READ THIS FIRST

Model G1021X2

******IMPORTANT UPDATE******

For Machines Mfd. Since 07/22
and Owner's Manual Revised 04/21

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

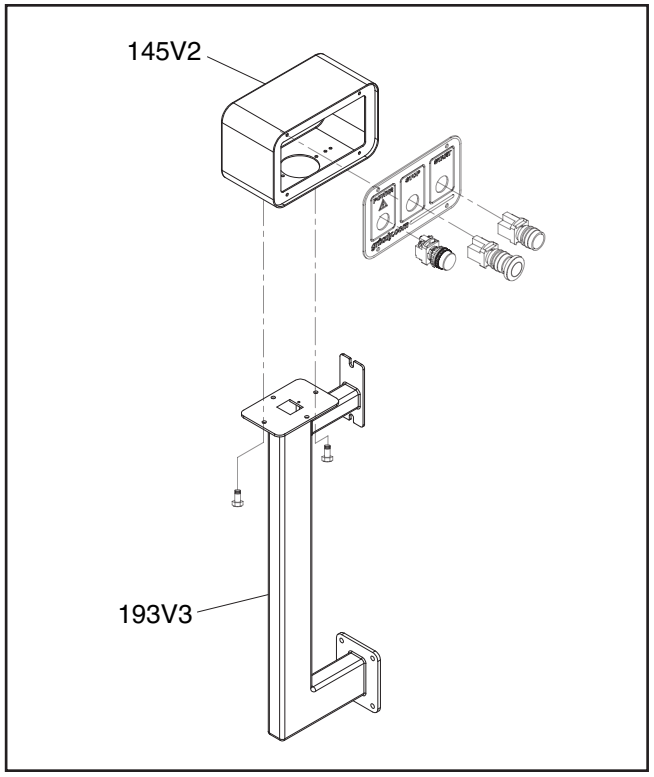
The following changes were recently made since the owner's manual was printed:

- Switch box and switch pedestal have been modified.
- An additional step has been included in **Assembly**.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Revised Parts



Revised Parts List

REF	PART #	DESCRIPTION
145V2	P1021X2145V2	SWITCH BOX V2.07.22
193V3	P1021X2193V3	SWITCH PEDESTAL V3.07.22

Revised Assembly

Please follow the **Assembly** instructions in your **Owner's Manual**, beginning on **Page 19**. Due to changes to the switch box and switch pedestal, the G1021X2 now requires an additional step.

10. G1021X2 Only: Remove (2) M5-.8 x 10 hex bolts from base of switch box, and rotate box 90 degrees so control panel faces front of machine. Re-install switch box to switch pedestal using hex bolts.

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#SS22230 PRINTED IN TAIWAN

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

Grizzly Industrial, Inc.®

MODEL G1021X2/G1021Z
15" PLANERS
OWNER'S MANUAL
(For models manufactured since 11/20)

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WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.
#WK19745 PRINTED IN TAIWAN
V5.04.21

⚠ 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 G1021X2 and G1021Z are CSA-certified, 3 HP, 15" planers with the following differences:

- **Model G1021X2** has a helical cutterhead and a pedestal-mounted control panel with magnetic ON/OFF switch.
- **Model G1021Z** has a 3-knife cutterhead and a magnetic ON/OFF switch mounted to the cabinet stand.

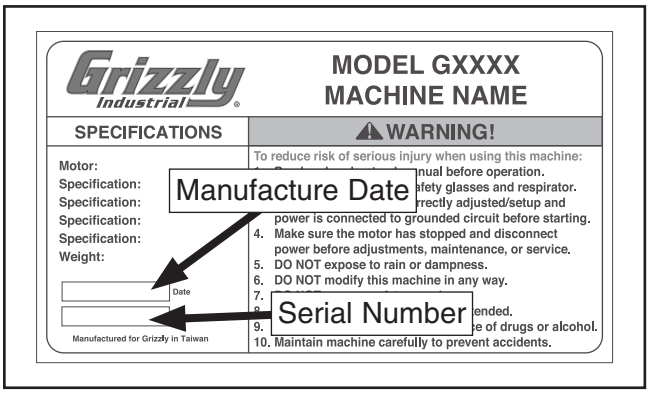
Manual Accuracy

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**.

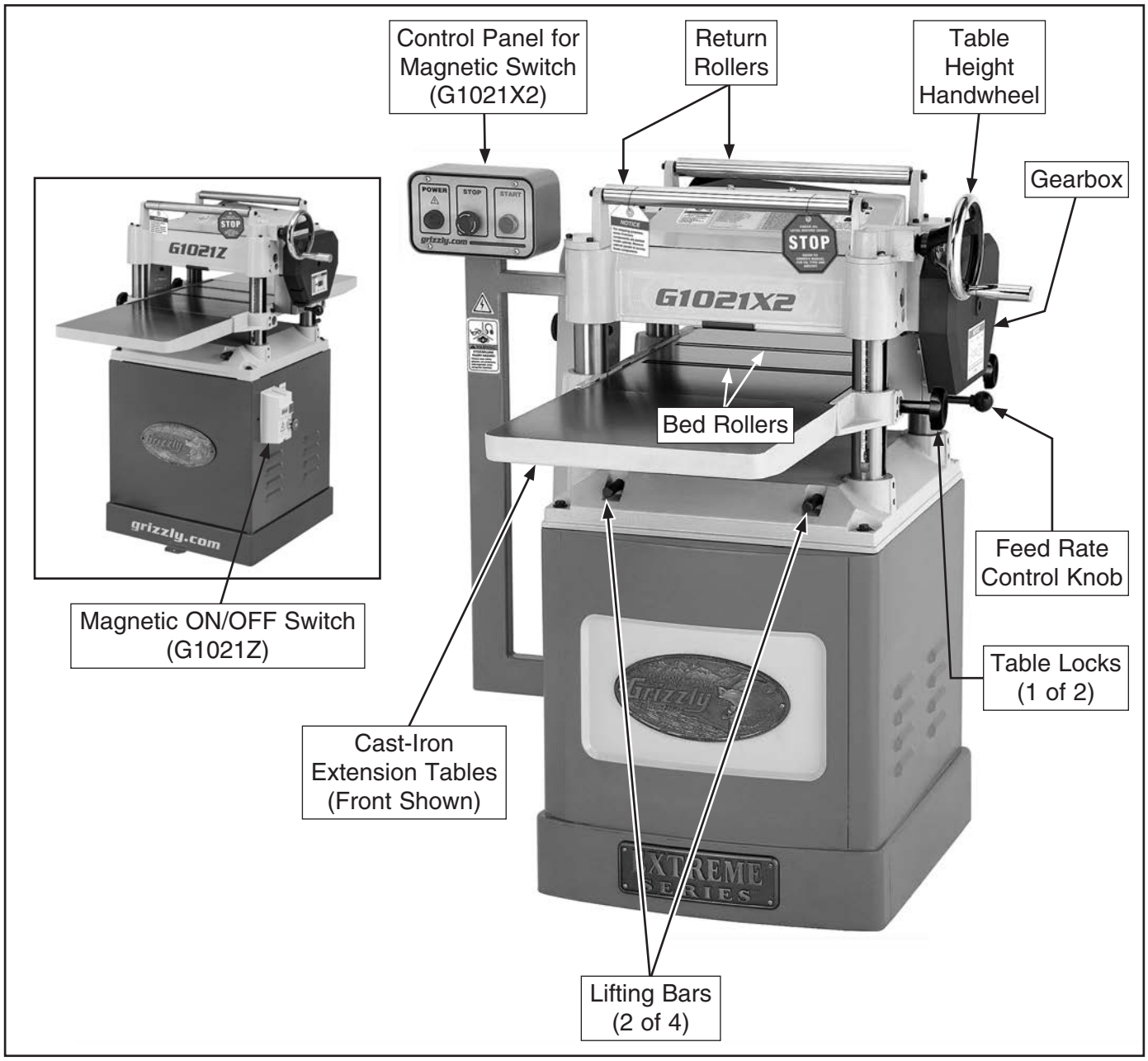
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

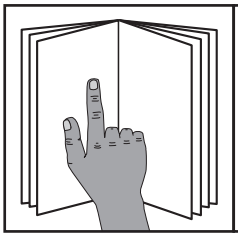
Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation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

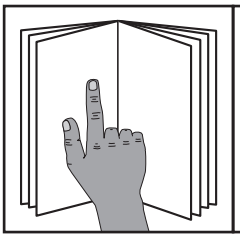




⚠WARNING

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 **Figures 1–3** 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.

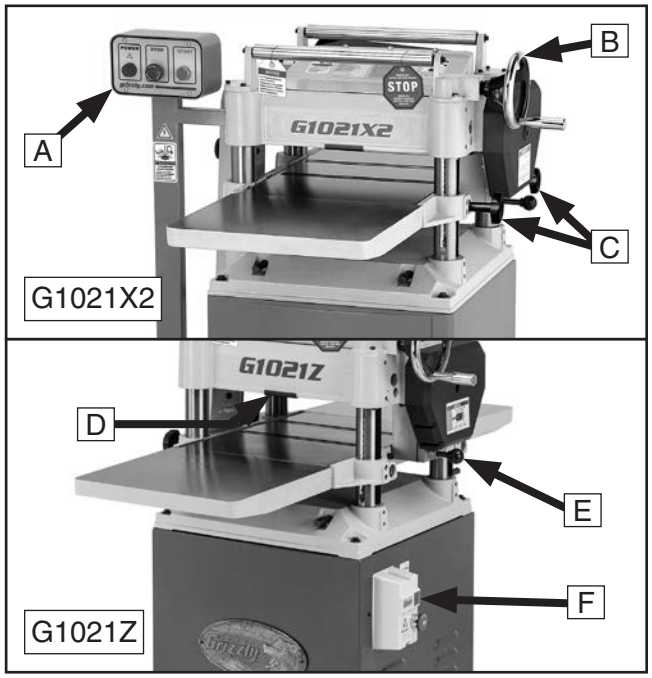


Figure 1. Table elevation and feed controls.

