# MODEL G0890/G0891
# 15" FIXED-TABLE PLANERS
## OWNER'S MANUAL
***(For models manufactured since 10/20)***



#MN20544 PRINTED IN TAIWAN V2.10.20

# ⚠ WARNING!

**This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.**

**Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.**

**The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**

# ⚠ WARNING!

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

# Table of Contents

# INTRODUCTION

## Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

## Machine Description

Models G0890 and G0891 are CSA-certified, 3 HP, 15" planers with the following differences:

- **Model G0890** has a 3-knife cutterhead.
- **Model G0891** has a helical cutterhead.

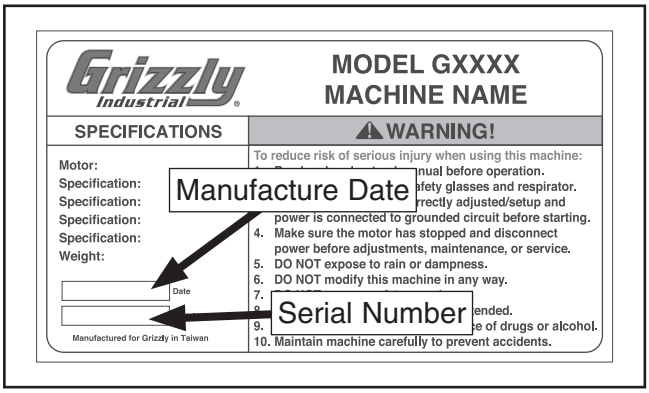
## Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual**.

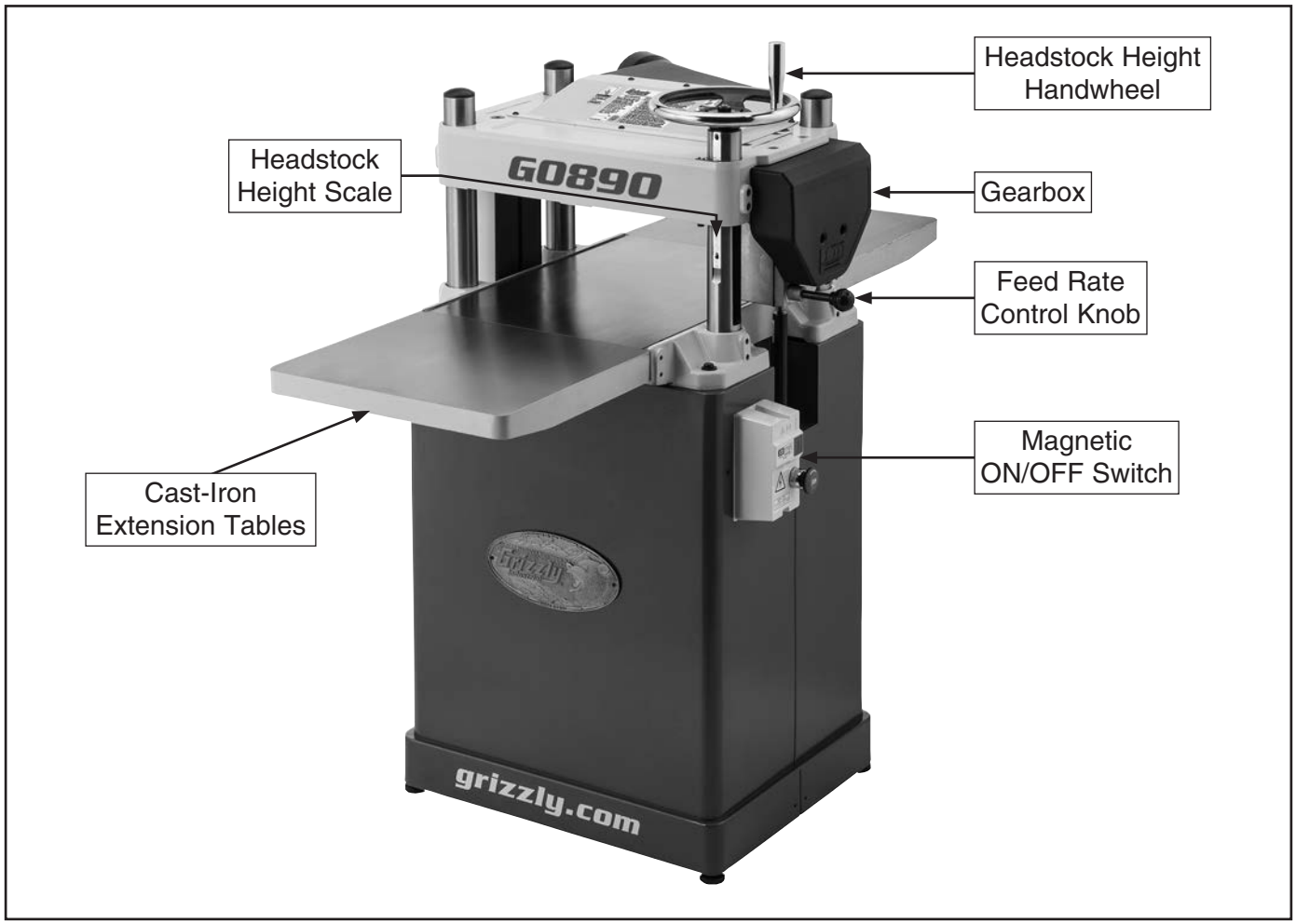
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.



# Identification

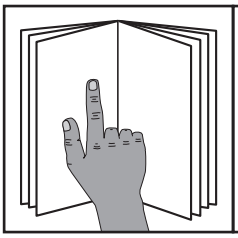
Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.




**⚠WARNING**

**To reduce your risk of serious injury, read this entire manual BEFORE using machine.**

# Controls & Components



**⚠WARNING**

**To reduce your risk of serious injury, read this entire manual BEFORE using machine.**

Refer to **Figure 1** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and stay safe when operating this machine.

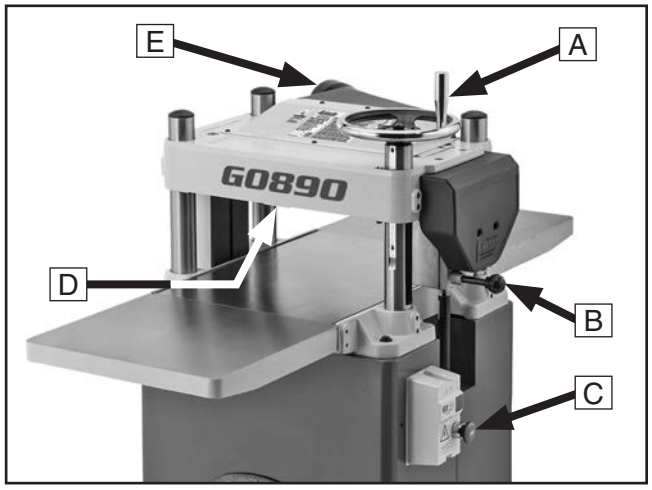



**Figure 1.** Main controls and components.

**A. Headstock Height Handwheel:** Raises and lowers headstock to accommodate different workpiece thicknesses. One complete revolution moves the headstock approximately 5/32" (4mm).

**B. Feed Rate Control Knob:** Selects 28 FPM feed rate when pushed in and 16 FPM feed rate when pulled out.

**C. Magnetic ON/OFF Switch:**
— Green start button turns motor ***ON*** when pressed.
— Red Stop button turns motor ***OFF*** when pressed; for safety purposes, this button will remain depressed and prevent restarting until reset. Reset by rotating clockwise until it pops out.

**D. Depth Limiter:** Limits depth of cut to a maximum of 1/8" at full width.

**E. Dust Port:** Connects to a dust collection system to extract shavings and dust during operation. Dust port size 4".

# Internal Components

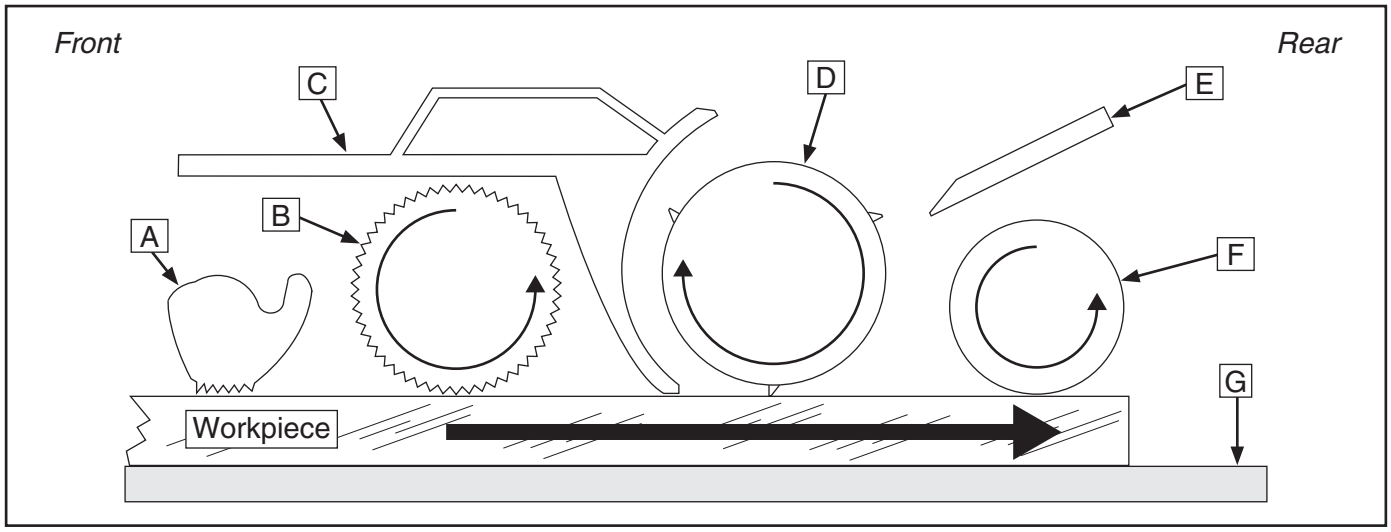



**Figure 2.** Workpiece path and major planing components (side cutaway view).

**A. Anti-Kickback Fingers:** Provide additional safety for the operator.

**B. Serrated Infeed Roller:** Pulls the workpiece toward the cutterhead.

**C. Chip Breaker:** Breaks off chips created by the cutterhead to prevent tear out and diverts the chips to the dust port.

**D. Cutterhead:** Holds the knives/inserts that remove material from the workpiece.

**E. Chip Deflector:** Directs chips into the dust port.

**F. Rubber Outfeed Roller:** Pulls the workpiece through the planer.

**G. Planer Table:** Provides a smooth and level path for the workpiece as it moves through the planer.

## ⚠WARNING

**Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.**

# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0890 15" 3 HP FIXED-TABLE PLANER

**Product Dimensions:**

Weight..... 300 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 25 x 49 x 47-1/2 in.
Footprint (Length x Width)..... 21 x 18-1/2 in.

**Shipping Dimensions:**

Type..... Wood Crate
Content..... Machine
Weight..... 374 lbs.
Length x Width x Height..... 30 x 24 x 49 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..... 10 ft.
Power Cord Gauge..... 12 AWG
Plug Included..... Yes
Included Plug Type..... 6-20
Switch Type..... Magnetic Switch w/Thermal Overload 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**

Planer Size..... 15 in.
Max. Cut Width..... 15 in.
Min. Stock Length..... 6 in.
Min. Stock Thickness..... 3/16 in.
Max. Stock Thickness..... 6 in.
Number of Cuts Per Inch..... 81, 46
Number of Cuts Per Minute..... 15,600
Cutterhead Speed..... 5200 RPM
Planing Feed Rate..... 16, 28 FPM
Max. Cut Depth Planing Full Width..... 1/8 in.
Max. Cut Depth Planing 6-Inch Wide Board..... 3/16 in.

**Cutterhead Info**

| | |
|---|---|
| Cutterhead Type | Straight Knife |
| Cutterhead Diameter | 2-5/8 in. |
| Number of Knives | 3 |
| Knife Type | HSS, Single-Sided, Solid |
| Knife Size Length | 15 in. |
| Knife Size Width | 1 in. |
| Knife Size Thickness | 1/8 in. |
| Knife Adjustment | Jack Screws |

**Table Info**

| | |
|---|---|
| Table/Headstock Movement | 6 in. |
| Table Bed Size Length | 21 in. |
| Table Bed Size Width | 15 in. |
| Floor-to-Table Height | 30-3/4 in. |
| Table Wings Size Length | 14 in. |
| Table Wings Size Width | 15-1/2 in. |

**Construction**

| | |
|---|---|
| Table | Precision-Ground Cast Iron |
| Body | Cast Iron |
| Stand | Steel |
| Cutterhead Assembly | Steel |
| Infeed Roller | Serrated Aluminum |
| Outfeed Roller | Rubber |
| Paint Type/Finish | Powder Coated |

**Other**

| | |
|---|---|
| Measurement Scale | Inch & Metric |
| Number of Dust Ports | 1 |
| Dust Port Size | 4 in. |
| Mobile Base | T28000 |

**Other Specifications:**

| | |
|---|---|
| Country of Origin | Taiwan |
| Warranty | 1 Year |
| Approximate Assembly & Setup Time | 30 Min. |
| Serial Number Location | Machine ID Label |
| Sound Rating | 82-84 dB |
| ISO 9001 Factory | Yes |
| Certified by a Nationally Recognized Testing Laboratory (NRTL) | Yes |

**Features:**

Large Top-Mounted Handwheel
Cabinet-Style Stand
Internally Mounted 3HP Motor
Poly-V Belt Drive
Magnetic Switch
Four Heavy-Duty Support Columns
Anti-Kickback Fingers
Drive Gears Run in Oil Bath
Cast-Iron Extension Table Wings
Includes Knife-Setting Jig
Elevation Scale with Both Inch and Metric
Powder-Coated Finish

# MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

## MODEL G0891 15" 3 HP FIXED-TABLE PLANER W/HELICAL CUTTERHEAD

**Product Dimensions:**

| | |
|---|---|
| Weight | 302 lbs. |
| Width (side-to-side) x Depth (front-to-back) x Height | 25 x 49 x 47-1/2 in. |
| Footprint (Length x Width) | 21 x 18-1/2 in. |

**Shipping Dimensions:**

| | |
|---|---|
| Type | Wood Crate |
| Content | Machine |
| Weight | 377 lbs. |
| Length x Width x Height | 30 x 24 x 49 in. |

**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 | 10 ft. |
| Power Cord Gauge | 12 AWG |
| Plug Included | Yes |
| Included Plug Type | 6-20 |
| Switch Type | Magnetic Switch w/Thermal Overload 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**

| | |
|---|---|
| Planer Size | 15 in. |
| Max. Cut Width | 15 in. |
| Min. Stock Length | 6 in. |
| Min. Stock Thickness | 3/16 in. |
| Max. Stock Thickness | 6 in. |
| Number of Cuts Per Inch | 108, 62 |
| Number of Cuts Per Minute | 20,800 |
| Cutterhead Speed | 5200 RPM |
| Planing Feed Rate | 16, 28 FPM |
| Max. Cut Depth Planing Full Width | 1/8 in. |
| Max. Cut Depth Planing 6-Inch Wide Board | 3/16 in. |

**Cutterhead Info**

| | |
|---|---|
| Cutterhead Type | Helical |
| Cutterhead Diameter | 2-5/8 in. |
| Number of Cutter Rows | 4 |
| Number of Indexable Cutters | 48 |
| Cutter Insert Type | 30 deg. Indexable Carbide |
| Cutter Insert Size Length | 15 mm |
| Cutter Insert Size Width | 15 mm |
| Cutter Insert Size Thickness | 2.5 mm |

**Table Info**

| | |
|---|---|
| Table/Headstock Movement | 6 in. |
| Table Bed Size Length | 21 in. |
| Table Bed Size Width | 15 in. |
| Floor-to-Table Height | 30-3/4 in. |
| Table Wings Size Length | 14 in. |
| Table Wings Size Width | 15-1/2 in. |

**Construction**

| | |
|---|---|
| Table | Precision-Ground Cast Iron |
| Body | Cast Iron |
| Stand | Steel |
| Cutterhead Assembly | Steel |
| Infeed Roller | Serrated Aluminum |
| Outfeed Roller | Rubber |
| Paint Type/Finish | Powder Coated |

**Other**

| | |
|---|---|
| Measurement Scale | Inch & Metric |
| Number of Dust Ports | 1 |
| Dust Port Size | 4 in. |
| Mobile Base | T28000 |

**Other Specifications:**

| | |
|---|---|
| Country of Origin | Taiwan |
| Warranty | 1 Year |
| Approximate Assembly & Setup Time | 30 Min. |
| Serial Number Location | Machine ID Label |
| Sound Rating | 75-77 dB |
| ISO 9001 Factory | Yes |
| Certified by a Nationally Recognized Testing Laboratory (NRTL) | Yes |

**Features:**

Large Top-Mounted Handwheel
Cabinet-Style Stand
Internally Mounted 3HP Motor
Poly-V Belt Drive
Magnetic Switch
Four Heavy-Duty Support Columns
Anti-Kickback Fingers
Drive Gears Run in Oil Bath
Cast-Iron Extension Table Wings
Elevation Scale with Both Inch and Metric
Powder-Coated Finish

# SECTION 1: SAFETY

## For Your Own Safety, Read Instruction Manual Before Operating This Machine

**The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.**

**⚠DANGER** **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

**⚠WARNING** **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

**⚠CAUTION** **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

***NOTICE*** **Alerts the user to useful information about proper operation of the machine to avoid machine damage.**

## Safety Instructions for Machinery

### ⚠WARNING

**OWNER'S MANUAL.** Read and understand this owner's manual BEFORE using machine.

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

**MENTAL ALERTNESS REQUIRED.** Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

**ELECTRICAL EQUIPMENT INJURY RISKS.** You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

**DISCONNECT POWER FIRST.** Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are NOT approved safety glasses.

# ⚠WARNING

**WEARING PROPER APPAREL.** Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

**HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

**USE CORRECT TOOL FOR THE JOB.** Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

**GUARDS & COVERS.** Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**NEVER STAND ON MACHINE.** Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

**STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine ***OFF*** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

**DAMAGED PARTS.** Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

**MAINTAIN POWER CORDS.** When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

# Additional Safety for Planers

## ⚠WARNING

**Amputation, serious cuts, entanglement, or death can occur from contact with rotating cutterhead or other moving parts! Flying chips can cause eye injuries or blindness. Workpieces or knives thrown by cutterhead can strike nearby operator or bystanders with deadly force. To reduce the risk of these hazards, operator and bystanders MUST completely heed hazards and warnings below.**

**KICKBACK.** Know how to reduce the risk of kickback and kickback-related injuries. "Kickback" occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator's hands are pulled into blade, resulting in amputation or severe lacerations.

