleys if necessary (Page 44). 4. Replace/rotate insert(s) (Page 38). 5. Secure pulley on shaft. 6. Tighten/replace. 7. Fix/replace fan cover; replace loose/damaged fan. 8. Replace bearing(s)/realign cutterhead. 9. Replace. 10. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Table is hard to adjust.	<ol style="list-style-type: none"> 1. Table lock engaged/partially engaged. 2. Table stop blocking movement. 	<ol style="list-style-type: none"> 1. Completely loosen table lock. 2. Loosen/reset table positive stop (Page 39).
Excessive snipe (gouge in end of board that is uneven with rest of cut); back of workpiece is concave.	<ol style="list-style-type: none"> 1. Outfeed table set too low. 2. Operator pushing down on trailing end (infeed side) of workpiece as it leaves cutterhead. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead inserts at top dead center (Page 40). 2. Focus most of the workpiece pressure against outfeed table while cutting.
Workpiece stops in middle of cut; front of workpiece is concave.	<ol style="list-style-type: none"> 1. Outfeed table set too high. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead inserts at top dead center (Page 40).
Workpiece chipping, tear-out, indentations, or overall rough cuts.	<ol style="list-style-type: none"> 1. Workpiece rough or has loose knots/surface flaws; not suitable for jointing. 2. Not feeding workpiece to cut "with" the grain. 3. Dull/nicked/chipped insert(s). 4. Feeding workpiece too fast. 5. Excessive depth of cut. 6. Lack of proper dust collection or clogged dust port. 	<ol style="list-style-type: none"> 1. Inspect workpiece (Page 23). Use smooth stock without loose knots/surface flaws. 2. Flip workpiece 180° before feeding again. 3. Rotate/replace insert(s) (Page 38). 4. Reduce feed rate. 5. Reduce depth of cut (Page 29). 6. Clear blockages, ensure dust collection is operating efficiently; upgrade dust collector.

Symptom	Possible Cause	Possible Solution
Fuzzy grain left in workpiece.	<ol style="list-style-type: none"> 1. Wood has high moisture content. 2. Dull insert(s). 	<ol style="list-style-type: none"> 1. Ensure wood moisture content is less than 20%. Allow to dry if necessary. 2. Replace/rotate insert(s) (Page 38).
Long lines or ridges that run along the length of the board.	<ol style="list-style-type: none"> 1. Nicked or chipped insert(s). Loose or incorrectly installed insert(s). Dirt or debris under carbide insert(s). 	<ol style="list-style-type: none"> 1. Replace/rotate insert(s) (Page 38). Remove/replace insert(s) and re-install (Page 38). Remove insert(s), clean bottom of insert/cutterhead mounting pocket and re-install (Page 38).
Uneven cutter marks, wavy surface, or chatter marks across face of workpiece.	<ol style="list-style-type: none"> 1. Feeding workpiece too fast. 2. Insert(s) not adjusted at even heights in cutterhead. 	<ol style="list-style-type: none"> 1. Reduce feed rate. 2. Remove, clean, and re-install any inserts that are "raised" in cutterhead (Page 38).
Glossy surface; scorching or burn marks on workpiece.	<ol style="list-style-type: none"> 1. Dull insert(s). 2. Feed rate too slow. 	<ol style="list-style-type: none"> 1. Replace/rotate insert(s) (Page 38). 2. Increase feed rate.
Workpiece is concave or convex along its length after jointing.	<ol style="list-style-type: none"> 1. Workpiece not held with even pressure against outfeed table during cut. 2. Workpiece too uneven at start of operation. 3. Tables not parallel with cutterhead and each other. 	<ol style="list-style-type: none"> 1. Apply even downward pressure against workpiece throughout entire travel along outfeed side during cut. 2. Take partial cuts to remove extreme high spots before doing a full pass. 3. Check/adjust table parallelism (Page 35).
Workpiece edges not square; tapered cut produced.	<ol style="list-style-type: none"> 1. Fence not square to table(s); fence tilt unlocked. 2. Warped infeed or outfeed table. 3. Insert(s) not at even heights. 	<ol style="list-style-type: none"> 1. Square fence to table(s); lock fence. 2. Regrind/replace table. 3. Remove, clean, and re-install any insert(s) any inserts that are "raised" in cutterhead (Page 38).

Electrical Safety Instructions

These pages are accurate at the time of printing. In the constant effort to improve, however, we may make changes to the electrical systems of future machines. Study this section carefully. If you see differences between your machine and what is shown in this section, call Technical Support at (360) 734-1540 for assistance BEFORE making any changes to the wiring on your machine.

Shock Hazard: It is extremely dangerous to perform electrical or wiring tasks while the machine is connected to the power source. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. For your own safety, disconnect machine from the power source before servicing electrical components or performing any wiring tasks!

Wire Connections: All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

Modifications: Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.

Motor Wiring: The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

Circuit Requirements: Connecting the machine to an improperly sized circuit will greatly increase the risk of fire. To minimize this risk, only connect the machine to a power circuit that meets the minimum requirements given in this manual.

Capacitors/Inverters: Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

Wire/Component Damage: Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.