A. Control Panel for Magnetic Switch (G1021X2):
- — Green START button turns motor ***ON*** when pressed.
- — Power indicator light illuminates when motor turned ***ON***.
- — 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.

B. Table Height Handwheel: Raises and lowers table to accommodate different workpiece thicknesses. One complete revolution moves the table approximately 2mm (0.08").

C. Table Locks: Secure table height position.

D. Depth Limiter: Limits depth of cut to a maximum of ⅛" at full width.

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

F. Magnetic ON/OFF Switch (G1021Z):
- — 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.

Figure 2. Example of return rollers and dust port.

G. Return Rollers: Assist sliding workpiece back to operator following planing operation.

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

Internal Components

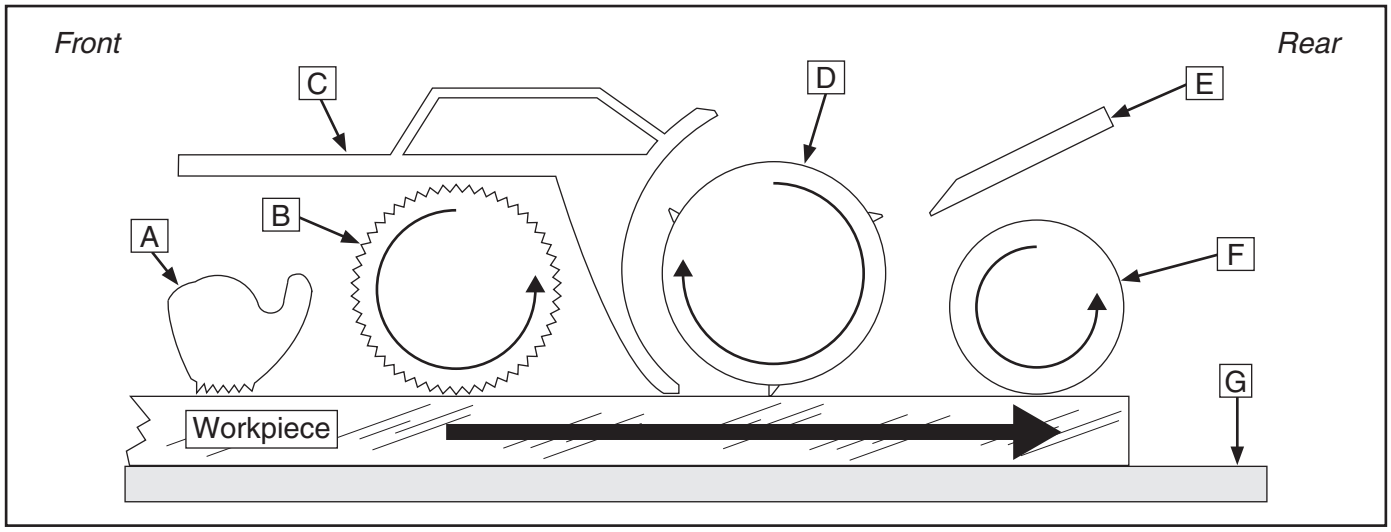


Figure 3. Workpiece path and major planing components (side cutaway view).

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. 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 G1021X2 15" 3 HP EXTREME SERIES PLANER W/ HELICAL CUTTERHEAD

Product Dimensions:

Weight..... 476 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 37 x 48 x 44 in.
Footprint (Length x Width)..... 22-1/2 x 21-1/2 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 553 lbs.
Length x Width x Height..... 29 x 36 x 52 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 ..... Triple V-Belt Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... External

Main Specifications:

Main Specifications

Planer Size	15 in.
Max. Cut Width	15 in.
Max. Cut Height	6 in.
Min. Stock Length	6 in.
Min. Stock Thickness	3/16 in.
Max. Stock Thickness	6-1/8 in.
Number of Cuts Per Inch	104, 83
Number of Cuts Per Minute	20,000
Cutterhead Speed	5000 RPM
Planing Feed Rate	16, 28 FPM
Max. Cut Depth Planing Full Width	3/32 in.
Max. Cut Depth Planing 6-Inch Wide Board	1/8 in.

Cutterhead Info

Cutterhead Type	Helical
Cutterhead Diameter	3 in.
Number of Cutter Rows	4
Number of Indexable Cutters	52
Cutter Insert Size Length	15mm
Cutter Insert Size Width	15mm
Cutter Insert Size Thickness	2.5mm

Table Info

Table/Headstock Movement	6 in.
Table Bed Size Length	48 in.
Table Bed Size Width	15 in.
Table Bed Size Thickness	2 in.
Number of Bed Rollers	2
Floor-to-Table Height	29 – 35 in.
Table Wings Size Length	14 in.
Table Wings Size Width	15-1/16 in.

Construction

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

Other

Table/Headstock Locks	Yes
Measurement Scale	Inch & Metric
Number of Dust Ports	1
Dust Port Size	4 in.
Mobile Base	D2057A

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ID Label on Upper Cover
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

MACHINE DATA SHEET

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

MODEL G1021Z 15" 3 HP PLANER W/ CABINET STAND

Product Dimensions:

Weight	474 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	32 x 48 x 44 in.
Footprint (Length x Width)	21-1/2 x 21 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	552 lbs.
Length x Width x Height	30 x 27 x 51 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	Triple V-Belt Drive
Bearings	Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type	External

Main Specifications:

Main Specifications

Planer Size	15 in.
Max. Cut Width	15 in.
Max. Cut Height	6 in.
Min. Stock Length	6 in.
Min. Stock Thickness	3/16 in.
Max. Stock Thickness	6 in.
Number of Cuts Per Inch	78, 63
Number of Cuts Per Minute	15,000
Cutterhead Speed	5000 RPM
Planing Feed Rate	16, 28 FPM
Max. Cut Depth Planing Full Width	3/32 in.
Max. Cut Depth Planing 6-Inch Wide Board	1/8 in.

Cutterhead Info

Cutterhead Type	3 Knife
Cutterhead Diameter	3 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	Springs or Jack Screws

Table Info

Table/Headstock Movement	6 in.
Table Bed Size Length	20 in.
Table Bed Size Width	15 in.
Table Bed Size Thickness	2 in.
Number of Bed Rollers	2
Floor-to-Table Height	29 – 35 in.
Table Wings Size Length	14 in.
Table Wings Size Width	15-1/16 in.

Construction

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

Other

Table/Headstock Locks	Yes
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	1 Hour
Serial Number Location	ID Label on Upper Cover
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

Features:

Extra-Large Ball Bearing Return Rollers
Large Side-Mounted Handwheel
Cabinet Style Stand
Internally Mounted 3HP Motor
Triple Belt Drive Inside Housing
Magnetic Switch with Prominent Off Switch
All Ball Bearing Construction
4 Heavy-Duty Support Columns
Anti-Kickback Fingers
Drive Gears Run in Oil Bath
Precision-Ground Cast-Iron Table & Extension Wings
Includes Knife-Setting Jig
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 risk of kickback and kickback-related injuries. "Kickback" occurs during operation when the workpiece is ejected back through infeed side of 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 workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator's hands are pulled into blade from outfeed side, resulting in amputation or severe lacerations.

AVOID CONTACT WITH MOVING PARTS. Never remove guards/covers or reach inside planer during operation or while connected to power. You could be seriously injured if you accidentally touch spinning cutterhead or get entangled in moving parts. If a workpiece becomes stuck or sawdust removal is necessary, turn planer ***OFF***, allow cutterhead to stop, 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 entire operation to avoid getting hit if kickback occurs.

GRAIN DIRECTION. Planing across grain is hard on planer and may cause kickback. Plane in same direction or at a slight angle with 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 240V

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 1-Phase
Power Supply Circuit ..... 20 Amps
Plug/Receptacle ..... NEMA 6-20
Cord ..... "S"-Type, 3-Wire, 14 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 220V" 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 figure below).

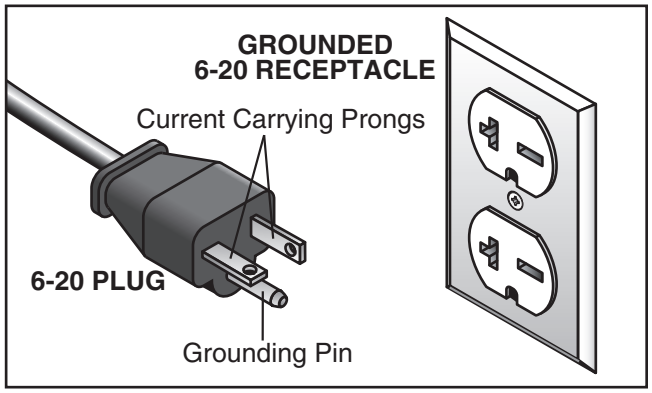
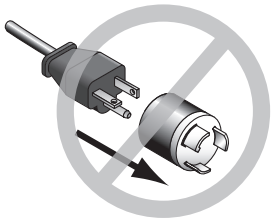


Figure 4. Typical 6-20 plug and receptacle.

