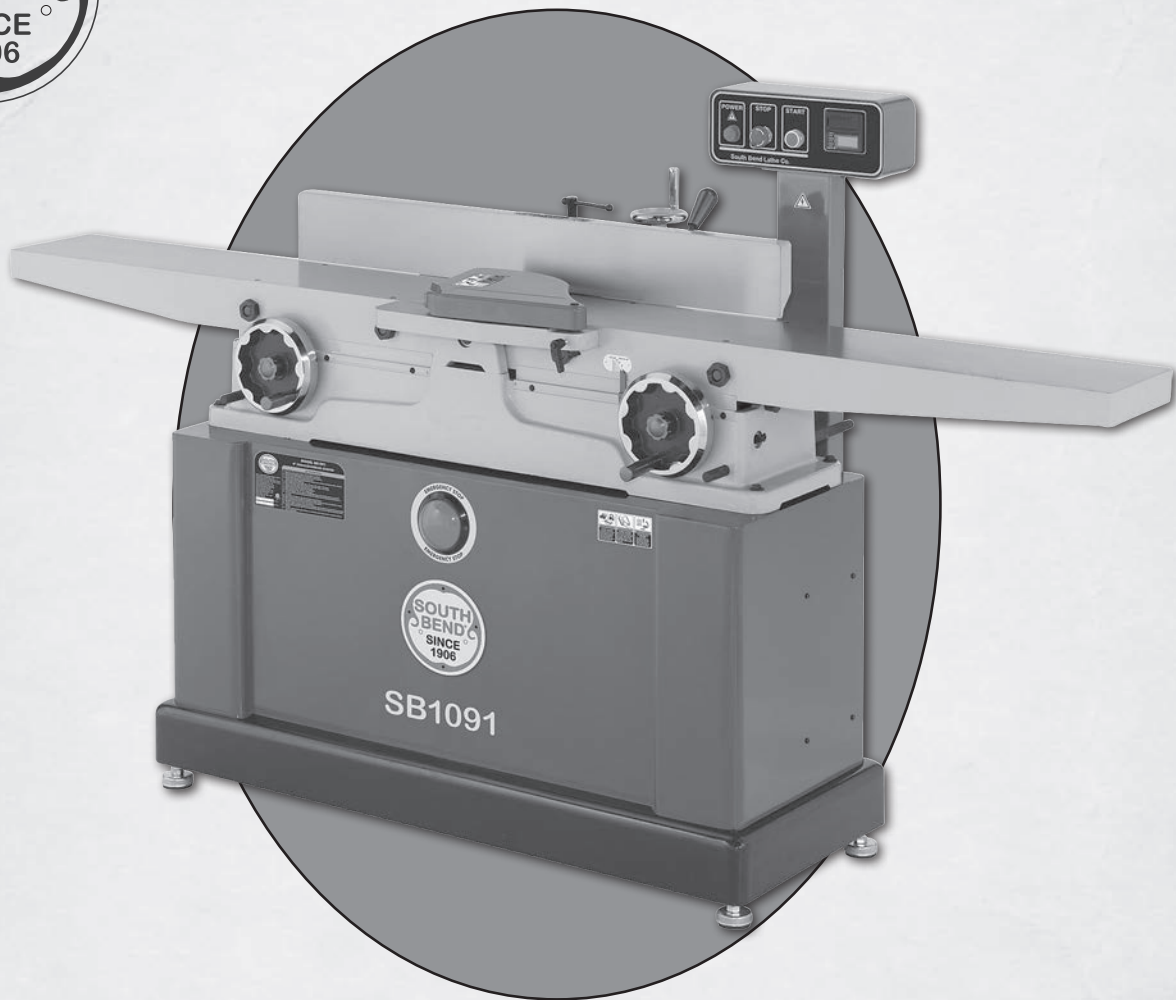


# 8" PARALLELOGRAM JOINTER

## MODEL SB1091



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

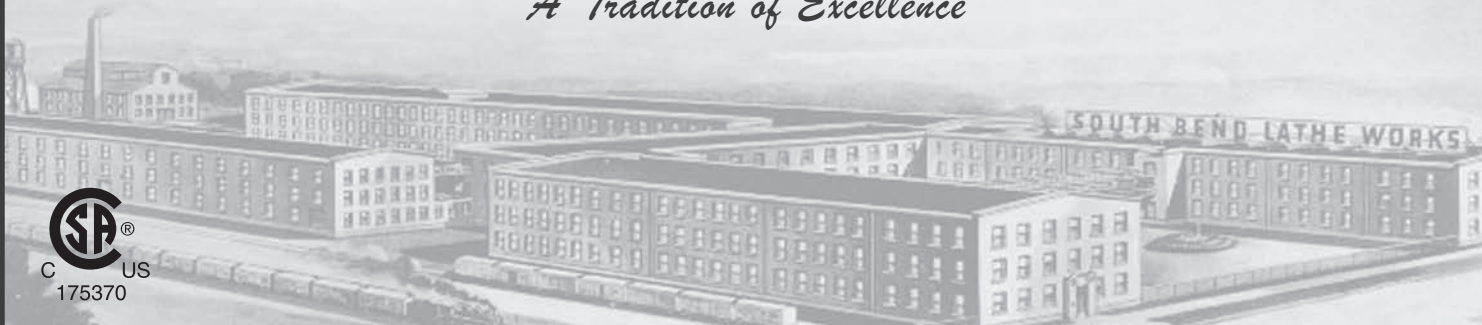
## OWNER'S MANUAL

---

# South Bend Tools®

---

*A Tradition of Excellence*



# 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?

**South Bend Tools**  
**c/o Technical Documentation Manager**  
**P.O. Box 2027**  
**Bellingham, WA 98227**  
**Email: [manuals@southbendtools.com](mailto:manuals@southbendtools.com)**

# Updates

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

**[www.southbendtools.com](http://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.

**South Bend Tools**  
**P.O. Box 2027**  
**Bellingham, WA 98227**  
**Phone: (360) 734-1540**  
**Fax: (360) 676-1075 (International)**  
**Fax: (360) 734-1639 (USA Only)**  
**Email: [sales@southbendtools.com](mailto:sales@southbendtools.com)**

# Table of Contents

<b>INTRODUCTION</b> .....	<b>2</b>	<b>ACCESSORIES</b> .....	<b>30</b>
Identification .....	2	<b>MAINTENANCE</b> .....	<b>32</b>
Description of Controls & Components .....	3	Maintenance Schedule.....	32
Product Specifications .....	6	Cleaning .....	32
<b>SAFETY</b> .....	<b>9</b>	Unpainted Cast Iron.....	32
Understanding Risks of Machinery .....	9	Lubrication .....	32
Basic Machine Safety .....	9	Machine Storage .....	33
Additional Jointer Safety .....	11	<b>TROUBLESHOOTING</b> .....	<b>34</b>
<b>PREPARATION</b> .....	<b>12</b>	<b>SERVICE</b> .....	<b>36</b>
Preparation Overview.....	12	Checking/Adjusting Table Parallelism .....	36
Required for Setup.....	12	Replacing Carbide Inserts .....	39
Power Supply Requirements .....	13	Setting Infeed Table .....	40
Unpacking .....	15	Calibrating Infeed Table .....	40
Inventory .....	15	Setting Outfeed Table Height .....	41
Cleaning & Protecting .....	16	Checking/Adjusting Cutterhead Guard.....	42
Location .....	17	Setting Fence Stops .....	43
Assembly .....	18	Adjusting/Replacing V-Belt.....	45
Dust Collection.....	19	Pulley Alignment .....	46
Digital Readout Batteries.....	20	<b>ELECTRICAL</b> .....	<b>47</b>
Test Run .....	20	Electrical Safety Instructions .....	47
Inspections & Adjustments .....	21	Wiring Diagram .....	48
<b>OPERATION</b> .....	<b>22</b>	Electrical Components.....	49
Operation Overview.....	22	<b>PARTS</b> .....	<b>50</b>
Stock Inspection & Requirements.....	23	Fence.....	50
Squaring Stock.....	24	Base .....	51
Surface Planing.....	25	Table & Accessories .....	53
Edge Jointing .....	26	Stand & Motor.....	54
Bevel Cutting .....	27	Machine Labels .....	56
Rabbet Cutting.....	28	<b>WARRANTY</b> .....	<b>57</b>
Setting Depth of Cut.....	29		

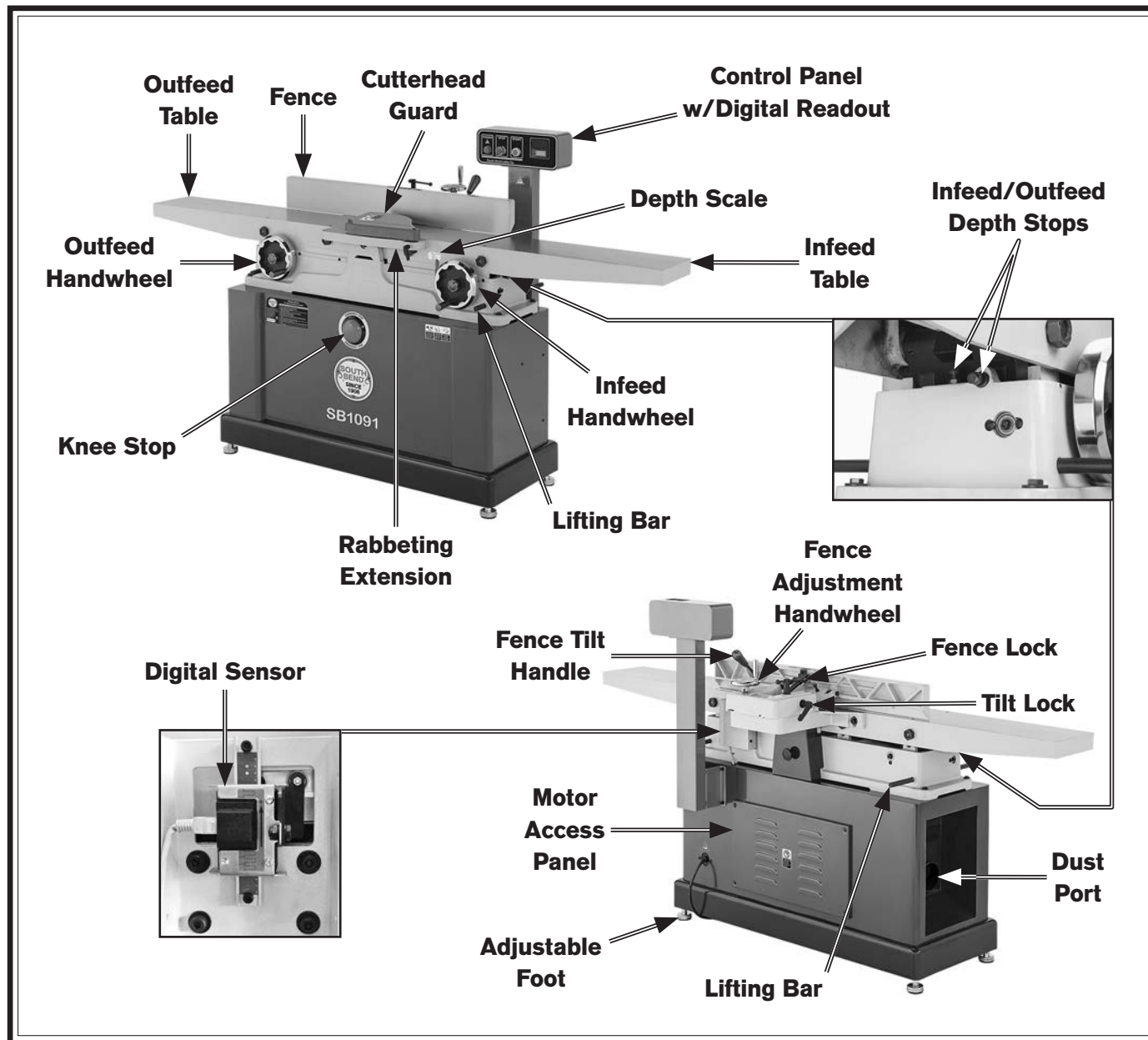
## **WARNING**

**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 10" in length.

# Description of Controls & Components

Refer to **Figures 1–5** and the following descriptions to become familiar with the basic controls and components used to operate this machine.

## Control Panel

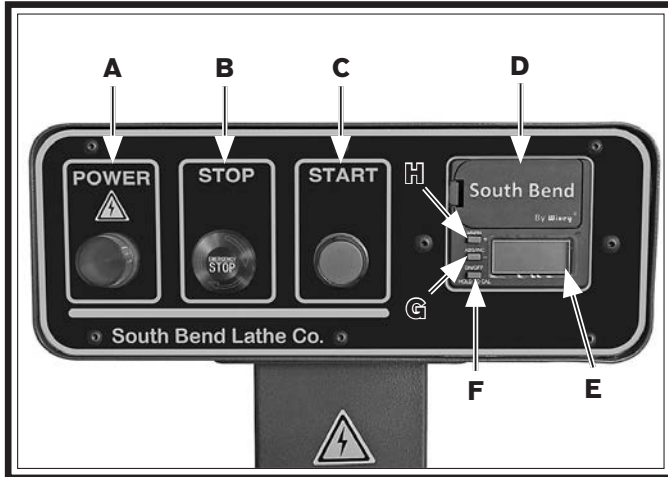


Figure 1. Example of control panel layout.

- 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 the 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

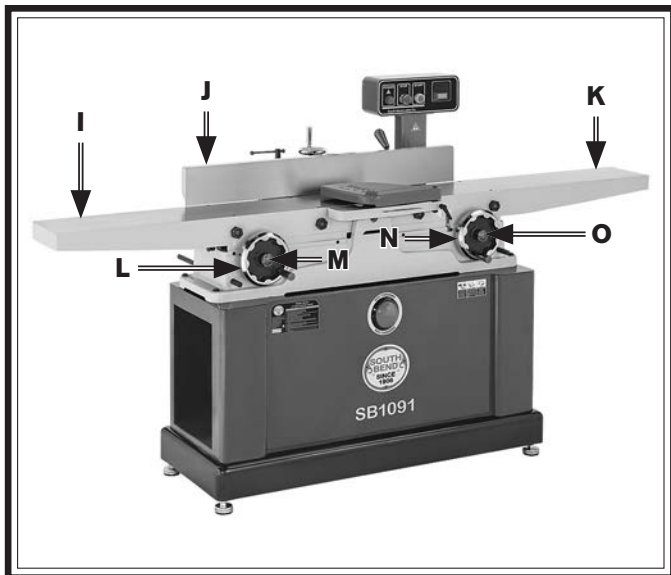


Figure 2. Tables and fence.

- 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 the outfeed table.
- M. Outfeed Table Lock:** Tighten to secure outfeed table position; loosen for table adjustment.
- N. Infeed Handwheel:** Raises or lowers the infeed table to control depth of cut.
- O. Infeed Table Lock:** Tighten to secure infeed table position; loosen for table adjustment.

## Safety & Support

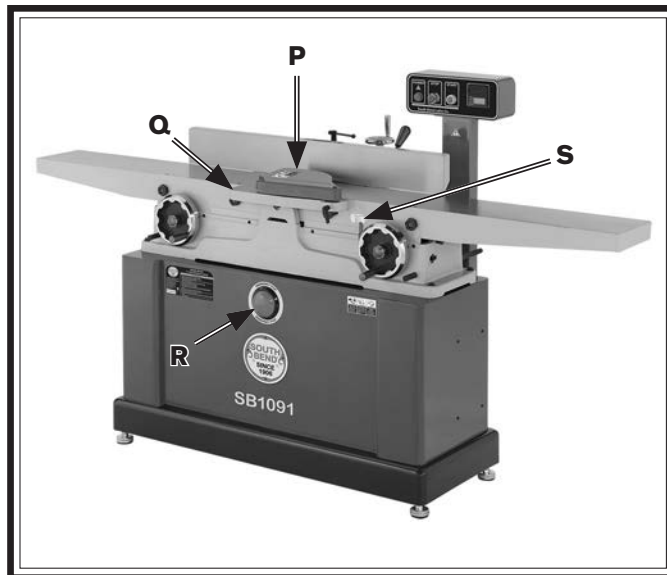


Figure 3. Safety and support features.

- 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 (per pass).

## Fence Controls

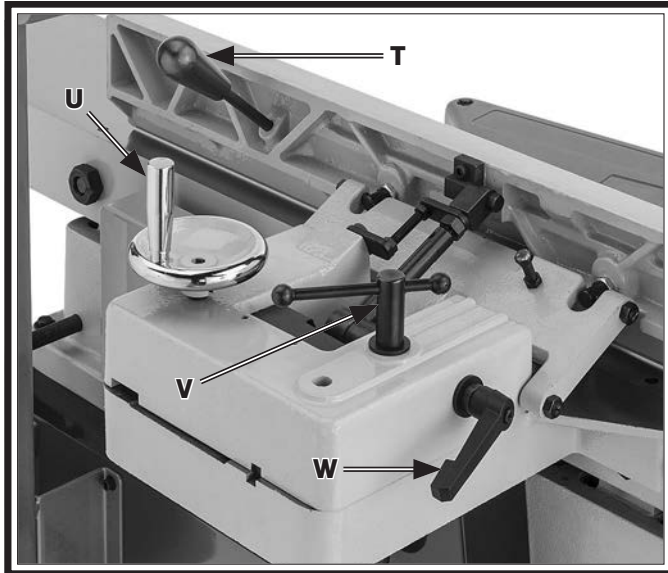


Figure 4. Fence controls.