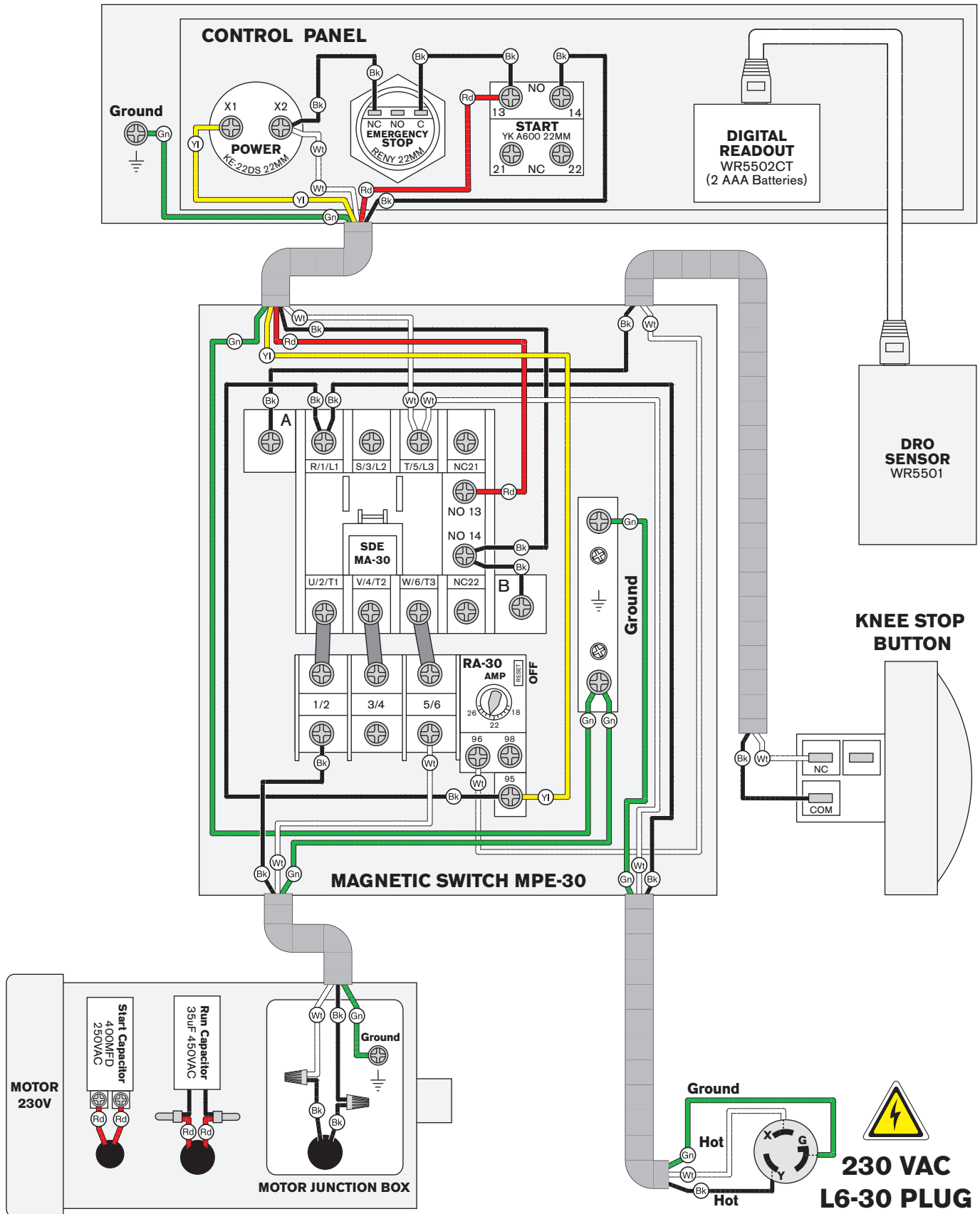
Experiencing Difficulties: If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-1540.

WIRING DIAGRAM COLOR KEY

BLACK — Bk	BLUE WHITE — Bw	RED — Rd	PINK — Pk	WHITE — Wt
BLUE — Bl	GREEN — Gn	LIGHT BLUE — Lb	PURPLE — Pu	YELLOW GREEN — Yg
BROWN — Br	GRAY — Gy	ORANGE — Or	TUR-QUIOSE — Tu	YELLOW — Yl

NOTICE: The photos and diagrams included in this section are best viewed in color. You can see them in color at www.southbendtools.com.

Wiring Diagram



Electrical Components

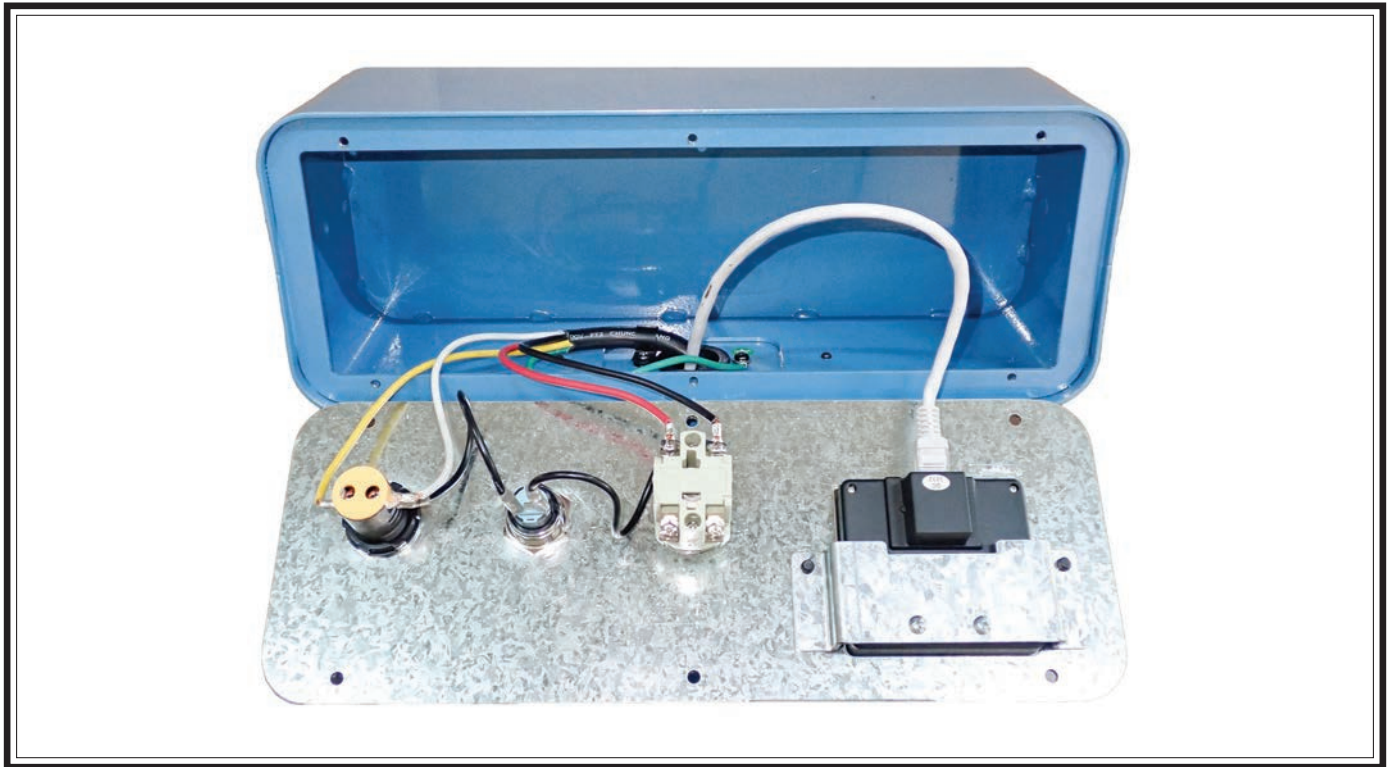


Figure 65. Control panel overview.



Figure 66. Magnetic switch cover.