⚠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

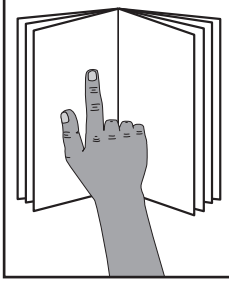
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

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

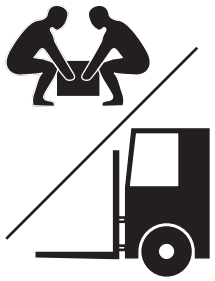


⚠WARNING

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

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

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
• Forklift (rated for at least 750 lbs.)	1
• Cleaner/Degreaser (**Page 17**)	As Needed
• Disposable Shop Rags	As Needed
• Phillips Screwdriver #2	1
• Flat Head Screwdriver	1
• Wrench or Socket 12mm, 14mm	1 Ea.
• Hex Wrenches 3, 4, 5, 6, 8mm	1 Ea.
• 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 5) **Qty**

- **A.** Planer Unit (Not Shown) 1
- **B.** Cast-Iron Extension Tables 2
- **C.** Table Elevation Handwheel 1
- **D.** Dust Port 1

Tools and Hardware (Figure 6)

- **E.** Hex Wrenches 3, 4, 6mm .....1 Ea.
- **F.** Hex Bolts M8-1.25 x 25 (Ext. Tables) 6
- **G.** Set Screws M8-1.25 x 12 (Ext. Tables) 6
- **H.** Flange Bolts M6-1 x 12 (Dust Port)..... 6
- **I.** LOW/HIGH Direction Label (Handwheel)... 1
- **J.** Hex Nut M10-1.25 (Handwheel)..... 1
- **K.** Key 4 x 4 x 10 (Handwheel)..... 1
- **L.** Flat Washers 8mm (Ext. Tables)..... 6
- **M.** Flat Washers 10mm (Handwheel)..... 1
- **N.** Handwheel Handle (Handwheel) 1
- **O.** Open-End Wrenches 10/13, 12/14mm..1 Ea.

G1021X2 Only (Figure 7)

- **P.** T-Handle Torx Drivers T-25 2
- **Q.** Flat Head Torx Screws #10-32 x ½" 10
- **R.** Indexable Carbide Inserts 15 x 15 x 2.5 5

G1021Z Only (Figure 8)

- **S.** Knife-Setting Jig 1
  - —E-Clips 9mm 4
  - —Jig Feet 2
  - —Jig Shaft 1

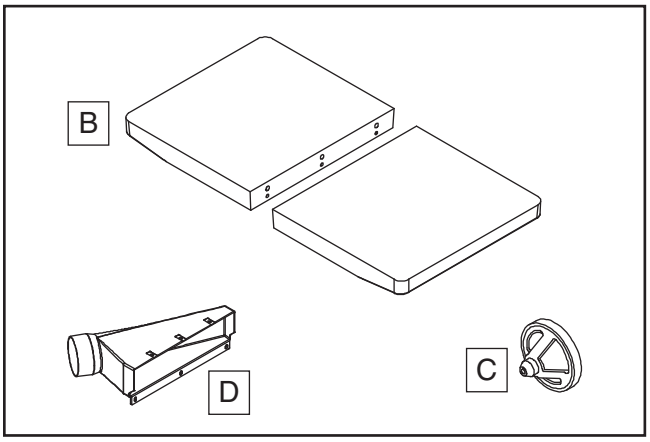


Figure 5. Box inventory.

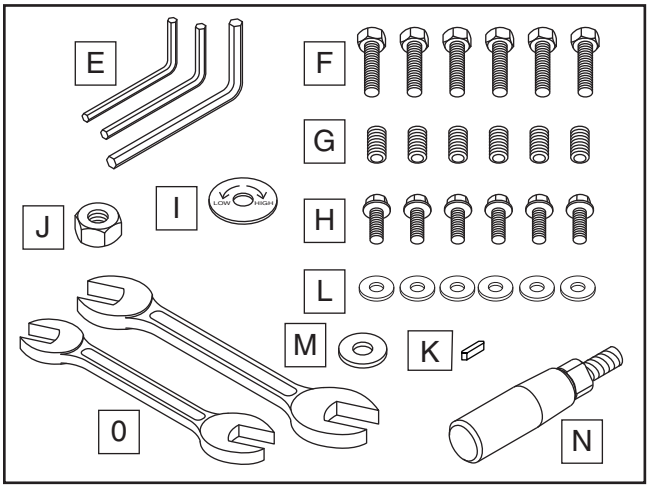


Figure 6. Tools and hardware.

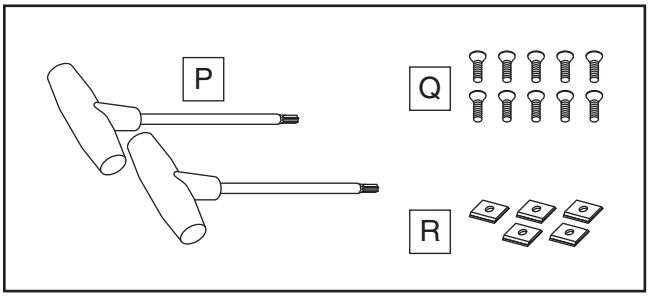


Figure 7. Tools and hardware (G1021X2 only).

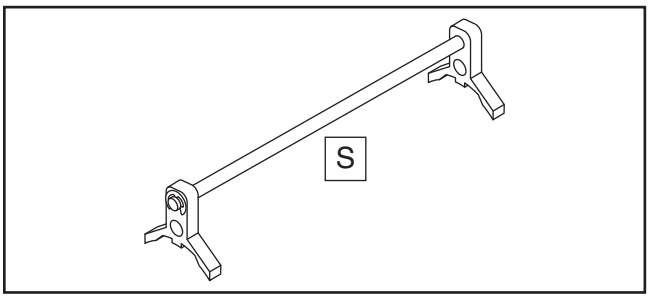


Figure 8. Tools and hardware (G1021Z only).

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 9. T23692 Orange Power Degreaser.

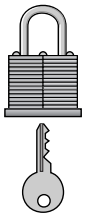
Site Considerations

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.

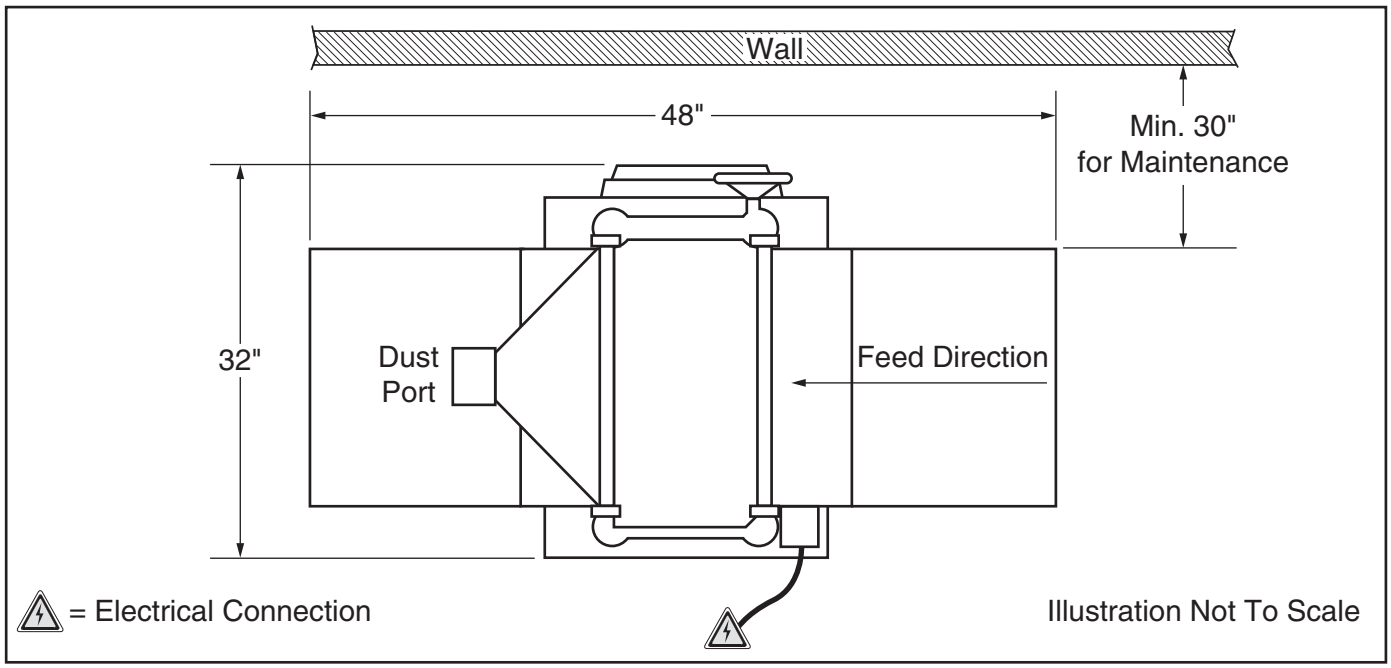
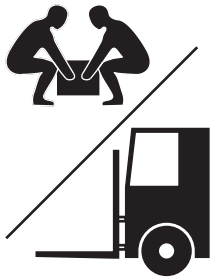


Figure 10. Minimum working clearances for Models G1021Z and G1021X2.