**AVOID CONTACT WITH MOVING PARTS.** Never remove guards/covers or reach inside the planer during operation or while connected to power. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. If a workpiece becomes stuck or sawdust removal is necessary, turn planer ***OFF*** and disconnect power before clearing.

**DULL/DAMAGED KNIVES/INSERTS.** Only use sharp, undamaged knives/inserts. Dull or damaged knives/inserts increase the risk of kickback.

**INSPECTING STOCK.** To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or foreign material. Workpieces with minor warping should be jointed first or planed with the cupped side facing the table.

**BODY PLACEMENT.** Stand to one side of planer during the entire operation to avoid getting hit if kickback occurs.

**GRAIN DIRECTION.** Planing across the grain is hard on the planer and may cause kickback. Plane in the same direction or at a slight angle with the wood grain.

**PLANING CORRECT MATERIAL.** Only plane natural wood stock with this planer. DO NOT plane MDF, OSB, plywood, laminates or other synthetic materials that can break up inside the planer and be ejected towards the operator.

**LOOKING INSIDE PLANER.** Wood chips fly around inside the planer at a high rate of speed during operation. To avoid injury from flying material, DO NOT look inside planer during operation.

**CUTTING LIMITATIONS.** To reduce the risk of kickback hazards or damage to the machine, do not exceed the maximum depth of cut or minimum board length and thickness found in the **Data Sheet**. Only feed one board at a time.

**INFEED ROLLER CLEARANCE.** The infeed roller is designed to pull material into the spinning cutterhead. To reduce the risk of entanglement, keep hands, clothing, jewelry, and long hair away from the infeed roller during operation.

**FEED WORKPIECE PROPERLY.** To reduce the risk of kickback, never start planer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding, and do not change feed speed during cutting operation.

**WORKPIECE SUPPORT.** To reduce the risk of kickback, always make sure workpiece can move completely across table without rocking or tipping. Use auxiliary support stands for long stock.

**SECURE KNIVES/INSERTS.** Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation.

# SECTION 2: POWER SUPPLY

## 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 all applicable codes and standards.

**⚠WARNING**

**Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.**

## 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 Current Rating ..... 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 specified circuit requirements.

## Circuit Requirements for 230V

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**
**Power Supply Circuit ..... 20 Amps**
**Plug/Receptacle ..... NEMA 6-20**
**Cord ..... "S"-Type, 3-Wire, 12 AWG, 300 VAC**

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current 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 electrical codes in your area.**

**Note:** *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

## Grounding Instructions

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

The power cord and plug specified under "Circuit Requirements for 230V" on the previous page has an equipment-grounding wire and a grounding prong. 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 (see following figure).

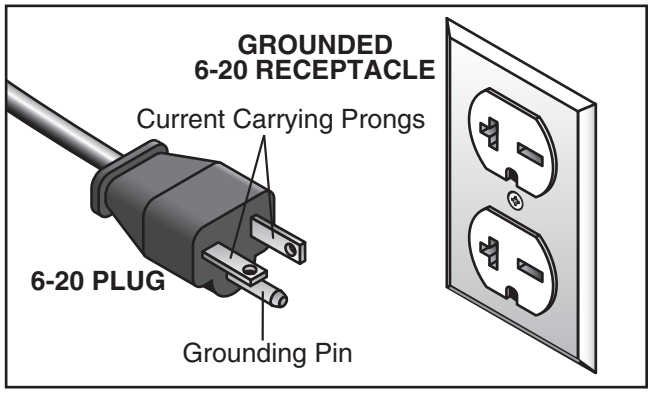
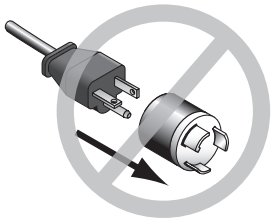



**Figure 3.** Typical 6-20 plug and receptacle.

**⚠WARNING**

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

**⚠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.**

**⚠WARNING**

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

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 a qualified electrician or 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

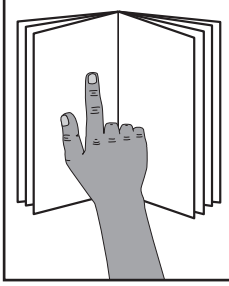
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can 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 be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

**Minimum Gauge Size .....12 AWG**
**Maximum Length (Shorter is Better).....50 ft.**

# SECTION 3: SETUP



**⚠WARNING**

**This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!**

**⚠WARNING**

**Wear safety glasses during the entire setup process!**

**⚠WARNING**

**This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.**

## Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

| Description | Qty |
|---|---|
| • Additional People | 1 |
| • Safety Glasses | 1 Per Person |
| • Cleaner/Degreaser (**Page 17**) | As Needed |
| • Disposable Shop Rags | As Needed |
| • Wrench or Socket 12mm, 17mm | 1 Ea. |
| • Hex Wrench 4mm | 1 |
| • Straightedge 4' | 1 |
| • Dust-Collection System | 1 |
| • 4" Dust Hose (length as needed) | 1 |
| • 4" Hose Clamps | 2 |
| • Gearbox Oil | As Needed |

## Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

**IMPORTANT:** Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*

# Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

## *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.**

**Box 1 (Figure 4)** **Qty**
- **A.** Planer Unit (Not Shown) ..... 1
- **B.** Cast-Iron Extension Tables ..... 2
- **C.** Dust Port ..... 1
- **D.** Headstock Elevation Handwheel ..... 1

**Tools and Hardware (Figure 5)**
- **E.** Hex Bolts M8-1.25 x 25 (Ext. Tables) ..... 6
- **F.** Button Head Cap Screws M6-1 x 12 ..... 6
- **G.** Set Screws M8-1.25 x 20 (Ext. Tables) ..... 6
- **H.** Hex Wrench 4mm ..... 1
- **I.** LOW/HIGH Direction Label (Handwheel) ... 1
- **J.** Hex Nut M10-1.25 (Handwheel) ..... 1
- **K.** Flat Washer 10mm (Handwheel) ..... 1
- **L.** Key 4 x 4 x 10 (Handwheel) ..... 1
- **M.** Handwheel Handle (Handwheel) ..... 1
- **N.** Wrenches 10/13, 12/14, 17/19mm .....1 Ea.
- **O.** T-Handle Torx Drivers T-25 ..... 2
- **P.** T-Handle Torx Driver T-30 ..... 1

**G0890 Only (Figure 6)**
- **Q.** Knife-Setting Jig ..... 1
  - — E-clips 9mm ..... 4
  - — Jig Feet ..... 2
  - — Jig Shaft ..... 1

**G0891 Only (Figure 7)**
- **R.** Flat Head Torx Screws #10-32 x ½" ..... 10
- **S.** Indexable Carbide Inserts 15 x 15 x 2.5 .... 5

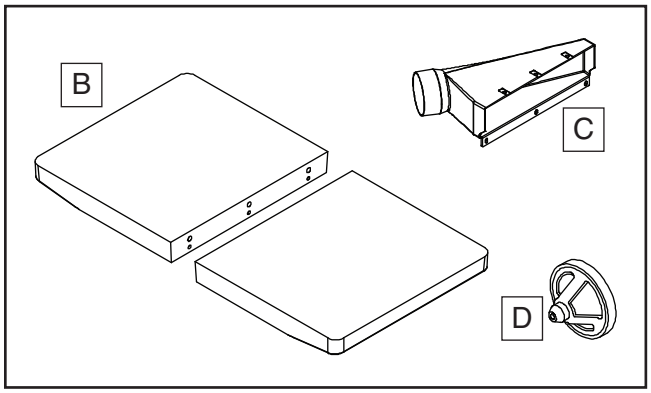



**Figure 4.** Box inventory.

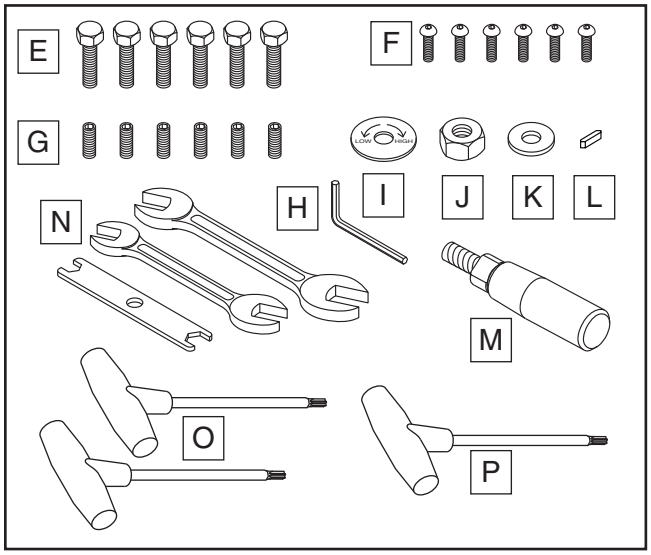



**Figure 5.** Tools and hardware.

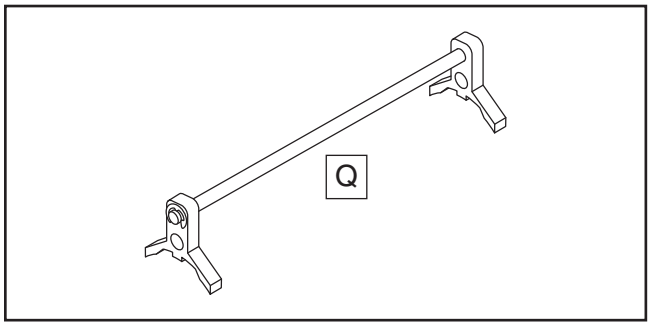



**Figure 6.** Tools and hardware (G0890 only).

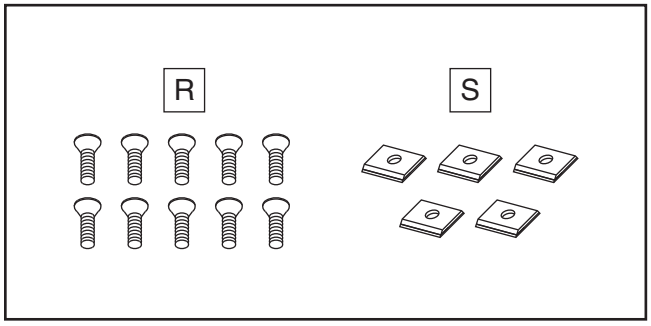



**Figure 7.** Tools and hardware (G0891 only).

# Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

**Before cleaning, gather the following:**
- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

**Basic steps for removing rust preventative:**

1. Put on safety glasses.

2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.

3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.

4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.


**⚠WARNING**

**Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery.**

**⚠CAUTION**

**Many cleaning solvents are toxic if inhaled. Only work in a well-ventilated area.**

***NOTICE***

**Avoid harsh solvents like acetone or brake parts cleaner that may damage painted surfaces. Always test on a small, inconspicuous location first.**

**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 8.** T23692 Orange Power Degreaser.

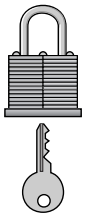
# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** 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. **See below for required space allocation.**



**⚠CAUTION**

**Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.**

## Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 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 enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

## Lighting

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

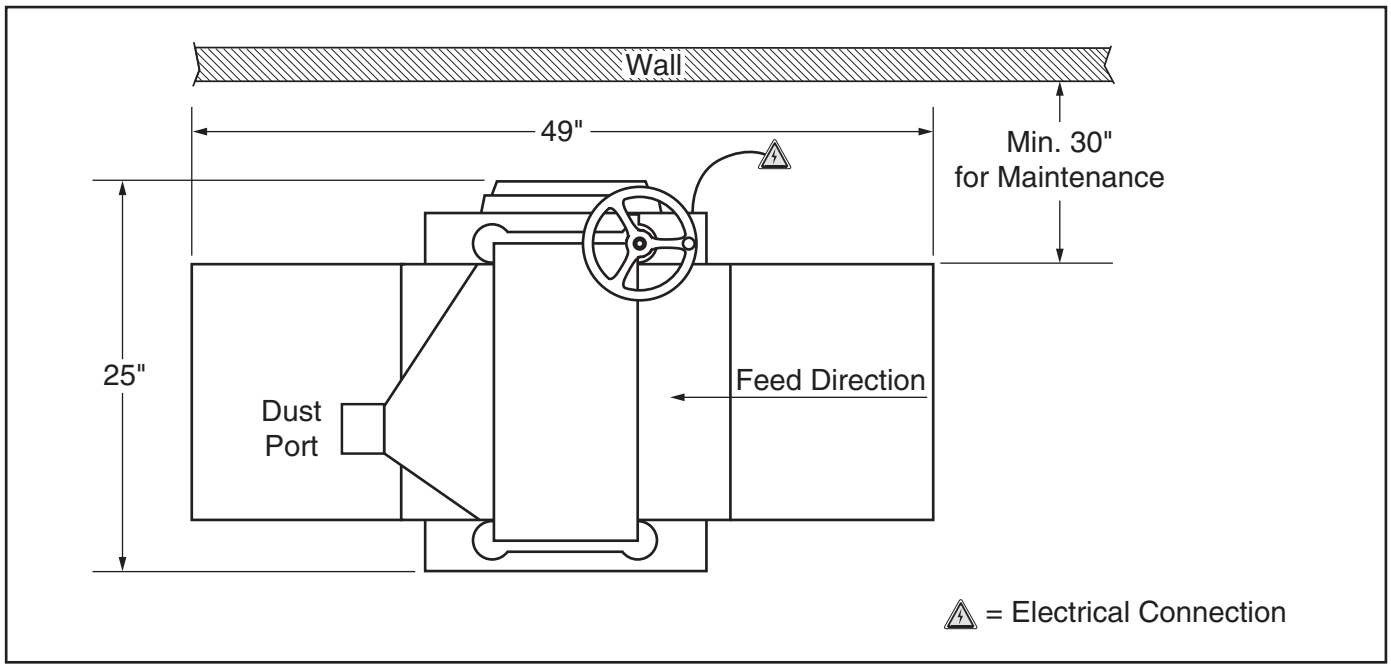



**Figure 9.** Minimum working clearances for Models G0890 and G0891.

# Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** 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).

**To assemble planer:**

1. Attach each cast-iron extension table (see **Figure 10**) to planer table with (3) M8-1.25 x 25 hex bolts. Do not fully tighten hex bolts at this time.

2. Thread (3) M8-1.25 x 20 set screws into each extension table at locations shown in **Figure 10**.

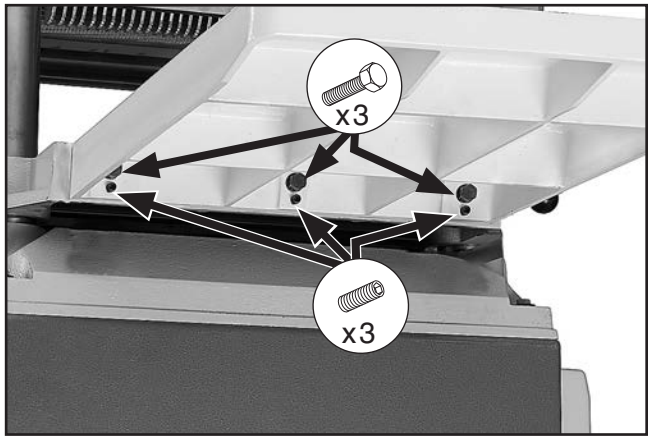



**Figure 10.** Extension table mounting locations.

3. Using a straightedge as a guide, rotate set screws until extension tables are in plane with main table, then fully tighten hex bolts installed during **Step 1**.

4. Insert key into keyway on handwheel shaft on top of planer.

5. Line up notch in handwheel bore with key, then slide handwheel onto shaft.

6. Slide LOW/HIGH direction label onto handwheel shaft, and secure handwheel with 10mm flat washer and M10-1.25 hex nut (see **Figure 11**).

7. Thread handwheel handle into handwheel (see **Figure 11**) and tighten with wrench.

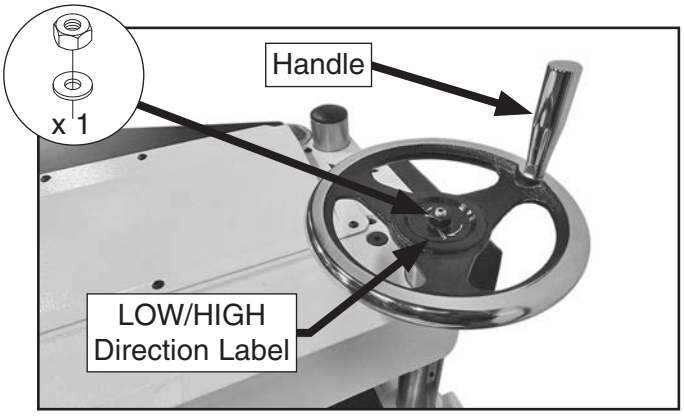



**Figure 11.** Headstock elevation handwheel installed.

8. Attach dust port to planer with (6) M6-1 x 12 button head cap screws (see **Figure 12**).

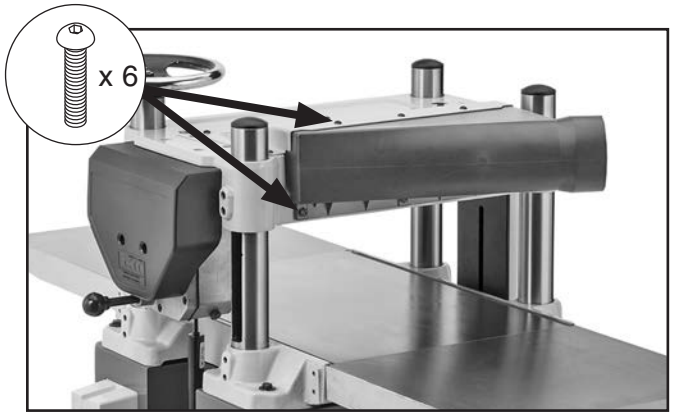



**Figure 12.** Dust port installed.

# Dust Collection

**⚠CAUTION**

**This machine creates a lot of wood chips/dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust-collection system.**

**Minimum 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 the machine to a dust-collection system, fit a 4" dust hose over the dust port, and secure in place with a hose clamp (see **Figure 13**). Tug the hose to make sure it does not come off.

**Note:** *A tight fit is necessary for proper performance.*

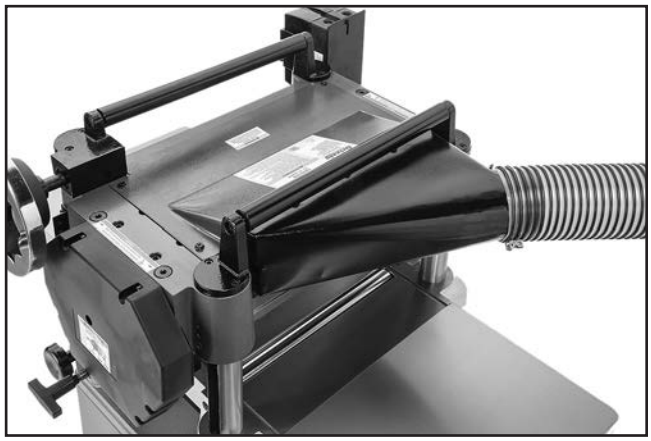


**Figure 13.** Example of dust hose connected to dust port.

# Checking Gearbox Oil Level

Before starting your machine for the first time, check the gearbox oil level. The proper oil level is just even with the bottom of the fill plug hole. The gearbox uses ISO 320, SAE 140 gear oil, or SAE 85W–140 multi-weight gear oil. DO NOT mix oil types.