- T. Fence Tilt Handle:** Use to tilt fence throughout its range of motion from 45° inward to 45° outward (135°). Fence tilt lock must be loosened first.
- U. Fence Adjustment Wheel:** Rotate to move fence position forward/backward. Fence lock must be loosened first.
- V. Fence Lock:** Tighten to secure fence position along width of tables; loosen for fence adjustment.
- W. 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.

## Fence Stops

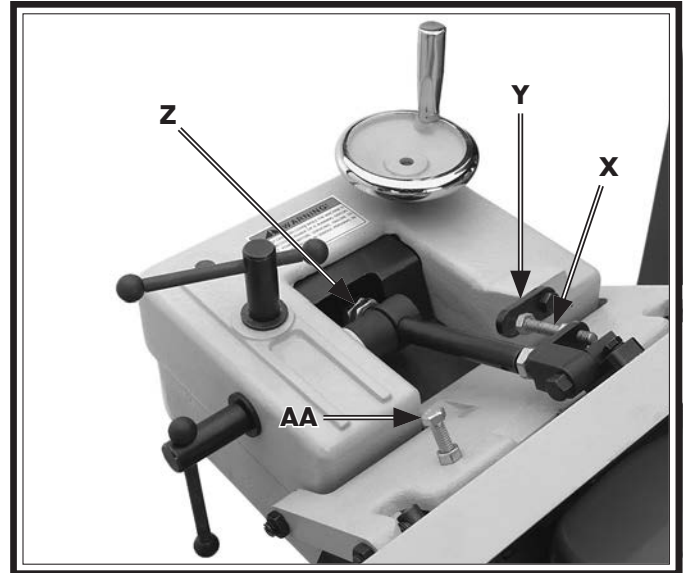


Figure 5. Fence stops.

- X. 90° Fence Stop:** Stops fence at 90°.
- Y. 90° Stop Block:** Swivels to engage with 90° stop bolt. When engaged, stops fence at 90°. When disengaged, allows bevel cuts greater than 90°.
- Z. 45° Inward Fence Stop:** Stops fence at 45° inward.
- AA. 45° Outward Fence Stop:** Stops fence at 45° outward (135°).

	<h1 style="margin: 0;">Product Specifications</h1> <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>	
---	---	---

## Model SB1091 8" Parallelogram Jointer

**Product Dimensions**

Weight..... 538 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 83 x 26 x 46 in.  
 Footprint (Length x Width)..... 46 x 18 in.

**Shipping Dimensions**

Type..... Wood Crate  
 Content..... Machine  
 Weight..... 730 lbs.  
 Length x Width x Height..... 89 x 28 x 45 in.  
 Must Ship Upright..... Yes

**Electrical**

Power Requirement..... 230V, Single-Phase, 60 Hz  
 Full-Load Current Rating..... 12A  
 Minimum Circuit Size..... 20A  
 Connection Type..... Cord & Plug  
 Power Cord Included..... Yes  
 Power Cord Length..... 6 ft.  
 Power Cord Gauge..... 14 AWG  
 Plug Included..... Yes  
 Included Plug Type..... 6-20  
 Switch Type..... Control Panel w/Magnetic Switch Protection

**Motors**

**Main**

Horsepower..... 3 HP  
 Phase..... Single-Phase  
 Amps..... 12A  
 Speed..... 3450 RPM  
 Type..... TEFC Capacitor-Start Induction  
 Power Transfer ..... Belt  
 Bearings..... Shielded & Permanently Lubricated  
 Centrifugal Switch/Contacts Type..... External



**Main Specifications****Main Specifications**

Jointer Size.....	8 in.
Bevel Jointing.....	0 - 45 deg. L/R
Maximum Width of Cut.....	8 in.
Maximum Depth of Cut.....	1/8 in.
Minimum Workpiece Length.....	10 in.
Minimum Workpiece Thickness.....	1/2 in.
Maximum Rabbeting Depth.....	1/2 in.
Number of Cuts Per Minute.....	28,000

**Fence Information**

Fence Length.....	38 in.
Fence Width.....	1-1/4 in.
Fence Height.....	4-5/8 in.
Fence Stops.....	45, 90, 135 deg.

**Cutterhead Information**

Cutterhead Type.....	Helical
Cutterhead Diameter.....	3-1/16 in.
Number of Cutter Rows.....	4
Number of Indexable Cutters.....	36
Cutterhead Speed.....	7000 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.....	83 in.
Table Width.....	8 in.
Table Thickness.....	3-5/16 in.
Floor to Table Height.....	32-1/2 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.....	4 in.

**Other**

Country of Origin .....	Taiwan
Warranty .....	1 Year
Approximate Assembly & Setup Time .....	45 Minutes
Serial Number Location .....	Machine ID Label
Sound Rating .....	85 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 45, 90, and 135 Degrees  
 V-Belt Drive  
 4" Dust Port with Built-In Dust Chute  
 Helical Cutterhead with 36 Indexable Carbide Inserts  
 Precision-Ground Cast-Iron Table  
 Two-Tone Powder-Coated Finish  
 Sturdy Steel Cabinet Stand  
 Rabbeting Table  
 Digital Readout for Infeed Table Height  
 Magnetic Switch w/Thermal Overload Protection  
 Easy-to-Reach Knee Stop Button Located Below Cutterhead  
 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  
 Five Replacement Cutterhead Inserts  
 Combo Screwdriver #2  
 Hex Wrenches 3, 4, 5, 6, 8mm  
 Open-End Wrenches 12/14, 14/17mm

# 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:



*Death or catastrophic harm WILL occur.*



*Moderate injury or fire MAY occur.*



*Death or catastrophic harm COULD occur.*



*Machine or property damage may occur.*

## 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 1000 lbs.)

### For Power Connection

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

### For Assembly


- Safety Glasses (for each person)
- Straightedge 4' (or longer)
- Open-End Wrench 12/14mm
- Dust Collection System
- 4" Dust Hose (length as needed)
- 4" 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.

	<p><b>! WARNING</b>  <b>Electrocution or fire may occur if machine is not correctly grounded and attached to the power supply. Use a qualified electrician to ensure a safe power connection.</b></p>
--	---

## 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 ..... 12 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 ..... 20 Amps**  
**Plug/Receptacle (included) ..... NEMA 6-20**

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.

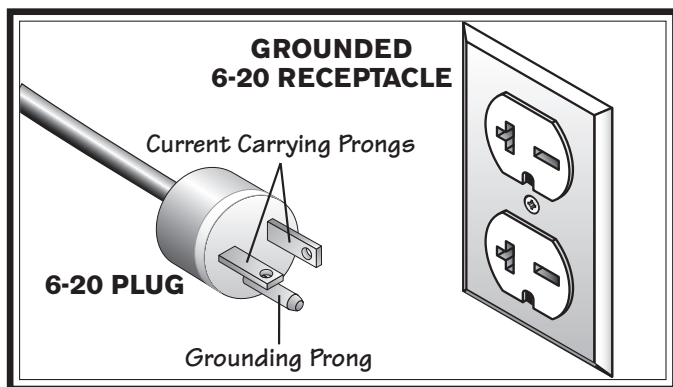


Figure 6. NEMA 6-20 plug and receptacle.

**⚠ 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.....12 AWG**
- Maximum Length (Shorter is Better) ....50 ft.**



# Unpacking

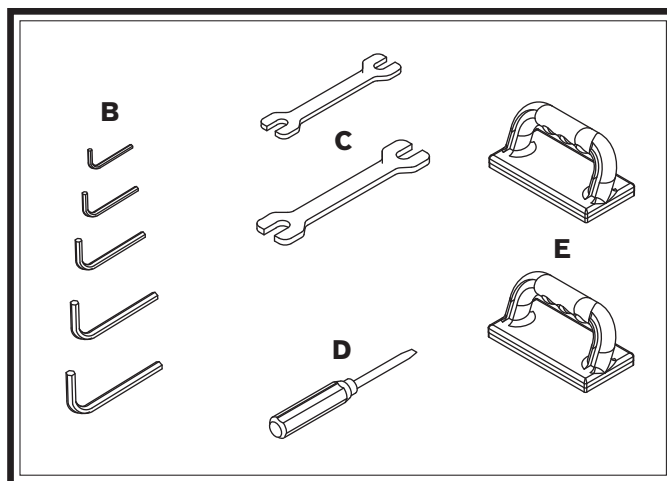
This item was carefully packaged to prevent damage during transport. If you discover any damage, please immediately call Customer Service at (360) 734-1540 for advice. You may need to file a freight claim, so save the containers and all packing materials for possible inspection by the carrier or its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

# Inventory

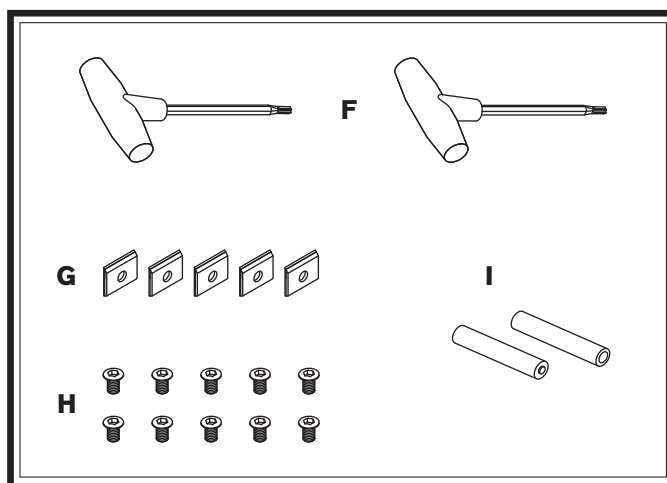
Wood Crate (Figures 7-9)	Qty
A. Jointer Assembly (not shown) .....	1
B. Hex Wrenches 3, 4, 5, 6, 8mm .....	1 Ea.
C. Open-End Wrenches 12/14, 14/17mm....	1 Ea.
D. Combo Screwdriver #1 .....	1
E. Safety Push Blocks .....	2
F. T-Handle T-25 Torx Driver.....	2
G. Inserts 15 x 15 x 2.5mm .....	5
H. Flat Head Torx Screws #10-32 x 1/2 .....	10
I. AAA Batteries .....	2
J. Cutterhead Guard Assembly.....	1
K. Fence Adjustment Wheel Handle .....	1

## **NOTICE**

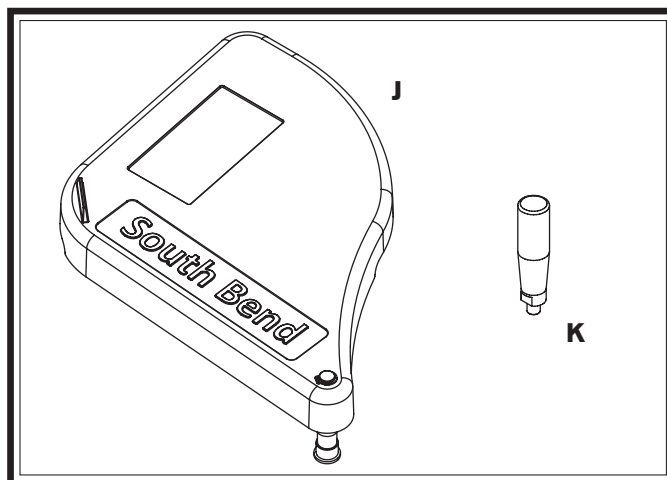
**If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.**



**Figure 7. Tools inventory.**



**Figure 8. Helical cutterhead inventory.**



**Figure 9. Cutterhead guard and fence adjustment wheel handle inventory.**

## 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.

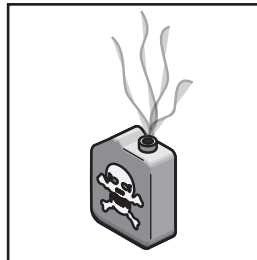
### Before cleaning, gather the following:

- 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.



**!WARNING**  
Gasoline and petroleum products have low flash points and can explode or cause fire if used for cleaning. Avoid using these products to remove rust preventative.



**!CAUTION**  
Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

## 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 10. 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.

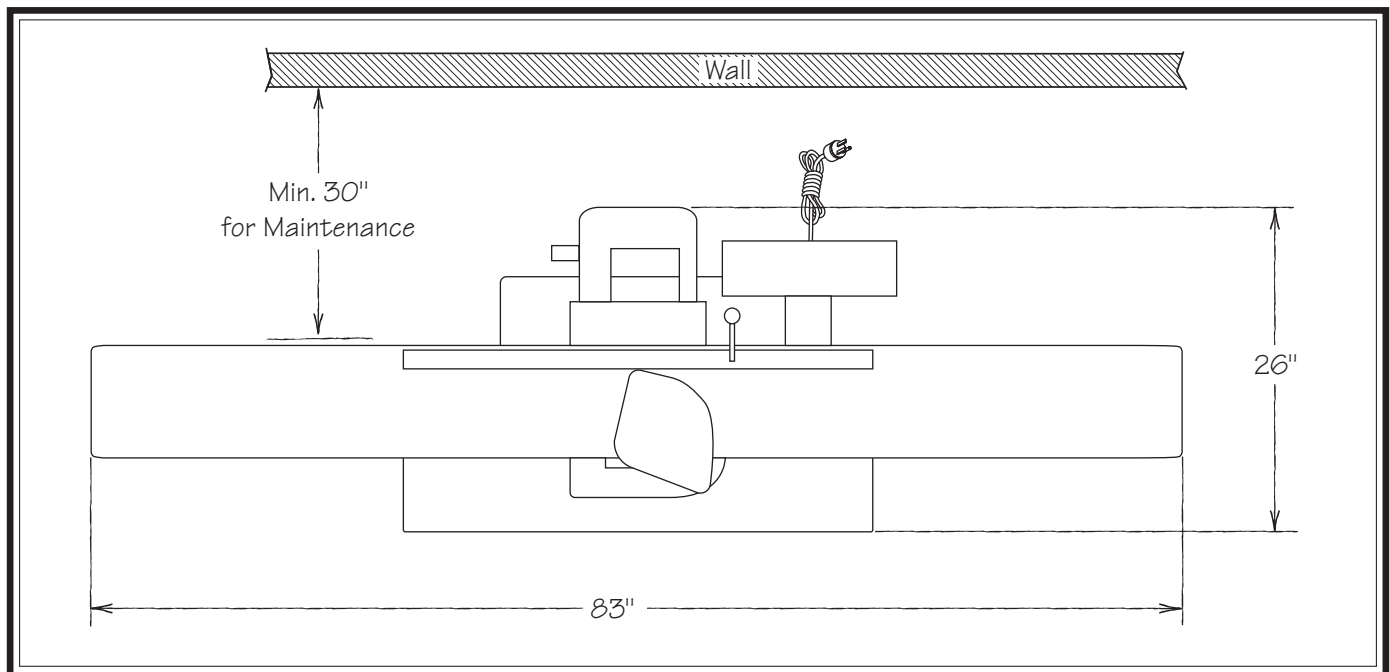
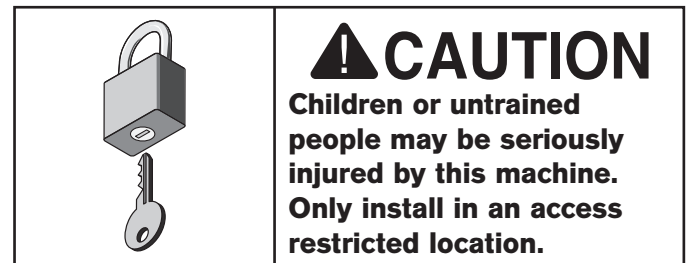
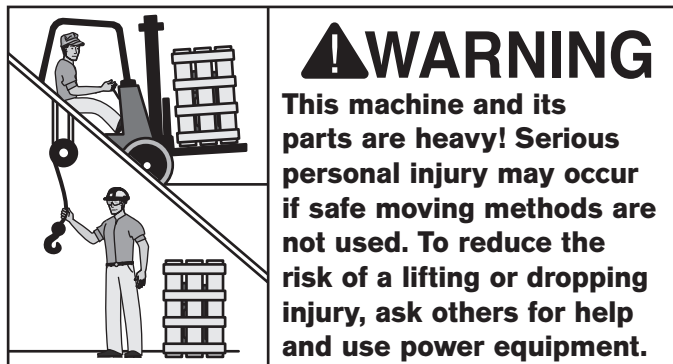


Figure 11. Minimum working clearances.

## 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.

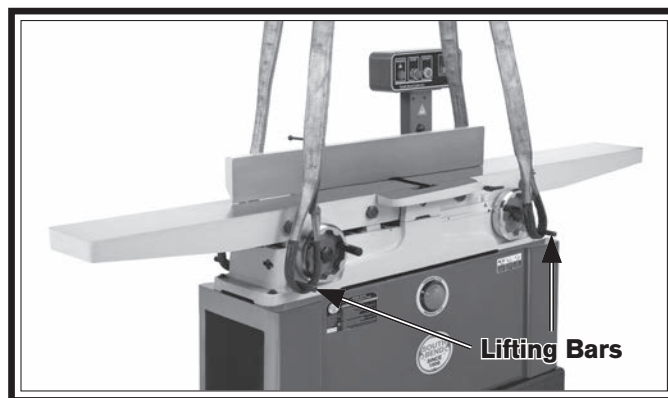
The Model SB1091 requires the use of lifting equipment such as a forklift, engine hoist, or boom crane. **DO NOT** attempt to lift or move jointer without necessary assistance from other people. Each piece of lifting equipment must be rated for **at least 1000 lbs.** to support dynamic loads that may be applied while lifting.