Lifting & Placing



⚠WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

The planer is equipped with four lifting bars that extend in order to lift and place the planer.

To lift and place the planer, extend the lifting bars and use a forklift to lift the machine off the pallet, as shown in **Figure 11**, then set the planer down in a suitable location and return the lifting bars to their original position.

Tip: *When positioning lift forks, place shop rags or cardboard between forks and cabinet stand to avoid scratching paint.*

Figure 11. Example of lifting planer with forklift.

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 to planer table with (3) M8-1.25 x 25 hex bolts and (3) 8mm flat washers. Do not fully tighten hex bolts at this time.

2. Thread (3) M8-1.25 x 12 set screws into each extension table at locations shown in **Figure 12**.

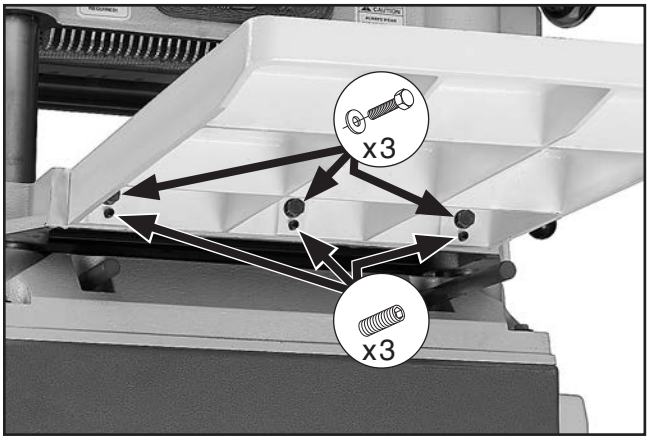


Figure 12. Extension table mounting locations.

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** on **Page 19**.

   Note: *Bed rollers will give you a false reading with your straightedge if they are raised above table. Move them down or work around them when leveling extension wings (refer to* ***Bed Roller Height*** *on* ***Page 27*** *for details).*

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 13**).

7. Thread handwheel handle into handwheel (see **Figure 13**), and tighten with wrench.

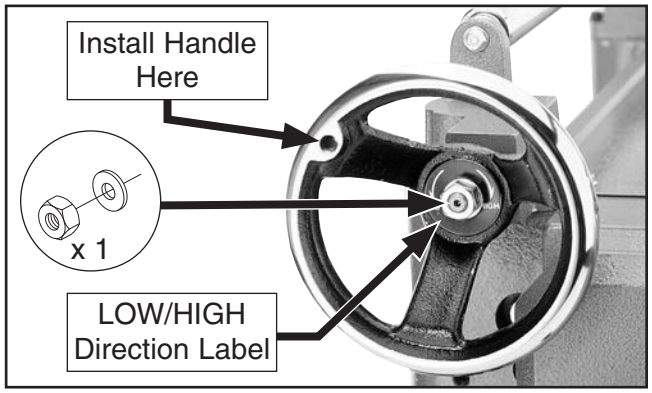


Figure 13. Table elevation handwheel installed.

8. Attach dust port to planer with (6) M6-1 x 12 flange bolts (see **Figure 14**).

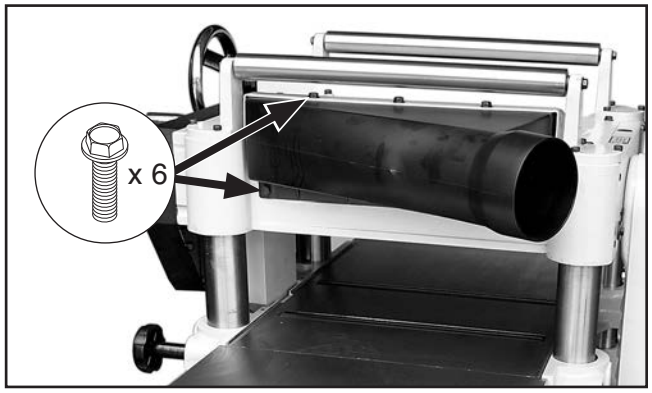


Figure 14. Dust port installed.

9. **G1021Z Only:** Assemble knife-setting jig using knife-setting shaft, feet, and 9mm E-clips, as shown in **Figure 15**.

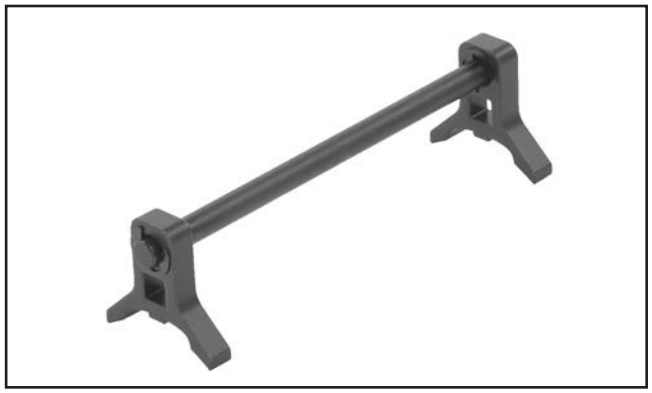


Figure 15. Knife-setting jig assembled.

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 16**). Tug the hose to make sure it does not come off.

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

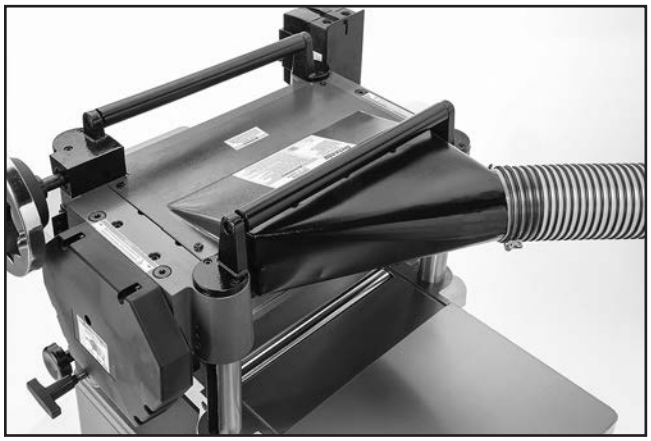


Figure 16. Example of dust hose connected to dust port.

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 drive chain cover (see **Figure 17**).*

To check gearbox oil level:

1. Remove gearbox fill plug (see **Figure 17**).

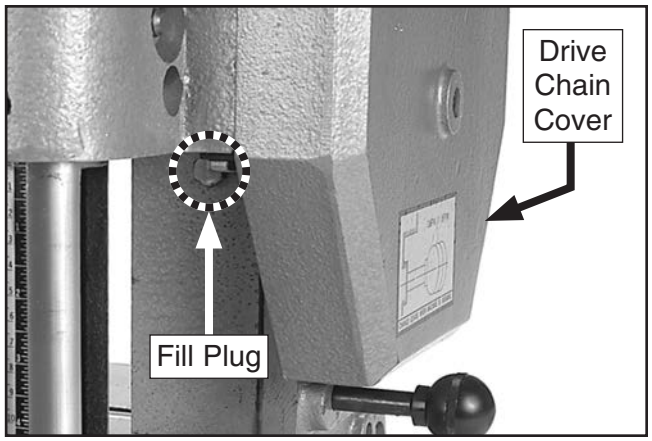


Figure 17. Location of gearbox fill plug.

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 37** 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 18**). This resets the switch so the machine can start.

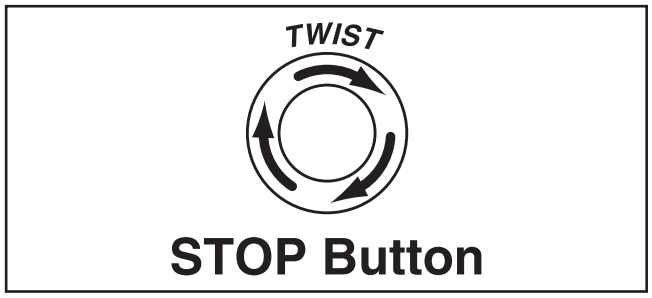


Figure 18. Resetting the switch.

5. Press 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 38**.

Factory adjustments that should be verified:

- Tensioning/replacing V-belts (**Page 41**).
- Calibrating table elevation scale (**Page 47**).
- Pulley alignment (**Page 42**).

NOTICE

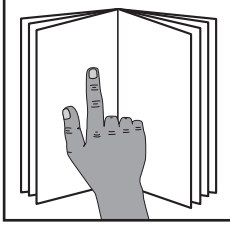
After approximately 16 hours of operation, V-belts will stretch and seat into pulley grooves and need to be properly tensioned to avoid severely reducing life of V-belts. Refer to Tensioning/Replacing V-Belts on Page 41 for detailed instructions.

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 table 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 raises table slightly (approximately ¼ to ½ turn of table 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 19. 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.

Rippled Cut

Problem: Regularly spaced indentations across face of workpiece are caused by excessive outfeed roller pressure or excessive feed rate.

Solution: Reduce outfeed roller pressure; reduce feed rate.

Depth of Cut

Table Movement per Handwheel Revolution
One Full Revolution.....2mm (0.08")

Material Thickness Range
Minimum–Maximum Stock Thickness ....$\frac{3}{16}$"–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 table elevation handwheel on the right side of the machine. Rotating the handwheel clockwise raises the table.