**Note:** *For easier access to the fill plug, remove the gearbox cover (see **Figure 14**).*

**To check gearbox oil level:**

**1.** Remove gearbox fill plug (see **Figure 14**).

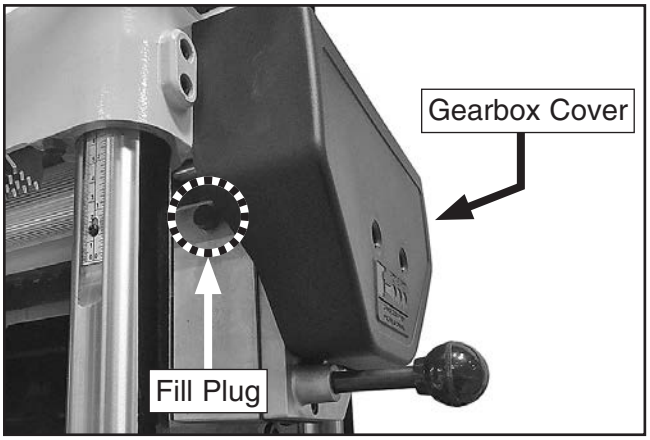



**Figure 14.** Location of gearbox fill plug.

**2.** Dip short end of a clean 6mm hex wrench inside fill hole, and then remove it.

— If the end of the hex wrench *is* coated with oil, then the gearbox oil level is okay. Replace the fill plug and continue setup.

— If the end of the hex wrench *is not* coated with oil, then you need to add more oil. Refer to **Gearbox Oil** on **Page 34** for instructions on how to do this.

**Note:** *We recommend that you replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure and will help maximize the service life of the machine by flushing away any particles from the break-in and manufacturing process.*

# Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the STOP/reset button safety feature functions properly.

**⚠WARNING**

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

**⚠WARNING**

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

**To test run machine:**

1. Clear all setup tools and loose objects away from machine.
2. Push STOP button in.
3. Connect machine to power supply.
4. Twist STOP button clockwise until it springs out (see **Figure 15**). This resets the switch so the machine can start.

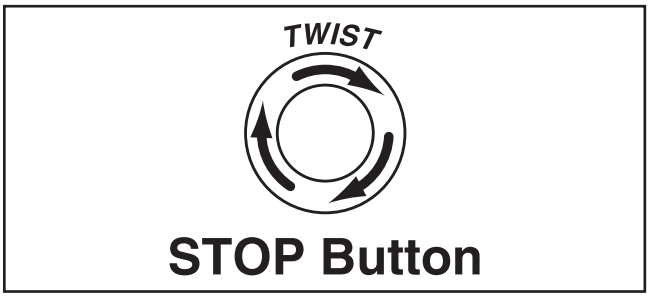



**Figure 15.** Resetting the switch.

5. Press green START button to turn machine ***ON***. Verify motor starts up and runs smoothly without any unusual problems or noises.
6. Press STOP button to turn machine ***OFF***.
7. WITHOUT resetting STOP button, try to start machine by pressing the START button. The machine should not start.

   — If the machine *does not* start, the STOP button safety feature is working correctly. Congratulations! Test Run is complete.

   — If the machine *does* start with the STOP button pushed in, immediately disconnect power to the machine. The STOP button safety feature is not working correctly and must be replaced before further using the machine. Call Tech Support for help.

# Recommended Adjustments

The adjustments listed below have been performed at the factory. However, because of the many variables involved with shipping, we recommend that you verify the adjustments to ensure the best possible results from your new machine.

Step-by-step instructions for these adjustments can be found in the **SERVICE** section starting on **Page 35**.

**Factory adjustments that should be verified:**

- Tensioning/replacing V-belt (**Page 38**).
- Calibrating headstock elevation scale (**Page 43**).

## *NOTICE*

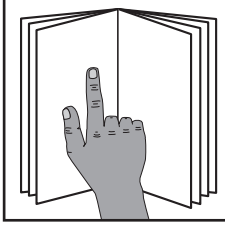
**After approximately 16 hours of operation, V-belt will stretch and seat into pulley grooves and need to be properly tensioned to avoid severely reducing life of V-belt. Refer to Tensioning/Replacing V-Belt on Page 38 for detailed instructions.**

# SECTION 4: OPERATIONS

## 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 the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

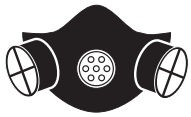


**⚠WARNING**

**To reduce your risk of serious injury, read this entire manual BEFORE using machine.**

**⚠WARNING**

**Eye injuries, respiratory problems, or hearing loss can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.**



***NOTICE***

**If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.**

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

1. Examines workpiece to make sure it is suitable for planing.

2. Puts on safety glasses or face shield, a respirator, and hearing protection.

3. Places workpiece on table with flat side down and correctly adjusts headstock height for workpiece thickness and depth of cut.

   — If workpiece is bowed, operator surface planes workpiece on a jointer until one side is flat. Doing so ensures that it sits solidly on planer table during operation.

4. When all safety precautions have been taken, turns planer ***ON***.

5. Stands to one side of planer path to reduce risk of kickback injuries, then feeds workpiece into planer until infeed roller grabs it.

   **Note:** *Infeed and outfeed rollers control feed rate of workpiece as it passes through planer. Operator should not push or pull on workpiece.*

   — If cut is too deep and bogs down planer, operator immediately reduces depth of cut.

6. Once workpiece is clear of outfeed roller and stops moving, operator removes workpiece from outfeed table and measures workpiece thickness. If further planing is required, operator lowers headstock slightly (approximately ¼ to ½ turn of headstock height handwheel), then feeds workpiece into front of planer again.

7. Operator continues process until desired thickness is achieved, then turns machine ***OFF***.

# Workpiece Inspection

Some workpieces are not safe to use or may require modification before they are. **Before cutting, inspect all workpieces for the following:**

- **Material Type:** This machine is only intended for workpieces of natural wood fiber Attempting to use workpieces of any other material that may break apart during operation could lead to serious personal injury and property damage.

- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, embedded gravel, etc,). If you have any question about the quality of your lumber, DO NOT use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.

- **Large/Loose Knots:** Loose knots can become dislodged during operation. Large knots can cause kickback and machine damage. Always use workpieces that do not have large/loose knots.

- **Wet or "Green" Stock:** Avoid using wood with a high water content. Wood with more than 20% moisture content or wood exposed to excessive moisture (such as rain or snow), will cut poorly and cause excessive wear to the machine. Excess moisture can also hasten rust and corrosion of the machine and/or individual components.

- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!

- **Minor Cupping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table. On the contrary, a workpiece supported on the bowed side will rock during operation and could cause severe injury from kickback.

# Wood Types

The species of wood, as well as its condition, greatly affects the depth of cut the planer can effectively take with each pass.

The chart in the figure below shows the Janka Hardness Rating for a number of commonly used species. The larger the number, the harder the workpiece, and the less material should be removed in any one pass for good results.

**Note:** *The Janka Hardness Rating is expressed in pounds of force required to embed a 0.444" steel ball into the surface of the wood to a depth equal to half the ball's diameter.*

| Species | Janka Hardness |
|---|---|
| Ebony | 3220 |
| Red Mahogany | 2697 |
| Rosewood | 1780 |
| Red Pine | 1630 |
| Sugar Maple | 1450 |
| White Oak | 1360 |
| White Ash | 1320 |
| American Beech | 1300 |
| Red Oak | 1290 |
| Black Walnut | 1010 |
| Teak | 1000 |
| Black Cherry | 950 |
| Cedar | 900 |
| Sycamore | 770 |
| Douglas Fir | 660 |
| Chestnut | 540 |
| Hemlock | 500 |
| White Pine | 420 |
| Basswood | 410 |
| Eastern White Pine | 380 |
| Balsa | 100 |

**Figure 16.** Janka Hardness Rating for some common wood species.

# Planing Tips

- Inspect your lumber for twisting or cupping, and surface one face on a jointer if necessary before planing workpiece.
- Scrape off all glue when planing glued-up panels. Dried glue can quickly dull knives/inserts.
- DO NOT plane more than one piece at a time. Never plane multiple pieces side by side.
- Never remove more than the recommended amount of material on each pass. Only remove a small amount of material on each pass when planing wide or dense stock.
- Support the workpiece on both ends. Get assistance from another person if you are planing long lumber, or use roller stands to support the workpiece.
- Measure the workpiece thickness with calipers to get exact results.
- Carefully inspect all stock to make sure it is free of large knots or foreign objects that may damage your knives/inserts, cause kickback, or be ejected from the planer.
- When possible, plane equal amounts on each side of the board to reduce the chance of twisting or cupping.
- Use the entire width of the planer to wear knives/inserts evenly. With narrow workpieces, alternate between far left, far right, and the middle of the table. Your knives/inserts will remain sharp much longer.
- To avoid "chip marks," always plane WITH the grain direction of the wood. Never plane cross-grain or end-grain.
- Plane ONLY natural wood fiber. Do not plane wood composites or other materials that could break up in the planer and cause operator injury or damage to planer.
- Always true cupped or warped stock on a jointer before planing.

# Cutting Problems

Below is a list of wood characteristics you may encounter when planing. The following descriptions of defects will give you some possible answers to problems you may encounter while planing different materials. Possible solutions follow the descriptions.

## Chipped Grain

**Problem:** Usually a result of cutting against the grain, planing lumber with knots or excessive amount of cross grain, or using dull knives/inserts.

**Note:** *Some amount of chipping is normal with highly figured wood.*

**Solution:** Decrease the depth of cut. Reduce the feed rate. Inspect your lumber and determine if its grain pattern is causing the problem. If the lumber does not show substantial crossgrain, inspect your knives/inserts.

## Fuzzy Grain

**Problem:** Usually caused by surfacing lumber with too high of a moisture content. Sometimes fuzzy grain is an unavoidable characteristic of some woods, such as basswood. Fuzzy grain can also be caused by dull knives/inserts.

**Solution:** Check the lumber with a moisture meter. If moisture is greater than 20%, sticker the lumber and allow it to dry. Otherwise, inspect the knife/insert condition.

## Snipe

**Problem:** Occurs when board ends have more material removed than the rest of the board. Usually caused when the workpiece is not properly supported as it goes through the machine. In many cases, however, a small amount of snipe is inevitable.

**Solution:** Hold workpiece up slightly as it leaves the outfeed end of the planer. The best way to deal with snipe is by planing lumber longer than your intended work length and then cutting off the excess after planing is completed.

## Pitch & Glue Build-up

**Problem:** Glue and resin buildup on the rollers and cutterhead will cause overheating by decreasing cutting sharpness while increasing drag in the feed mechanism. The result can include scorched lumber, uneven knife/insert marks, and chatter.

**Solution:** Clean the rollers and cutterhead.

## Chip Marks or Indentations

**Problem:** Chip indentation or chip bruising is the result of wood chips not being thrown away from the cutterhead and out of the machine. Instead they are carried around the cutterhead, deposited on the planed surface and crushed by the outfeed roller. Some of the causes of chip indentation are:

- Wood chips/sawdust not being properly expelled from the cutterhead.
- The type of lumber being planed. Certain species have a tendency to chip bruise.
- A high moisture content (over 20%) or surface moisture (refer to **Workpiece Inspection**).
- Dull knives/inserts.
- Excessive depth of cut.

**Solution:**

- Use a proper dust-collection system; adjust chip deflector in or out as necessary.
- Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT surface partially-air-dried (PAD) lumber.
- Make sure planer knives/inserts are sharp.
- Reduce depth of cut.

# Depth of Cut

**Headstock Movement per Handwheel Revolution**
One Full Revolution ..... 5/32" (4mm)

**Material Thickness Range**
Minimum–Maximum Stock Thickness .... 3/16"–6"

The depth of cut on a planer means the amount of material that is removed from the top of the workpiece as it passes underneath the cutterhead.

The depth of cut is set by adjusting the distance of the table below the cutterhead. This distance is the thickness of the workpiece minus the depth of cut. The planing depth of cut is controlled by using the headstock elevation handwheel on the right side of the machine. Rotating the handwheel clockwise raises the headstock.

Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend the maximum depth of cut (per pass) be no more than 1/16". A series of light cuts will give better end results and put less stress on the planer than trying to take off too much material in a single pass.

The depth of cut can be referenced directly from the inch/millimeter scale on the front of the planer, as shown.

**Note:** *The scale functions as a general guide only, and is not intended for low-tolerance, precision results.*

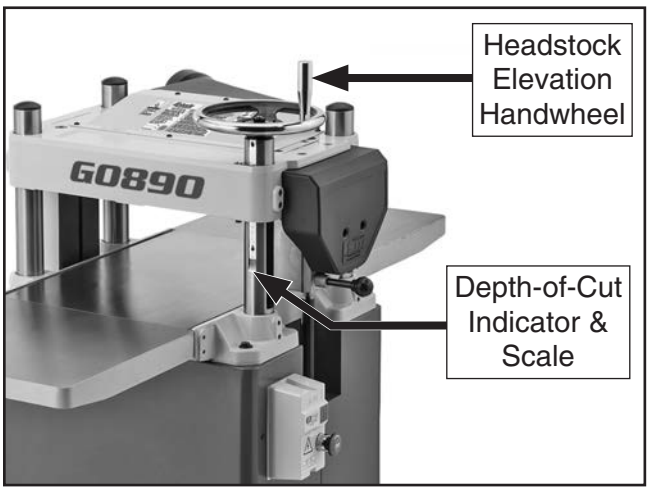



**Figure 17.** Location of depth-of-cut control.

# Setting Feed Rate

High Feed Rate .....28 FPM
Low Feed Rate .....16 FPM

The infeed and outfeed rollers move the workpiece through the planer while keeping it flat and providing a consistent rate of movement. The speed that these rollers move the workpiece through the planer is the feed rate.

Generally, low feed rates are used for finishing passes, while higher feed rates are used for dimensioning passes.

The figure below illustrates the three different positions of the feed rate control knob:

- Push knob in to use high feed rate.
- Pull the knob out to use the low feed rate.
- Move knob to center position to place gearbox in neutral.

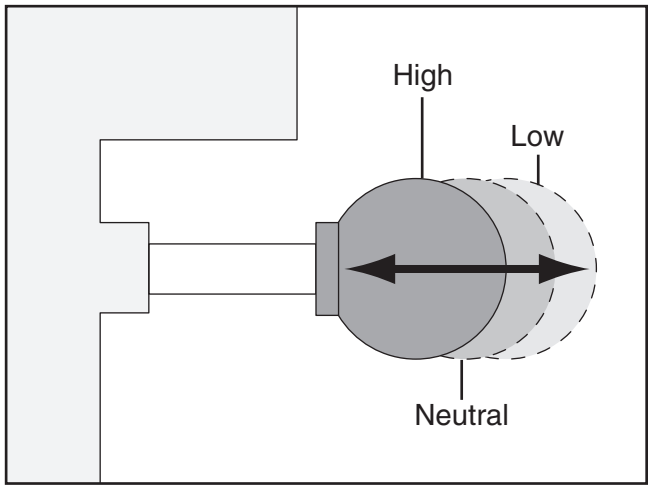
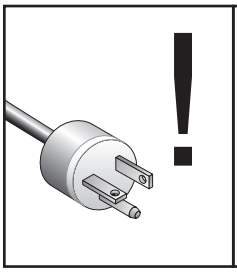



**Figure 18.** Feed rate control knob positions.

## *NOTICE*

**Only change the feed rate when the planer is running, but DO NOT attempt to change the feed rate during any cutting operations or damage to the gearbox will result.**

# Adjusting/Replacing Knives (G0890)



## ⚠WARNING

**To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.**

## ⚠CAUTION

**Cutterhead knives are extremely sharp. Accidental contact with knives can result in severe cuts. Take great caution whenever working with or around cutterhead knives. Wear heavy leather gloves to reduce risk of severe cuts.**

## *NOTICE*

**To maintain accurate and consistent planing results, we do not recommend sharpening knives yourself. Instead, just replace dull knives or have them professionally sharpened.**

Setting the height of the knives correctly is crucial to the proper operation of your planer and is very important in keeping the knives sharp. If one knife protrudes higher than the others, it will do the majority of the work, dull much faster, and produce poor cutting results.

The knife-setting jig included with this planer is designed to set the knives at a uniform distance of 0.060" above the cutterhead surface.

**Note:** *If you need to replace or sharpen a knife, you can remove the knife from the cutterhead during* ***Step 4*** *of the following procedure. Thoroughly clean out any debris from the knife slots before replacing the knives.*

*Replacement knives are available through Grizzly (refer to* ***Accessories*** *for options).*

| Items Needed | Qty |
|---|---|
| Hex Wrench 4mm | 1 |
| Wrench or Socket 12mm | 1 |
| Knife-Setting Jig | 1 |
| Heavy Leather Gloves | 1 Pair |

**To adjust height of knives:**

**1.** DISCONNECT MACHINE FROM POWER!

**2.** Remove dust hood and top cover to expose cutterhead.

**3.** Put on heavy leather gloves.

**4.** Remove belt cover, then rotate cutterhead pulley to provide access to one of the knives.

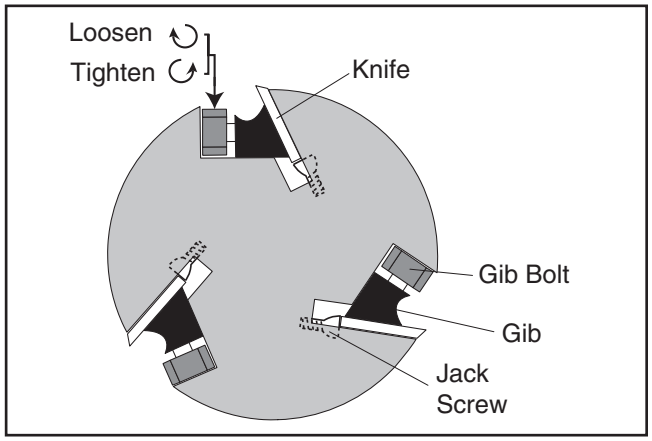



**Figure 19.** G0890 cutterhead components.

**5.** Loosen cutterhead gib bolts until knife is completely loose.

— If you are replacing the knives, remove the old knife and install the new one, making sure the beveled edge of the new knife is facing the correct direction.