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

### To assemble jointer:

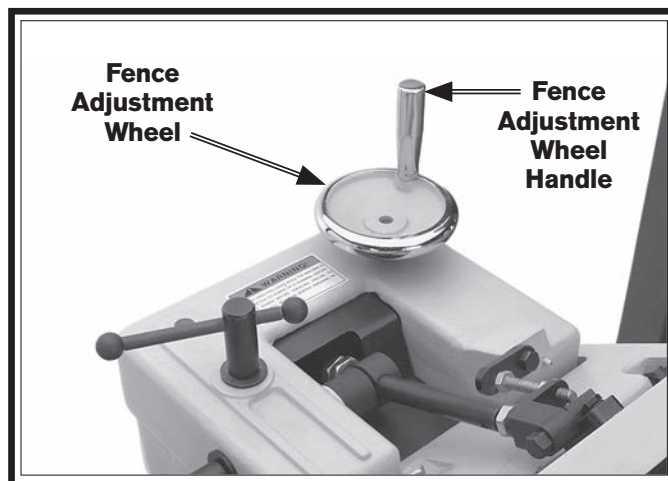
1. Move jointer to desired location.
2. Unbolt jointer from pallet.

3. Wrap lifting straps around lifting bars, as shown in **Figure 12**.



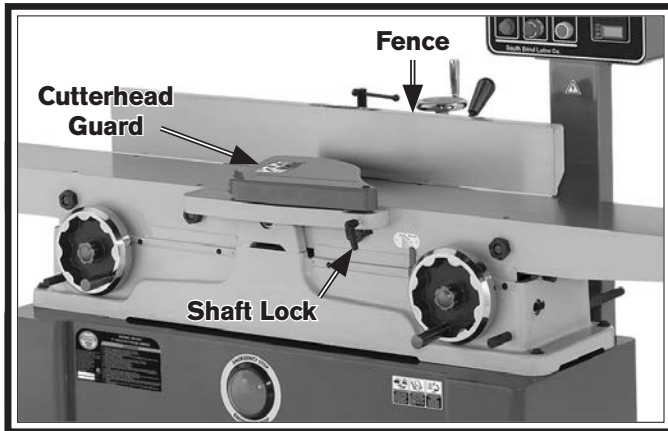
**Figure 12.** Jointer supported evenly at lifting bars by lifting straps.

4. With lifting straps positioned evenly on forks or crane, lift jointer off of pallet and place it in desired location.
5. Verify all carbide inserts are securely tightened on cutterhead.
6. Verify outfeed table height is set correctly with inserts at top dead center (TDC) as instructed in **Setting Outfeed Table Height** on **Page 41**.
7. Insert fence adjustment wheel handle into fence adjustment wheel (see **Figure 13**) and tighten.



**Figure 13.** Fence adjustment wheel handle installed.

8. Set fence to 90° and move it all the way back.
9. Remove pre-installed screw and flat washer from bottom of cutterhead guard shaft, then loosen shaft lock and insert shaft into mounting hole, positioned so guard rests against fence (see **Figure 14**).



**Figure 14. Location of cutterhead guard components.**

10. Position guard height as low as possible without dragging on infeed table/rabbeting ledge (approximately  $\frac{1}{16}$ " above infeed table), tighten shaft lock to secure setting, then install button head cap screw and flat washer.

## ⚠ 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.

11. 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 42** for instructions).

## Dust Collection

### ⚠ CAUTION

**DO NOT** operate the Model SB1091 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: 400 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 4" dust hose that is connected to a dust collector over dust port (see **Figure 15**), and secure in place with a hose clamp.



**Figure 15. Dust hose attached to dust port.**

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

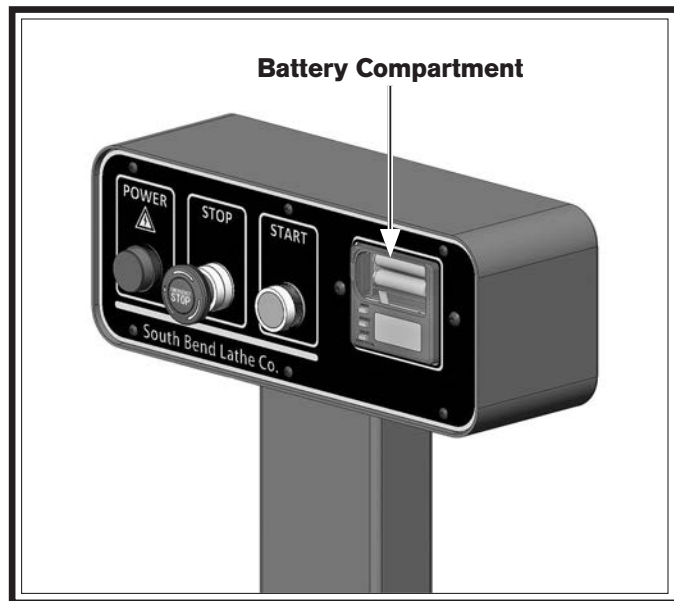
**Note:** A tight fit is necessary and ensures proper performance during operation.

## 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 16**).



**Figure 16.** 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 34** 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 your 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 17).



Figure 17. Resetting EMERGENCY STOP button.

4. Verify machine is operating correctly by pushing START button.
  - 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 turns **OFF**, Knee Stop button safety feature is working correctly. The test run is complete, press START to resume operations.
  - If machine *does not* turn **OFF**, 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:

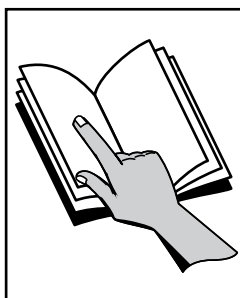
- **Table Parallelism.....(Page 36)**
- **Infeed Table Calibration .....(Page 40)**
- **Outfeed Table Adjustment .....(Page 41)**
- **Fence Stop Settings .....(Page 43)**
- **V-Belt Tension Adjustment .....(Page 46)**

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

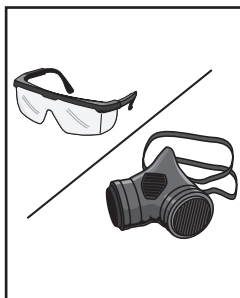
The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so they can more easily understand the controls discussed later in this manual.

**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** below).

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

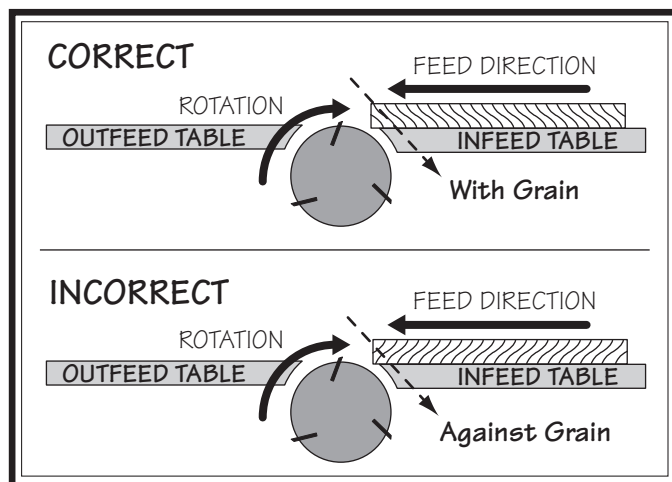


Figure 18. Proper grain alignment with cutterhead.

- **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.

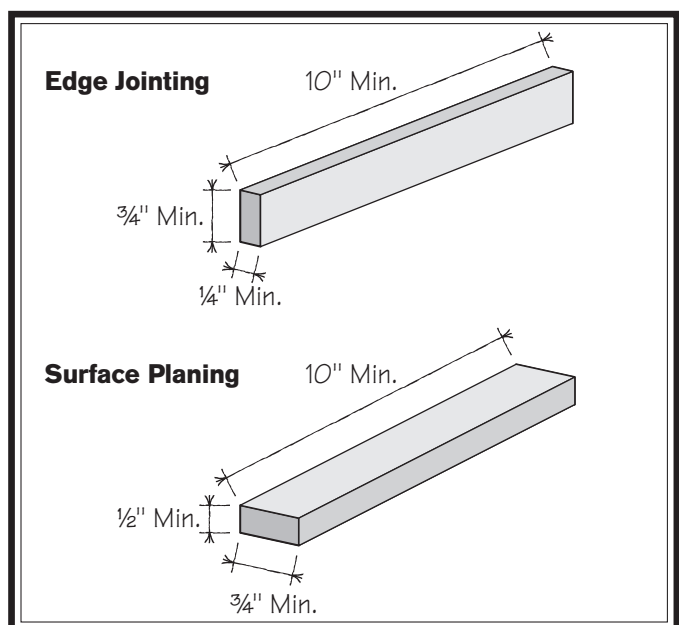


Figure 19. Minimum stock dimensions for jointer.

# 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.

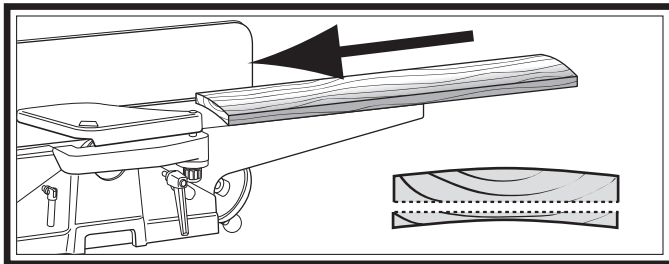
A properly "squared up" workpiece is essential for tasks such as accurate table saw cuts, glue-ups/laminations, cutting accurate bevels on a bandsaw, and many other applications where one surface of a workpiece is used to reference another.

### Items Needed

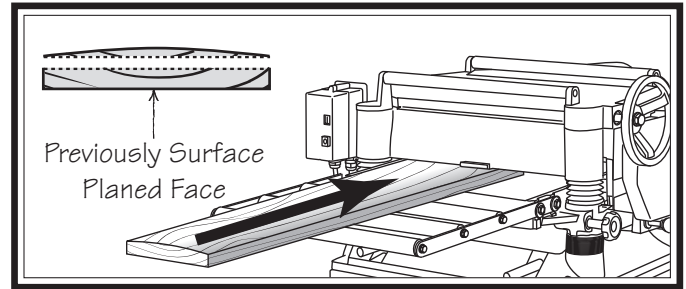
	Qty
Table Saw .....	1
Jointer.....	1
Planer .....	1

**Squaring stock involves four steps performed in the order below:**

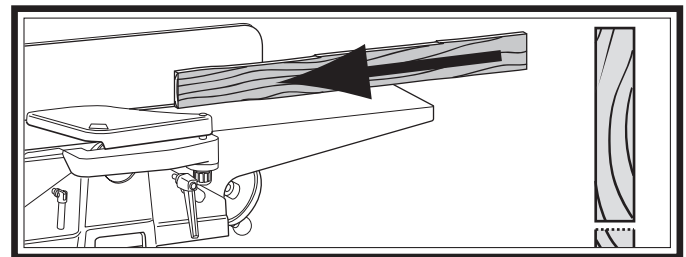
- 1. Surface Plane on Jointer**—Concave face of workpiece is surface planed flat with jointer.



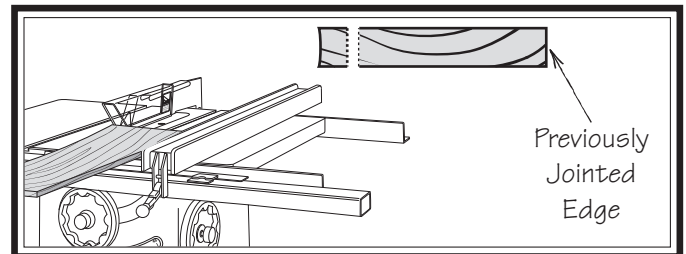
- 2. Surface Plane on a Thickness Planer**—Opposite face of workpiece is surface planed flat with a thickness planer.



- 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.

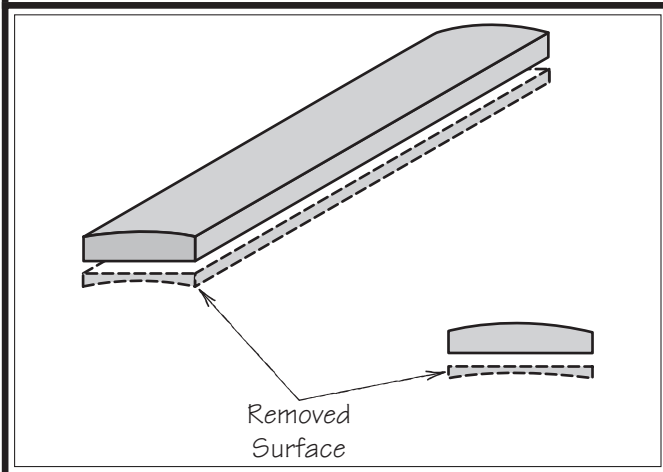
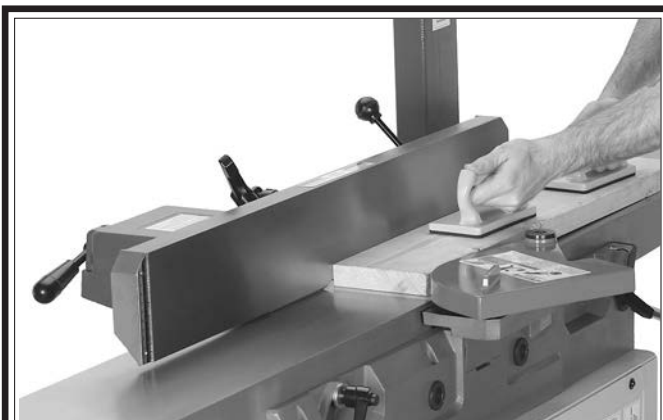


## Surface Planing

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 20. Generic example photo of a surface planing operation.**

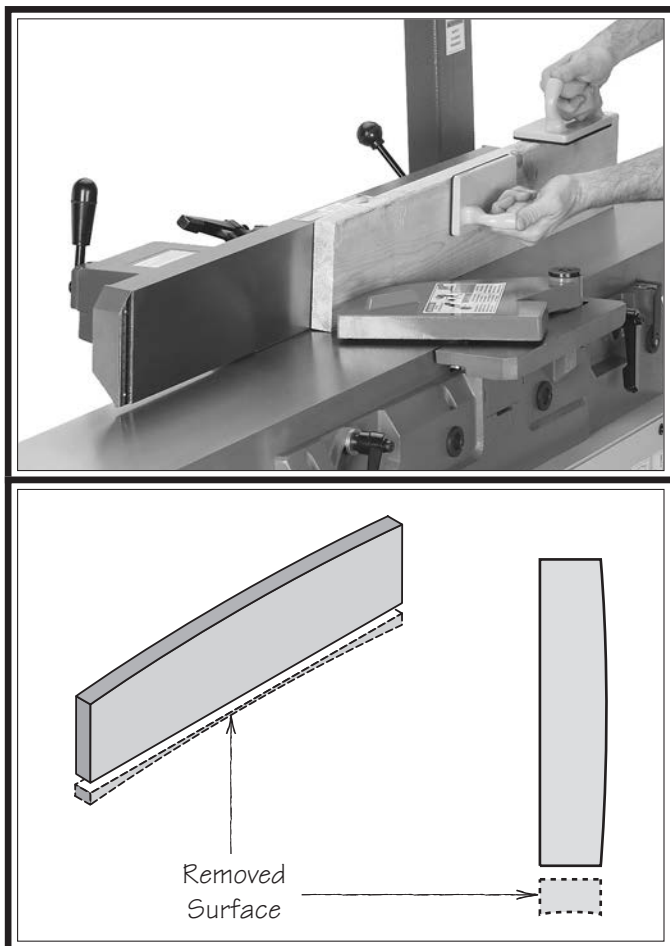
### To surface plane on jointer:

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  $90^\circ$ .
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 21. Generic example photo 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  $90^\circ$ .

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.

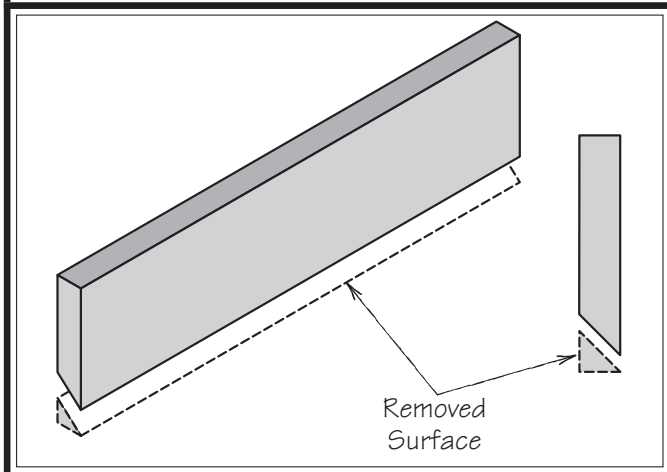
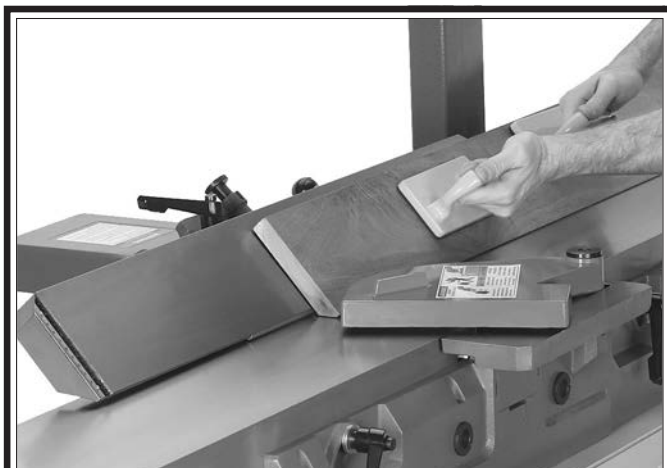
**▲ CAUTION:** Keep hands at least 4" away from cutterhead during the entire cut. Instead of allowing a hand to pass directly over cutterhead, lift it up and over cutterhead, and safely reposition it on the outfeed side to continue supporting workpiece. Use push blocks whenever practical to further reduce 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 22.** Generic example photo of fence set up for a bevel cut of 45°.