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 $\frac{1}{16}$". 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.*

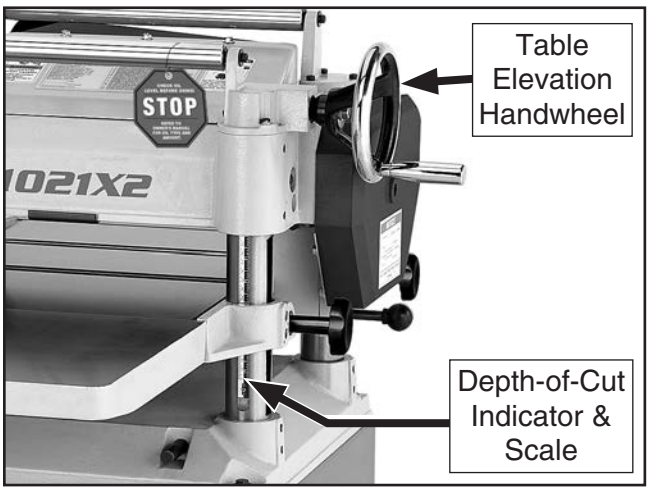


Figure 20. Location of depth-of-cut controls (G1021X2 shown).

Bed Roller Height

Bed Roller Height Range .....0.002"–0.020"

The correct height of the bed rollers will vary, depending on the type of material you intend to plane. However, as a general rule, keep the bed roller height within 0.002"–0.020" above the table surface, as illustrated in **Figure 21**.

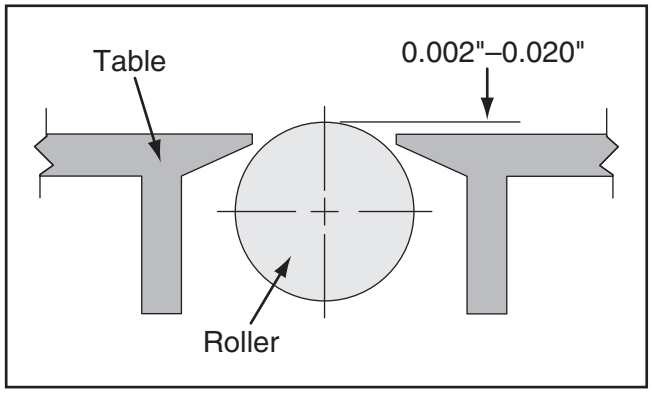


Figure 21. Recommended bed roller height above the table surface.

When planing rough stock, set the rollers high to keep the lumber from dragging along the bed. When planing milled lumber, set the rollers low to help minimize snipe.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (refer to **Page 32**) to gauge the bed roller height from the table surface. If a Rotacator is not available, a straightedge and feeler gauges can be used, but care must be taken to achieve accurate results.

NOTICE

Bed rollers that are not adjusted to the correct height or out of alignment with each other can cause poor finishes, inconsistent planing thickness, and other undesirable results.

Items Needed	**Qty**
Hex Wrench 3mm	1
Open-End Wrench 12mm	1
Straightedge	1
Feeler Gauge Set	1
Rotacator (optional, **Page 32**)	1

To adjust bed rollers:

1. DISCONNECT MACHINE FROM POWER!

2. Completely lower table to give yourself enough room to work.

3. Loosen set screws (see **Figure 22**) above each of four roller adjustment cams (there are two on each side of planer).

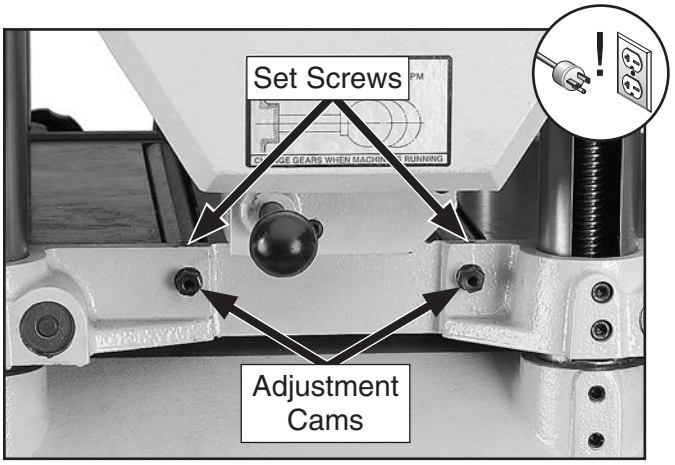


Figure 22. Bed roller height controls (G1021X2 shown).

4. Rotate eccentric adjustment cams to raise or lower bed rollers to desired height above table surface.

5. Verify both sides of each roller are at the same height, then re-tighten set screws to secure in place.

6. Re-check roller heights to make sure they did not change while being secured.

   — If roller heights are not correct, repeat this procedure until they are.

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.

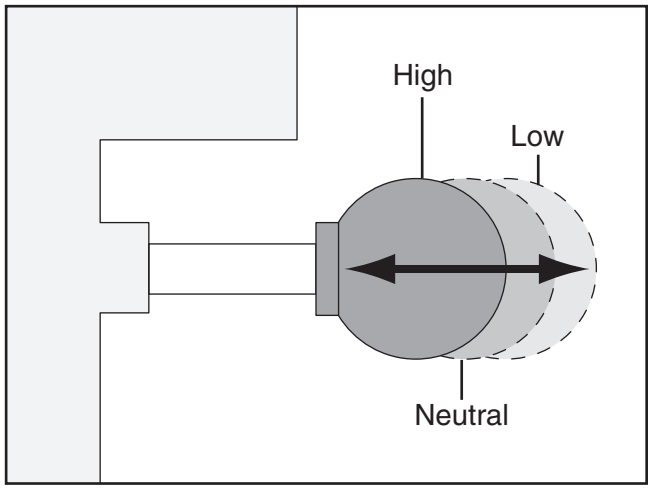
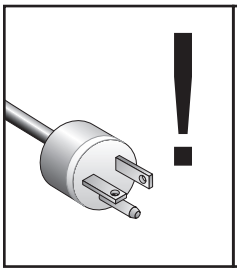


Figure 23. Feed rate control knob positions.

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 (G1021Z)



⚠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 0.070" 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
Phillips Screwdriver #2	1
Wrench or Socket 12mm, 13mm	1 Ea.
Hex Wrench 3mm	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.

Note for G1021Z Only: The cutterhead for Model G1021Z ships with both springs and jack screws to adjust the knife height (see ***Figure 24***)—which one you use is up to your personal preference. However, if you use the springs, you must first remove the jack screws from the cutterhead before proceeding.

— The advantage of using springs is that springs maintain a constant upward pressure on the knives while using the knife-setting Jig during **Step 6**.

— The advantage of using jack screws is that once you set the proper height of the screws, they should require little to no adjustment when replacing the knives.

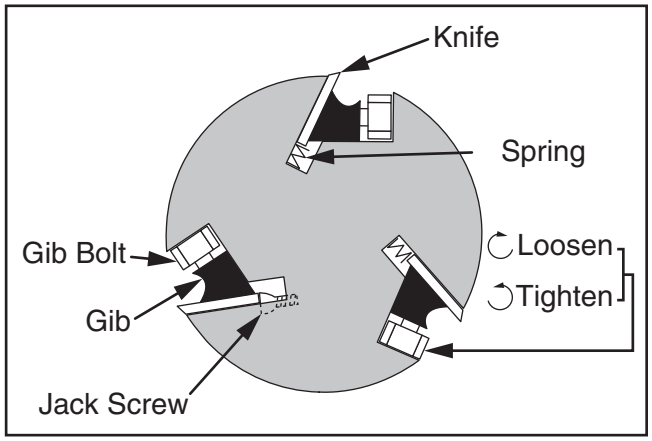


Figure 24. G1021Z cutterhead components.

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.

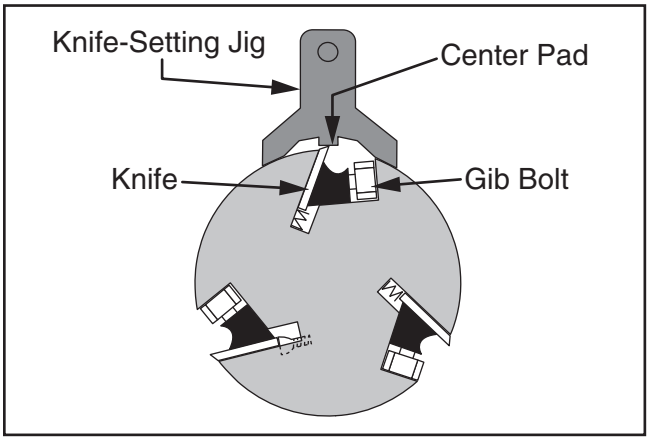


Figure 25. Knife-setting jig correctly positioned over knife.

7. **Jack Screws:** Insert hex wrench into access holes in cutterhead (see **Figure 26**), 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 27**).

   Springs: Insert hex wrench into access holes in cutterhead (see **Figure 26**), and remove jack screws. Push down on knife jig until all legs of jig are firmly on cutterhead and knife just touches center pad of jig, then tighten gib bolts enough to hold knife in place without fully tightening gib bolts (see **Figure 27**).