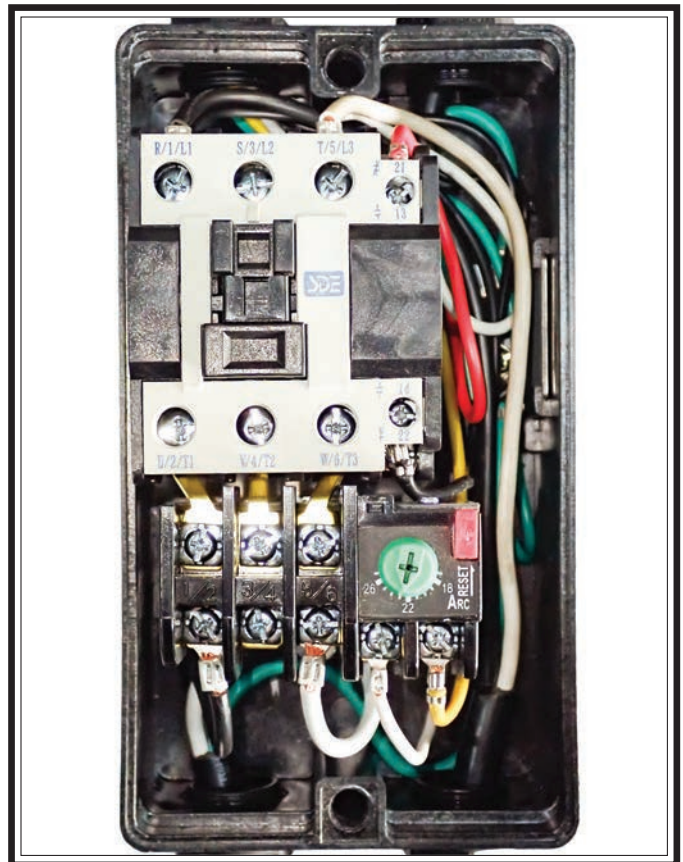


Figure 67. Magnetic switch wiring.



Figure 68. Motor junction box wiring.

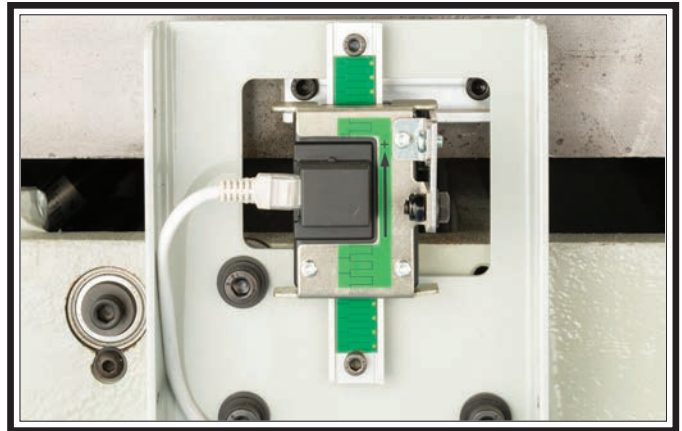


Figure 70. DRO Sensor WR5501.



Figure 69. Start Capacitor 400MFD 250VAC.



Figure 71. Run Capacitor 35µF 450VAC.

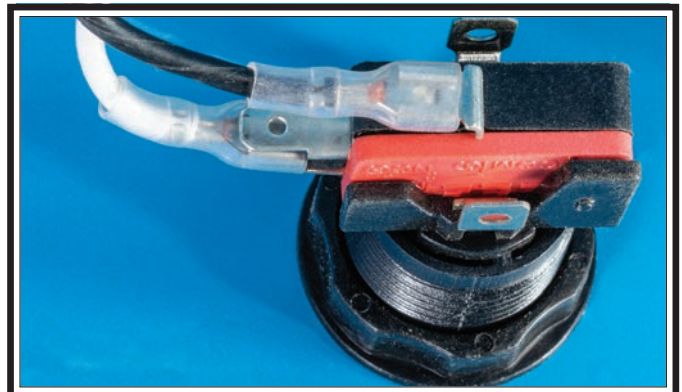
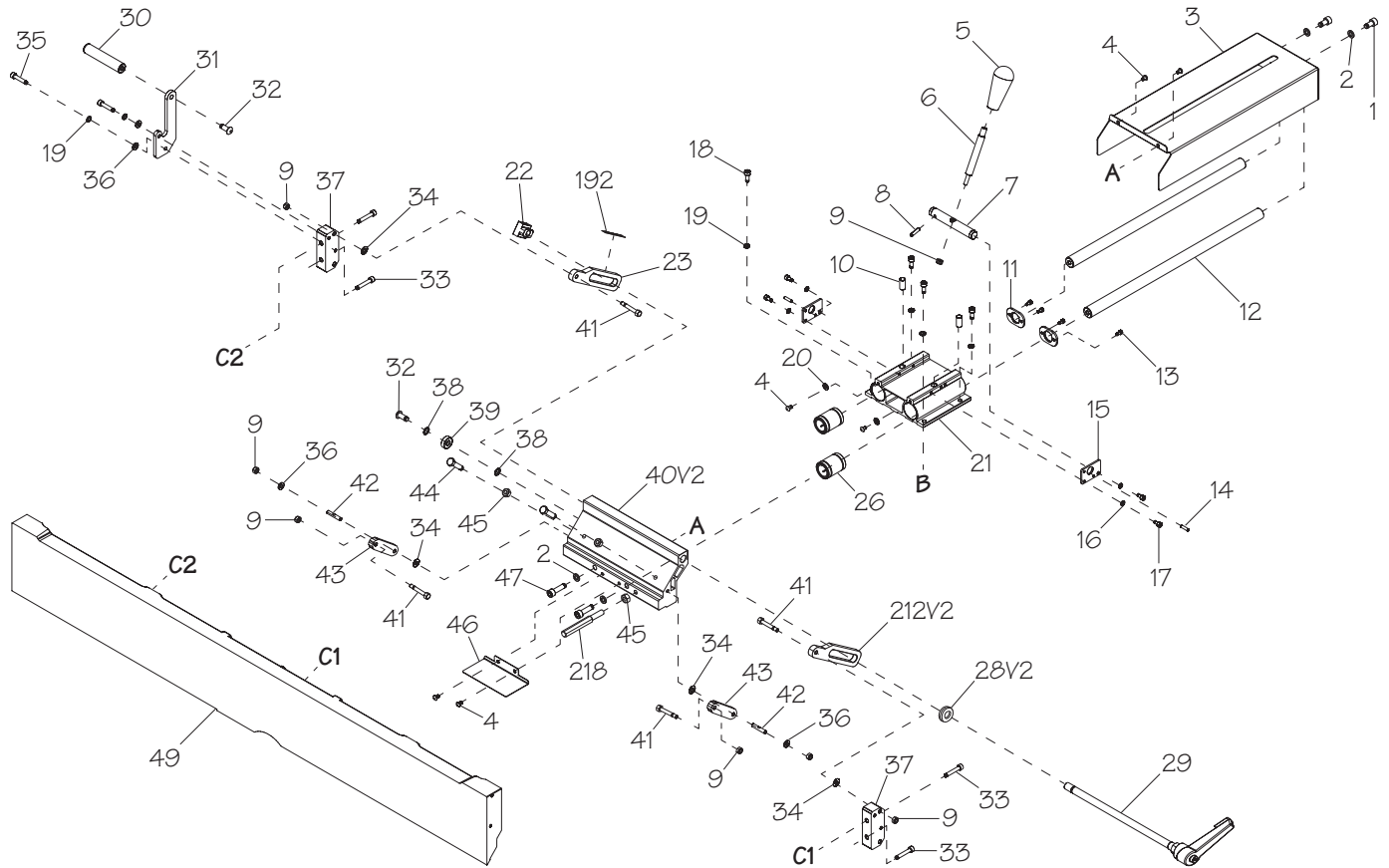


Figure 72. Knee Stop Button 100mm.