### To bevel cut on jointer:

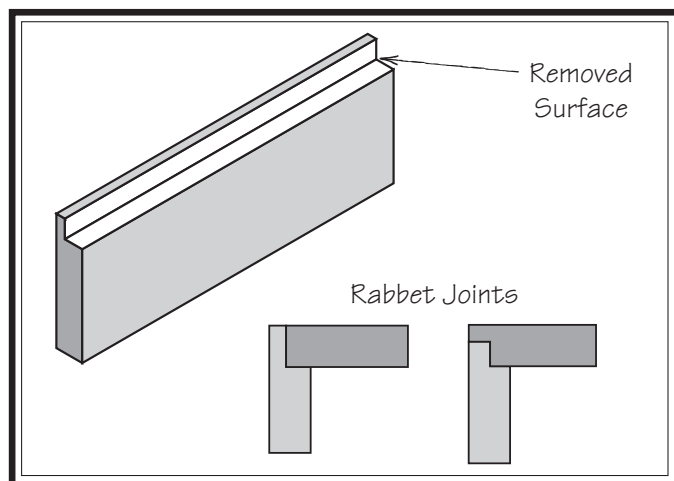
1. Inspect stock to ensure it is safe and suitable for the operation (see **Stock Inspection & Requirements** on **Page 23**).
2. Set infeed table height to cutting depth desired for each pass.
  - ▲ **CAUTION:** Cutting depth for bevel cuts is typically between  $\frac{1}{16}$ " and  $\frac{1}{8}$ ", 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

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.

A rabbet cut can alternatively be made using a table saw, router, or even a hand saw. As with any type of cutting operation, always consider your safety first and use good judgement!

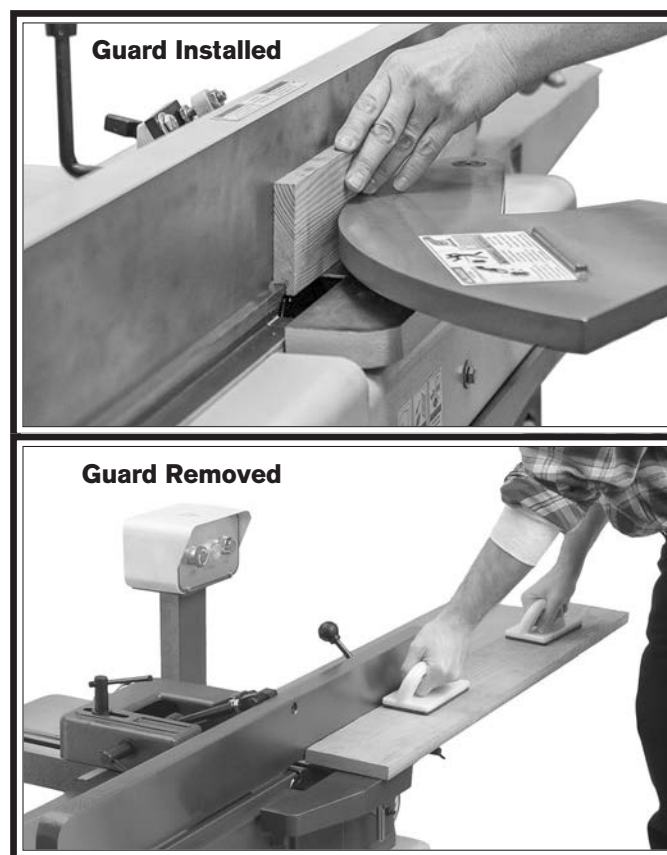
Typically, rabbet cutting with a jointer requires the cutterhead guard to be removed first, so the workpiece can slide along the rabbeting ledge during the cut. However, it is possible to make rabbet cuts with workpieces up to 1" thick without removing the cutterhead guard. This is done by performing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

## ! WARNING

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

### 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:** For safety reasons, cutting depth should never exceed  $\frac{1}{8}$ " per pass.
3. Remove cutterhead guard if necessary to perform operation (see **Figures** below).



**Figure 23. Generic example photos 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).

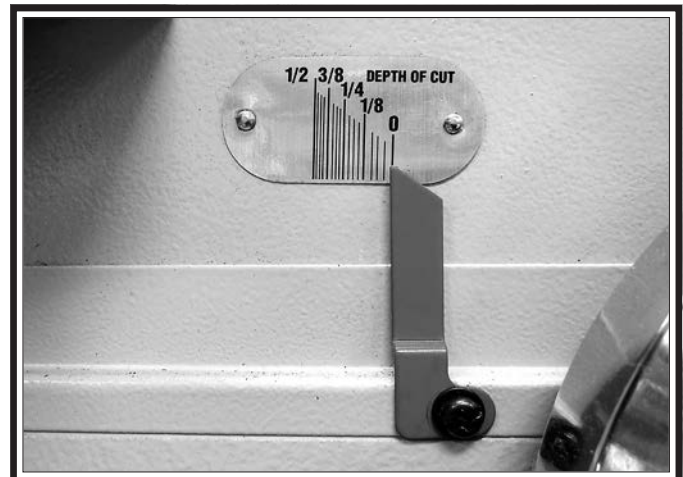
### ▲ WARNING

**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 24**) indicates desired depth of cut.

**Note:** The depth scale can be calibrated or "zeroed" if it is not accurate. (Refer to **Calibrating Infeed Table on Page 40**).



**Figure 24. Model SB1091 depth scale.**

2. Set infeed table positive stops according to **Setting Infeed Table on Page 40**.
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](http://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.

**H9893—10 pk. Carbide Inserts 15 x 15 x 2.5mm**

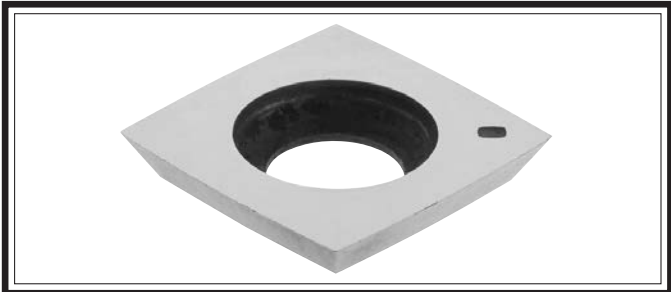


Figure 25. H9893 Replacement Carbide Inserts.

- D4206—Clear Flexible Hose 4" x 10'**
- D4256—45° Elbow 4"**
- D4216—Black Flexible Hose 4" x 10'**
- W1034—Heavy-Duty Clear Flex Hose 4" x 10'**
- D2107—Hose Hanger 4 1/4"**
- W1015—Y-Fitting 4" x 4" x 4"**
- W1017—90° Elbow 4"**
- W1019—Hose Coupler (Splice) 4"**
- W1317—Wire Hose Clamp 4"**
- W1007—Plastic Blast Gate 4"**
- W1053—Anti-Static Grounding Kit**

We've hand picked a selection of commonly used dust collection components for machines with 4" dust ports.



Figure 26. Dust collection accessories.

- T20501—Face Shield Crown Protector 4"**
- T20502—Face Shield Crown Protector 7"**
- T20503—Face Shield Window**
- T20451—"Kirova" Clear Safety Glasses**
- T20456—DAKURA Safety Glasses, Black/Clear**
- T28175—R3 SAFETY Stealth Safety Glasses**



Figure 27. Assortment of basic eye protection.

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**



- H2499—Small Half-Mask Respirator**
- H3631—Medium Half-Mask Respirator**
- H3632—Large Half-Mask Respirator**
- H3635—Cartridge Filter Pair P100**

Wood dust has been linked to nasal cancer and severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!



**Figure 28. Half-mask respirator with disposable cartridge filters.**

**Recommended Metal Protectants**

- G5562—SLIPIT® 1 Qt. Gel**
- G5563—SLIPIT® 12 Oz. Spray**
- G2870—Boeshield® T-9 4 Oz. Spray**
- G2871—Boeshield® T-9 12 Oz. Spray**
- H3788—G96® Gun Treatment 12 Oz. Spray**
- H3789—G96® Gun Treatment 4.5 Oz. Spray**



**Figure 29. Recommended products for protecting unpainted cast iron/steel part on machinery.**

**SB1099—3 HP Cyclone Dust Collector**

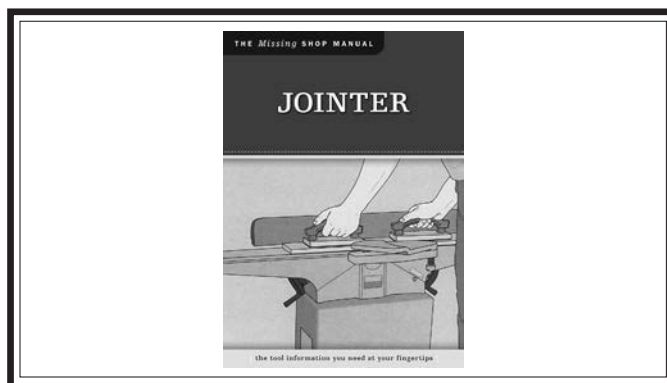
The Model SB1099 features a 3 HP motor, a whopping 1860 CFM of airflow capacity, and a 52-gallon collection capacity. It's packed with features like a built-in sound muffler, an automatic filter paddle brush for easy cleaning, a remote-controlled magnetic switch, and a quick-release lift handle for easy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



**Figure 30. Model SB1099 3 HP Cyclone Dust Collector.**

**T23246—The Missing Shop Manual: Jointer**

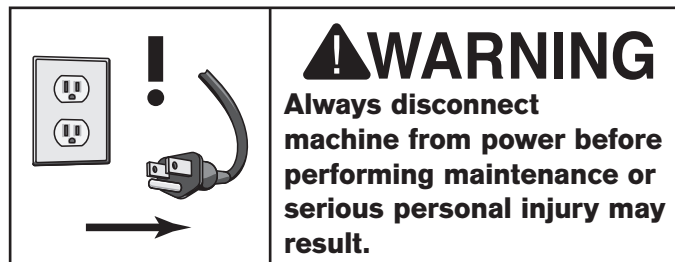
Dedicated to providing integral information about woodworking tools and techniques that other manuals overlook, the books in this series contain safety facts, explanations about basic project set-up, and tips for maximizing tool performance.



**Figure 31. Instructional reference book.**

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**

# 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.
- 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 and digital sensor as needed.

## Cleaning

Cleaning the Model SB1091 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 G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.

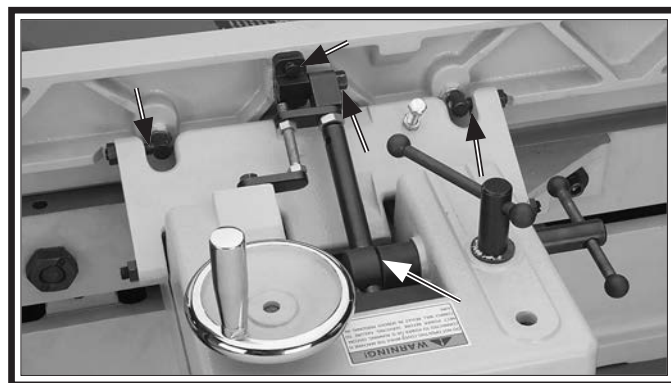
Bare metal surfaces can quickly develop surface rust if not coated. Machinery stored near windows in direct sunlight or where paints, thinners, or certain gasses are open to the air can experience bleaching, discoloring of paint or yellowing of clear plastic guards.

## Lubrication

Since all bearings on the Model SB1091 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 32**) as needed.



**Figure 32. Example of fence lubrication locations.**

**Gears:** Use a small brush to apply multi-purpose grease to the 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 light weight 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.
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.

**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.*

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 a breaker trips.	<ol style="list-style-type: none"> <li>1. Knee Stop button is engaged/at fault.</li> <li>2. Wiring is open/has high resistance.</li> <li>3. Motor START or EMERGENCY STOP button is at fault.</li> <li>4. Fuse has blown.</li> <li>5. Power supply switched OFF or is at fault.</li> <li>6. Start capacitor is at fault.</li> <li>7. Thermal overload relay has tripped.</li> <li>8. Wall fuse/circuit breaker is blown/tripped.</li> <li>9. Contactor not getting energized/has burnt contacts.</li> <li>10. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate clockwise slightly until it pops out/replace it.</li> <li>2. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> <li>3. Replace at fault START or EMERGENCY STOP button.</li> <li>4. Correct short/replace fuse on control panel.</li> <li>5. Ensure power supply is switched on; ensure power supply has the correct voltage.</li> <li>6. Test/replace if at fault.</li> <li>7. Turn cut-out dial to increase working amps and push the reset pin. Replace if tripped multiple times. Reduce workload on machine or test and replace motor. If motor is OK, replace relay.</li> <li>8. Ensure circuit size is suitable for this machine; correct for short. Reset/replace fuse or breaker.</li> <li>9. Test for power on all legs and contactor operation. Replace unit if at fault.</li> <li>10. Test/repair/replace.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>1. Feed rate/cutting speed too fast for task.</li> <li>2. Workpiece material is not suitable for this machine.</li> <li>3. Belt slipping.</li> <li>4. Motor connection is wired incorrectly.</li> <li>5. Motor bearings are at fault.</li> <li>6. Contactor not getting energized or has poor contacts.</li> <li>7. Motor has overheated.</li> <li>8. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Decrease feed rate/cutting speed.</li> <li>2. Only cut wood products; make sure moisture content is below 20% and there are no foreign materials in the workpiece.</li> <li>3. Replace bad belt, align pulleys, and re-tension.</li> <li>4. Correct motor wiring connections.</li> <li>5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>6. Test for power on all legs and contactor operation. Replace if at fault.</li> <li>7. Clean off motor, let cool, and reduce workload.</li> <li>8. Test/repair/replace.</li> </ol>
Machine has excessive vibration or noise.	<ol style="list-style-type: none"> <li>1. Motor or component is loose.</li> <li>2. Inserts are at fault.</li> <li>3. V-belt worn or loose.</li> <li>4. Pulley is loose.</li> <li>5. Motor mount loose/broken.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>2. Rotate or replace inserts causing problem.</li> <li>3. Inspect/replace belt with a new one (<b>Page 45</b>).</li> <li>4. Realign/replace shaft, pulley, setscrew, and key as required.</li> <li>5. Tighten/replace.</li> </ol>

<b>Symptom</b>	<b>Possible Cause</b>	<b>Possible Solution</b>
Machine has excessive vibration or noise (continued).	<ol style="list-style-type: none"> <li>6. Machine is incorrectly mounted or sits unevenly.</li> <li>7. Motor fan is rubbing on fan cover.</li> <li>8. Motor bearings are at fault.</li> <li>9. Cutterhead bearings at fault.</li> </ol>	<ol style="list-style-type: none"> <li>6. Tighten/replace anchor studs in floor; relocate/shim machine.</li> <li>7. Replace dented fan cover; replace loose/damaged fan.</li> <li>8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>9. Replace bearing(s)/re-align cutterhead.</li> </ol>
Tables are hard to adjust.	<ol style="list-style-type: none"> <li>1. Table lock is engaged or partially engaged.</li> <li>2. Table stops blocking movement.</li> </ol>	<ol style="list-style-type: none"> <li>1. Completely loosen the table lock.</li> <li>2. Loosen/reset table positive stops.</li> </ol>
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	<ol style="list-style-type: none"> <li>1. Outfeed table is set too low.</li> <li>2. Operator pushing down on end of workpiece.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align outfeed table with cutterhead insert at top dead center (<b>Page 41</b>).</li> <li>2. Reduce/eliminate downward pressure on that end of workpiece.</li> </ol>
Workpiece stops in the middle of the cut.	<ol style="list-style-type: none"> <li>1. Outfeed table is set too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Align outfeed table with cutterhead insert at top dead center (<b>Page 41</b>).</li> </ol>
Chipping.	<ol style="list-style-type: none"> <li>1. Knots or conflicting grain direction in wood.</li> <li>2. Nicked or chipped insert.</li> <li>3. Feeding workpiece too fast.</li> <li>4. Taking too deep of a cut.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect workpiece for knots and grain (<b>Page 23</b>); only use clean stock.</li> <li>2. Rotate insert to expose sharp edge; replace insert (<b>Page 39</b>).</li> <li>3. Slow down the feed rate.</li> <li>4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)</li> </ol>
Fuzzy Grain.	<ol style="list-style-type: none"> <li>1. Wood may have high moisture content or surface wetness.</li> <li>2. Dull inserts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check moisture content and allow to dry if moisture is too high.</li> <li>2. Replace inserts (<b>Page 39</b>).</li> </ol>
Long lines or ridges that run along the length of the board.	<ol style="list-style-type: none"> <li>1. Nicked or chipped insert.</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate insert to expose sharp edge; replace insert (<b>Page 39</b>).</li> </ol>
Uneven insert marks, wavy surface, chatter marks across board face.	<ol style="list-style-type: none"> <li>1. Feeding workpiece too fast.</li> </ol>	<ol style="list-style-type: none"> <li>1. Slow down the feed rate.</li> </ol>
Board edge is concave or convex after jointing.	<ol style="list-style-type: none"> <li>1. Board not held with even pressure on infeed and outfeed table during cut.</li> <li>2. Board started too uneven.</li> <li>3. Board has excessive bow or twist along its length.</li> <li>4. Insufficient number of passes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Hold board with even pressure as it moves over the cutterhead.</li> <li>2. Take partial cuts to remove the extreme high spots before doing a full pass.</li> <li>3. Surface plane one face so there is a good surface to position against the fence.</li> <li>4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.</li> </ol>