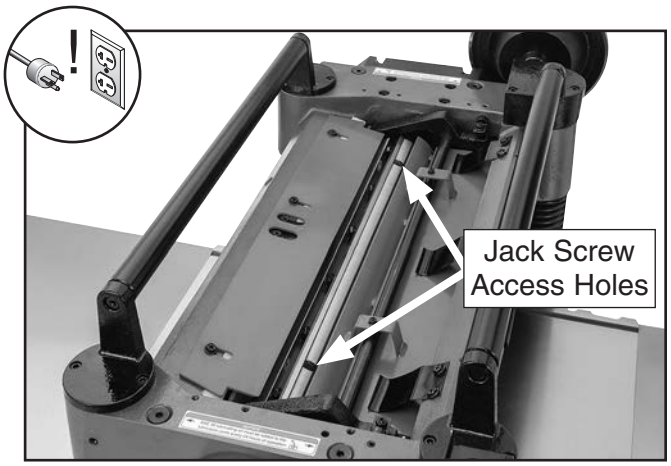


Figure 26. Example of jack screw access holes in cutterhead.

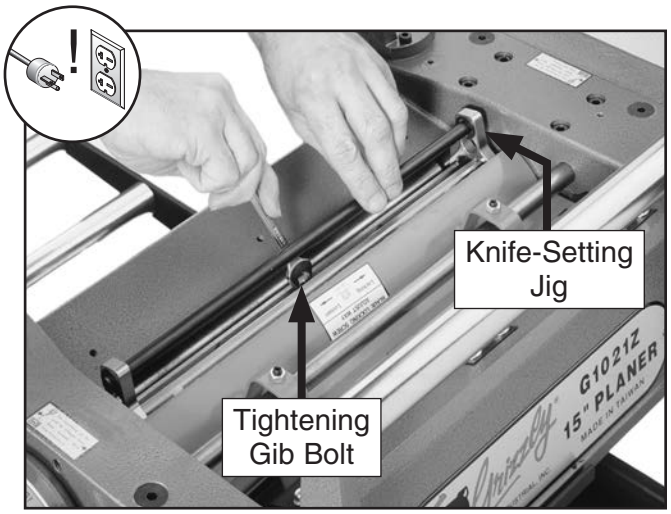


Figure 27. Using knife-setting jig to set knife height on Model G1021Z.

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.

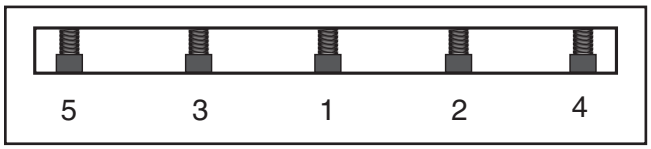


Figure 28. Gib bolt tightening sequence.

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 (G1021X2)

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 29**.

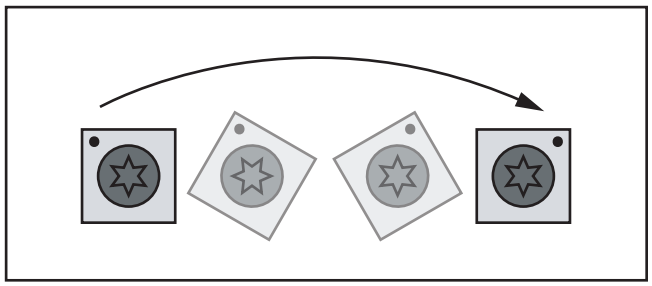


Figure 29. Insert rotating sequence.

Items Needed	Qty
Phillips Screwdriver #2	1
Wrench or Socket 12mm, 13mm	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 dust port, 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 30**).

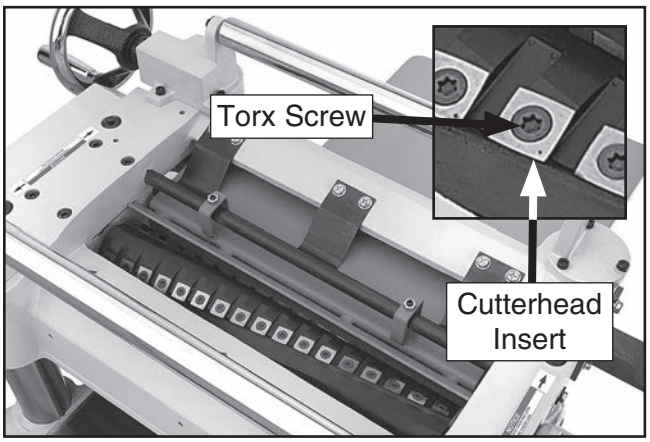


Figure 30. G1021X2 cutterhead inserts and Torx screws.

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 29**).

   — 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.

W1218A—Rotacator™ Precision Planer Tool

The Rotacator is a dial indicator on a magnetic base, designed for quickly and accurately setting the critical tolerances needed when making planer adjustments. Perfect for adjusting infeed/outfeed rollers, pressure bars, chip breakers, and bed rollers. Also a great setup tool for other machines! Accurate to 0.001". Indicator rotates 360°

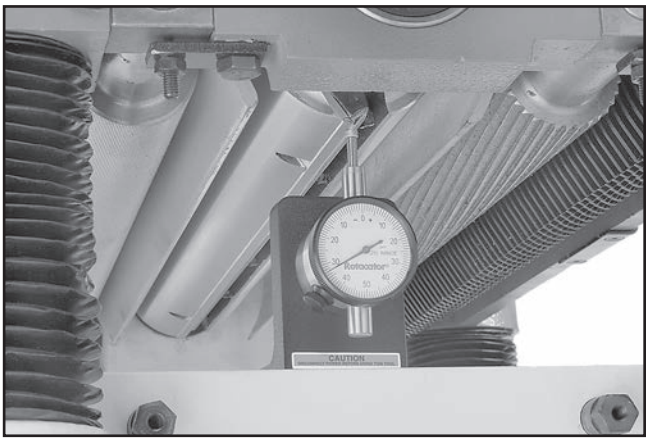


Figure 31. Rotacator™ Precision Planer Tool.

T27695—15" Helical Spiral Cutterhead for Planers

These helical spiral cutterheads feature four spirals and replaceable carbide inserts for providing an incredible finish.

Figure 32. T27395 !5" Helical Spiral Cutterhead.

For G1021X2:

H9893—Indexable Carbide Inserts, 10 Pack

These Indexable Carbide Inserts are designed for use in spiral or helical cutterhead systems and made to last up to 10 times longer than a set of HSS steel inserts. Made of solid carbide. Size: 15 x 15 x 2.5mm.

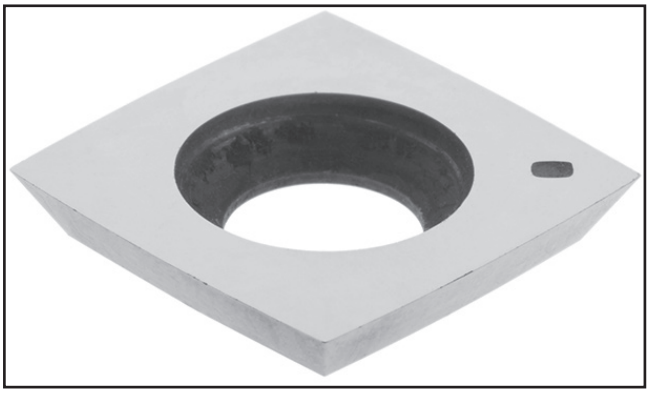


Figure 33. H9893 Indexable Carbide Inserts.

For G1021Z:

G6701—HSS Replacement Knives, Set of 3

These M-2 HSS planer knife sets are hardened and tempered to 62–64 Rockwell and balanced to within 1 gram.

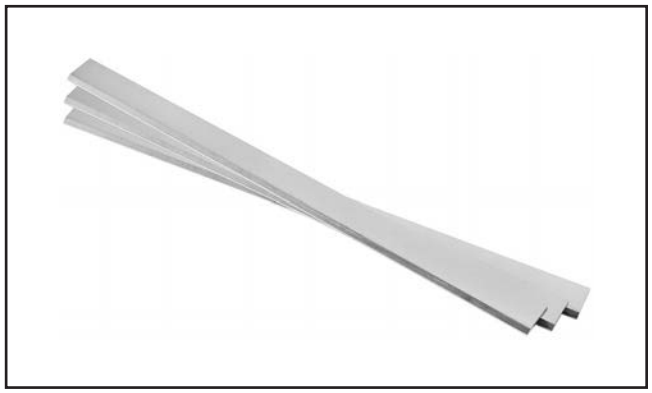


Figure 34. Grizzly planer blades.

D2273— Single Roller Stand

This super heavy-duty roller stand features convenient hand knobs for fast height adjustment. Invaluable for supporting work on machines of varying heights. Adjusts from 26⅝" to 45". 250 lb. capacity.

Figure 35. D2273 Single Roller Stand.

Basic Eye Protection

T20501—Face Shield Crown Protector 4"
T20502—Face Shield Crown Protector 7"
T20503—Face Shield Window
T20451—"Kirova" Clear Safety Glasses
T20452—"Kirova" Anti-Reflective S. Glasses
T20456—DAKURA Safety Glasses, Black/Clear

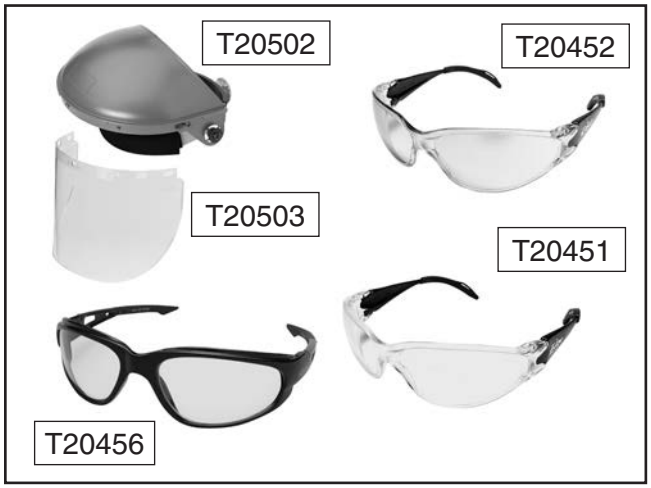


Figure 36. Assortment of basic eye protection.