Fence

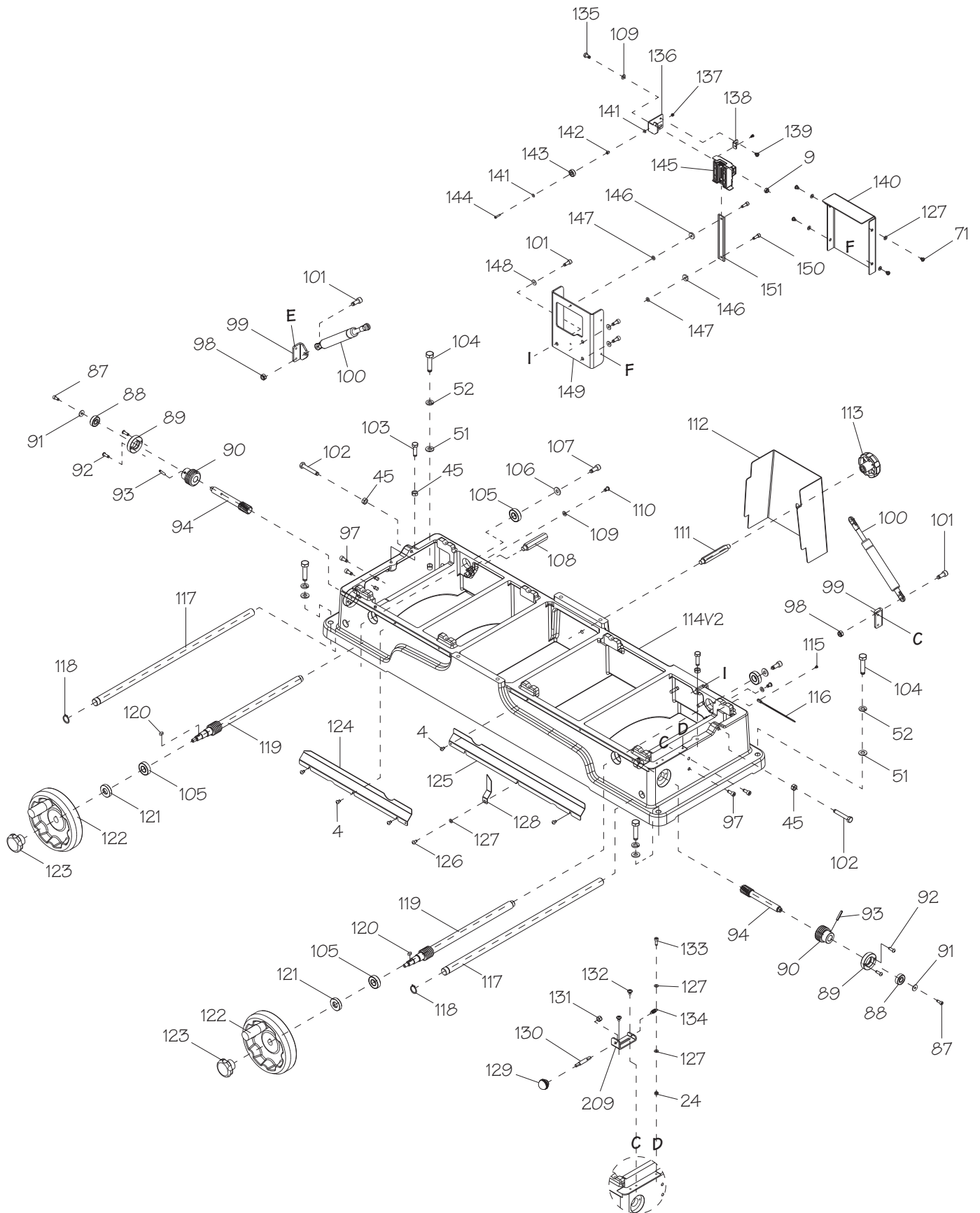


Fence Parts List

REF	PART #	DESCRIPTION
1	PSB1113001	CAP SCREW M8-1.25 X 16
2	PSB1113002	LOCK WASHER 8MM
3	PSB1113003	FENCE PISTON COVER
4	PSB1113004	BUTTON HD CAP SCR M5-.8 X 8
5	PSB1113005	KNOB 3/8-16, D36, TAPERED
6	PSB1113006	STUD-UDE M6-1 X 110, 12, 3/8-16 X 15
7	PSB1113007	FENCE HANDLE SHAFT
8	PSB1113008	ROLL PIN 5 X 25
9	PSB1113009	LOCK NUT M6-1
10	PSB1113010	DOWEL PIN 10 X 20 BR
11	PSB1113011	PISTON SUPPORT PLATE
12	PSB1113012	FENCE PISTON
13	PSB1113013	CAP SCREW M4-.7 X 8
14	PSB1113014	ROLL PIN 4 X 16
15	PSB1113015	FENCE HANDLE SHAFT BRACKET
16	PSB1113016	LOCK WASHER 5MM
17	PSB1113017	CAP SCREW M5-.8 X 10
18	PSB1113018	CAP SCREW M6-1 X 20
19	PSB1113019	LOCK WASHER 6MM
20	PSB1113020	FLAT WASHER 5MM
21	PSB1113021	FENCE PISTON SUPPORT
22	PSB1113022	T-SLOT NUT 1/2", 1/2-13
23	PSB1113023	TILT SLIDE BLOCK
24	PSB1113024	HEX NUT M5-.8
26	PSB1113026	LINEAR BEARING LM20UU

REF	PART #	DESCRIPTION
28V2	PSB1113028V2	LOCKING COLLAR V2.05.23
29	PSB1113029	LEVER HANDLE 1/2-13 X 7/8, 10-1/4
30	PSB1113030	FIXED HANDLE 18 X 90, M8-1.25
31	PSB1113031	FENCE TILT HANDLE BRACKET
32	PSB1113032	BUTTON HD CAP SCR M8-1.25 X 20
33	PSB1113033	CAP SCREW M6-1 X 35
34	PSB1113034	FLAT WASHER 6.8 X 14 X 0.3MM
35	PSB1113035	CAP SCREW M6-1 X 25
36	PSB1113036	FLAT WASHER 6MM
37	PSB1113037	FENCE TILT HANDLE SUPPORT BLOCK
38	PSB1113038	FLAT WASHER 8MM
39	PSB1113039	BALL BEARING 608ZZ
40V2	PSB1113040V2	FENCE SUPPORT BRACKET V2.05.23
41	PSB1113041	HEX BOLT M10-1.5 X 30
42	PSB1113042	STANDOFF-ROUND MM M6-1
43	PSB1113043	FENCE TILT SUPPORT BRACKET
44	PSB1113044	HEX BOLT M8-1.25 X 40
45	PSB1113045	HEX NUT M8-1.25
46	PSB1113046	FENCE SUPPORT GUARD PLATE
47	PSB1113047	CAP SCREW M8-1.25 X 30
49	PSB1113049	FENCE
192	PSB1113192	FENCE ANGLE SCALE
212V2	PSB1113212V2	TILT SLIDE BLOCK V2.05.23
218	PSB1113218	STANDOFF-HEX MALE M8-1.25 X 28, 90