6. Position knife-setting jig over knife so that knife edge is directly under center pad, as shown below.

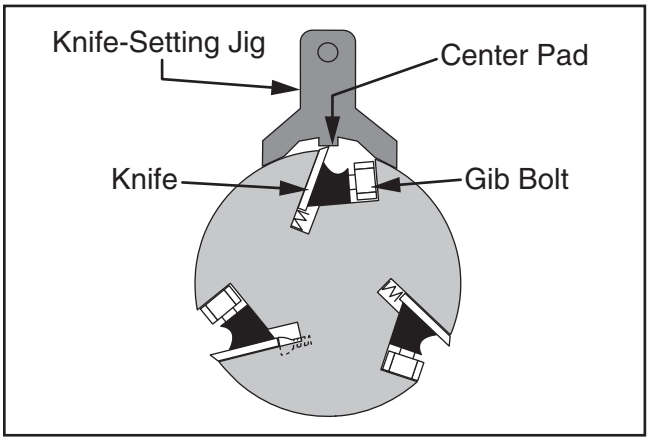



**Figure 20.** Knife-setting jig correctly positioned over knife.

**7.** Insert hex wrench into access holes in cutterhead (see **Figure 21**) and rotate jack screws to raise or lower knife until it barely touches center pad of knife-setting jig with all legs of jig still firmly on cutterhead. Then snug gib bolts enough to hold knife in place without fully tightening gib bolts (see **Figure 22**).

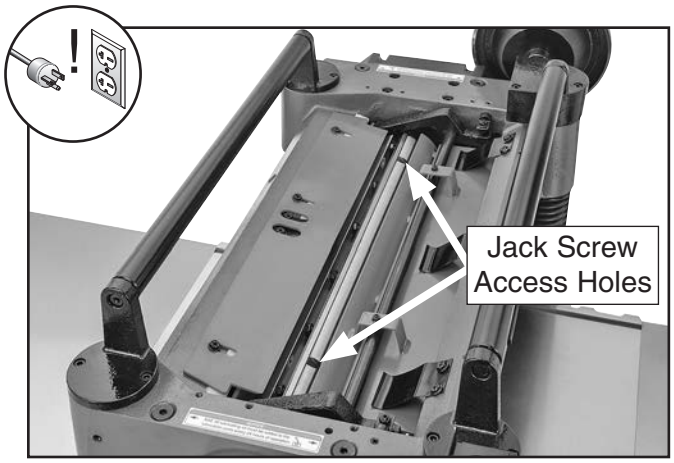



**Figure 21.** Example of jack screw access holes in cutterhead.

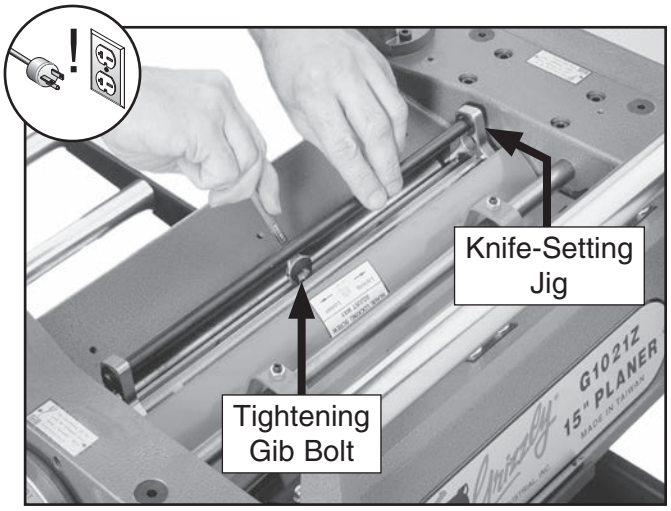



**Figure 22.** Example of using knife-setting jig to set knife height on Model G0890.

**8.** Incrementally snug gib bolts in an even manner, starting at middle and working your way to ends by alternating left and right, as illustrated.

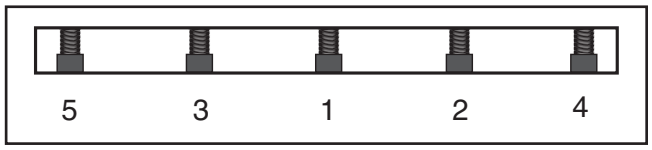



**Figure 23.** Gib bolt tightening sequence.

**9.** Repeat **Step 8**, snugging gib bolts a little more.

**10.** Repeat **Step 8**, this time fully tightening all gib bolts.

**11.** Repeat **Steps 4–8** for remaining knives.

# Rotating/Replacing Cutterhead Inserts (G0891)

The helical cutterhead is equipped with indexable carbide inserts that can be rotated to reveal any one of their four cutting edges. If one edge of the insert becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge, as shown in **Figure 24**.

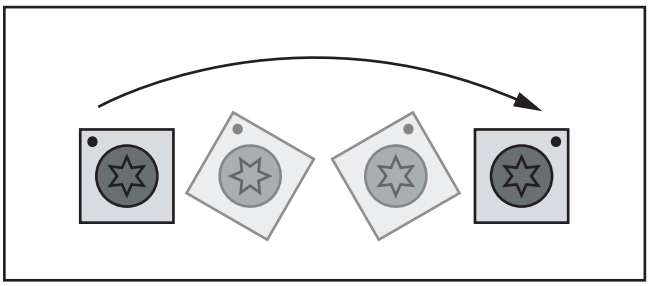


**Figure 24.** Insert rotating sequence.

| **Items Needed** | **Qty** |
|---|---|
| Hex Wrench 4mm | 1 |
| Torque Wrench | 1 |
| T-20 Torx Bit | 1 |
| Heavy Leather Gloves | 1 Pair |
| Light Machine Oil | As Needed |

**To rotate or replace a helical cutterhead insert:**

**1.** DISCONNECT MACHINE FROM POWER!

**2.** Remove top cover and belt cover.

**3.** Put on heavy leather gloves to protect your fingers and hands.

**⚠CAUTION**

**The carbide inserts are very sharp and can quickly cut your hands. ALWAYS use caution and heavy leather gloves when handling these parts to reduce the risk of personal injury.**

4. Remove any sawdust or debris from head of insert, Torx screw, and surrounding area (see **Figure 25**).

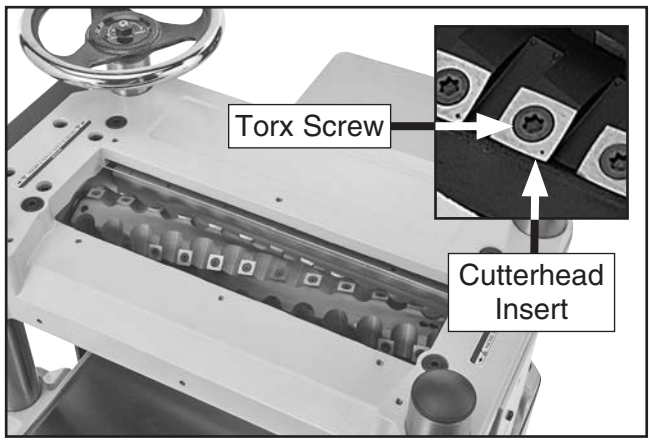



**Figure 25.** G0891 cutterhead inserts and Torx screws.

5. Remove Torx screw and insert, then clean all dust and debris from both parts and pocket they were removed from.

   **Note:** *Proper cleaning of insert, Torx screw, and cutterhead pocket is critical to achieving a smooth finish. Dirt or dust trapped between insert and cutterhead will raise insert, and make marks on your workpiece when planing.*

   **Tip:** *Use low-pressure compressed air or a vacuum nozzle to clean out cutterhead pocket.*

6. Rotate insert 90° and install so that a fresh cutting edge faces outward (see **Figure 24**).

   — When all four insert cutting edges have been used, replace insert with a new one. Always position insert reference dot in same position when installing a new insert to aid in rotational sequencing.

7. Lubricate Torx screw threads with a very small amount of light machine oil, wipe excess off, and torque screw to 50–55 inch/pounds.

   **Note:** *If too much oil is applied to the threads, excess oil will attempt to squeeze out of the threaded hole and raise insert during installation, bringing it out of height alignment.*

# SECTION 5: ACCESSORIES

**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 for this machine by Grizzly.**

***NOTICE***

**Refer to our website or latest catalog for additional recommended accessories.**

**For G0890:**

**G6701—HSS Replacement Knives, Set of 3**

These HSS planer knives are hardened and tempered to 62–64 Rockwell and balanced to within 1 gram.

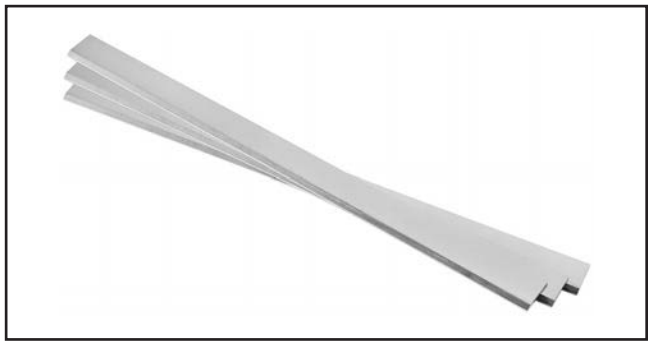


**Figure 26.** Grizzly planer blades.

**For G0891:**

**H9893—Indexable Carbide Inserts, 10 Pack**

These inserts are designed for use in spiral cutterhead systems and made to last up to 10 times longer than a set of HSS steel inserts.

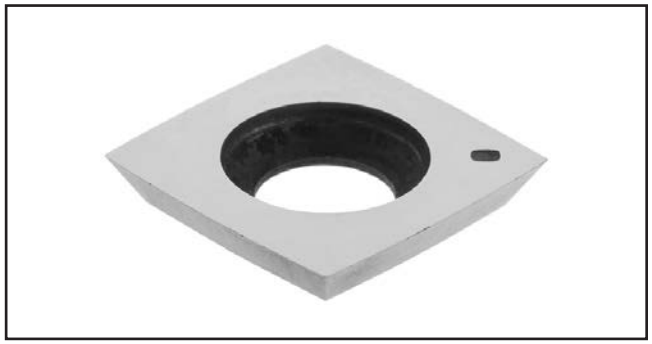


**Figure 27.** H9893 Indexable Carbide Inserts.

**T28000—"Bear Crawl" Mobile Base**

We took years of input and months of testing and design to come out with the Grizzly "Bear Crawl" Mobile Base. Its 1200 lb. capacity, steel and rubber heavy-duty ball bearing wheels, and toe flip-stops are only a few of the features that will make this mobile base a staple under your machines for years to come. Adjusts from 19" x 21" to 29-1/2" x 29-1/2"!

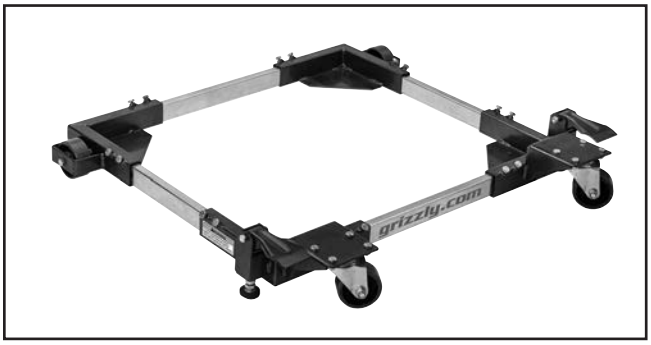
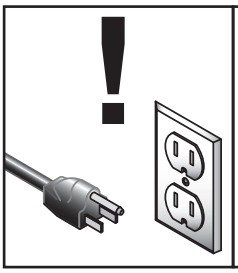



**Figure 28.** T28000 Bear Crawl Mobile Base.

**G5562—SLIPIT® 1 Qt. Gel**
**G5563—SLIPIT® 12 Oz. Spray**
**G2871—Boeshield® T-9 12 Oz. Spray**
**G2870—Boeshield® T-9 4 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 parts on machinery.

# SECTION 6: MAINTENANCE



**⚠WARNING**

**To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.**

## Schedule

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

**Note:** *This maintenance schedule is based on average daily usage. Adjust the maintenance schedule to match your usage, to keep your planer running smoothly, and to protect your investment.*

**Every 8 Hours of Operation:**
- Clean machine and protect unpainted cast-iron surfaces.
- Lubricate feed roller bushings (**Page 33**).
- Tighten loose mounting bolts.
- Check/sharpen/replace damaged or worn knives/inserts (**Page 27**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

**Every 40 Hours of Operation:**
- Clean cutterhead and, for G0890, check knife gib bolt tightness (**Page 27**).
- Lubricate table columns and leadscrews (**Page 33**).

**Every 160 Hours of Operation:**
- Check/tension/replace V-belt (**Page 38**).
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Lubricate headstock height chain and sprockets (**Page 33**).
- Lubricate drive chain and sprockets (**Page 34**).

**Yearly:**
- Change gearbox oil (**Page 34**).

## Cleaning & Protecting

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.

Protect the unpainted cast-iron table by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the table rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 31** for more details).

## Lubrication

***NOTICE***

**Failure to follow reasonable lubrication practices as instructed in this manual for your machine could lead to premature failure of components and void the warranty.**

This planer features bearings that are lubricated and sealed at the factory. These bearing do not require any further attention unless they need to be replaced. If a bearing fails, your planer will probably develop a noticeable rumble or vibration, which will increase when the machine is under a load. The bearings are standard sizes and can be replaced through Grizzly.

Follow the maintenance schedule on this page and the procedures beginning on **Page 33** to properly lubricate the other planer components, which are essential for long life and trouble-free operation of your planer.

## Feed Roller Bushings

Oil Type ..... SB1365 or ISO-68 Equivalent
Oil Amount..... 2–3 Drops
Frequency..... Every 8 Hours of Operation

The infeed and outfeed rollers rotate inside bushing blocks on both ends of the rollers. Add 2–3 drops of ISO 68 machine oil to the center hole of the four feed roller tension adjustment bolts on top of the headstock, as shown in **Figure 30**.

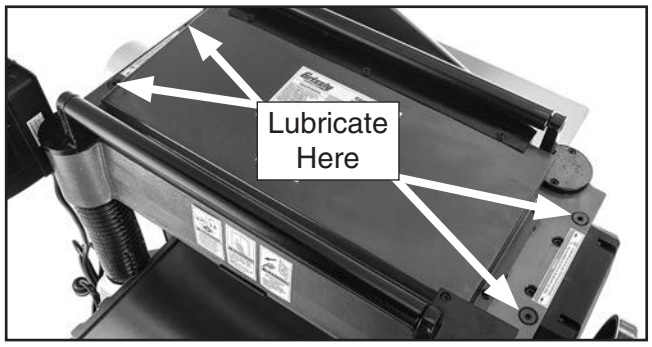



**Figure 30.** Example of lubrication locations for feed roller bushings.

## Columns & Leadscrews

Oil Type ..... SB1365 or ISO-68 Equivalent
Oil Amount..... Thin Coat
Grease Type..... NLGI#2 Equivalent
Frequency..... Every 40 Hours of Operation

The headstock rides on the columns and is moved by the rotation of the leadscrews inside the columns. Loosen the dust sleeve (see **Figure 31**) to access the columns and leadscrews. Apply a thin coat of ISO 68 machine oil to the outside surface of the columns and brush on a light application of multi-purpose grease to the leadscrew threads. Move the headstock up and down to distribute the lubricant.

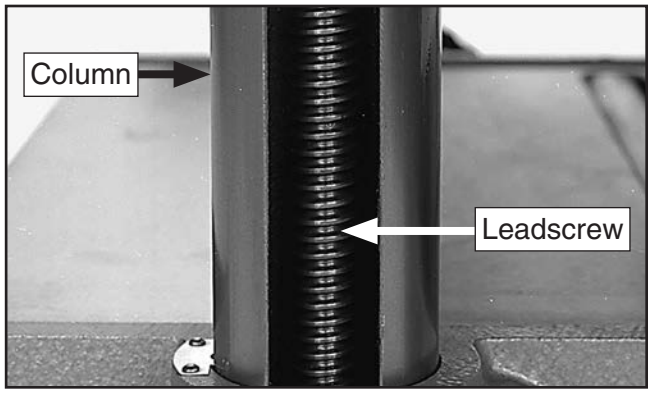



**Figure 31.** Location of column and leadscrew.

## Headstock Height Chain & Sprockets

Grease Type..... NLGI#2 Equivalent
Frequency..... Every 160 Hours of Operation

The headstock leadscrews are synchronized by the headstock height chain and sprockets located underneath the planer base (see **Figure 32**). Use shop rags and mineral spirits to clean away debris and grime, then brush a light coat of multi-purpose grease onto the chain and sprockets.

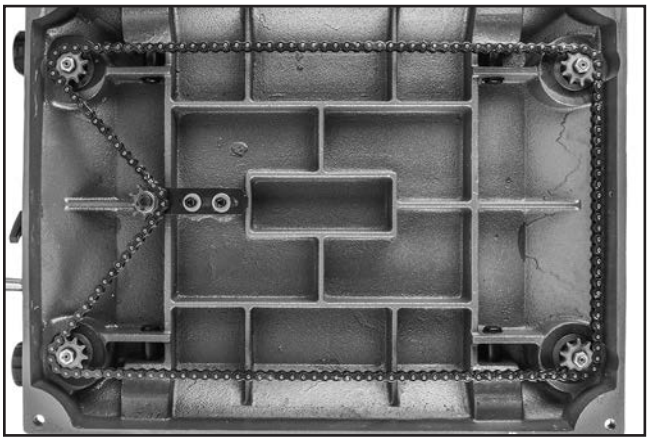


**Figure 32.** Example of headstock height chain and sprockets (viewed from underneath the base).

## Drive Chain & Sprockets

Grease Type..... T26419 Synthetic Grease
Frequency..... Every 160 Hours of Operation

The infeed and outfeed rollers receive the transferred power from the cutterhead through the drive chain system on the right side of the machine, as shown in **Figure 33**. Remove the gearbox cover to access these parts.

Use shop rags and mineral spirits to clean away any debris and grime, then brush a light coat of multi-purpose grease on the chain and sprockets.

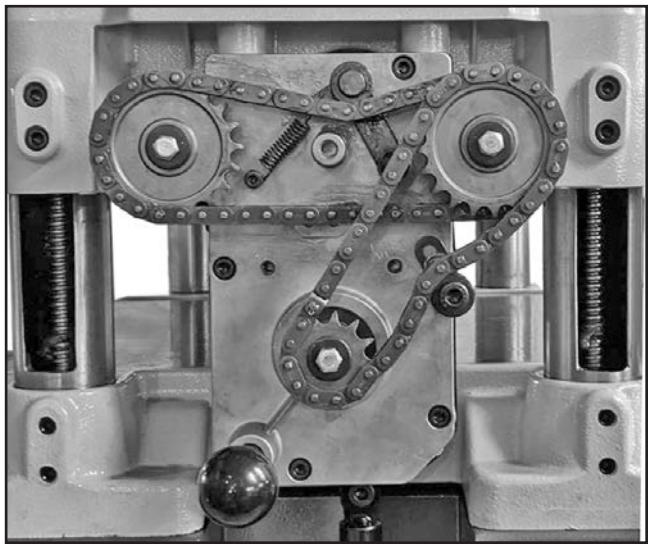


**Figure 33.** Drive chains and sprockets for infeed and outfeed rollers.

## Gearbox Oil

Oil Type ..... T28042 or ISO-320 Equivalent
Oil Amount.....20 Oz.
Frequency..... After First 20 Hours, Then Yearly

**Note:** *We recommend that you replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure and will help maximize the service life of the machine by flushing away any particles from the break-in and manufacturing process.*

Although it is not necessary to remove the gearbox cover to access the fill and drain plugs, it is more convenient to do so (see **Figures 34–35**). Replace the gearbox oil with ISO 320 or equivalent oil until it just reaches the fill plug.