H4978—Deluxe Earmuffs - 27dB
H4979—Twin Cup Hearing Protector - 29dB
T20446—Classic Earplugs, 200-pair - 31dB

Protect yourself comfortably with a pair of cushioned earmuffs. Especially important if you or employees operate for hours at a time.

Figure 37. Hearing protection.

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 38. Recommended products for protecting unpainted cast iron/steel parts on machinery.

D4206—Clear Flexible Hose 4" x 10'
W1034—Heavy-Duty Clear Flex Hose 4" x 10'
W1015—Y-Fitting 4" x 4" x 4"
W1017—90° Elbow 4"
W1019—Hose Coupler (Splice) 4"
W1317—Wire Hose Clamp 4"
W1007—Plastic Blast Gate 4"
W1053—Anti-Static Grounding Kit
We've hand-picked a selection of commonly used dust-collection components for machines with 4" dust ports.

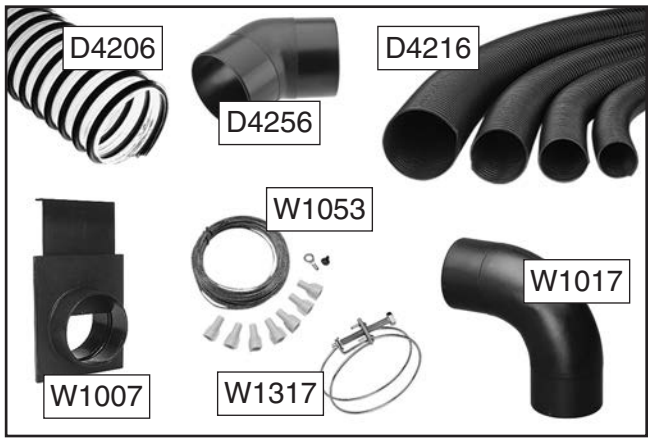


Figure 39. Dust-collection accessories.

SB1365—South Bend Way Oil-ISO 68
Engineered for the high pressure exerted on horizontal or vertical ways and slides. Protects against rust and corrosion. Ensures stick-free, smooth motion which maximizes finishes and extends the life of your machine. Won't gum up! 12 oz. AMGA#2 (ISO 68 Equivalent)

Figure 40. SB1365 Way Oil.

T28042—Moly-D Industrial Gear Oil-ISO 320
This industrial gear oil from Primrose has been developed specifically for the high temperatures and pressures typical of modern industrial applications. 1-gallon size.

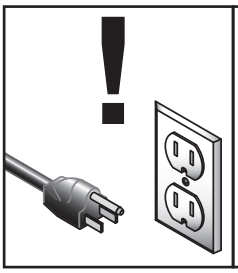
Figure 41. T28042 Gear Oil.

T26419—Syn-O-Gen Synthetic Grease
100% pure synthesized hydrocarbon basestocks compounded with special thickeners and additives make Syn-O-Gen non-melt, tacky, and water resistant. Extremely low pour point, high temperature oxidation, and thermal stability produce a grease unmatched in performance.

Figure 42. T26419 Synthetic Grease.

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

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 36**).
- Tighten loose mounting bolts.
- Check/sharpen/replace damaged or worn knives/inserts (**Page 28**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

Every 40 Hours of Operation:
- Clean cutterhead and, for G1021Z, check knife height (**Page 28**).
- Lubricate table columns and leadscrews (**Page 36**).

Every 160 Hours of Operation:
- Check/tension/replace V-belts (**Page 41**).
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Lubricate table height worm gear (**Page 36**).
- Lubricate table height chain and sprockets (**Page 36**).
- Lubricate drive chain and sprockets (**Page 37**).

Yearly:
- Change gearbox oil (**Page 37**).

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 34** 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 36** 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 head casting, as shown in **Figure 43**.

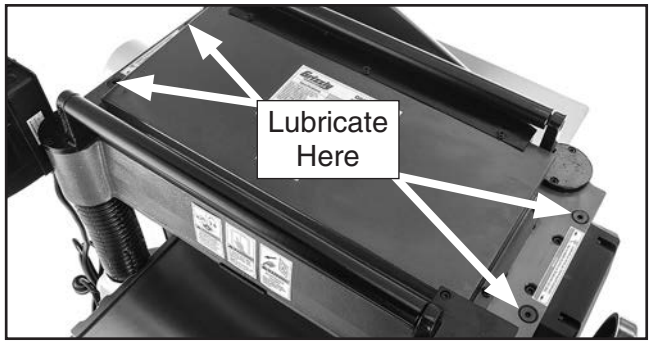


Figure 43. Example of lubrication locations for feed roller bushings.

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 table rides on the columns and is moved by the rotation of the leadscrews inside the columns. Loosen the dust sleeve (see **Figure 44**) 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 table up and down to distribute the lubricant.

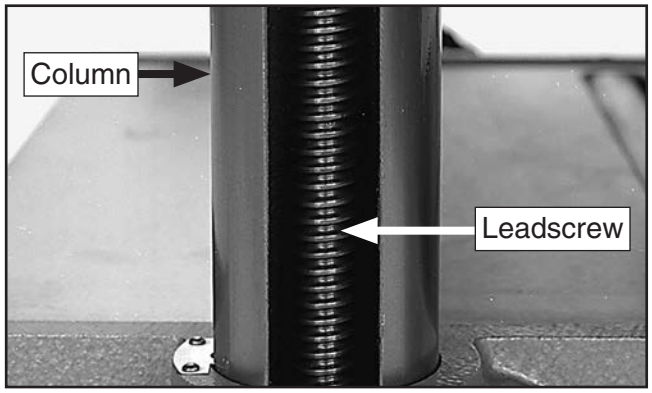


Figure 44. Location of column and leadscrew.

Table Height Worm Gear

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

Remove the three cap screws that secure the worm gear housing (see **Figure 45**), then lift the housing and handwheel assembly off the machine. Clean away any debris from the housing and gears, then brush on a moderate amount of multi-purpose grease to the gear teeth.

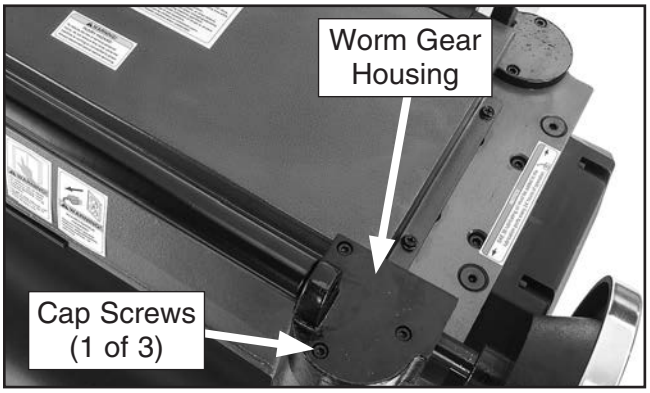


Figure 45. Example of table height worm gear housing.

Table Height Chain & Sprockets

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

The table leadscrews are synchronized by the table height chain and sprockets located underneath the planer base (see **Figure 46**). Use shop rags and mineral spirits to clean away debris and grime, then brush on a light coat of multi-purpose grease to the chain and sprockets.

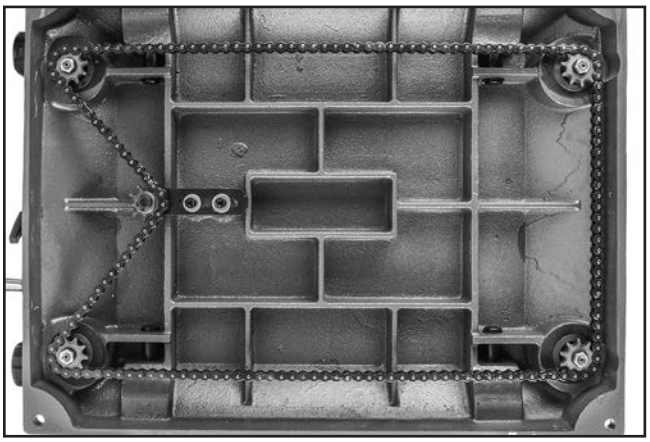


Figure 46. Example of table height chain and sprockets as viewed from underneath the base.

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 47**.

Remove the table height handwheel and the safety covers attached to the inside of the drive chain cover, then remove the cover to access these parts.