Base

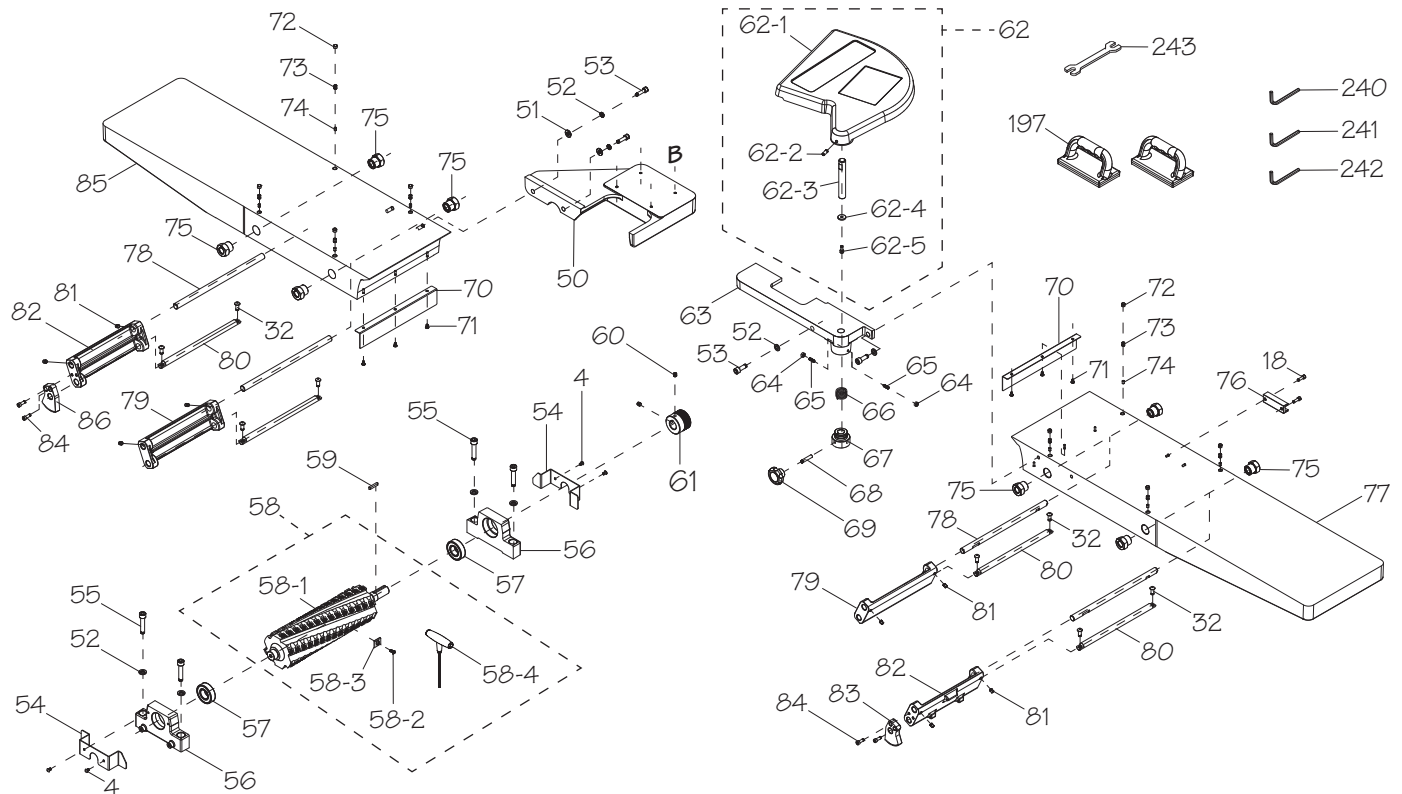


Base Parts List

REF	PART #	DESCRIPTION
4	PSB1113004	BUTTON HD CAP SCR M5-.8 X 8
9	PSB1113009	LOCK NUT M6-1
24	PSB1113024	HEX NUT M5-.8
45	PSB1113045	HEX NUT M8-1.25
51	PSB1113051	FLAT WASHER 10MM
52	PSB1113052	LOCK WASHER 10MM
71	PSB1113071	TAP SCREW M5 X 8
87	PSB1113087	CAP SCREW 10-24 X 1/2
88	PSB1113088	BALL BEARING 6000ZZ
89	PSB1113089	BEARING COVER
90	PSB1113090	PINION GEAR
91	PSB1113091	FENDER WASHER 5MM
92	PSB1113092	BUTTON HD CAP SCR M5-.8 X 16
93	PSB1113093	ROLL PIN 4 X 25
94	PSB1113094	BASE SHAFT
97	PSB1113097	CAP SCREW M6-1 X 15
98	PSB1113098	LOCK NUT M8-1.25
99	PSB1113099	STRUT BRACKET
100	PSB1113100	TABLE STRUT
101	PSB1113101	CAP SCREW M8-1.25 X 20
102	PSB1113102	HEX BOLT M8-1.25 X 50
103	PSB1113103	HEX BOLT M8-1.25 X 30
104	PSB1113104	HEX BOLT M10-1.5 X 45
105	PSB1113105	BALL BEARING 6002ZZ
106	PSB1113106	FLAT WASHER 8MM
107	PSB1113107	CAP SCREW M8-1.25 X 20
108	PSB1113108	STANDOFF-HEX MF M10-1.5 X 10, M8-1.25
109	PSB1113109	FLAT WASHER 6MM
110	PSB1113110	BUTTON HD CAP SCR M6-1 X 10
111	PSB1113111	STANDOFF-HEX MM M10-1.5 X 98, 10
112	PSB1113112	V-BELT COVER
113	PSB1113113	KNOB M10-1.5, 6-LOBE, D62
114V2	PSB1113114V2	TABLE BASE V2.05.22
115	PSB1113115	PHLP HD SCR M3-.5 X 12
116	PSB1113116	NYLON CLAMP TIE ALC-1105
117	PSB1113117	LIFTING BAR