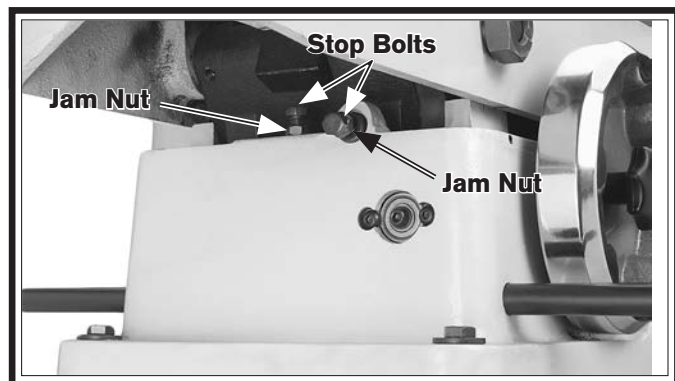
# Checking/Adjusting Table Parallelism

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

<b>Tools Needed:</b>	<b>Qty</b>
Straightedge .....	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

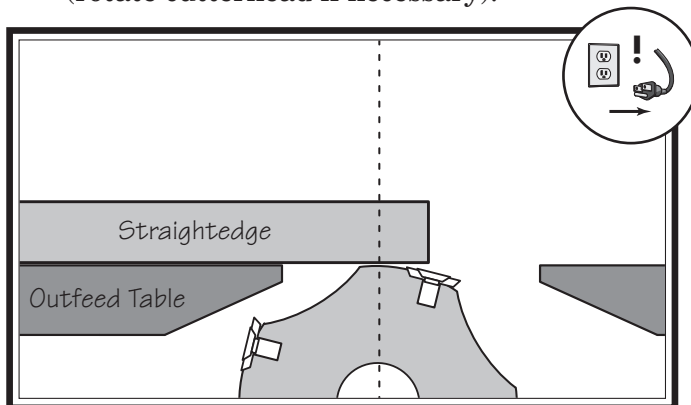
## Checking Outfeed Table

1. DISCONNECT MACHINE FROM POWER!
2. Put on 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 33**).



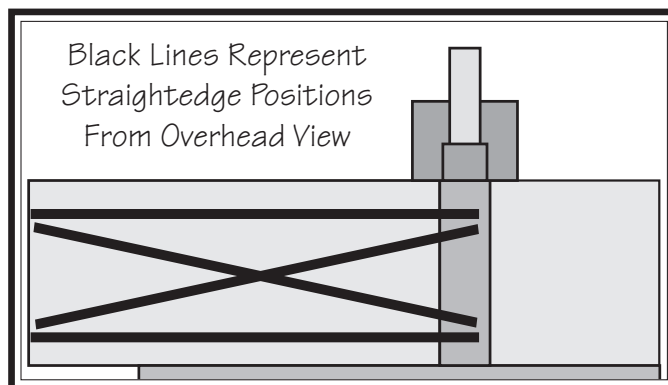
**Figure 33. Outfeed table positive stop bolts.**

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 34** (rotate cutterhead if necessary).



**Figure 34. Adjusting outfeed table even with cutterhead body.**

6. Place straightedge in positions shown in **Figure 35**. In each position, straightedge should touch cutterhead body and sit flat on outfeed table.

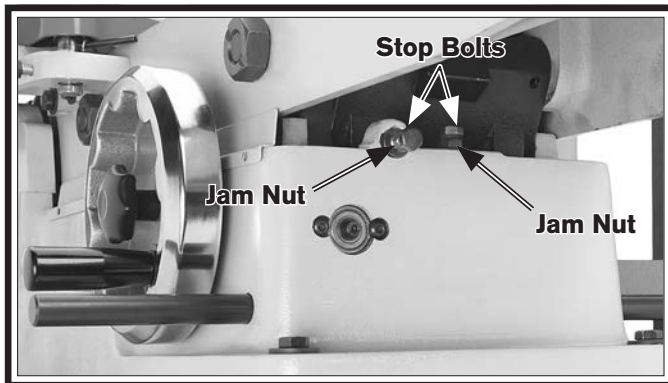


**Figure 35. Straightedge positions for verifying if outfeed table is parallel with cutterhead.**

- 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.

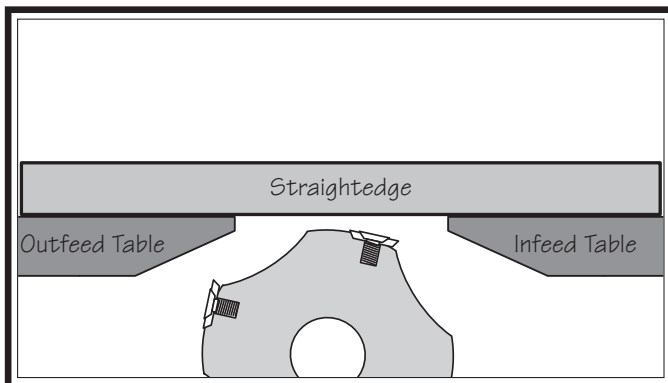
## Checking Infeed Table

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 36**.



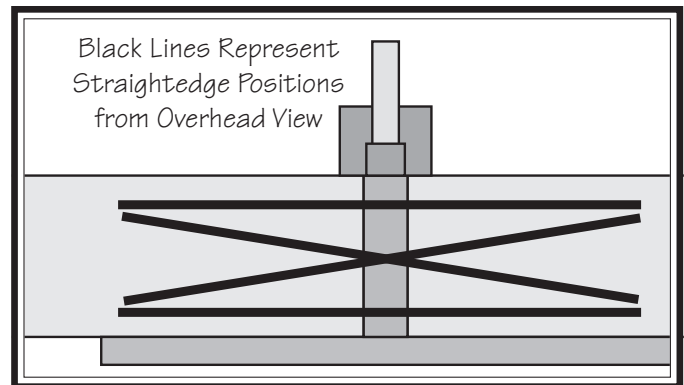
**Figure 36. Infeed table positive stop bolts.**

4. Place straightedge halfway across infeed table and halfway over outfeed table, and adjust infeed table even with outfeed table, as shown in **Figure 37**.



**Figure 37. Infeed and outfeed tables set evenly.**

5. Place straightedge in positions shown in **Figure 38**. In each position, straightedge should sit flat against both outfeed table and infeed table.



**Figure 38. 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 40–41**) 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.

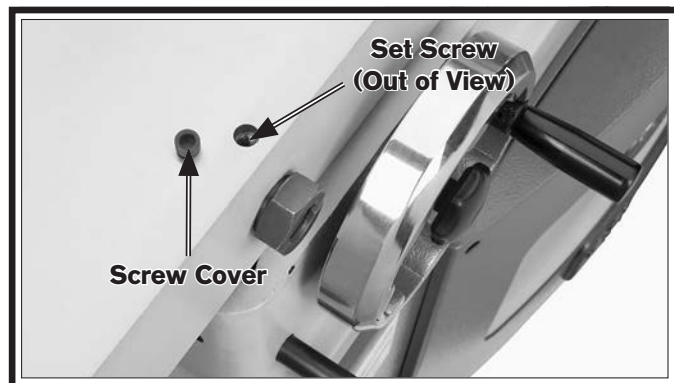
### To adjust table parallelism:

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 34** (rotate cutterhead if necessary).

2. Remove screw cover (see **Figure 39**) 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 39**) two turns.



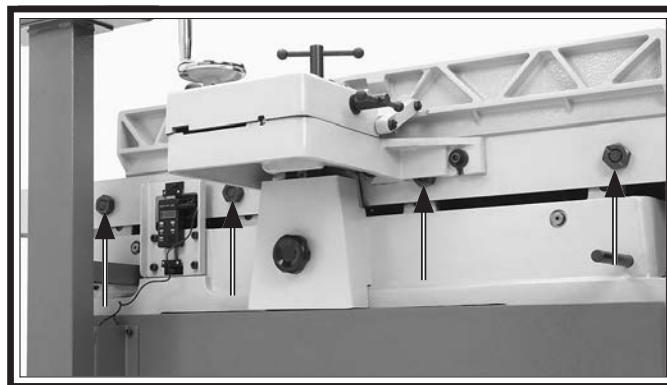
**Figure 39. Screw cover and set screw location.**

4. Place straightedge in one of the positions shown in **Figure 38**, and adjust table by turning eccentric bushings (**Figures 40–41**) 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.

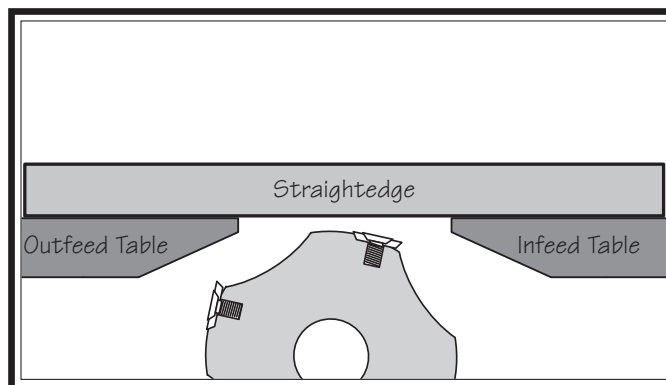


**Figure 40. Front eccentric bushings.**



**Figure 41. 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 42**.



**Figure 42. Infeed and outfeed tables set evenly.**



8. Place straightedge in one of the positions shown in **Figure 38**, 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** on **Page 41**).
11. Re-install cutterhead guard and fence.

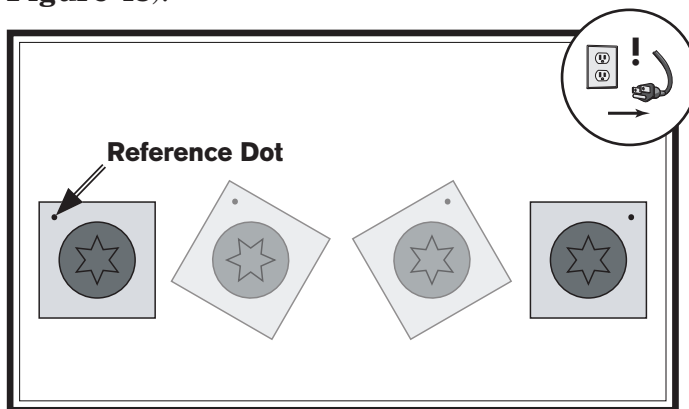
## Replacing Carbide Inserts

### Tools Needed:

T-Handle Wrench w/T-25 Torx Bit..... 1

Qty

The cutterhead is equipped with 36 indexable carbide inserts. Each insert can be rotated to reveal any one of its four cutting edges. Therefore, if one cutting edge becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge (see **Figure 43**).



**Figure 43. Insert rotating sequence.**

In addition, each insert has a reference dot on one corner. As the insert is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. When the reference dot revolves back around to its starting position, the insert should be replaced.

### To rotate or change a carbide insert:

1. DISCONNECT MACHINE FROM POWER!
2. Remove any sawdust from head of carbide insert Torx screw.
3. Remove Torx screw and carbide insert.
4. 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.
5. 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.*

## Setting Infeed Table

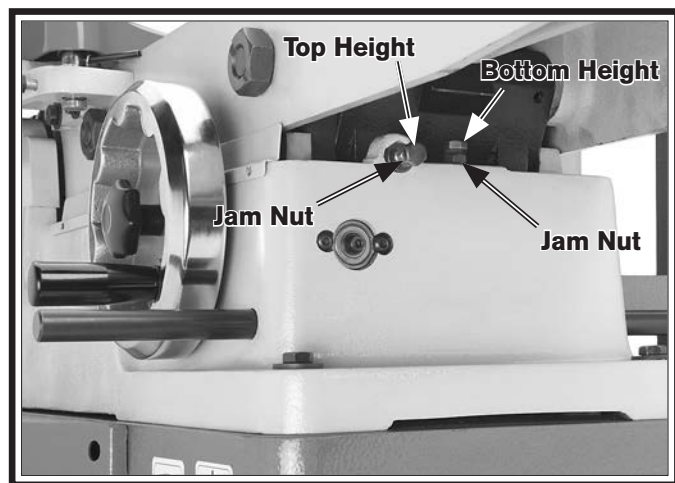
The infeed table on the Model SB1091 has positive stop bolts that, when properly set up, allow the operator to quickly adjust the infeed table between finish/final cuts and shaping/heavy cuts.

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 44**) 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 44. Infeed table positive stop bolts.**

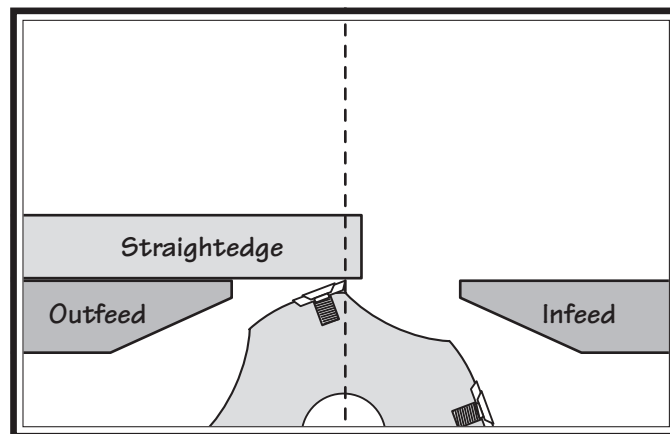
## Calibrating Infeed Table

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

<b>Tools Needed:</b>	<b>Qty</b>
Straightedge .....	1
Wrench 12mm .....	1

### To calibrate depth scale on infeed table:

1. Set outfeed table height per **Setting Outfeed Table Height** on **Page 41**.
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 45**.



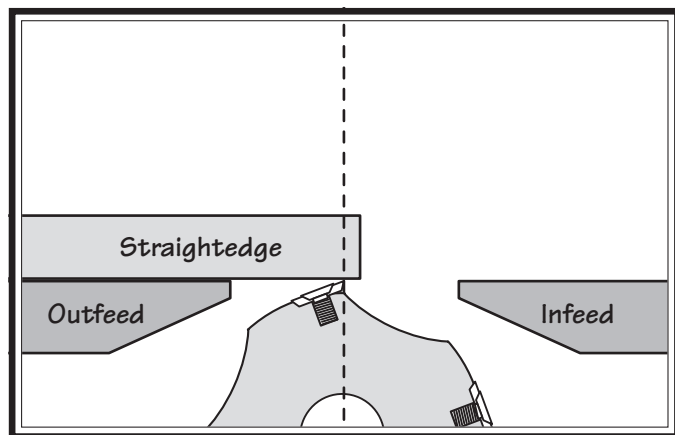
**Figure 45. Cutterhead insert at top-dead-center.**

# 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 46**.



**Figure 46. Cutterhead insert at top-dead-center.**

4. When correctly set, carbide insert will just touch straightedge when insert is at its highest point of rotation (see **Figure 46**).
  - 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 42 for instructions).

## **!**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 47**) 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 47**). Move guard so it is resting against fence, and  $\frac{1}{16}$ " above infeed table.

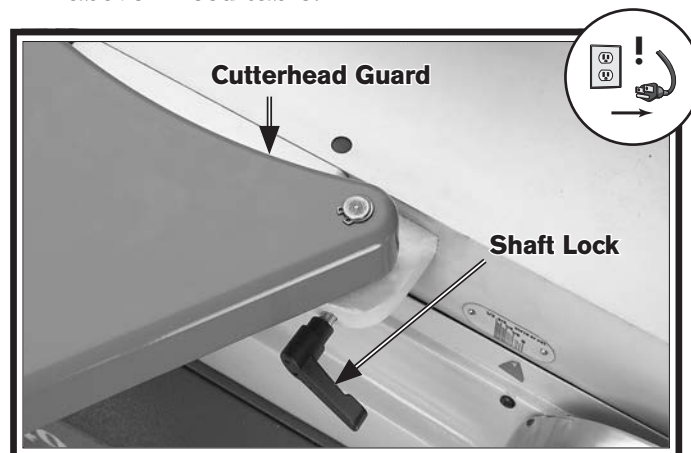


Figure 47. Example of cutterhead guard components.

4. Holding guard height in place, tighten shaft lock to secure setting.
5. Repeat **Step 2** and, if necessary, repeat **Steps 3–4** until cutterhead guard is properly adjusted.

## Setting Fence Stops

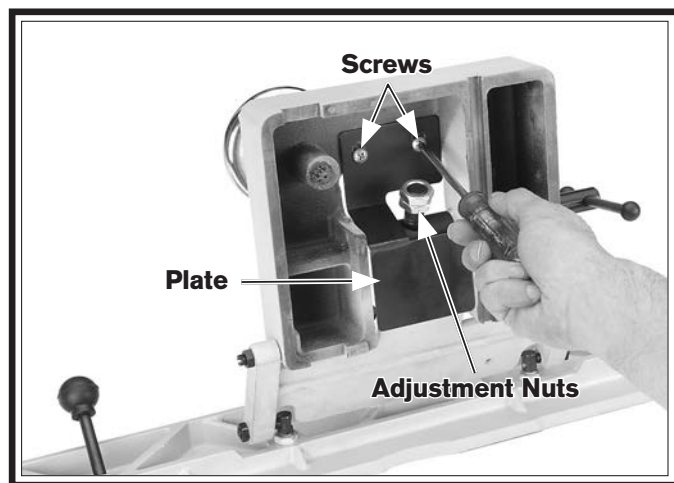
The fence stops simplify the task of adjusting the fence to 45° inward, 90°, and 45° outward (135°).