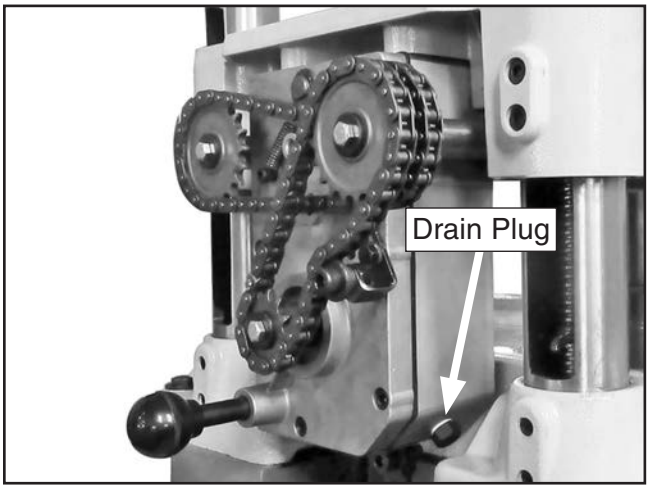



**Figure 34.** Location of gearbox drain plug.

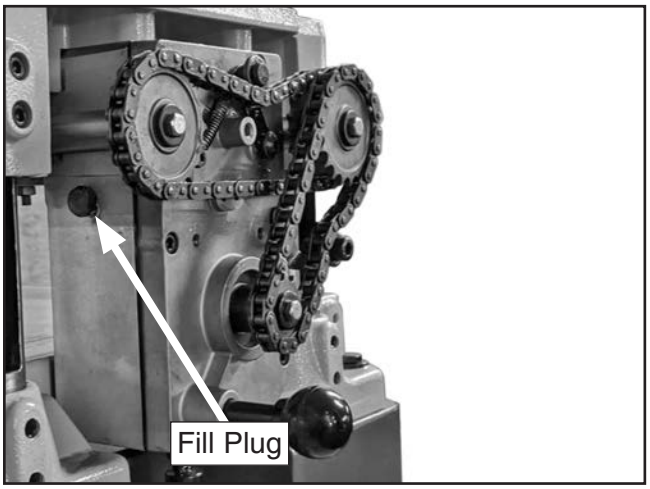
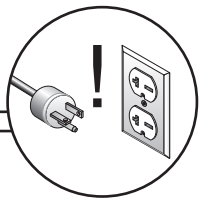



**Figure 35.** Example of gearbox fill plug.

# SECTION 7: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

## Troubleshooting



### Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Machine does not start, or power-supply fuse/breaker trips immediately after startup. | 1. Stop button depressed/at fault.<br>2. Incorrect power supply voltage or circuit size.<br>3. Thermal overload relay has tripped.<br>4. Power supply circuit breaker tripped or fuse blown.<br>5. Motor wires connected incorrectly.<br>6. Wiring open/has high resistance.<br>7. Start button switch at fault.<br>8. Centrifugal switch/contact points at fault.<br>9. Start capacitor at fault.<br>10. Thermal overload relay has tripped.<br>11. Contactor not energized; has poor contacts.<br>12. Motor at fault. | 1. Rotate button head to reset; replace if at fault.<br>2. Ensure correct power supply voltage and circuit size.<br>3. Reset; adjust trip load dial if necessary; replace.<br>4. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse.<br>5. Correct motor wiring connections.<br>6. Check/fix broken, disconnected, or corroded wires.<br>7. Replace switch.<br>8. Adjust/replace centrifugal switch/contact points if available.<br>9. Test/replace if at fault.<br>10. Reset; adjust trip load dial if necessary; replace.<br>11. Test all legs for power/replace.<br>12. Test/repair/replace. |
| Machine stalls or is underpowered. | 1. Machine undersized for task.<br>2. Workpiece not suitable for machine.<br>3. Motor overheated, causing thermal overload to trip.<br>4. Belt slipping; oil/grease on belt(s).<br>5. Dull knives/inserts.<br>6. Dust-collection problem causing internal components to clog up with shavings.<br>7. Motor wired incorrectly.<br>8. Centrifugal switch/contact points at fault.<br>9. Run capacitor at fault.<br>10. Pulley slipping on shaft.<br>11. Contactor not energized/has poor contacts.<br>12. Motor bearings at fault. | 1. Reduce feed rate/depth of cut.<br>2. Only cut wood/ensure moisture is below 20%.<br>3. Allow motor to cool, reset overload if necessary, and reduce depth of cut.<br>4. Clean/tension/replace belt (**Page 38**).<br>5. Sharpen/replace knives (**Page 27**), or replace inserts (**Page 29**).<br>6. Clear blockages in dust chute/ducting, ensure dust collector is operating efficiently.<br>7. Wire motor correctly.<br>8. Adjust/replace centrifugal switch/contact points if available.<br>9. Test/repair/replace.<br>10. Tighten loose pulley; replace pulley/shaft if damaged.<br>11. Test all legs for power/replace.<br>12. Test/repair/replace. |

## Motor & Electrical (Cont.)

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Machine has vibration or noisy operation. | 1. Motor or component loose.<br>2. V-belt worn,loose, or slapping cover.<br>3. Pulley loose.<br>4. Plastic chip deflector hitting knives.<br>5. Motor fan rubbing on fan cover.<br>6. Knives/gibs at fault.<br>7. Cutterhead bearings at fault.<br>8. Motor bearings at fault. | 1. Inspect/tighten loose bolts/nuts; replace damaged components.<br>2. Tension/replace belt (**Page 38**).<br>3. Re-align/replace shaft, pulley set screw, and key.<br>4. Adjust chip deflector (**Page 42**); replace if necessary.<br>5. Fix/replace fan cover; replace loose/damaged fan.<br>6. Sharpen/replace knives; set knife alignment/height correctly (**Page 27**).<br>7. Replace bearing(s).<br>8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. |

## Machine Operation

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Excessive snipe (gouge in end of board that is uneven with rest of cut).<br><br>Note: A small amount of snipe is inevitable with all types of planers. The key is minimizing it as much as possible. | 1. Outfeed extension slopes down or is not level with main table.<br>2. Workpiece is not supported as it leaves planer.<br>3. Some snipe is inevitable. | 1. Shim outfeed extension wing level with main table.<br>2. Hold workpiece up slightly as it leaves outfeed end of planer.<br>3. Plane lumber longer than your intended workpiece length, then cut off excess after planing complete. |
| Workpiece stops/ slows in middle of cut. | 1. Taking too heavy of a cut.<br>2. Feed rollers set too low or too high.<br>3. Pitch and glue buildup on planer components. | 1. Take a lighter cut.<br>2. Adjust feed rollers (**Page 39**).<br>3. Clean internal cutterhead components with a pitch/ resin-dissolving solvent. |
| Chipping (consistent pattern). | 1. Knots or conflicting grain direction in wood.<br>2. Taking too deep of a cut.<br>3. Feeding workpiece too fast.<br>4. Nicked or chipped knife/insert. | 1. Inspect workpiece for knots and grain direction; only use clean stock, and cut WITH the grain.<br>2. Take a smaller depth of cut. (Reduce cutting depth when planing hard woods.)<br>3. Slow down feed rate.<br>4. Replace affected knife (**Page 27**) or have it sharpened; rotate/replace insert (**Page 29**). |
| Chipping/indentation in workpiece surface (inconsistent pattern). | 1. Chips aren't being properly expelled from cutterhead. | 1. Use a proper dust-collection system. |

## Machine Operation (Cont.)

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Fuzzy grain. | 1. Wood may have high moisture content or surface wetness.<br>2. Dull knives/inserts. | 1. Check moisture content is below 20% and allow to dry if moisture is too high.<br>2. Replace knives (**Page 27**) or have them professionally sharpened; rotate/replace inserts (**Page 29**). |
| Long lines or ridges that run along length of board. | 1. Nicked or chipped knife/inserts. | 1. Replace knives (**Page 27**) or have them professionally sharpened; rotate/replace inserts (**Page 29**). |
| Uneven cutting` marks, wavy surface, or chatter marks across face of board. | 1. Feeding workpiece too fast.<br>2. Knives not installed evenly/inserts not properly installed.<br>3. Worn cutterhead bearings. | 1. Slow down feed rate.<br>2. Adjust knives with knife gauge (**Page 27**); remove inserts, properly clean mounting pocket and re-install (**Page 29**).<br>3. Replace cutterhead bearings. |
| Glossy surface. | 1. Knives/inserts are dull.<br>2. Feeding workpiece too slow.<br>3. Cutting depth too shallow. | 1. Replace knives (**Page 27**) or have them professionally sharpened; rotate/replace inserts (**Page 29**).<br>2. Increase feed rate.<br>3. Increase depth of cut. |
| If workpiece twists in machine. | 1. Feed rollers not parallel with table. | 1. Adjust feed rollers (**Page 39**). |

# Tensioning/ Replacing V-Belt

## NOTICE

**After approximately 16 hours of operation, V-belt will stretch and seat into pulley grooves and need to be properly tensioned to avoid severely reducing life of V-belt.**

A V-belt transfers power from the motor to the cutterhead, and then to the infeed and outfeed rollers with the use of the drive chain system. To ensure efficient transfer of power to these systems, make sure the V-belt is always properly tensioned and in good condition. If the V-belt is worn, cracked, or damaged, replace it.

## ⚠CAUTION

**V-belt and pulleys will be hot after operation. Allow them to cool before handling.**

| Items Needed | Qty |
|---|---|
| Hex Wrench 4mm | 1 |
| Hex Wrench 6mm | 1 |

**To tension/replace V-belt:**

1. DISCONNECT MACHINE FROM POWER!

2. Remove side panel and belt cover from left side of machine to expose belt and pulleys, as shown in **Figure 36**.

   **Note:** *A collection of black belt dust at the bottom of the belt cover is normal during the life of the belt.*

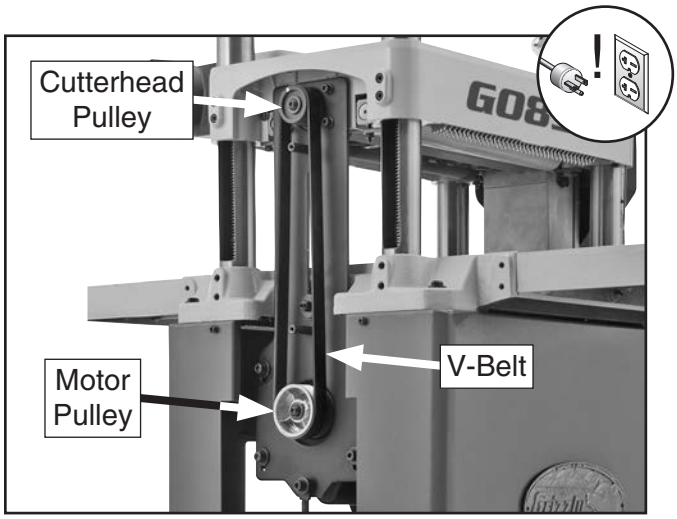



**Figure 36.** Belt cover and side panel removed to expose V-belt and pulleys.

3. If V-belt needs to be replaced, raise motor to release belt tension (see next step for instructions), roll belt off pulleys, then install new belt.

4. To adjust V-belt tension, loosen (4) motor mount cap screws (see **Figure 37**), then raise or lower motor.

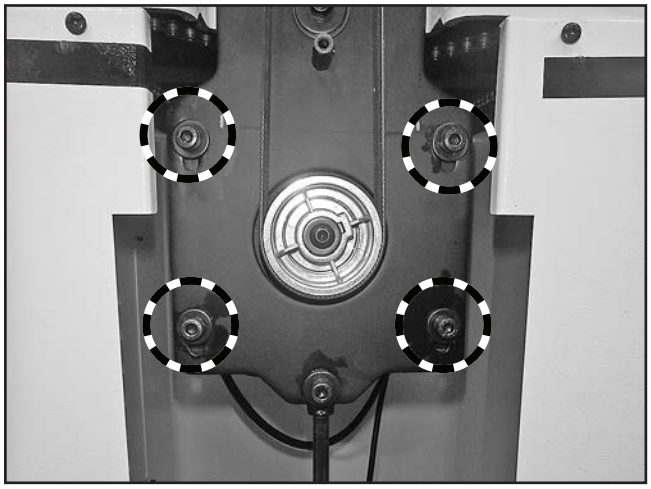


**Figure 37.** Location of motor mount cap screws.

**Note:** *V-belt is correctly tensioned when there is approximately ½" deflection when moderate pressure is applied to them midway between pulleys, as illustrated in* ***Figure 38****.*

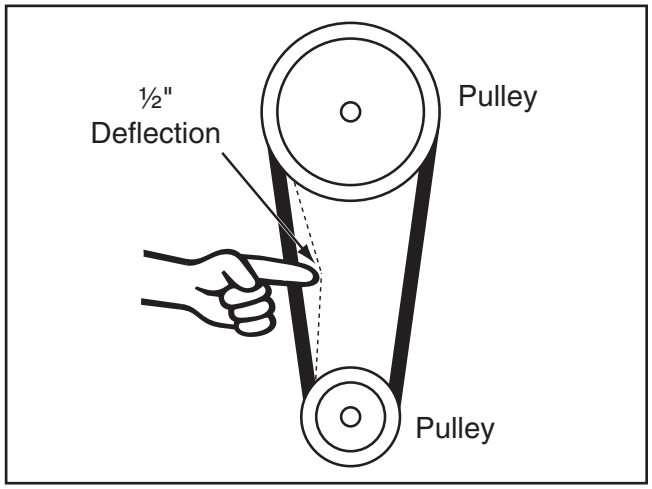



**Figure 38.** Belt deflection when V-belt is correctly tensioned.

**5.** After V-belt is correctly tensioned, tighten motor mount cap screws, then re-install side panel and belt cover.

# Adjusting Feed Roller Heights

It is essential that the feed rollers are set at the correct distance below the cutterhead knives at BDC (bottom dead center) to ensure that the workpiece moves through the planer evenly and the correct distance from the cutterhead knives.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator for these adjustments (refer to **Accessories**).

If a Rotacator is not available, a 6' 2x4 cut into two even sized pieces and a feeler gauge set can be used, but care must be taken when jointing the wood to achieve accurate results.

**Note:** *The chip breaker is spring mounted, which allows it to adjust automatically to the workpiece. No adjustment is necessary.*

**Dist. Below Knife/Insert at BDC (Figure 39)**
**A.** Infeed Roller ..... 0.040"
**B.** Outfeed Roller ..... 0.020"

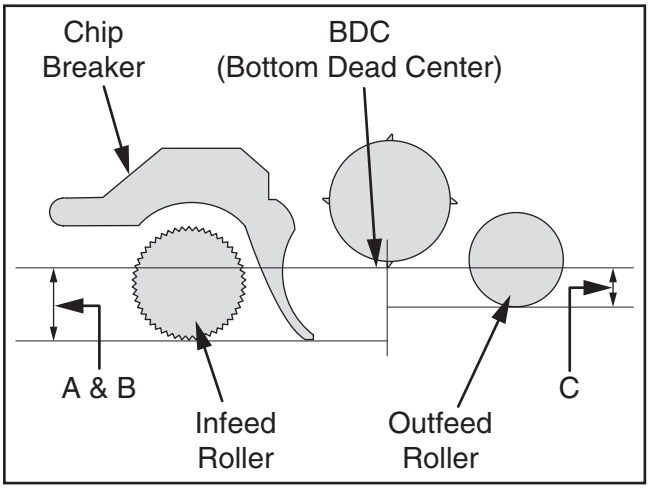



**Figure 39.** Planer component recommended clearances (illustration is not to scale).

## Using a Rotacator

| Items Needed | Qty |
|---|---|
| Hex Wrenches 3mm, 4mm | 1 Ea. |
| Wrench or Socket 10mm | 1 Ea. |
| Rotacator | 1 |

**To use a Rotacator:**

1. DISCONNECT MACHINE FROM POWER!

2. Make sure knives are set to correct height (refer to **Adjusting/Replacing Knives** on **Page 27** for detailed instructions). If machine is helical cutterhead, make sure all inserts are properly installed (refer to **Rotating/ Replacing Cutterhead Inserts** on **Page 29** for detailed instructions).

3. Raise headstock at least 4" above table.

4. Remove top cover, belt cover, and gearbox cover.

5. Using your Rotacator, find bottom dead center (BDC) of any knife/insert edge by slowly rocking cutterhead pulley back and forth, then set Rotacator dial to "0" (see **Figure 40**).

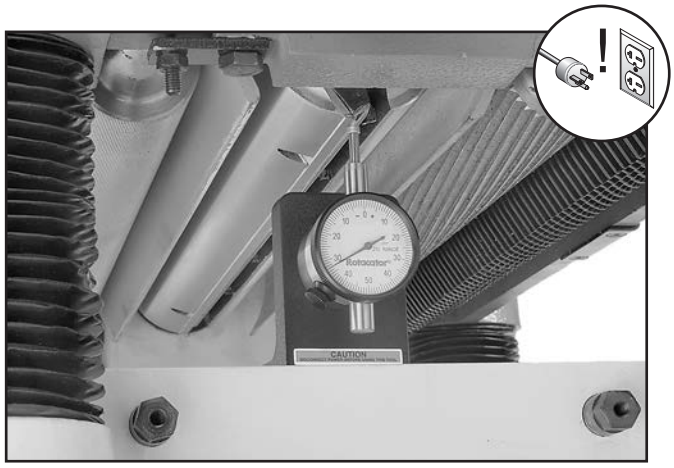


**Figure 40.** Example of using a Rotacator to find BDC.

6. Move feed speed knob to neutral position to allow infeed roller to freely rotate.

7. Keeping Rotacator dial at "0", position it under right-hand side of infeed roller and find BDC of a serrated edge by rocking infeed roller back and forth.

8. Loosen jam nuts and use set screws on each side of feed roller as shown to adjust height of infeed roller bushing block until Rotacator dial shows 0.040", which is the recommended distance for infeed roller below cutterhead.