REF	PART #	DESCRIPTION
118	PSB1113118	EXT RETAINING RING 17MM
119	PSB1113119	HANDWHEEL SHAFT
120	PSB1113120	KEY 5 X 5 X 10
121	PSB1113121	BUSHING 15ID X 32OD X 7L
122	PSB1113122	HANDWHEEL TYPE-13 16OD X 12B-K X M6-1
123	PSB1113123	KNOB 5/16-18, D46, 6-LOBE
124	PSB1113124	TABLE GUARD (LEFT)
125	PSB1113125	TABLE GUARD (RIGHT)
126	PSB1113126	BUTTON HD CAP SCR M5-.8 X 10
127	PSB1113127	FLAT WASHER 5MM
128	PSB1113128	DEPTH SCALE POINTER
129	PSB1113129	KNOB 1/4-20, D25, BALL
130	PSB1113130	STUD-DE 1/4-20 X 50, 12
131	PSB1113131	LOCK NUT 1/4-20
132	PSB1113132	FLANGE SCREW M5-.8 X 6
133	PSB1113133	CAP SCREW M5-.8 X 20
134	PSB1113134	COMPRESSION SPRING 0.6 X 7.6 X 10.4
135	PSB1113135	HEX BOLT M6-1 X 12
136	PSB1113136	BEARING BRACKET
137	PSB1113137	LOCK NUT M3-.5
138	PSB1113138	ANGLE BRACKET
139	PSB1113139	PHLP HD SCR M5-.8 X 6
140	PSB1113140	DRO SENSOR COVER
141	PSB1113141	FLAT WASHER 3MM
142	PSB1113142	BUSHING 3ID x 6OD x 6L
143	PSB1113143	BALL BEARING 606ZZ
144	PSB1113144	PHLP HD SCR M3-.5 X 15
145	PSB1113145	DIGITAL SENSOR WR5501
146	PSB1113146	FENDER WASHER 5MM
147	PSB1113147	FLAT WASHER 5MM
148	PSB1113148	FLAT WASHER 8MM
149	PSB1113149	DRO SENSOR BRACKET
150	PSB1113150	CAP SCREW M5-.8 X 12
151	PSB1113151	MAGNETIC SCALE
209	PSB1113209	POSITION PLATE

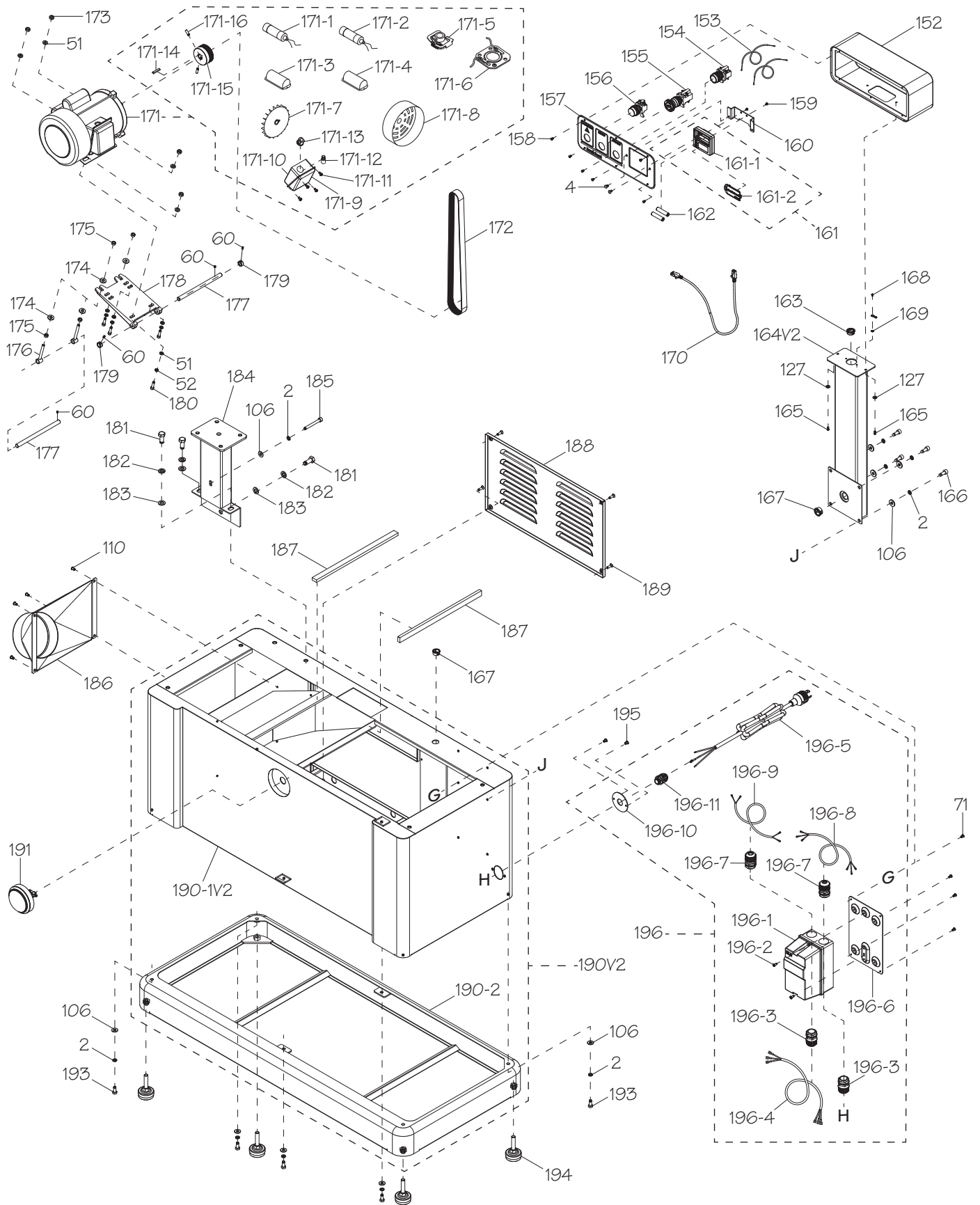
Table & Accessories



REF	PART #	DESCRIPTION
4	PSB1113004	BUTTON HD CAP SCR M5-.8 X 8
18	PSB1113018	CAP SCREW M6-1 X 20
32	PSB1113032	BUTTON HD CAP SCR M8-1.25 X 20
50	PSB1113050	FENCE BRACKET
51	PSB1113051	FLAT WASHER 10MM
52	PSB1113052	LOCK WASHER 10MM
53	PSB1113053	CAP SCREW M10-1.5 X 30
54	PSB1113054	CUTTERHEAD BEARING COVER
55	PSB1113055	CAP SCREW M10-1.5 X 50
56	PSB1113056	BEARING SUPPORT BLOCK
57	PSB1113057	BALL BEARING 6205-2NSE
58	PSB1113058	HELICAL CUTTERHEAD ASSEMBLY
58-1	PSB1113058-1	HELICAL CUTTERHEAD 12"
58-2	PSB1113058-2	FLAT HD TORX SCR 10-32 X 1/2
58-3	PSB1113058-3	INSERT 15 X 15 X 2.5MM
58-4	PSB1113058-4	T-HANDLE TORX DRIVER T-25
59	PSB1113059	KEY 6 X 6 X 30 RE
60	PSB1113060	SET SCREW M8-1.25 X 20
61	PSB1113061	CUTTERHEAD PULLEY
62	PSB1113062	CUTTERHEAD GUARD ASSEMBLY
62-1	PSB1113062-1	CUTTERHEAD GUARD COVER
62-2	PSB1113062-2	SET SCREW M8-1.25 X 20
62-3	PSB1113062-3	CUTTERHEAD GUARD SHAFT
62-4	PSB1113062-4	FENDER WASHER 6MM
62-5	PSB1113062-5	CAP SCREW M6-1 X 15
63	PSB1113063	RABBETING TABLE
64	PSB1113064	HEX NUT 1/4-20