Tools Needed:	Qty
Square 45° .....	1
Square 90° .....	1
Sliding Bevel .....	1
Wrench 12mm .....	1
Wrench 24mm .....	1
Phillips Screwdriver .....	1

### Setting 45° Inward Stop

1. Remove fence assembly from jointer, remove Phillips head screws from plate shown in **Figure 48** under fence carriage.

**Note:** Plate must be removed to access the adjustment nuts.



**Figure 48. Removing plate to access inward fence stop.**

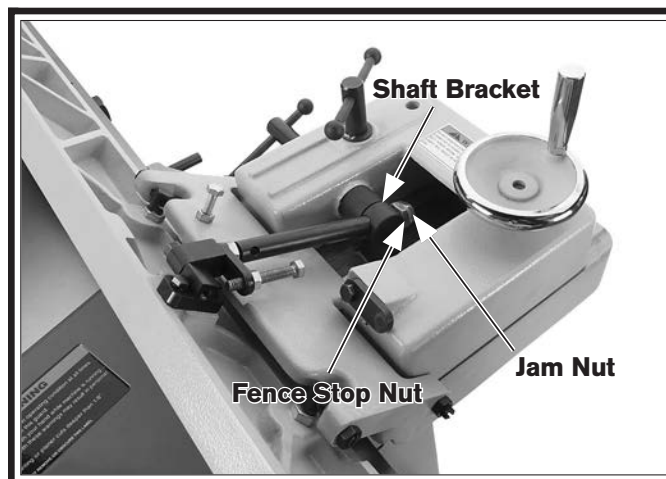
2. Re-install fence assembly on jointer.

3. Using a 45° square, adjust fence to 45° inward position, as shown in **Figure 49**.



**Figure 49. Generic example photo of adjusting fence 45° inward.**

4. Loosen jam nut shown in **Figure 50**.



**Figure 50. 45° inward fence stop jam nut.**

5. Adjust 45° inward fence stop nut until it makes contact with back of shaft bracket.
6. Tighten jam nut loosened in **Step 4**.
7. Remove fence assembly, re-install plate with screws removed in **Step 1**, then re-install fence assembly.

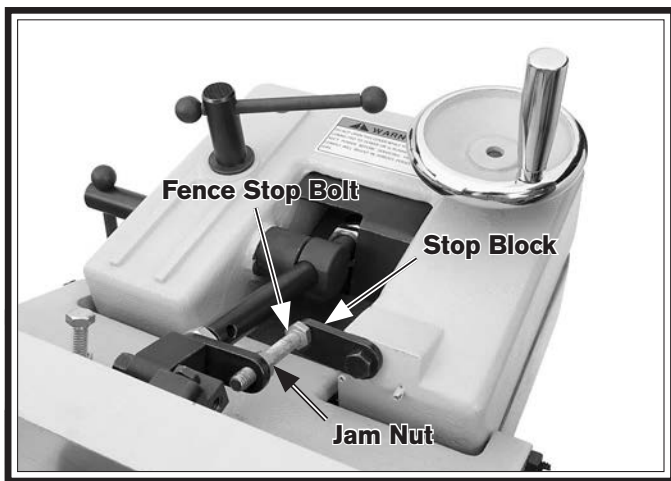
## Setting 90° Stop

1. Using a 90° square, adjust fence to 90° position, as shown in **Figure 51**.



**Figure 51.** Generic example photo of adjusting fence to 90°.

2. Flip the 90° stop block into the position shown in **Figure 52**.



**Figure 52.** 90° stop block engaged.

3. Loosen jam nut on 90° fence stop bolt (see **Figure 52**).
4. Adjust 90° fence stop bolt until it makes contact with 90° stop block.
5. Tighten jam nut loosened in **Step 3**.

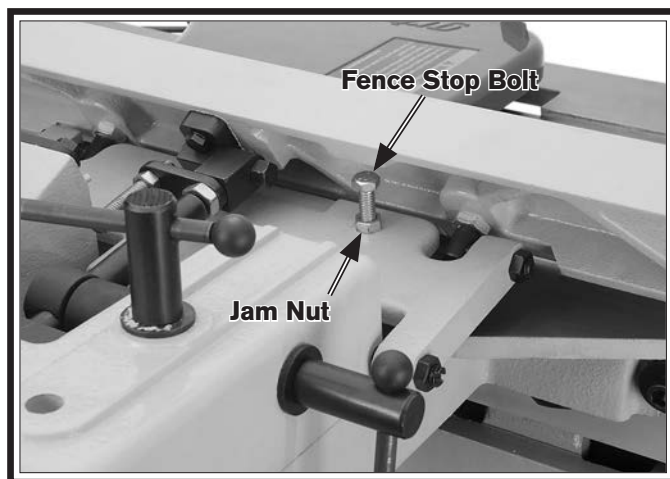
## Setting 45° Outward (135°) Stop

1. Using a sliding bevel set to 135°, adjust the fence to 135° (45° outward) position, as shown in **Figure 53**.



**Figure 53.** Generic example photo of adjusting fence 45° outward.

2. Loosen jam nut on 45° outward fence stop bolt (see **Figure 54**).



**Figure 54.** 45° outward fence stop jam nut.

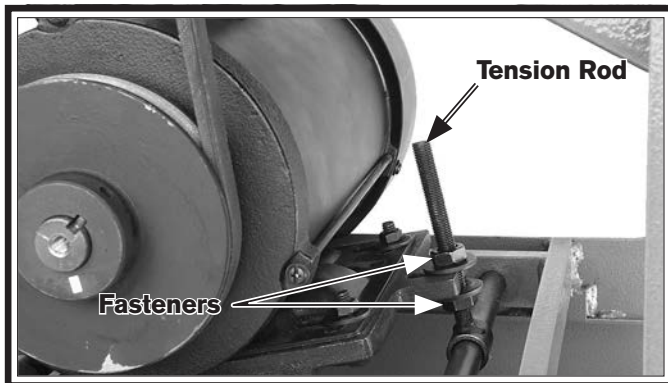
3. Adjust 45° outward fence stop bolt until it makes contact with back of fence.
4. Tighten jam nut loosened in **Step 2**.

# Adjusting/Replacing V-Belt

V-belt adjusting and replacing involves removing the V-belt, rolling it off the pulleys, replacing it with a new belt, then re-tensioning it.

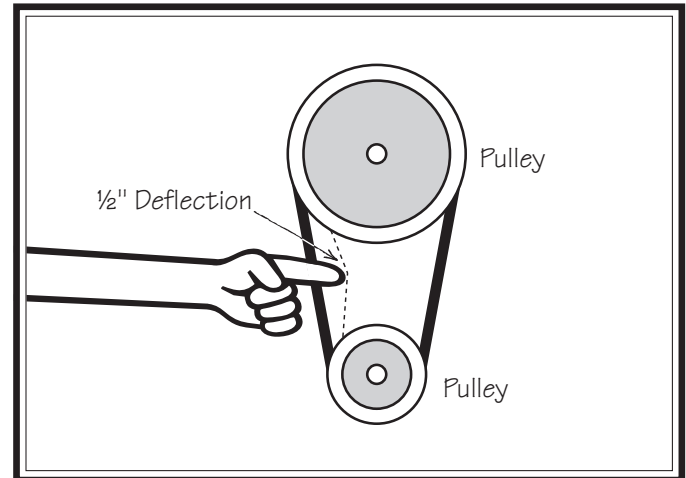
## To adjust/replace V-belt:

1. DISCONNECT MACHINE FROM POWER!
2. Remove rear access panel and V-belt guard.
3. Using a 17mm wrench, loosen fasteners on tension rod shown in **Figure 55**.



**Figure 55.** Fasteners needed to be loosened for V-belt replacement.

4. Lift motor up, slide V-belt off of motor and cutterhead pulleys, and replace with a new one.
5. Lower motor and adjust V-belt tension with tension rod fasteners so there is approximately  $\frac{1}{2}$ " deflection when belt is pushed with moderate pressure, as shown in **Figure 56**.



**Figure 56.** Checking V-belt tension.

6. Replace rear access panel and V-belt guard.

## Pulley Alignment

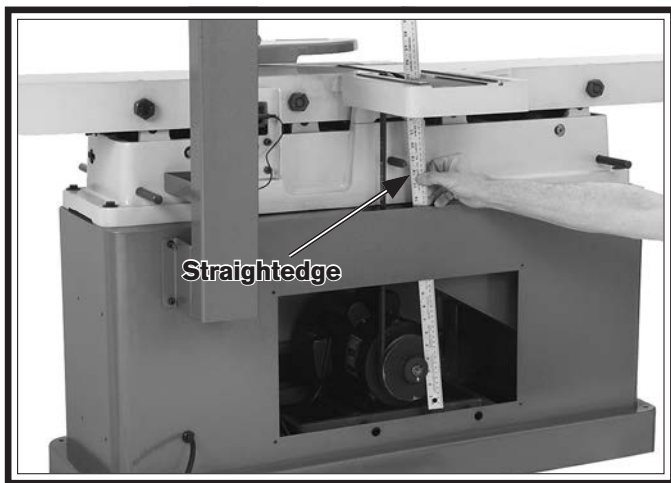
Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplaner) for optimum performance.

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

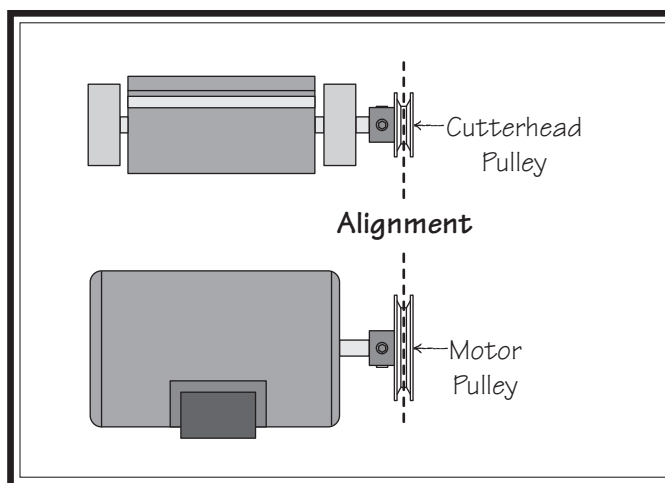
**Tools Needed:** Qty  
Wrench or Socket 17mm..... 1

### 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 57**) and check to make sure they are aligned and that V-belt is straight up and down (see **Figure 58**).



**Figure 57.** Example of checking belt alignment.

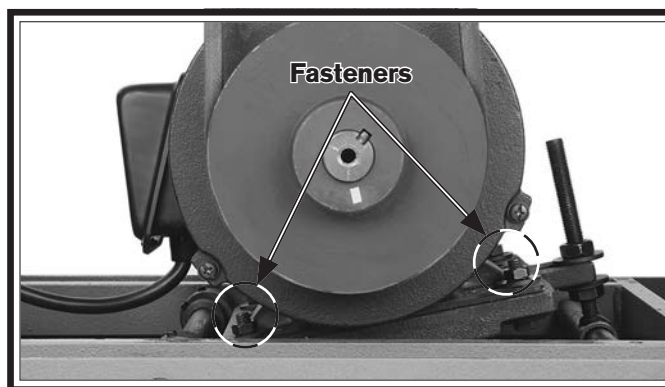


**Figure 58.** Example of V-belt aligned with pulleys.

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

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

4. Loosen the motor mount fasteners shown in **Figure 59**.



**Figure 59.** Motor mount fasteners.

5. Shift motor horizontally as needed to align motor pulley with cutterhead pulley.
6. Tighten motor mount fasteners. V-belt should be parallel and aligned as shown in **Figure 58**.
7. Re-install fence assembly, rear access panel, and V-belt guard.



# 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.

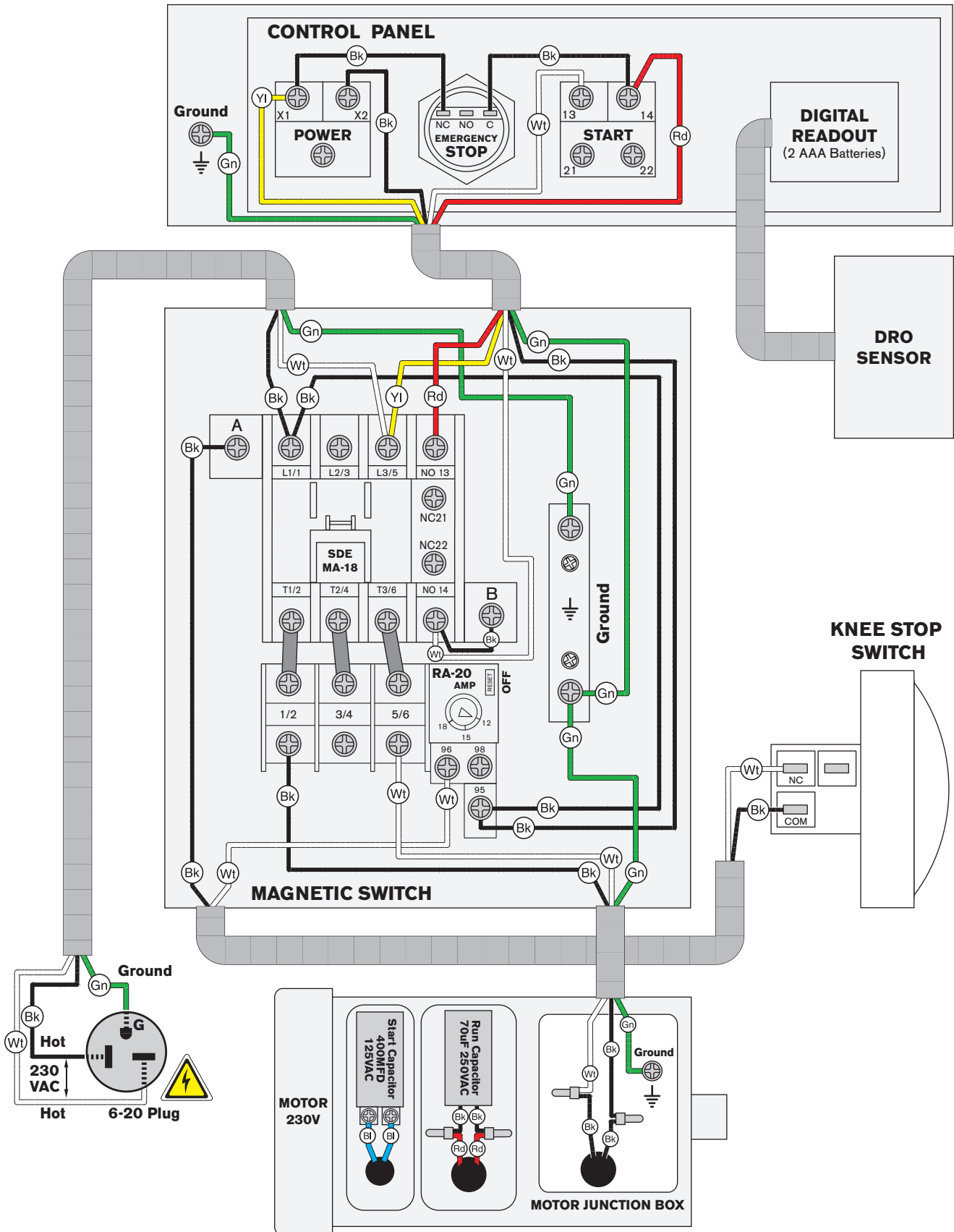
**Experiencing Difficulties:** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-1540.

## 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](http://www.southbendtools.com).

# Wiring Diagram



# Electrical Components

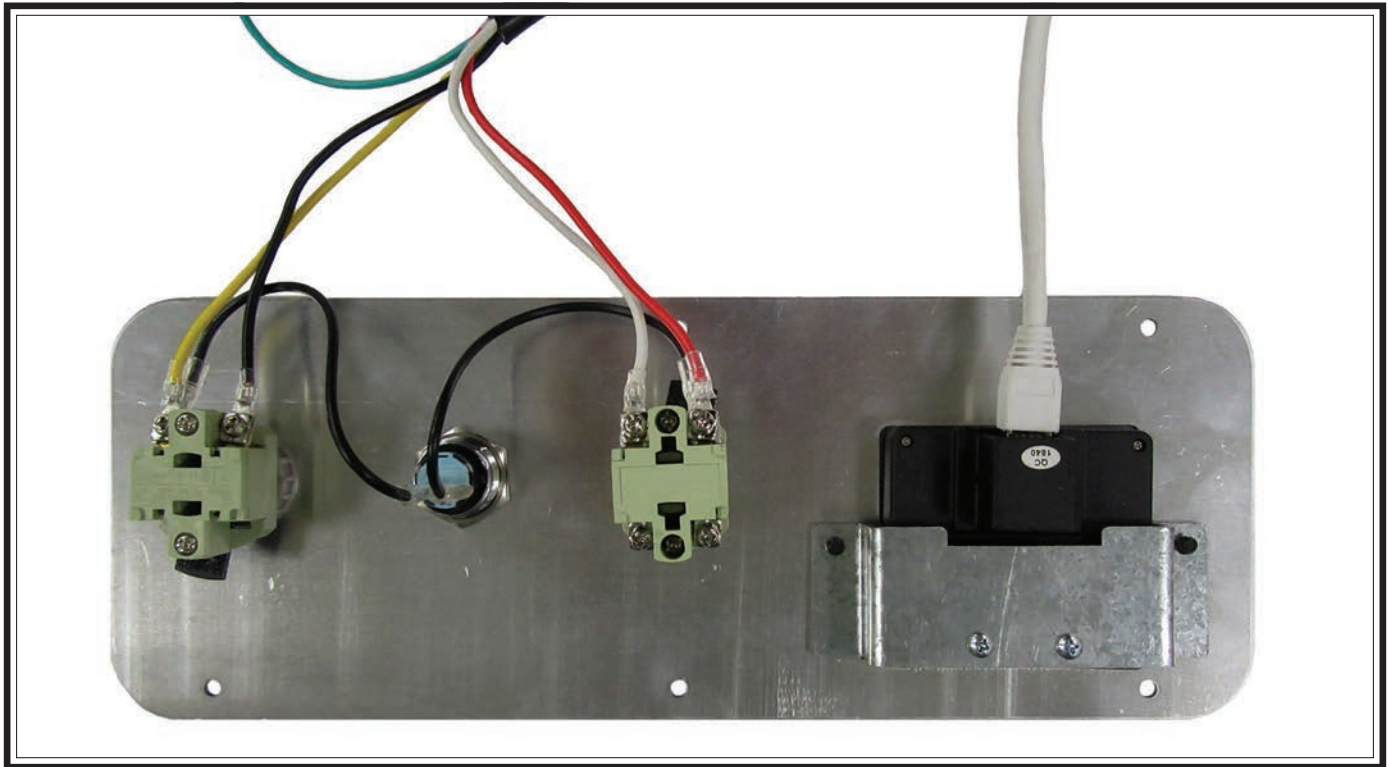


Figure 60. Control panel overview.