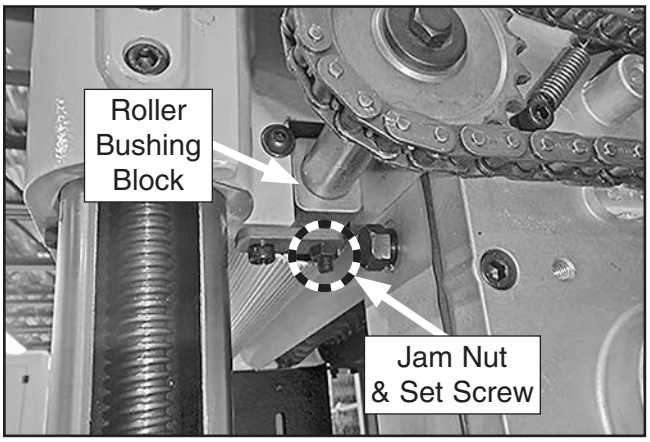



**Figure 41.** Example of infeed roller bushing block and height adjustment controls.

9. Repeat **Steps 7–8** on left side of infeed roller.

10. Re-check both sides of infeed roller and, if necessary, make further adjustments until infeed roller height from side-to-side is 0.040" below BDC of cutterhead knife, then retighten both jam nuts.

11. Keeping same "0" reference on Rotacator dial from **Step 5**, repeat **Steps 7–10** for outfeed roller, but adjust it until it is 0.020" below BDC of cutterhead knife.

12. Re-install belt cover, top cover, and gearbox cover.

## Using Wood Blocks

| Items Needed | Qty |
|---|---|
| Hex Wrench 3mm, 4mm | 1 |
| Wrench or Socket 10mm | 1 |
| 2x4 6' Long | 1 |
| Feeler Gauge Set | 1 |

**To use wood blocks:**

1. Build wood blocks by cutting a *straight* 6-foot-long 2x4 in half.

   **Note:** *Having the wood blocks at an even height is critical to the accuracy of your overall adjustments. For best results, make the 2x4 square with a jointer and table saw before cutting it in half.*

2. **G0890 Only:** Make sure knives are set to correct height (refer to **Adjusting/Replacing Knives** on **Page 27** for detailed instructions).

3. DISCONNECT MACHINE FROM POWER!

4. Place wood blocks along sides of table, as illustrated in **Figure 42**.

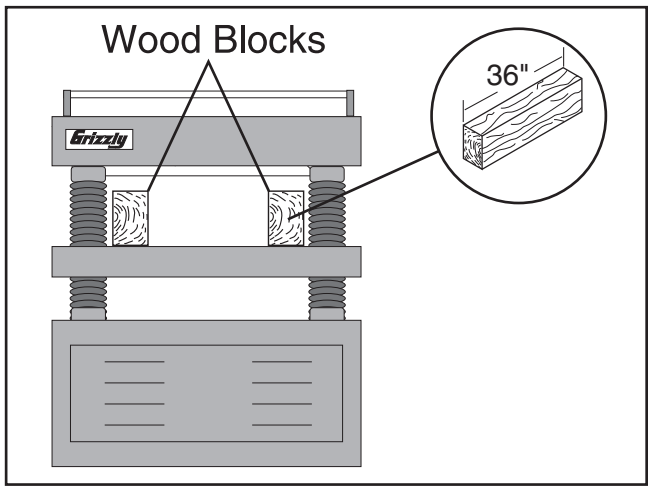



**Figure 42.** Wood blocks properly positioned on the planer table.

5. Remove top cover, belt cover, and gearbox cover.

6. Lower headstock until wood blocks get close to cutterhead.

7. Use belt to rotate cutterhead and continue lowering headstock until blocks just barely touch cutterhead knife/insert at its lowest point of rotation (BDC).

8. Upward pressure of wood blocks will be holding infeed and outfeed rollers at same level as knife/insert at BDC.

9. Loosen jam nuts and set screws on each side of infeed roller (see **Figure 43**).

10. Using a feeler gauge, adjust set screw so it is 0.040" from roller bushing block (see **Figure 43**), then tighten jam nut. Repeat on other side of infeed roller.

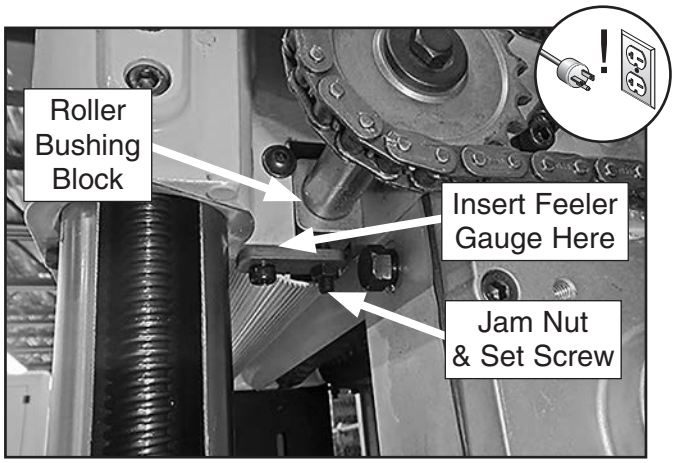



**Figure 43.** Example of feeler gauge location for adjusting infeed roller height when using wood blocks (one of two locations shown).

11. Repeat **Steps 10–11** with outfeed roller, only adjust the gaps to 0.020".

12. Re-install belt cover, top cover, and gearbox cover.

# Adjusting Roller Spring Tension

The infeed and outfeed rollers keep the workpiece moving through the planer. Springs exert downward pressure on the feed rollers while allowing them to raise with an uneven workpiece surface. Proper spring tension is crucial to keep the workpiece moving through the planer during operation.

The ideal feed-roller spring tension varies depending upon the type of wood you plane. When adjusting spring tension, keep the following in mind:

- If you are planing milled lumber with a consistent surface, use less spring tension to reduce the risk of marring the workpiece.
- If you are planing rough lumber with inconsistent surfaces, use greater spring tension to keep the stock moving through the planer.
- If the workpiece consistently stops feeding during operation, the spring tension may need to be increased.

**Items Needed** **Qty**
Hex Wrench 6mm..... 1

**To adjust feed-roller spring tension:**

1. DISCONNECT MACHINE FROM POWER!
2. Rotate tension screws (shown below) clockwise to increase tension or counterclockwise to decrease tension.

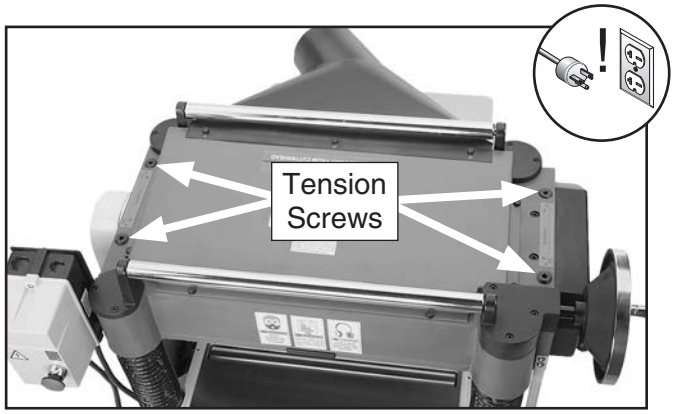



**Figure 44.** Example of roller spring tension adjustment screws.

# Positioning Chip Deflector

**Chip Deflector Gap Setting** ..... 1/16"–1/8"

When properly distanced from the cutterhead, the chip deflector directs the chips into the dust hood, and keeps them from falling onto the outfeed roller and being pressed into the workpiece.

**Items Needed:** **Qty**
Wrench or Socket 10mm..... 1

**To adjust chip deflector gap:**

1. DISCONNECT MACHINE FROM POWER!
2. Remove dust hood, top cover, and belt cover.
3. Use cutterhead pulley to rotate cutterhead until a knife/insert reaches closest distance to chip deflector (see **Figure** below), then measure distance between knife/insert and chip deflector.

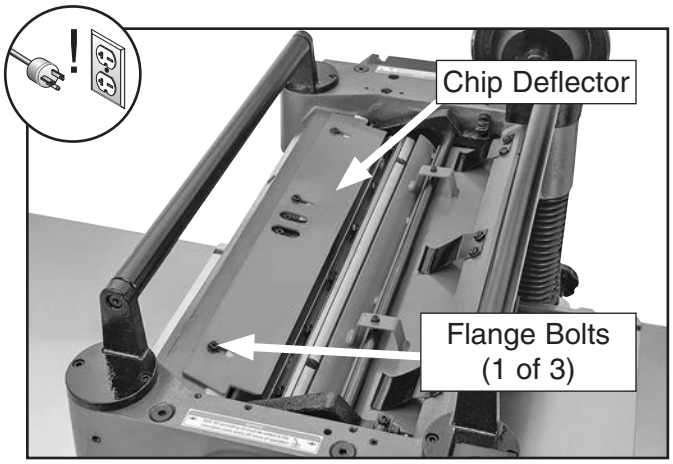



**Figure 45.** Example of chip deflector and mounting hardware.

4. If distance measured in **Step 3** is *not* equal to correct chip deflector gap setting, then loosen flange bolts (see **Figure 45**) that secure chip deflector and adjust gap to correct setting.
5. Re-tighten flange bolts, then replace belt cover, top cover, and dust port.

# Calibrating Headstock Elevation Scale

Although correctly set at the factory, the headstock elevation scale can be adjusted for accuracy if necessary.

| Items Needed | Qty |
|---|---|
| Phillips Screwdriver #2 | 1 |
| Scrap Piece of Stock | 1 |
| Calipers | 1 |

**To calibrate headstock elevation scale:**

1. Plane a scrap piece of stock until it is flat and of even thickness along its length.

   **Note:** *Turn board over between each pass.*

2. Use calipers to measure board thickness.

3. If there is a discrepancy between board thickness and reading on headstock elevation scale, loosen the screw shown in **Figure 46**, adjust scale as necessary, then re-tighten screw.

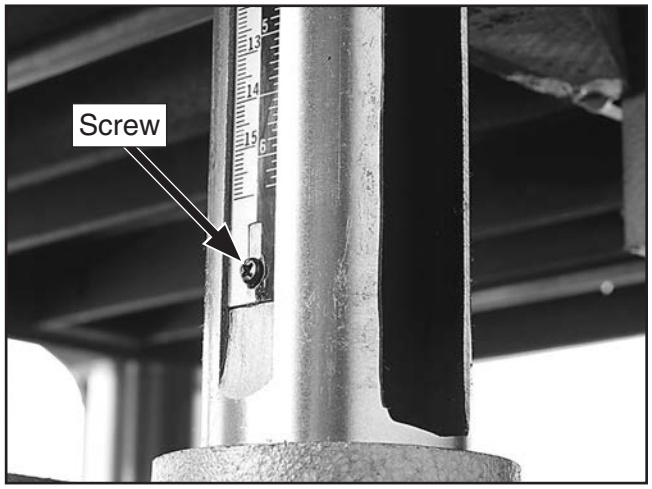



**Figure 46.** Location of adjustment screw for table elevation scale.

# Checking Anti-Kickback Fingers

The anti-kickback fingers are an important safety feature of your planer. The fingers hang from a rod suspended across the head casting and in front of the infeed roller, as shown. This design allows the workpiece to easily enter the planer but reduces the risk of kickback by digging into the workpiece if it moves backward.

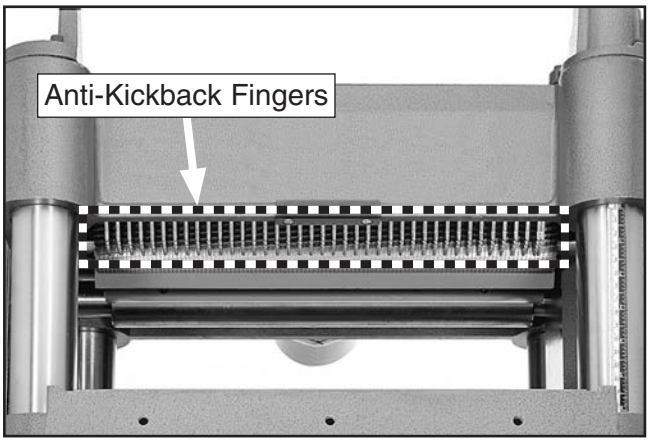



**Figure 47.** Anti-kickback fingers.

Check the anti-kickback fingers regularly to ensure they swing freely and easily. If the fingers do not swing freely and easily, first clean them with a wood-resin solvent, then inspect them for damage. If any of the fingers are damaged, the device must be replaced before using the machine.

Do not apply oil or other lubricants to the anti-kickback fingers that will attract dust and restrict free movement of the fingers.

**⚠WARNING**

**Proper operation of anti-kickback fingers is critical for safe operation of this planer. DO NOT operate planer if anti-kickback fingers are not operating correctly. Failure to heed this warning could result in serious personal injury.**

# Tensioning Headstock Height Chain

The headstock height chain transfers movement from the elevation handwheel to the columns that control headstock height. The chain drive can be adjusted to remove slack if the chain stretches over time or is loosened during headstock leveling procedures.

| Items Needed | Qty |
|---|---|
| Hex Wrench 5mm | 1 |
| Wrench or Socket 12mm | 1 |

**To adjust headstock height chain tension:**

1. DISCONNECT MACHINE FROM POWER!

2. Remove motor access panel to access headstock height chain (see **Figure 48**).

3. Loosen the two chain tension lock bolts, then push idler sprocket against chain with moderate pressure to eliminate slack in chain. While maintaining pressure on idler sprocket, re-tighten lock bolts (see **Figure 48**).

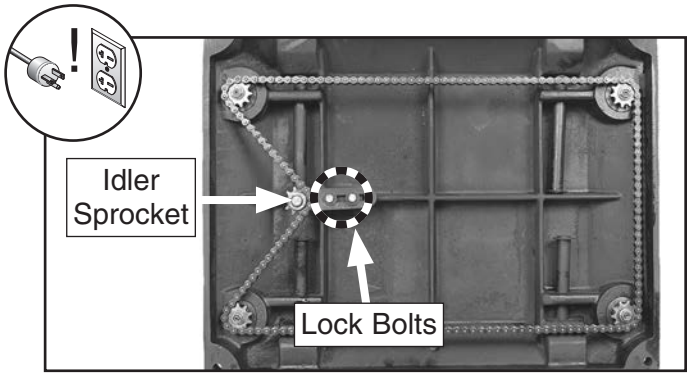



**Figure 48.** Headstock height chain adjustment.

4. Clean and lubricate chain and sprockets (refer to **Headstock Height Chain & Sprockets** on **Page 33** for detailed instructions), then re-install motor access panel.

## *NOTICE*

**DO NOT let chain fall off sprockets. It can be very difficult to return chain to its proper location on sprockets without changing table adjustments.**

# Adjusting Cutterhead Parallelism

**Maximum Allowable Tolerances:**

| | |
|---|---|
| Cutterhead/Table Side-to-Side | 0.002" |
| Head Casting/Table Front/Back | 0.020" |

Cutterhead parallelism is critical to the operation of the machine. As such, it is essential that the Cutterhead is parallel with the table (within 0.002") from side-to-side, as illustrated in **Figure 49.**

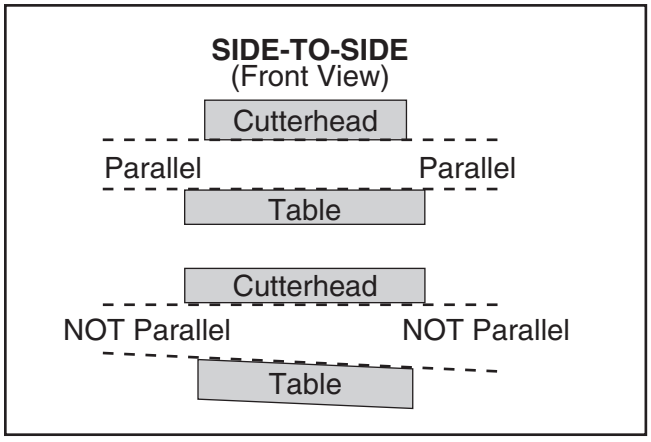



**Figure 49.** Side-to-side parallelism of table and cutterhead.

How the table sits in relation to the head casting from front-to-back is also important (see **Figure 50**). Because the feed rollers and chip breaker will be adjusted off the table position, the tolerances on the front-to-back positioning are not as critical as the cutterhead/table side-to-side positioning. Therefore, the maximum allowable tolerance for the front-to-back parallelism is not more than 0.020".

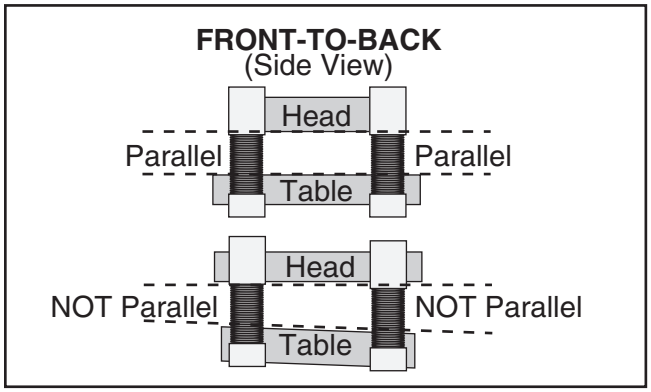



**Figure 50.** Front-to-back parallelism of table and cutterhead.

## Cutterhead Parallelism Inspection

Use your Rotacator to inspect the cutterhead parallelism. If you do not have a Rotacator, a wood block and feeler gauges may be used, but extra care must be taken to ensure accuracy. If the cutterhead is not within the maximum allowable tolerances, it must be adjusted.

## Headstock Parallelism Adjustments

The headstock is adjusted by turning the chain sprockets underneath the table for movements over 0.008" or by adjusting how the headstock is mounted on the columns for movements under 0.008".

### *NOTICE*

**When making adjustments, tighten fasteners after each step to ensure the accuracy of your tests. When adjusting the chain sprockets, keep in mind that if the chain becomes too loose, it will fall off of all the sprockets, and returning it to its proper location can be extremely difficult.**

**To adjust headstock parallelism:**

1. DISCONNECT MACHINE FROM POWER!

2. Remove cabinet panel and locate chain on underside of table.

3. Loosen idler sprocket (see **Chain Tension** instructions on **Page 33**).

4. Move chain away from sprocket you want to adjust so only that sprocket can be rotated independent of chain.

   **Note:** *If the left side of the table is too high, the left two sprockets will need to be adjusted. Each tooth on the sprocket represents .008" of vertical movement as the cogs are turned. Make sure, as you turn the sprockets, to keep an accurate tooth count to ensure that the headstock is adjusted equally.*

5. Mark location of one tooth of sprocket that you are adjusting.

6. Carefully rotate sprocket (clockwise to raise headstock; counterclockwise to lower headstock) just enough to position next tooth at marked location, then fit chain around sprocket again.

7. Repeat **Steps 4–6** with each sprocket that needs to be adjusted until table-to-cutterhead clearance is within 0.008" from one side to the other.