REF	PART #	DESCRIPTION
65	PSB1113065	SET SCREW 1/4-20 X 3/4
66	PSB1113066	TORSION SPRING 2.6 X 30 X 47.5
67	PSB1113067	BUSHING 19ID X 500D X 44L
68	PSB1113068	SET SCREW M8-1.25 X 40
69	PSB1113069	KNOB M8-1.25, 6-LOBE, D50
70	PSB1113070	CHIP BREAKER
71	PSB1113071	TAP SCREW M5 X 8
72	PSB1113072	SCREW COVER
73	PSB1113073	SET SCREW M8-1.25 X 10
74	PSB1113074	BUSHING 6ID X 80D X 8L
75	PSB1113075	ECCENTRIC BUSHING
76	PSB1113076	SENSOR MOUNT BLOCK
77	PSB1113077	INFEED TABLE
78	PSB1113078	TILT SHAFT
79	PSB1113079	TILT BRACKET
80	PSB1113080	TILT BRACKET MOUNT
81	PSB1113081	SET SCREW M8-1.25 X 10
82	PSB1113082	POSITIVE STOP BRACKET
83	PSB1113083	ELEVATION BRACKET (RIGHT)
84	PSB1113084	CAP SCREW M6-1 X 12
85	PSB1113085	OUTFEED TABLE
86	PSB1113086	ELEVATION BRACKET (LEFT)
197	PSB1113197	SAFETY PUSH BLOCK
240	PSB1113240	HEX WRENCH 5MM
241	PSB1113241	HEX WRENCH 6MM
242	PSB1113242	HEX WRENCH 8MM
243	PSB1113243	WRENCH 17 X 19MM OPEN-ENDS