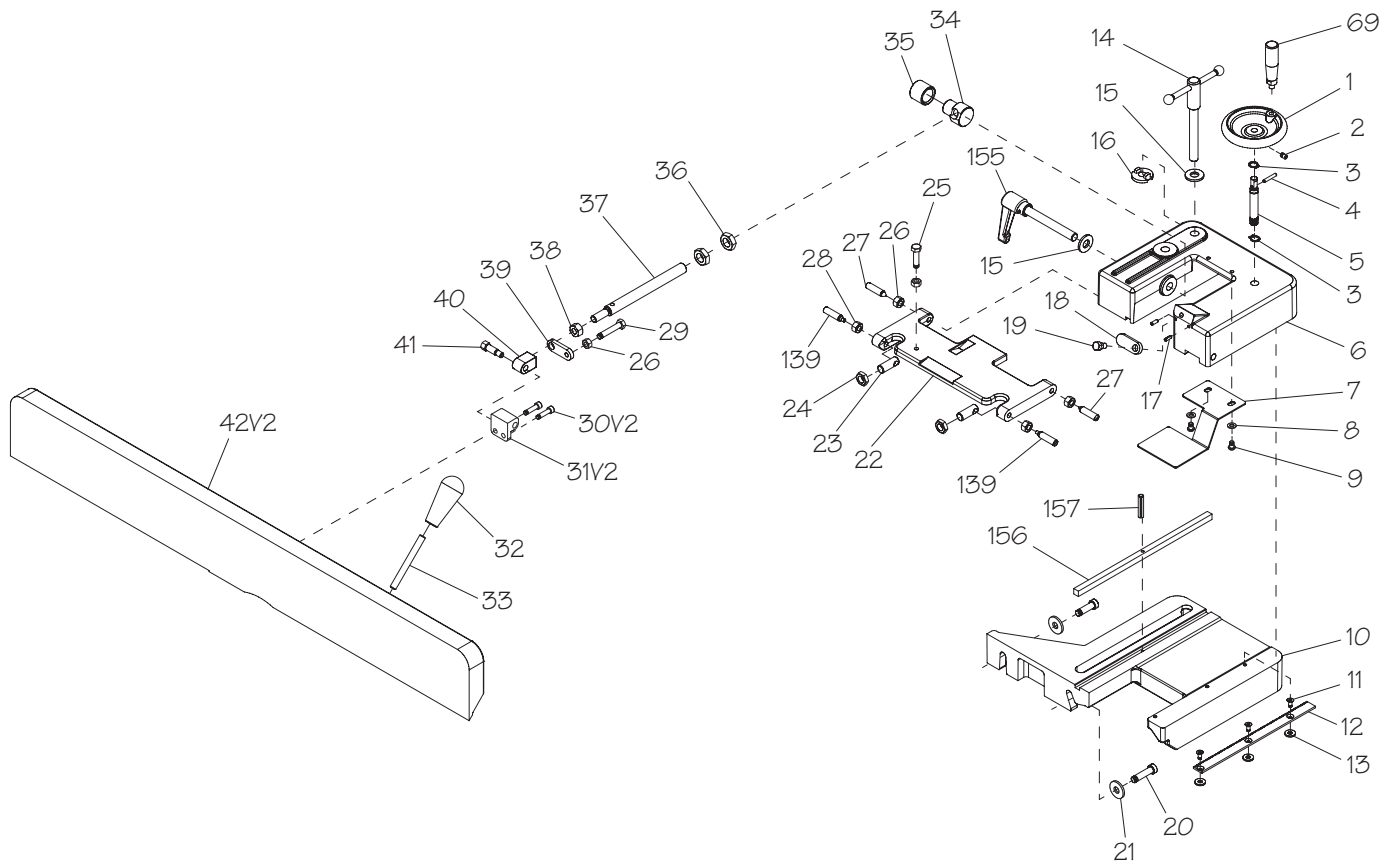


Figure 61. Motor junction box wiring.



Figure 62. Magnetic switch wiring.

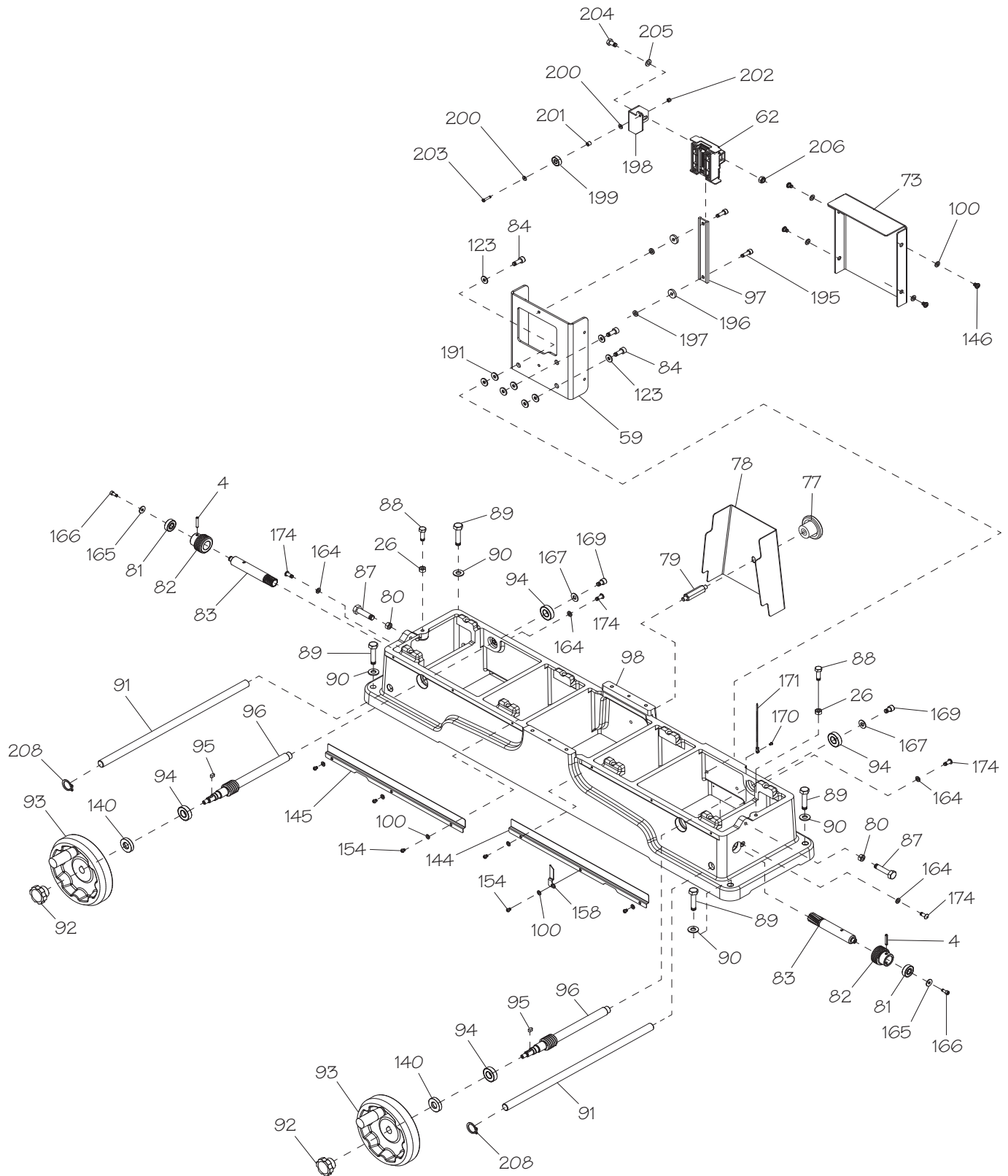
# Fence



REF PART #	DESCRIPTION
1	PSB1091001 HANDWHEEL TYPE-10 97D X 9.5B-S X 5/16-18
2	PSB1091002 SET SCREW 1/4-20 X 3/8
3	PSB1091003 EXT RETAINING RING 12MM
4	PSB1091004 ROLL PIN 4 X 25
5	PSB1091005 GEAR SHAFT
6	PSB1091006 FENCE BRACKET
7	PSB1091007 PLATE
8	PSB1091008 FLAT WASHER 6MM
9	PSB1091009 CAP SCREW 1/4-20 X 3/8
10	PSB1091010 TABLE BRACKET
11	PSB1091011 FLAT HD SCR M5-.8 X 12
12	PSB1091012 BAR
13	PSB1091013 FLAT WASHER 6MM
14	PSB1091014 LOCKING HANDLE ASSEMBLY
15	PSB1091015 FLAT WASHER 12MM
16	PSB1091016 FENCE LOCK NUT
17	PSB1091017 ROLL PIN 4 X 12
18	PSB1091018 STOP BLOCK
19	PSB1091019 HEX BOLT 5/16-18 X 3/8
20	PSB1091020 CAP SCREW 3/8-16 X 1-1/4
21	PSB1091021 FENDER WASHER 10MM
22	PSB1091022 FENCE HINGE
23	PSB1091023 STUD-SE 1/2-20 X 1-3/8, 11/16
24	PSB1091024 HEX NUT 1/2-20

REF PART #	DESCRIPTION
25	PSB1091025 HEX BOLT 5/16-18 X 1-1/4
26	PSB1091026 HEX NUT 5/16-18
27	PSB1091027 SET SCR 3/8-16 X 1-1/2 CONE-PT, SLOTTED
28	PSB1091028 HEX NUT 3/8-16
29	PSB1091029 HEX BOLT 5/16-18 X 1-3/4
30V2	PSB1091030V2 CAP SCREW 1/4-20 X 3/4 V2.06.22
31V2	PSB1091031V2 FENCE SUPPORT BRACKET V2.06.22
32	PSB1091032 KNOB 3/8-16, D36, TAPERED
33	PSB1091033 STUD-DE 3/8-16 X 3-1/2, 3/8
34	PSB1091034 PIVOT NUT
35	PSB1091035 COLLAR
36	PSB1091036 HEX NUT 5/16-24
37	PSB1091037 ROD
38	PSB1091038 HEX NUT 7/16-14
39	PSB1091039 STOP TAB
40	PSB1091040 ADAPTER
41	PSB1091041 ADAPTER SCREW
42V2	PSB1091042V2 FENCE V2.06.22
69	PSB1091069 FENCE ADJUSTMENT WHEEL HANDLE
139	PSB1091139 SET SCR 3/8-16 X 1-1/2 DOG-PT, SLOTTED
155	PSB1091155 ADJUSTABLE HANDLE 1/2-12 X 30, 95L
156	PSB1091156 KEY 9.5 X 9.5 X 268
157	PSB1091157 ROLL PIN 4 X 20

# Base

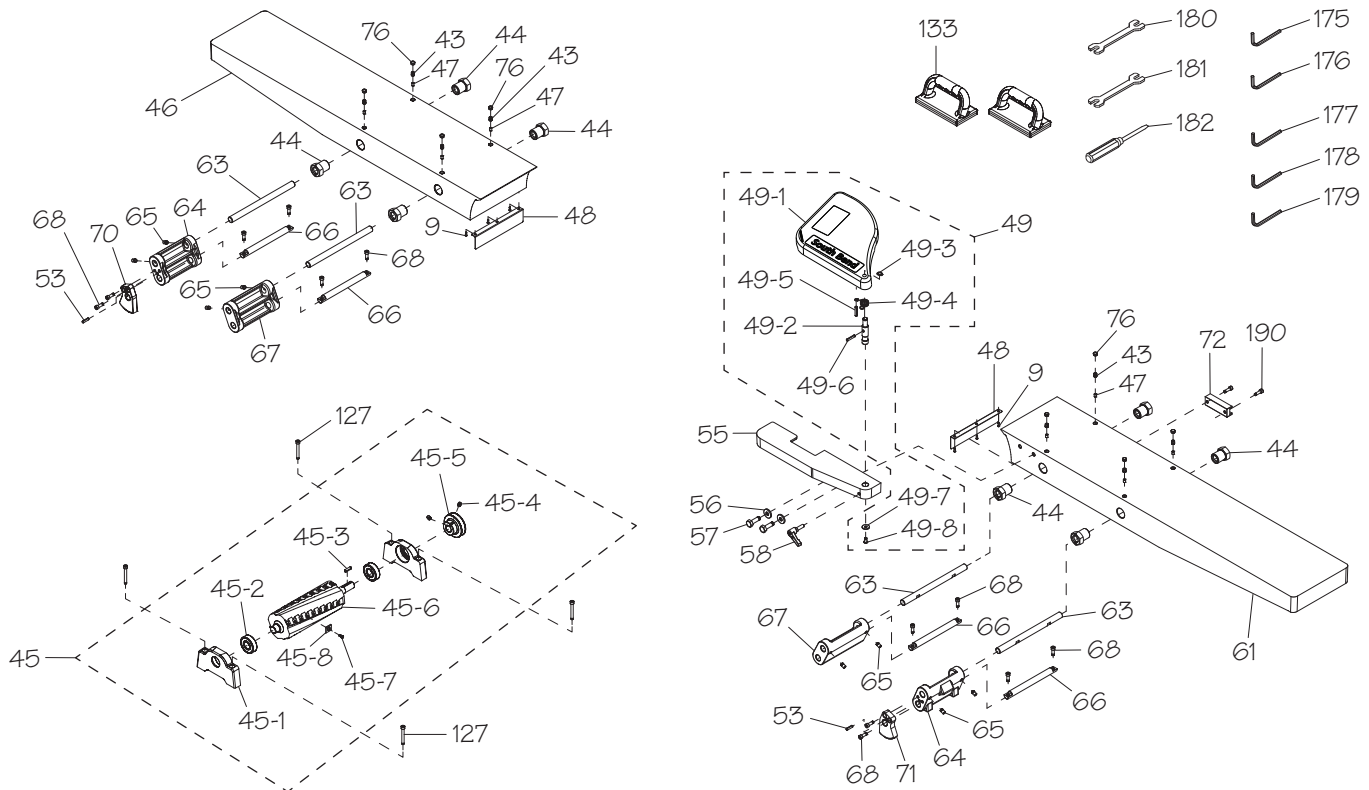


# Base Parts List

REF	PART #	DESCRIPTION
4	PSB1091004	ROLL PIN 4 X 25
26	PSB1091026	HEX NUT 5/16-18
59	PSB1091059	DRO SENSOR PLATE
62	PSB1091062	DRO SENSOR
73	PSB1091073	DRO SENSOR COVER
77	PSB1091077	KNOB 5/16-18, D44, ROUND
78	PSB1091078	GUARD COVER
79	PSB1091079	STANDOFF-HEX MM 5/16-18 X 1/2, 90
80	PSB1091080	HEX NUT 1/2-12
81	PSB1091081	BALL BEARING 6000ZZ
82	PSB1091082	PINION GEAR
83	PSB1091083	BASE SHAFT
84	PSB1091084	CAP SCREW 5/16-18 X 3/4
87	PSB1091087	HEX BOLT 1/2-12 X 2
88	PSB1091088	HEX BOLT 5/16-18 X 1
89	PSB1091089	HEX BOLT 3/8-16 X 1-3/4
90	PSB1091090	FLAT WASHER 10MM
91	PSB1091091	LIFTING ROD
92	PSB1091092	KNOB M4-.7, D46, 7-LOBE
93	PSB1091093	HANDWHEEL TYPE-13 160D X 12B-K X M6-1
94	PSB1091094	BALL BEARING 6002ZZ
95	PSB1091095	KEY 5 X 5 X 10 RE
96	PSB1091096	SPIRAL GEAR SHAFT
97	PSB1091097	MAGNETIC SCALE
98	PSB1091098	TABLE BASE
100	PSB1091100	FLAT WASHER 5MM
123	PSB1091123	FLAT WASHER 8MM
140	PSB1091140	BUSHING 15ID X 320D X 7L