8. Make sure chain is properly fitted on sprockets, then re-tighten idler sprocket and lock bolts.

9. If necessary, micro-adjust headstock position by loosening cap screws shown in **Figure 51** and raising or lowering headstock until it is properly aligned with table.

   **Note:** *This process may require adjusting the columns on both the left and right hand sides until you find the correct combination.*

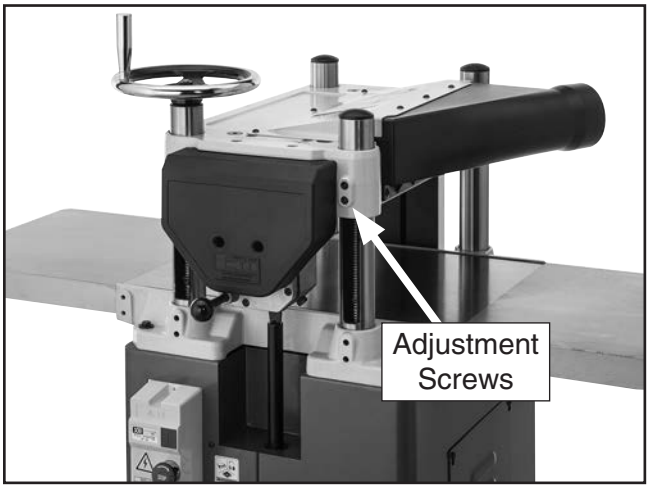



**Figure 51.** Location of headstock micro-adjustment screws (one side shown only).

# Tensioning Drive Chain

The drive chain system transfers power from the cutterhead to the infeed and outfeed rollers. The chain drive can be adjusted to remove slack if the chain stretches over time.

| Items Needed | Qty |
|---|---|
| Phillips Head Screwdriver #2 | 1 |
| Wrench or Socket 10mm | 1 |

**To tension drive chain:**

**1.** DISCONNECT MACHINE FROM POWER!

**2.** Remove gearbox cover to access drive chain components (see **Figure 52**).

**3.** Loosen hex bolt (see **Figure 52**) that secures idler bracket to gearbox, then push idler wheel against chain with moderate pressure to eliminate slack in chain. While maintaining pressure on idler wheel, tighten hex bolt (see **Figure 52**).

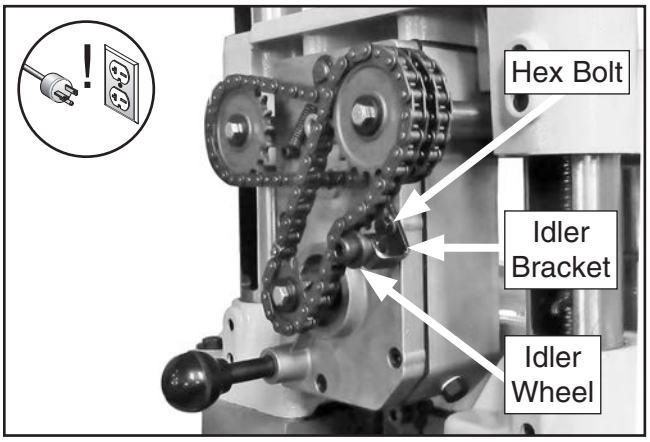



**Figure 52.** Drive chain adjustment.

**4.** Clean and lubricate chain and sprockets (refer to **Drive Chain & Sprockets** on **Page 33**), then install gearbox cover.

# SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

## ⚠WARNING
## Wiring Safety Instructions

**SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

**MODIFICATIONS.** Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

**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.

**CIRCUIT REQUIREMENTS**. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

**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.

**MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

**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.

**EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

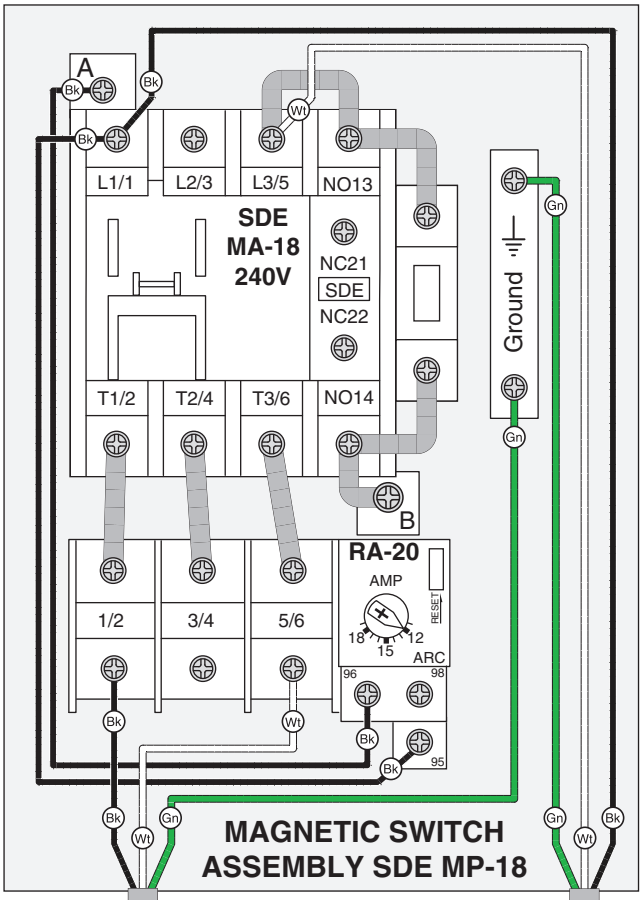
**NOTICE**

**The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.**

**COLOR KEY**

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

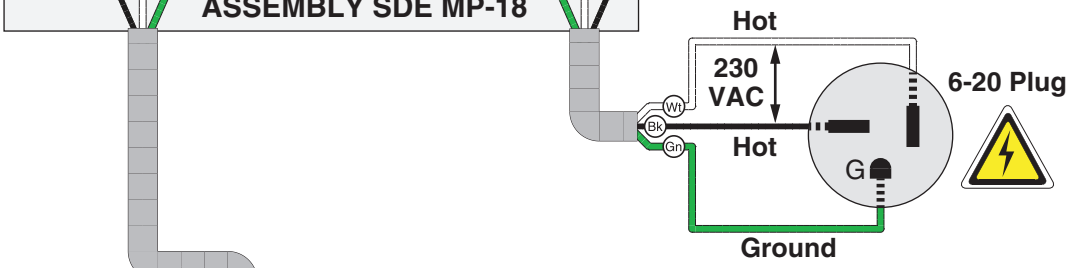
# G0890/G0891 Wiring Diagram

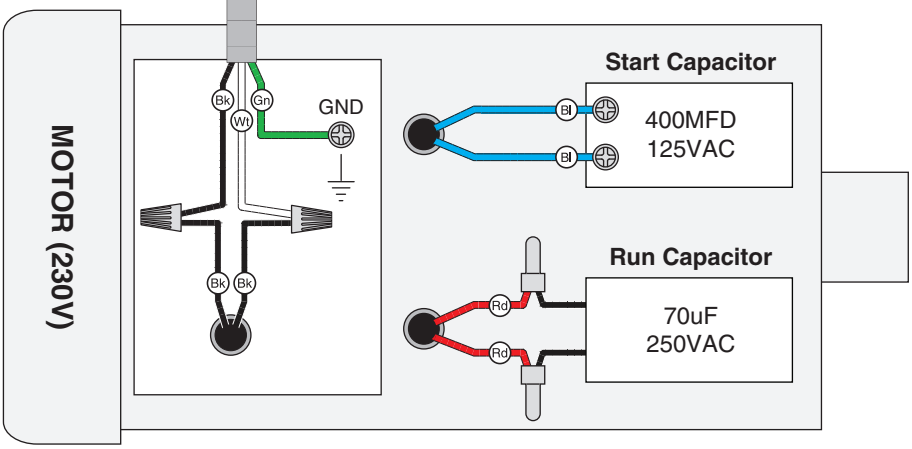




**NOTICE**

**The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.**






STOP *READ ELECTRICAL SAFETY ON PAGE 47!*

# G0890/G0891 Electrical Components

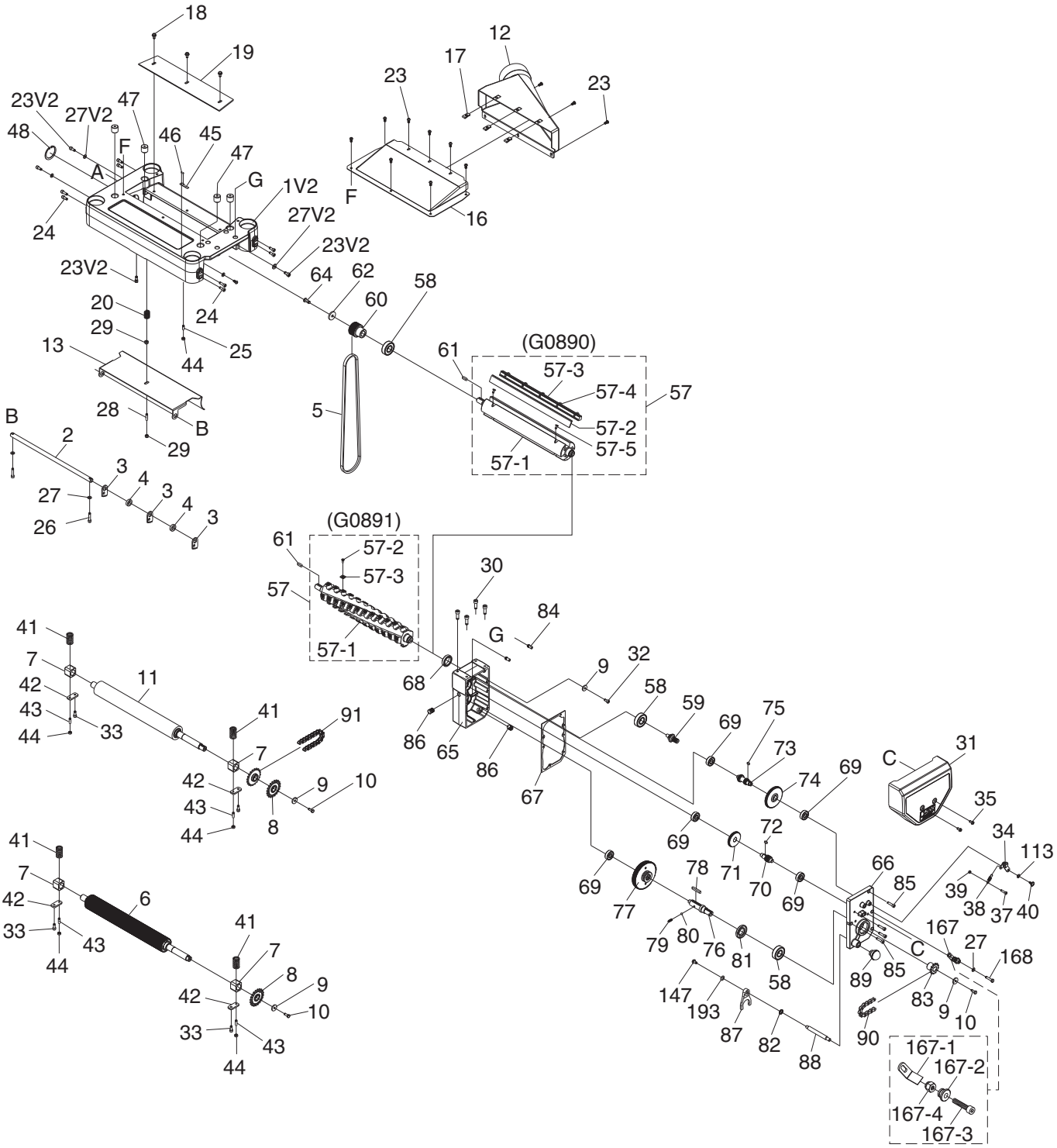

**Figure 53.** G0890/G0891 magnetic switch with cover removed.


**Figure 54.** G0890/G0891 motor junction box.

# SECTION 9: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

## Headstock

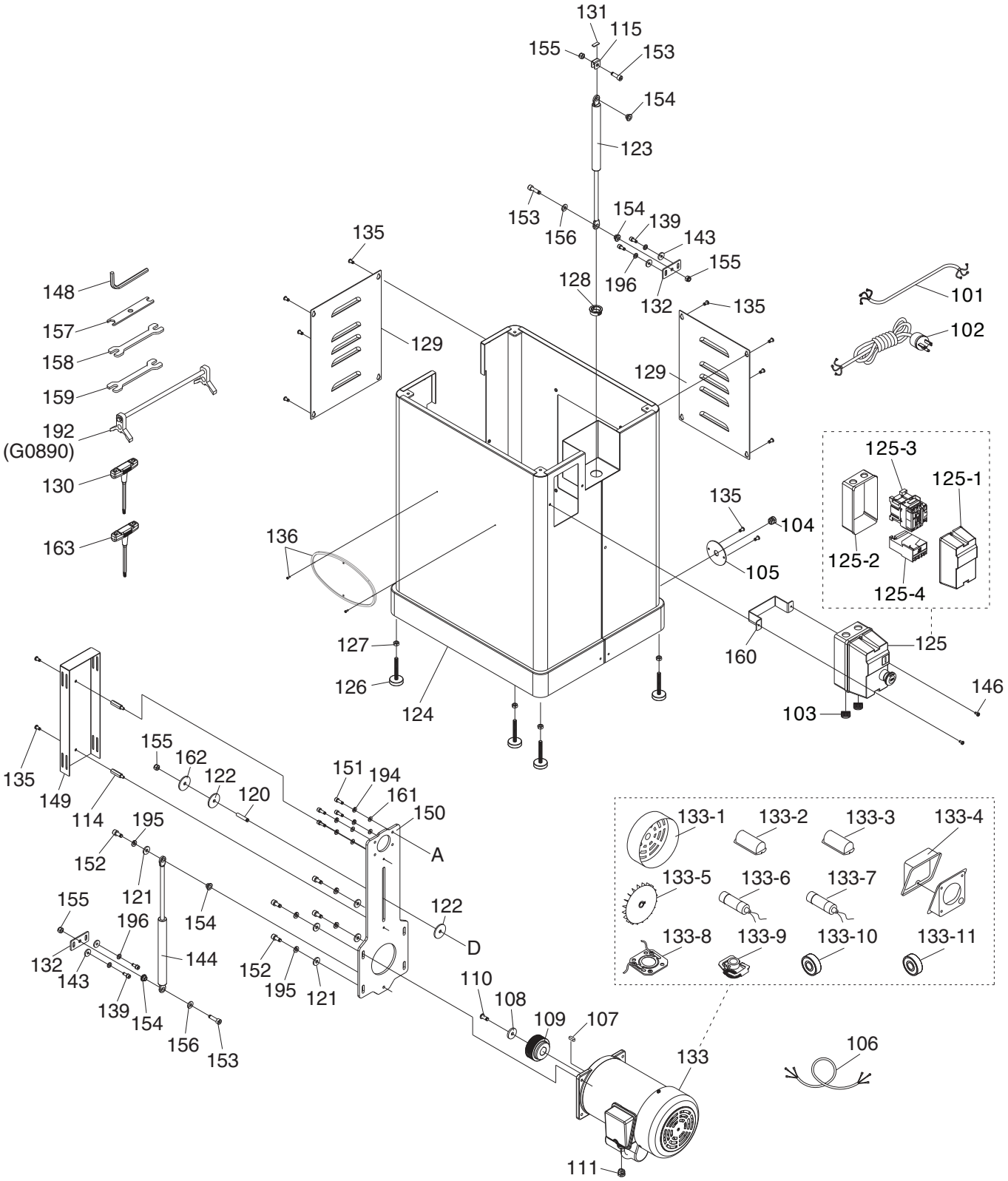


# Headstock Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 1V2 | P0890001V2 | HEADSTOCK V2.10.20 |
| 2 | P0890002 | SHAFT |
| 3 | P0890003 | ANTI-KICKBACK FINGER |
| 4 | P0890004 | COLLAR |
| 5 | P0890005 | POLY V-BELT 360J-9 |
| 6 | P0890006 | INFEED ROLLER |
| 7 | P0890007 | ROLLER SEAT |
| 8 | P0890008 | SPROCKET |
| 9 | P0890009 | FLAT WASHER 6MM |
| 10 | P0890010 | HEX BOLT M6-1 X 16 |
| 11 | P0890011 | OUTFEED ROLLER |
| 12 | P0890012 | COLLECTOR HOOD |
| 13 | P0890013 | CHIP BREAKER |
| 16 | P0890016 | TOP COVER |
| 17 | P0890017 | CLAMP |
| 18 | P0890018 | HEX BOLT M6-1 X 12 |
| 19 | P0890019 | DEFLECTOR PLATE |
| 20 | P0890020 | SPRING |
| 23V2 | P0890023V2 | CAP SCREW M6-1 X 12 V2.10.20 |
| 24 | P0890024 | BUTTON HD CAP SCR M6-1 X 20 |
| 25 | P0890025 | SET SCREW M6-1 X 16 |
| 26 | P0890026 | BUTTON HD CAP SCR M6-1 X 25 |
| 27 | P0890027 | FLAT WASHER 6MM |
| 27V2 | P0890027V2 | BUSHING V2.10.20 |
| 28 | P0890028 | SET SCREW M6-1 X 30 |
| 29 | P0890029 | HEX NUT M6-1 (NYLON) |
| 30 | P0890030 | BUTTON HD CAP SCR M8-1.25 X 25 |
| 31 | P0890031 | DRIVE CHAIN COVER |
| 32 | P0890032 | BUTTON HD CAP SCR M6-1 X 12 |
| 33 | P0890033 | BUTTON HD CAP SCR M6-1 X 16 |
| 34 | P0890034 | BRACKET |
| 35 | P0890035 | PHLP HD SCR M6-1 X 12 |
| 37 | P0890037 | BUTTON HD CAP SCR M5-.8 X 12 |
| 38 | P0890038 | SPRING |
| 39 | P0890039 | HEX NUT M5-.8 |
| 40 | P0890040 | SHOULDER BOLT M8-1.25 X 14, 4 X 12 |
| 41 | P0890041 | SPRING |
| 42 | P0890042 | PLATE |
| 43 | P0890043 | SET SCREW M6-1 X 20 |
| 44 | P0890044 | HEX NUT M6-1 |
| 45 | P0890045 | POINTER |
| 46 | P0890046 | RIVET 2.5MM X 8MM |
| 47 | P0890047 | TENSION BOLT |
| 48 | P0890048 | EXT RETAINING RING 47MM |
| 57 | P0890057 | CUTTERHEAD ASSEMBLY (G0890) |
| 57-1 | P0890057-1 | CUTTERHEAD 15" 3-KNIFE |
| 57-2 | P0890057-2 | PLANER BLADE 15" X 1" X 1-1/8" |
| 57-3 | P0890057-3 | GIB |
| 57-4 | P0890057-4 | GIB SCREW |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 57-5 | P0890057-5 | ADJUSTMENT SCREW M5-.8 X 12 |
| 57 | P0891057 | CUTTERHEAD ASSEMBLY (G0891) |
| 57-1 | P0891057-1 | HELICAL CUTTERHEAD 15" |
| 57-2 | P0891057-2 | FLATHEAD TORX 10-32 X 1/2 |
| 57-3 | P0891057-3 | CARBIDE INSERT 15 X 15 X 2.5MM 10-PK |
| 58 | P0890058 | BALL BEARING 6204-2NSE |
| 59 | P0890059 | GEAR |
| 60 | P0890060 | PULLEY (G0890) |
| 60 | P0890060 | PULLEY (G0891) |
| 61 | P0890061 | KEY 6 X 6 X 20 (G0890) |
| 61 | P0891061 | KEY 6 X 6 X 30 (G0891) |
| 62 | P0890062 | FLAT WASHER 8MM |
| 64 | P0890064 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 65 | P0890065 | GEAR BOX |
| 66 | P0890066 | GEAR BOX COVER |
| 67 | P0890067 | GASKET |
| 68 | P0890068 | OIL SEAL 28 X 40 X 8 |
| 69 | P0890069 | BALL BEARING 6201-2NSE |
| 70 | P0890070 | SHAFT |
| 71 | P0890071 | GEAR 52T |
| 72 | P0890072 | KEY 5 X 5 X 12 |
| 73 | P0890073 | SHAFT |
| 74 | P0890074 | GEAR |
| 75 | P0890075 | KEY 5 X 5 X 10 |
| 76 | P0890076 | SHAFT |
| 77 | P0890077 | GEAR ASSEMBLY |
| 78 | P0890078 | KEY 6 X 6 X 40 |
| 79 | P0890079 | SPRING |
| 80 | P0890080 | STEEL BALL 6MM |
| 81 | P0890081 | OIL SEAL 25 X 47 X 6 |
| 82 | P0890082 | OIL SEAL P12 |
| 83 | P0890083 | SPROCKET |
| 84 | P0890084 | PIN |
| 85 | P0890085 | BUTTON HD CAP SCR M6-1 X 25 |
| 86 | P0890086 | OIL PLUG 1/4 |
| 87 | P0890087 | CLUTCH FORK |
| 88 | P0890088 | HANDLE |
| 89 | P0890089 | KNOB 3/8-16, D1-1/4, BALL |
| 90 | P0890090 | CHAIN 06B X 41P |
| 91 | P0890091 | CHAIN 06B X 50P |
| 113 | P0890113 | WAVY WASHER 8MM |
| 147 | P0890147 | HEX BOLT M6-1 X 12 |
| 167 | P0890167 | IDLER ASSEMBLY |
| 167-1 | P0890167-1 | IDLER BRACKET |
| 167-2 | P0890167-2 | IDLER WHEEL |
| 167-3 | P0890167-3 | CAP SCREW M8-1.25 X 20 |
| 167-4 | P0890167-4 | LOCK NUT M8-1.25 |
| 168 | P0890168 | HEX BOLT M6-1 X 30 |
| 193 | P0890193 | FLAT WASHER 6MM |