Stand & Motor

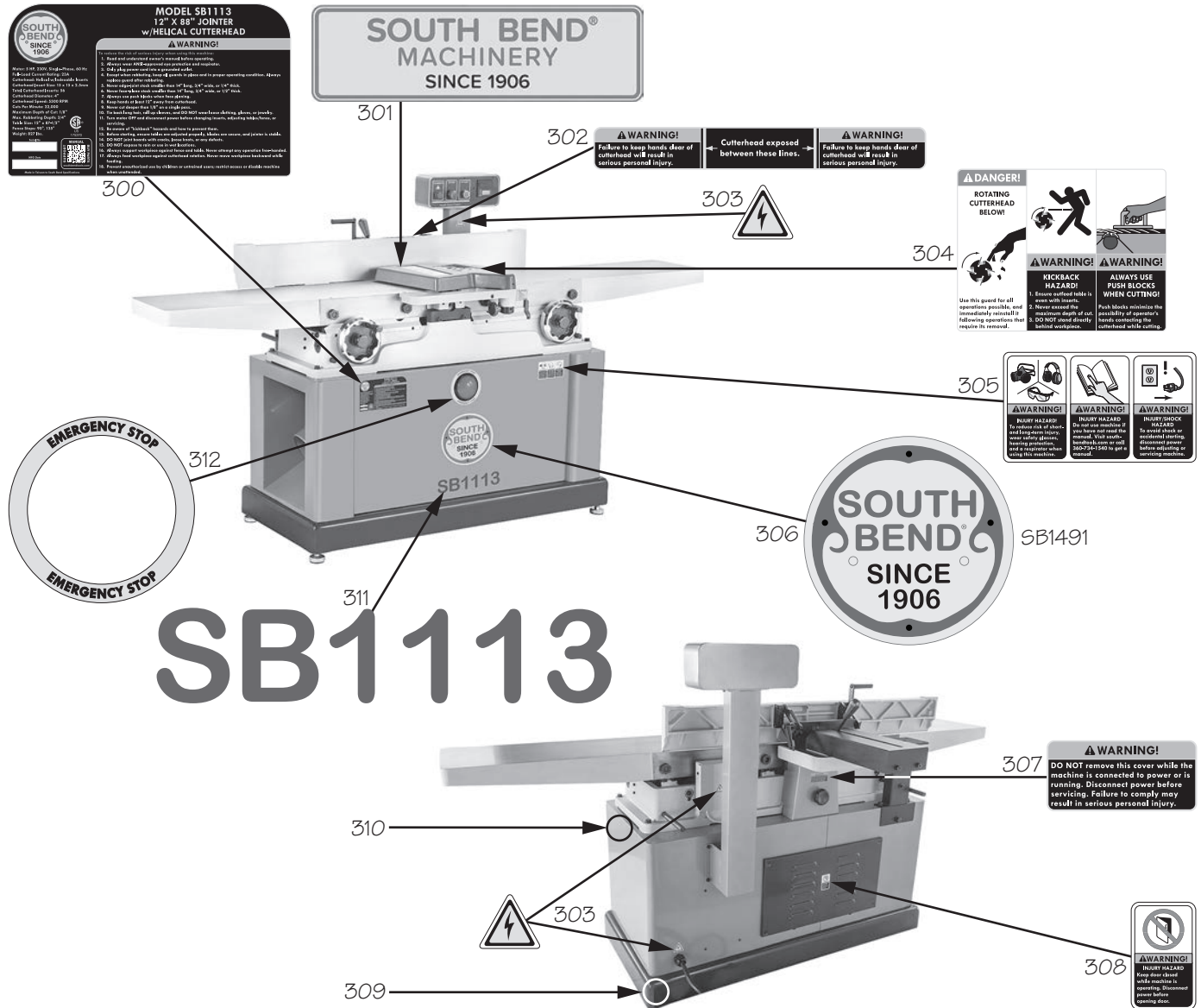


Stand & Motor Parts List

REF	PART #	DESCRIPTION
2	PSB1113002	LOCK WASHER 8MM
4	PSB1113004	BUTTON HD CAP SCR M5-.8 X 8
51	PSB1113051	FLAT WASHER 10MM
52	PSB1113052	LOCK WASHER 10MM
60	PSB1113060	SET SCREW M8-1.25 X 20
71	PSB1113071	TAP SCREW M5 X 8
106	PSB1113106	FLAT WASHER 8MM
109	PSB1113109	FLAT WASHER 6MM
110	PSB1113110	BUTTON HD CAP SCR M6-1 X 10
127	PSB1113127	FLAT WASHER 5MM
152	PSB1113152	CONTROL PANEL HOUSING
153	PSB1113153	DRO CORD 18G 1W 6"
154	PSB1113154	BUTTON SWITCH YK A600 22MM GREEN
155	PSB1113155	E-STOP BUTTON RENVY 22MM 250V
156	PSB1113156	POWER LIGHT KE-22DS 22MM 230V
157	PSB1113157	CONTROL PANEL FACEPLATE
158	PSB1113158	BUTTON HD CAP SCR M4-.7X 6
159	PSB1113159	TAP SCREW M3 X 8
160	PSB1113160	DRO MOUNTING BRACKET
161	PSB1113161	DIGITAL READOUT ASSEMBLY
161-1	PSB1113161-1	DIGITAL READOUT
161-2	PSB1113161-2	BATTERY COVER
162	PSB1113162	BATTERY AAA
163	PSB1113163	SNAP BUSHING 24ID X 340D X 12L
164V2	PSB1113164V2	CONTROL PANEL COLUMN V2.05.22
165	PSB1113165	CAP SCREW M5-.8 X 8
166	PSB1113166	CAP SCREW M8-1.25 X 20
167	PSB1113167	SNAP BUSHING 19ID X 250D X 11L
168	PSB1113168	PHLP HD SCR M4-.7X 8
169	PSB1113169	EXT TOOTH WASHER 4MM
170	PSB1113170	ETHERNET CABLE CAT 5E RJ-45-CT-A 72"
171	PSB1113171	MOTOR 5HP 230V1-PH
171-1	PSB1113171-1	S CAP 800M 250V1-3/4 X 3-3/8
171-2	PSB1113171-2	R CAP 50M 250V1-3/4 X 3-3/8
171-3	PSB1113171-3	S CAPACITOR COVER
171-4	PSB1113171-4	R CAPACITOR COVER
171-5	PSB1113171-5	CENTRIFUGAL SWITCH
171-6	PSB1113171-6	CONTACT PLATE
171-7	PSB1113171-7	FAN
171-8	PSB1113171-8	FAN COVER
171-9	PSB1113171-9	JUNCTION BOX COVER
171-10	PSB1113171-10	JUNCTION BOX BASE
171-11	PSB1113171-11	PHLP HD SCR 10-24 X 3/8

REF	PART #	DESCRIPTION
171-12	PSB1113171-12	WIRE NUT SW-P4
171-13	PSB1113171-13	STRAIN RELIEF TYPE-3 M25-1.5
171-14	PSB1113171-14	KEY 6 X 6 X 40 RE
171-15	PSB1113171-15	MOTOR PULLEY
171-16	PSB1113171-16	SET SCREW M8-1.25 X 25
172	PSB1113172	V-BELT 480-J9
173	PSB1113173	HEX NUT M10-1.5
174	PSB1113174	FLAT WASHER 13MM
175	PSB1113175	HEX NUT M12-1.75
176	PSB1113176	ADJUSTMENT ROD
177	PSB1113177	PLATE CONNECTING ROD
178	PSB1113178	MOTOR PLATE
179	PSB1113179	CONNECTING ROD COLLAR
180	PSB1113180	CAP SCREW M10-1.5 X 40
181	PSB1113181	HEX BOLT M12-1.75 X 30
182	PSB1113182	LOCK WASHER 12MM
183	PSB1113183	FLAT WASHER 12MM
184	PSB1113184	ACCESSORY COLUMN
185	PSB1113185	CAP SCREW M8-1.25 X 70
186	PSB1113186	DUST PORT 6"
187	PSB1113187	DUST SEAL
188	PSB1113188	REAR ACCESS PANEL
189	PSB1113189	FLAT HD SCR M6-1 X 20
190V2	PSB1113190V2	STAND ASSEMBLY V2.05.22
190-1V2	PSB1113190-1V2	STAND BODY V2.05.22
190-2	PSB1113190-2	STAND BASE
191	PSB1113191	KNEE STOP BUTTON 100MM
193	PSB1113193	HEX BOLT M8-1.25 X 20
194	PSB1113194	THREADED FOOT M12-1.75 X 50
195	PSB1113195	PHLP HD SCR M6-1 X 8
196	PSB1113196	MAGNETIC SWITCH ASSEMBLY
196-1	PSB1113196-1	MAG SWITCH MPE-30
196-2	PSB1113196-2	PHLP HD SCR M5-.8 X 10
196-3	PSB1113196-3	STRAIN RELIEF TYPE-3 1
196-4	PSB1113196-4	MOTOR CORD 12G 3W 37"
196-5	PSB1113196-5	POWER CORD 12G 3W 146" L6-30P
196-6	PSB1113196-6	SWITCH PLATE
196-7	PSB1113196-7	STRAIN RELIEF TYPE-3 1
196-8	PSB1113196-8	CONTROL PANEL CORD 16G 5W 50"
196-9	PSB1113196-9	KNEE STOP CORD 18G 2W 35"
196-10	PSB1113196-10	CORD FIXED PLATE
196-11	PSB1113196-11	STRAIN RELIEF TYPE-3 3/4

Machine Labels



REF	PART #	DESCRIPTION
300	PSB1113300	MACHINE ID LABEL
301	PSB1113301	SOUTH BEND CUTTERHEAD NAMEPLATE
302	PSB1113302	FENCE/CUTTERHEAD LABEL
303	PSB1113303	ELECTRICITY LABEL
304	PSB1113304	CUTTERHEAD GUARD LABEL
305	PSB1113305	COMBO WARNING LABEL
306	PSB1113306	SOUTH BEND NAMEPLATE 203MM

REF	PART #	DESCRIPTION
307	PSB1113307	DO NOT OPEN COVER LABEL
308	PSB1113308	DO NOT OPEN PANEL LABEL
309	PSB1113309	TOUCH-UP PAINT, SB DARK BLUE
310	PSB1113310	TOUCH-UP PAINT, SB LIGHT BLUE
311	PSB1113311	MODEL NUMBER LABEL
312	PSB1113312	EMERGENCY STOP RING LABEL

⚠ WARNING

The safety labels provided with your machine are used to make the operator aware of the machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of these safety labels. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact South Bend Tools at (360) 734-1540 or www.southbendtools.com to order new labels.

Warranty

This quality product is warranted by South Bend Tools to the original buyer for **2 years** from the date of purchase. This warranty does not apply to consumable parts, or defects due to any kind of misuse, abuse, negligence, accidents, repairs, alterations or lack of maintenance. We do not reimburse for third party repairs. In no event shall we be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our products.

We do not warrant or represent that this machine complies with the provisions of any law, act, code, regulation, or standard of any domestic or foreign government, industry, or authority. In no event shall South Bend's liability under this warranty exceed the original purchase price paid for this machine. Any legal actions brought against South Bend Tools shall be tried in the State of Washington, County of Whatcom.

This is the sole written warranty for this machine. Any and all warranties that may be implied by law, including any merchantability or fitness, for any purpose, are hereby limited to the duration of this warranty.

Thank you for your business and continued support.

To take advantage of this warranty, register at <https://www.grizzly.com/forms/warranty>, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.





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