REF	PART #	DESCRIPTION
144	PSB1091144	DUST PLATE (RH)
145	PSB1091145	DUST PLATE (LH)
146	PSB1091146	PHLP HD SCR M5-.8 X 8
154	PSB1091154	PHLP HD SCR 10-24 X 1/4
158	PSB1091158	POINTER
164	PSB1091164	FLAT WASHER 6MM
165	PSB1091165	FENDER WASHER 5MM
166	PSB1091166	CAP SCREW 10-24 X 1/2
167	PSB1091167	FLAT WASHER 8MM
169	PSB1091169	CAP SCREW 5/16-18 X 1/2
170	PSB1091170	PHLP HD SCR M3-.5 X 12
171	PSB1091171	NYLON MARKER TIE ALC-110S
174	PSB1091174	HEX BOLT 1/4-20 X 5/8
191	PSB1091191	FLAT WASHER 8MM
195	PSB1091195	CAP SCREW M5-.8 X 12
196	PSB1091196	FENDER WASHER 5MM
197	PSB1091197	FLAT WASHER 5MM
198	PSB1091198	DRO SENSOR BRACKET
199	PSB1091199	BALL BEARING 606ZZ
200	PSB1091200	FLAT WASHER 3MM
201	PSB1091201	BUSHING 3ID x 60D x 6L
202	PSB1091202	HEX NUT M3-.5
203	PSB1091203	PHLP HD SCR M3-.5 X 16
204	PSB1091204	HEX BOLT M6-1 X 12
205	PSB1091205	FLAT WASHER 6MM
206	PSB1091206	HEX NUT M6-1
208	PSB1091208	EXT RETAINING RING 16MM

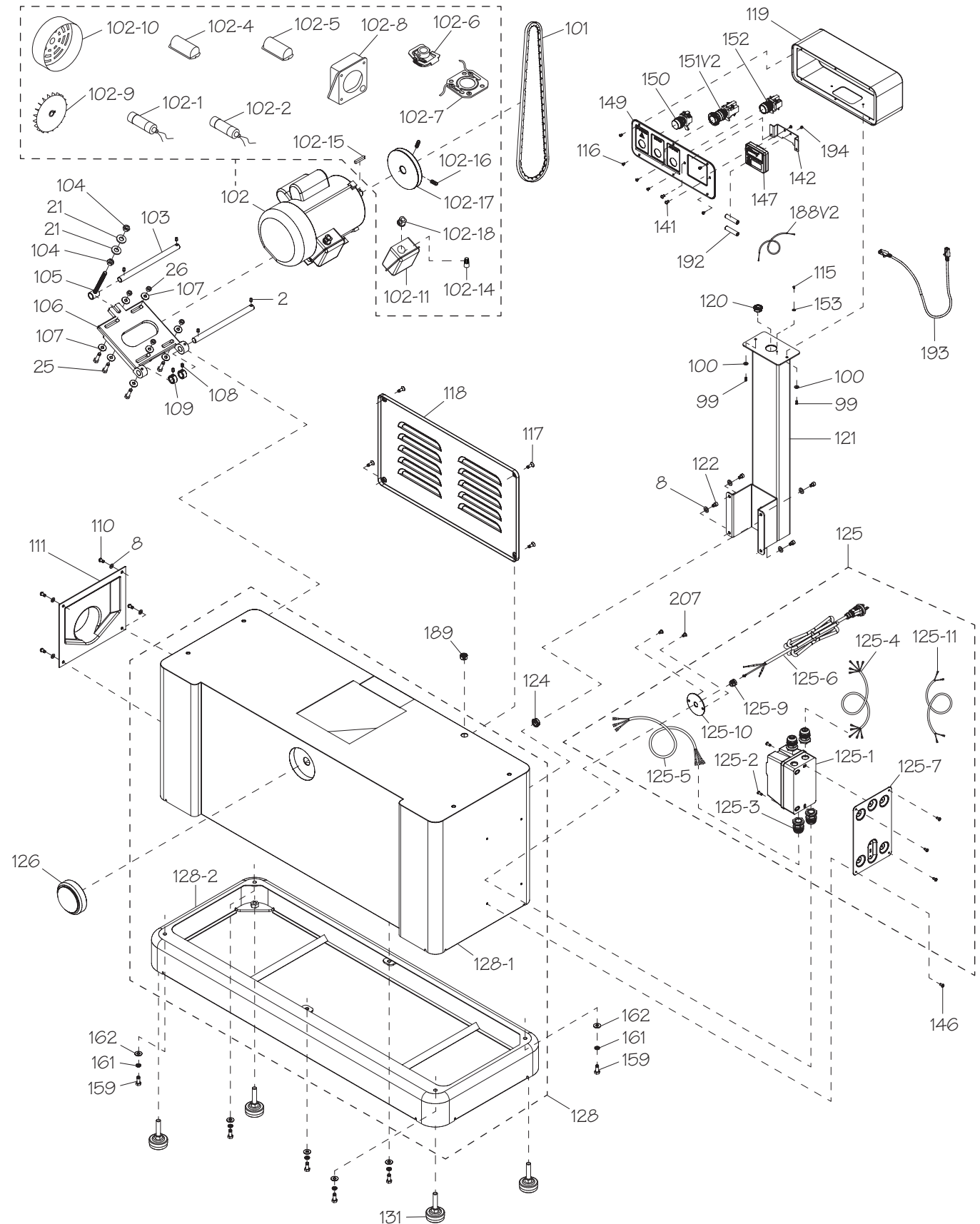
# Table & Accessories



REF	PART #	DESCRIPTION
9	PSB1091009	CAP SCREW 1/4-20 X 3/8
43	PSB1091043	SET SCREW 5/16-18 X 3/8
44	PSB1091044	ECCENTRIC BUSHING
45	PSB1091045	HELICAL CUTTERHEAD ASSEMBLY
45-1	PSB1091045-1	BEARING SUPPORT BLOCK
45-2	PSB1091045-2	BALL BEARING 6204-2NSE
45-3	PSB1091045-3	KEY 5 X 5 X 22
45-4	PSB1091045-4	SET SCREW 5/16-18 X 3/8
45-5	PSB1091045-5	CUTTERHEAD PULLEY
45-6	PSB1091045-6	HELICAL CUTTERHEAD 8"
45-7	PSB1091045-7	FLAT HD TORX SCR 10-32 X 1/2
45-8	PSB1091045-8	CARBIDE INSERT 15 X 15 X 2.5MM
46	PSB1091046	OUTFEED TABLE
47	PSB1091047	BUSHING 6ID x 8OD x 8L
48	PSB1091048	CHIP BREAKER
49	PSB1091049	BLADE GUARD ASSEMBLY
49-1	PSB1091049-1	BLADE GUARD
49-2	PSB1091049-2	GUARD SHAFT
49-3	PSB1091049-3	EXT RETAINING RING 11MM
49-4	PSB1091049-4	TORSION SPRING 1.6 X 21.2 X 10
49-5	PSB1091049-5	ROLL PIN 6 X 28
49-6	PSB1091049-6	ROLL PIN 5 X 26
49-7	PSB1091049-7	FENDER WASHER 6MM
49-8	PSB1091049-8	HEX BOLT M6-1 X 12
53	PSB1091053	ROLL PIN 5 X 20
55	PSB1091055	RABBETING TABLE

REF	PART #	DESCRIPTION
56	PSB1091056	FLAT WASHER 10MM
57	PSB1091057	HEX BOLT 3/8-16 X 1-1/4
58	PSB1091058	ADJUSTABLE HANDLE 5/16-18 x 1", 1-1/2"L
61	PSB1091061	INFEED TABLE
63	PSB1091063	TABLE SHAFT
64	PSB1091064	ROD BRACKET (RH)
65	PSB1091065	SET SCREW 5/16-18 X 1/2
66	PSB1091066	TABLE ROD
67	PSB1091067	ROD BRACKET (LH)
68	PSB1091068	CAP SCREW 1/4-20 X 3/4
70	PSB1091070	ELEVATION BRACKET (LH)
71	PSB1091071	ELEVATION BRACKET (RH)
72	PSB1091072	SENSOR MOUNT BLOCK
76	PSB1091076	SCREW COVER
127	PSB1091127	CAP SCREW 5/16-18 X 1-3/4
133	PSB1091133	PUSH BLOCK
175	PSB1091175	HEX WRENCH 3MM
176	PSB1091176	HEX WRENCH 4MM
177	PSB1091177	HEX WRENCH 5MM
178	PSB1091178	HEX WRENCH 6MM
179	PSB1091179	HEX WRENCH 8MM
180	PSB1091180	WRENCH 12 X 14MM OPEN-ENDS
181	PSB1091181	WRENCH 14 X 17MM OPEN-ENDS
182	PSB1091182	COMBO SCREWDRIVER #1
190	PSB1091190	CAP SCREW M6-1 X 20

# Stand & Motor



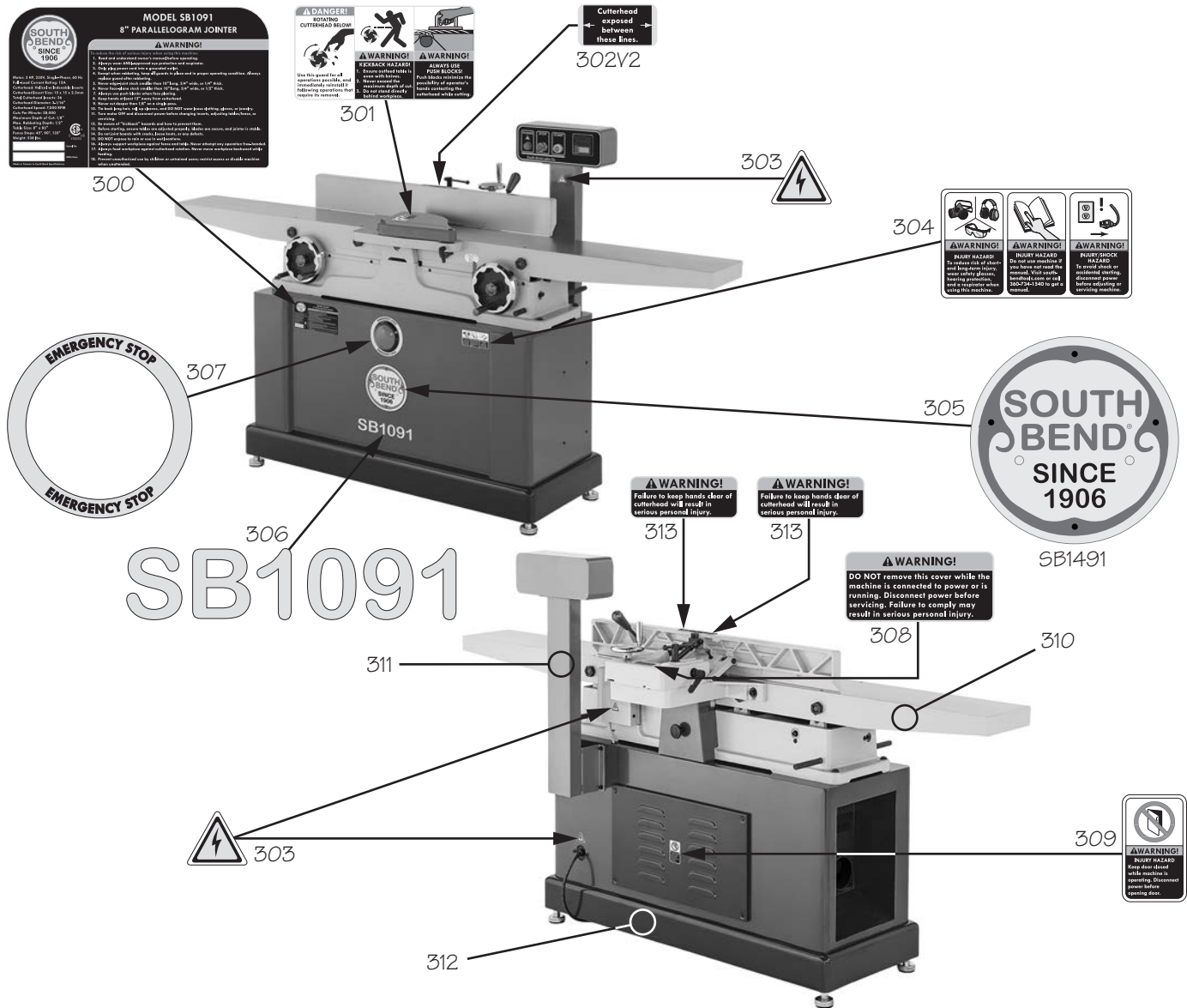


# Stand & Motor Parts List

REF	PART #	DESCRIPTION
2	PSB1091002	SET SCREW 1/4-20 X 3/8
8	PSB1091008	FLAT WASHER 6MM
21	PSB1091021	FENDER WASHER 10MM
25	PSB1091025	HEX BOLT 5/16-18 X 1-1/4
26	PSB1091026	HEX NUT 5/16-18
99	PSB1091099	CAP SCREW M5-.8 X 10
100	PSB1091100	FLAT WASHER 5MM
101	PSB1091101	V-BELT A-51
102	PSB1091102	MOTOR 3HP 230V1-PH
102-1	PSB1091102-1	S CAP 400M 125V 1-1/2 X 3-1/2
102-2	PSB1091102-2	R CAP 70M 250V 1-1/2 X 3-1/2
102-4	PSB1091102-4	S CAPACITOR COVER
102-5	PSB1091102-5	R CAPACITOR COVER
102-6	PSB1091102-6	CENTRIFUGAL SWITCH
102-7	PSB1091102-7	CONTACT PLATE
102-8	PSB1091102-8	CENTRIFUGAL SWITCH COVER
102-9	PSB1091102-9	FAN
102-10	PSB1091102-10	FAN COVER
102-11	PSB1091102-11	MOTOR JUNCTION BOX
102-14	PSB1091102-14	WIRE NUT 5W-P4
102-15	PSB1091102-15	KEY 5 X 5 X 30 RE
102-16	PSB1091102-16	SET SCREW 1/4-20 X 1/4
102-17	PSB1091102-17	MOTOR PULLEY
102-18	PSB1091102-18	STRAIN RELIEF PGA 13.5-11B
103	PSB1091103	SHAFT
104	PSB1091104	HEX NUT M10-1.25
105	PSB1091105	ADJUSTMENT SHAFT
106	PSB1091106	MOTOR PLATE
107	PSB1091107	FENDER WASHER 8MM
108	PSB1091108	SET SCREW M6-1 X 8
109	PSB1091109	COLLAR
110	PSB1091110	PHLP HD SCR 1/4-20 X 1/2
111	PSB1091111	DUST CHUTE
115	PSB1091115	PHLP HD SCR M4-.7 X 8
116	PSB1091116	BUTTON HD CAP SCR M4-.7 X 6
117	PSB1091117	FLAT HD SCR 1/4-20 X 3/4
118	PSB1091118	REAR ACCESS PANEL

REF	PART #	DESCRIPTION
119	PSB1091119	CONTROL PANEL COVER
120	PSB1091120	SNAP BUSHING 24ID X 34OD X 12L
121	PSB1091121	SWITCH BRACKET ASSEMBLY
122	PSB1091122	CAP SCREW 1/4-20 X 1/2
124	PSB1091124	SNAP BUSHING 19ID X 25OD X 11L
125	PSB1091125	MAGNETIC SWITCH ASSEMBLY
125-1	PSB1091125-1	MAG SWITCH MPE-18
125-2	PSB1091125-2	PHLP HD SCR M5-.8 X 10
125-3	PSB1091125-3	STRAIN RELIEF TYPE-1 1/2
125-4	PSB1091125-4	CONTROL PANEL CORD 16G 5W 50"
125-5	PSB1091125-5	MOTOR CORD 14G 3W 34"
125-6	PSB1091125-6	POWER CORD 14G 3W 120" 6-20P
125-7	PSB1091125-7	SWITCH PLATE
125-9	PSB1091125-9	STRAIN RELIEF TYPE-1 3/4
125-10	PSB1091125-10	CORD FIXED PLATE
125-11	PSB1091125-11	KNEE STOP CORD 18G 2W 31"
126	PSB1091126	KNEE STOP BUTTON ASSEMBLY
128	PSB1091128	STAND ASSEMBLY
131	PSB1091131	THREADED FOOT M12-1.75 X 50
141	PSB1091141	BUTTON HD CAP SCR M5-.8 X 8
142	PSB1091142	DRO BRACKET
147	PSB1091147	DIGITAL READOUT ASSEMBLY
149	PSB1091149	SWITCH PLATE
150	PSB1091150	LIGHT 250V 1.2W JG18
151V2	PSB1091151V2	E-STOP BUTTON LB 19/22MM V2.10.20
152	PSB1091152	BUTTON SWITCH YK A600 29MM GREEN
153	PSB1091153	EXT TOOTH WASHER 4MM
159	PSB1091159	HEX BOLT M8-1.25 X 20
161	PSB1091161	LOCK WASHER 8MM
162	PSB1091162	FLAT WASHER 8MM
188V2	PSB1091188V2	DRO CORD 18G 1W 6" V2.10.20
189	PSB1091189	SNAP BUSHING 14ID X 20OD X 10L
192	PSB1091192	BATTERY AAA
193	PSB1091193	ETHERNET CABLE CAT 5E RJ-45-CT-A 72"
194	PSB1091194	PHLP HD SCR M3-.5 X 8
207	PSB1091207	PHLP HD SCR M6-1 X 8

# Machine Labels



REF	PART #	DESCRIPTION
300	PSB1091300	MACHINE ID LABEL
301	PSB1091301	CUTTERHEAD GUARD LABEL
302Y2	PSB1091302Y2	FENCE/CUTTERHEAD LABEL V2.06.22
303	PSB1091303	ELECTRICITY LABEL
304	PSB1091304	COMBO WARNING LABEL
305	PSB1091305	SOUTH BEND NAMEPLATE 203MM
306	PSB1091306	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
307	PSB1091307	EMERGENCY STOP RING LABEL
308	PSB1091308	DO NOT OPEN COVER LABEL
309	PSB1091309	DO NOT OPEN PANEL LABEL
310	PSB1091310	TOUCH-UP PAINT, SB GRAY
311	PSB1091311	TOUCH-UP PAINT, SB LIGHT BLUE
312	PSB1091312	TOUCH-UP PAINT, SB DARK BLUE
313	PSB1091313	CUTTERHEAD WARNING 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](http://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.





[southbendtools.com](http://southbendtools.com)