# Stand & Motor

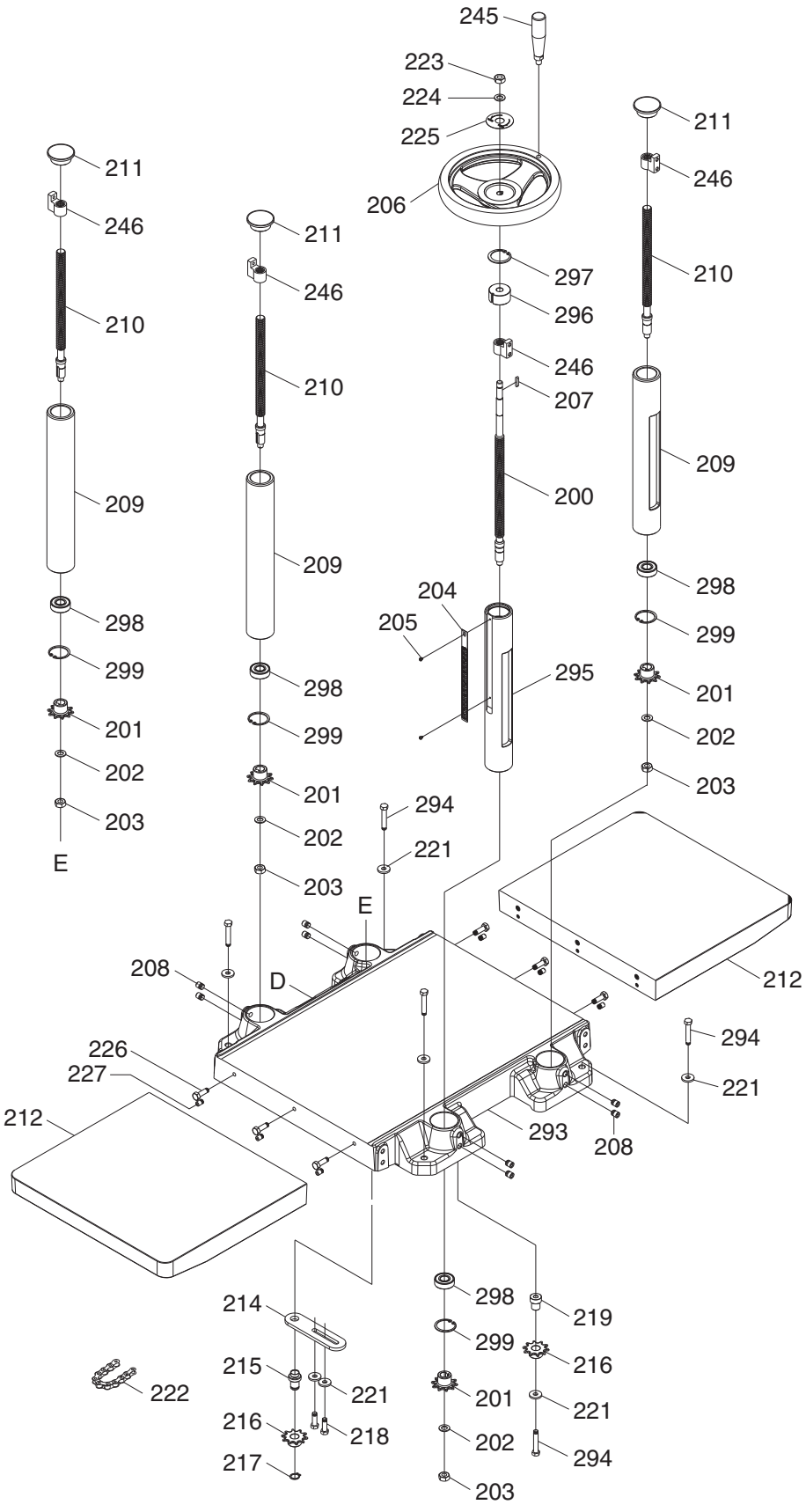


# Stand & Motor Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 101 | P0890101 | SWITCH CORD 12G 3W 34" |
| 102 | P0890102 | POWER CORD 12G 3W 150" 6-20P |
| 103 | P0890103 | STRAIN RELIEF TYPE-3 PG13.5 |
| 104 | P0890104 | STRAIN RELIEF TYPE-1 1/2 |
| 105 | P0890105 | MOUNTING PLATE |
| 106 | P0890106 | MOTOR CORD 12G 3W 24" |
| 107 | P0890107 | KEY 6 X 6 X 18 |
| 108 | P0890108 | FLAT WASHER 8MM |
| 109 | P0890109 | MOTOR PULLEY |
| 110 | P0890110 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 111 | P0890111 | STRAIN RELIEF TYPE-1 1/2 |
| 114 | P0890114 | COVER MOUNT |
| 115 | P0890115 | STRUT MOUNT |
| 120 | P0890120 | SET SCREW M8-1.25 X 35 |
| 121 | P0890121 | FLAT WASHER 8MM |
| 122 | P0890122 | FLAT WASHER 10MM PLASTIC |
| 123 | P0890123 | GAS STRUT |
| 124 | P0890124 | STAND |
| 125 | P0890125 | MAGNETIC SWITCH ASSY MP-18 |
| 125-1 | P0890125-1 | MAGNETIC SWITCH COVER (FRONT) |
| 125-2 | P0890125-2 | MAGNETIC SWITCH COVER (REAR) |
| 125-3 | P0890125-3 | CONTACTOR SDE MA-18 220V-240V |
| 125-4 | P0890125-4 | OL RELAY SDE RA-20 12-18A |
| 126 | P0890126 | FOOT M8-1.25 X 60 |
| 127 | P0890127 | HEX NUT M8-1.25 |
| 128 | P0890128 | CABLE PROTECTOR |
| 129 | P0890129 | ACCESS PANEL |
| 130 | P0890130 | T-HANDLE TORX DRIVER T-25 |
| 131 | P0890131 | PLATE |
| 132 | P0890132 | ADJUSTABLE BRACKET |
| 133 | P0890133 | MOTOR 3HP 230V 1PH |
| 133-1 | P0890133-1 | MOTOR FAN COVER |
| 133-2 | P0890133-2 | RUN CAPACITOR COVER |
| 133-3 | P0890133-3 | START CAPACITOR COVER |
| 133-4 | P0890133-4 | MOTOR JUNCTION BOX |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 133-5 | P0890133-5 | MOTOR FAN |
| 133-6 | P0890133-6 | R CAPACITOR 70M 250V 1-9/16 X 3-1/2 |
| 133-7 | P0890133-7 | S CAPACITOR 400M 125V 1-9/16 X 3-1/2 |
| 133-8 | P0890133-8 | CENTRIFUGAL SWITCH |
| 133-9 | P0890133-9 | CONTACT PLATE |
| 133-10 | P0890133-10 | BALL BEARING 6205ZZ (FRONT) |
| 133-11 | P0890133-11 | BALL BEARING 6203ZZ (REAR) |
| 135 | P0890135 | PHLP HD SCR M6-1 X 12 |
| 136 | P0890136 | PHLP HD SCR M3-.5 X 10 |
| 139 | P0890139 | CAP SCREW M6-1 X 16 |
| 143 | P0890143 | FLAT WASHER 6MM |
| 144 | P0890144 | GAS STRUT |
| 146 | P0890146 | PHLP HD SCR M5-.8 X 10 |
| 147 | P0890147 | HEX BOLT M6-1 X 12 |
| 148 | P0890148 | HEX WRENCH 4MM |
| 149 | P0890149 | BELT COVER |
| 150 | P0890150 | MOTOR PLATE |
| 151 | P0890151 | BUTTON HD CAP SCR M6-1 X 20 |
| 152 | P0890152 | BUTTON HD CAP SCR M8-1.25 X 20 |
| 153 | P0890153 | BUTTON HD CAP SCR M8-1.25 X 25 |
| 154 | P0890154 | SLEEVE |
| 155 | P0890155 | HEX NUT M8-1.25 NYLON |
| 156 | P0890156 | FLAT WASHER 8MM |
| 157 | P0890157 | OPEN-END WRENCH 10/13MM |
| 158 | P0890158 | OPEN-END WRENCH 12/14MM |
| 159 | P0890159 | OPEN-END WRENCH 17/19MM |
| 160 | P0890160 | BRACKET |
| 161 | P0890161 | FLAT WASHER 6MM |
| 162 | P0890162 | FLAT WASHER 8MM |
| 163 | P0890163 | T-HANDLE TORX DRIVER T-30 |
| 192 | P0890192 | KNIFE SETTING JIG (G0890) |
| 193 | P0890193 | FLAT WASHER 6MM |
| 194 | P0890194 | LOCK WASHER 6MM |
| 195 | P0890195 | LOCK WASHER 8MM |
| 196 | P0890196 | SPRING WASHER 6MM |

# Table

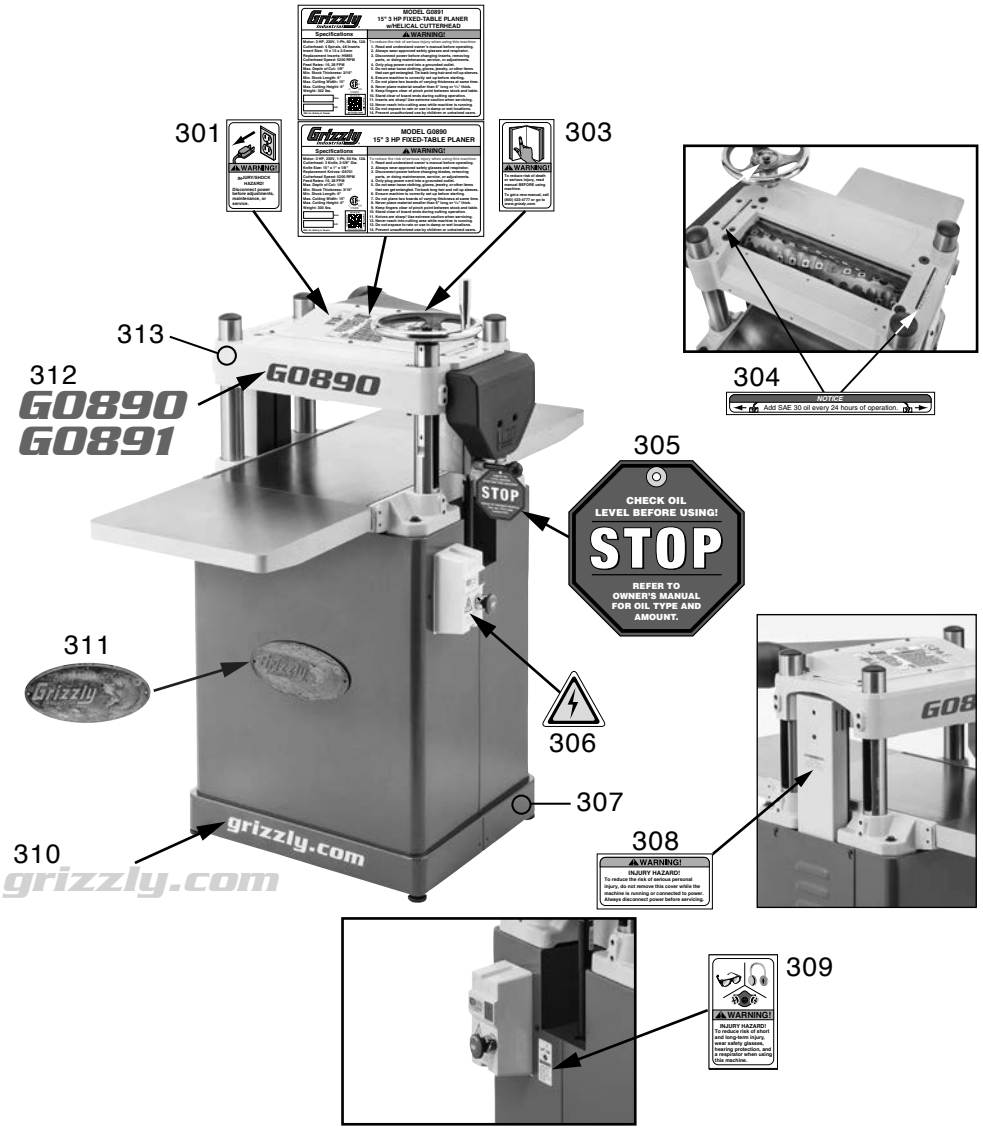


# Table Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 200 | P0890200 | LEADSCREW |
| 201 | P0890201 | SPROCKET |
| 202 | P0890202 | FLAT WASHER 10MM |
| 203 | P0890203 | HEX NUT M10-1.25 |
| 204 | P0890204 | DEPTH-OF-CUT SCALE |
| 205 | P0890205 | PHLP HD SCR M3-.5 X 4 |
| 206 | P0890206 | HANDWHEEL TYPE-3 216D X 10B-K X M10-1.5 |
| 207 | P0890207 | KEY 4 X 4 X 20 |
| 208 | P0890208 | SET SCREW M10-1.5 X 12 |
| 209 | P0890209 | COLUMN |
| 210 | P0890210 | LEADSCREW |
| 211 | P0890211 | CAP |
| 212 | P0890212 | CAST IRON EXTENSION TABLE |
| 212-1 | P0890212-1 | HEX BOLT M8-1.25 X 25 |
| 212-2 | P0890212-2 | SET SCREW M8-1.25 X 20 |
| 212-3 | P0890212-3 | CAST IRON EXTENSION TABLE |
| 214 | P0890214 | BRACKET |
| 215 | P0890215 | SHAFT |
| 216 | P0890216 | SPROCKET |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 217 | P0890217 | EXT RETAINING RING 15MM |
| 218 | P0890218 | HEX BOLT M8-1.25 X 25 |
| 219 | P0890219 | SLEEVE |
| 221 | P0890221 | FLAT WASHER 8MM |
| 222 | P0890222 | CHAIN 410 X 148P |
| 223 | P0890223 | HEX NUT M10-1.25 |
| 224 | P0890224 | FLAT WASHER 10MM |
| 225 | P0890225 | DIRECTION LABEL |
| 226 | P0890226 | HEX BOLT M8-1.25 X 25 |
| 227 | P0890227 | SET SCREW M8-1.25 X 20 |
| 245 | P0890245 | REVOLVING HANDLE 24 X 92, M10-1.5 X 12 |
| 246 | P0890246 | LEADSCREW MOUNT |
| 293 | P0890293 | MAIN TABLE |
| 294 | P0890294 | HEX BOLT M8-1.25 X 45 |
| 295 | P0890295 | COLUMN |
| 296 | P0890296 | BUSHING |
| 297 | P0890297 | INT RETAINING RING 38MM |
| 298 | P0890298 | BALL BEARING 6202Z |
| 299 | P0890299 | INT RETAINING RING 35MM |

# Labels & Cosmetics




| REF | PART # | DESCRIPTION |
|---|---|---|
| 301 | P0890301 | DISCONNECT POWER LABEL |
| 302 | P0890302 | MACHINE ID LABEL (G0890) |
| 302 | P0891302 | MACHINE ID LABEL (G0891) |
| 303 | P0890303 | READ MANUAL LABEL |
| 304 | P0890304 | ADD OIL LABEL |
| 305 | P0890305 | STOP OIL FILL TAG |
| 306 | P0890306 | ELECTRICITY LABEL |
| 307 | P0890307 | TOUCH-UP PAINT, GRIZZLY GREEN |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 308 | P0890308 | INJURY HAZARD LABEL |
| 309 | P0890309 | EYE/EAR/LUNG LABEL |
| 310 | P0890310 | GRIZZLY.COM LABEL |
| 311 | P0890311 | GRIZZLY NAMEPLATE–LARGE |
| 312 | P0890312 | MODEL NUMBER LABEL (G0890) |
| 312 | P0891312 | MODEL NUMBER LABEL (G0891) |
| 313 | P0890313 | TOUCH-UP PAINT, GRIZZLY BEIGE |

## ⚠WARNING

**Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.**

# WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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