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

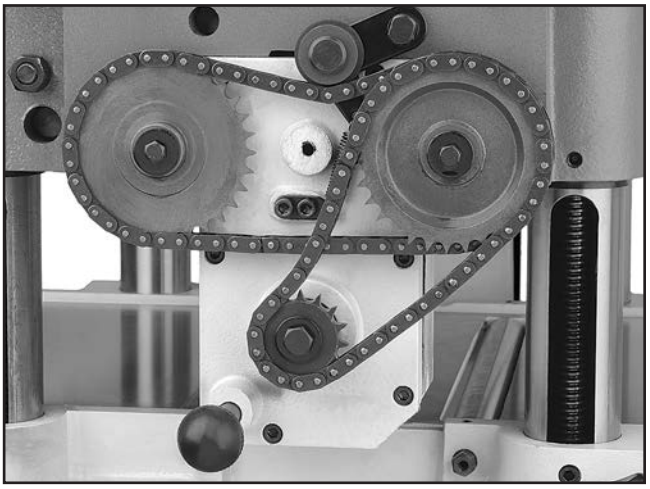


Figure 47. Drive chains and sprockets for infeed and outfeed rollers.

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 drive chain cover to access the fill and drain plugs, it is more convenient to do so (see **Figures 48–49**). Replace the gearbox oil with ISO 320 or equivalent oil until it just reaches the fill plug.

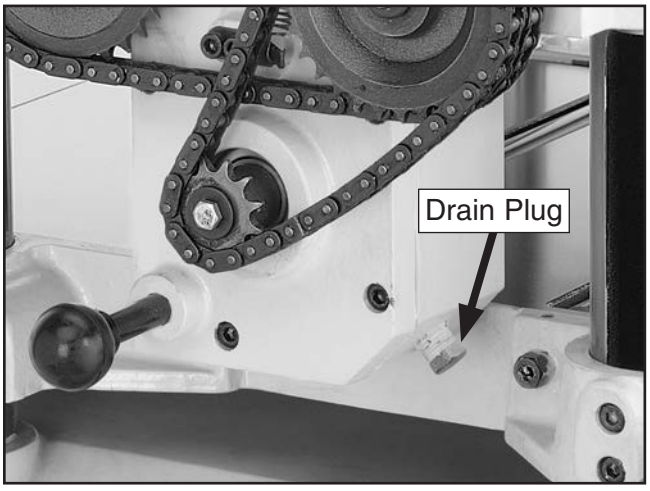


Figure 48. Location of gearbox drain plug.

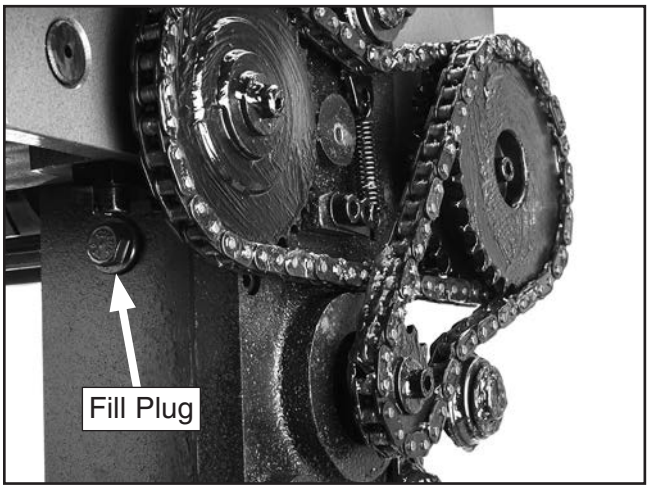
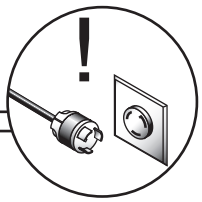


Figure 49. Example of gearbox fill plug.

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. 2. Incorrect power supply voltage or circuit size. 3. Thermal overload relay has tripped. 4. Power supply circuit breaker tripped or fuse blown. 5. Motor wires connected incorrectly. 6. Wiring open/has high resistance. 7. Start button switch at fault. 8. Centrifugal switch/contact points at fault. 9. Start capacitor at fault. 10. Thermal overload relay has tripped. 11. Contactor not energized; has poor contacts. 12. Motor at fault.	1. Rotate button head to reset; replace if at fault. 2. Ensure correct power supply voltage and circuit size. 3. Reset; adjust trip load dial if necessary; replace. 4. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. 5. Correct motor wiring connections. 6. Check/fix broken, disconnected, or corroded wires. 7. Replace switch. 8. Adjust/replace centrifugal switch/contact points if available. 9. Test/replace if at fault. 10. Reset; adjust trip load dial if necessary; replace. 11. Test all legs for power/replace. 12. Test/repair/replace.
Machine stalls or is underpowered.	1. Machine undersized for task. 2. Workpiece not suitable for machine. 3. Motor overheated, causing thermal overload to trip. 4. Belt(s) slipping; oil/grease on belt(s). 5. Dull knives/inserts. 6. Dust-collection problem causing internal components to clog up with shavings. 7. Motor wired incorrectly. 8. Centrifugal switch/contact points at fault. 9. Run capacitor at fault. 10. Pulley slipping on shaft. 11. Contactor not energized/has poor contacts. 12. Motor bearings at fault.	1. Reduce feed rate/depth of cut. 2. Only cut wood/ensure moisture is below 20%. 3. Allow motor to cool, reset overload if necessary, and reduce depth of cut. 4. Clean/tension/replace belt(s) (**Page 41**); align pulleys (**Page 42**). 5. Sharpen/replace knives (**Page 28**), or replace inserts (**Page 31**). 6. Clear blockages in dust chute/ducting, ensure dust collector is operating efficiently. 7. Wire motor correctly. 8. Adjust/replace centrifugal switch/contact points if available. 9. Test/repair/replace. 10. Tighten loose pulley; replace pulley/shaft if damaged. 11. Test all legs for power/replace. 12. Test/repair/replace.

Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	1. Motor or component loose.	1. Inspect/tighten loose bolts/nuts; replace damaged components.
	2. V-belt(s) worn,loose, or slapping cover.	2. Tension/replace belts as a matched set (**Page 41**).
	3. Pulley loose.	3. Re-align/replace shaft, pulley set screw, and key.
	4. Bed rollers protruding unevenly.	4. Adjust bed rollers (**Page 27**).
	5. Plastic chip deflector hitting knives.	5. Adjust chip deflector (**Page 47**); replace if necessary.
	6. Motor fan rubbing on fan cover.	6. Fix/replace fan cover; replace loose/damaged fan.
	7. Knives/gibs at fault.	7. Sharpen/replace knives; set knife alignment/height correctly (**Page 28**).
	8. Cutterhead bearings at fault.	8. Replace bearing(s).
	9. Motor bearings at fault.	9. 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). Note: A small amount of snipe is inevitable with all types of planers. The key is minimizing it as much as possible.	1. One or both of bed rollers are set too high.	1. Lower bed rollers (**Page 27**).
	2. Outfeed extension slopes down or is not level with main table.	2. Shim outfeed extension wing level with main table.
	3. Chip breaker set too low.	3. Raise height of chip breaker (**Page 43**).
	4. Workpiece is not supported as it leaves planer.	4. Hold workpiece up slightly as it leaves outfeed end of planer.
	5. Some snipe is inevitable.	5. 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.	1. Take a lighter cut.
	2. One or both of bed rollers are set too low or too high.	2. Adjust bed rollers (**Page 27**).
	3. Chip breaker or pressure bar set too low.	3. Raise height of chip breaker or pressure bar (**Page 43**).
	4. Feed rollers set too low or too high.	4. Adjust feed rollers (**Page 43**).
	5. Pitch and glue buildup on planer components.	5. Clean internal cutterhead components with a pitch/ resin-dissolving solvent.
Chipping (consistent pattern).	1. Knots or conflicting grain direction in wood.	1. Inspect workpiece for knots and grain direction; only use clean stock, and cut WITH the grain.
	2. Taking too deep of a cut.	2. Take a smaller depth of cut. (Reduce cutting depth when planing hard woods.)
	3. Feeding workpiece too fast.	3. Slow down feed rate.
	4. Mis-adjusted chip breaker.	4. Adjust both sides of chip breaker to correct height.
	5. Nicked or chipped knife/insert.	5. Replace affected knife (**Page 28**), or have it sharpened; rotate/replace insert (**Page 31**).
Chipping/indentation in workpiece surface (inconsistent pattern).	1. Chips aren't being properly expelled from cutterhead.	1. Use a proper dust-collection system.
	2. Chip breaker not set correctly.	2. Correctly adjust chip breaker (**Page 43**).

Machine Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Fuzzy grain.	1. Wood may have high moisture content or surface wetness. 2. Dull knives/inserts.	1. Check moisture content is below 20% and allow to dry if moisture is too high. 2. Replace knives (**Page 28**) or have them professionally sharpened; rotate/replace inserts (**Page 31**).
Long lines or ridges that run along length of board.	1. Nicked or chipped knife/inserts.	1. Replace knives (**Page 28**) or have them professionally sharpened; rotate/replace inserts (**Page 31**).
Uneven cutting` marks, wavy surface, or chatter marks across face of board.	1. Feeding workpiece too fast. 2. Chip breaker or pressure bar set unevenly or not low enough. 3. Knives not installed evenly/inserts not properly installed. 4. Worn cutterhead bearings.	1. Slow down feed rate. 2. Adjust height of chip breaker (**Page 43**). 3. Adjust knives with knife gauge (**Page 28**); remove inserts, properly clean mounting pocket and re-install (**Page 31**). 4. Replace cutterhead bearings.
Glossy surface.	1. Knives/inserts are dull. 2. Feeding workpiece too slow. 3. Cutting depth too shallow.	1. Replace knives (**Page 28**) or have them professionally sharpened; rotate/replace inserts (**Page 31**). 2. Increase feed rate. 3. Increase depth of cut.
If workpiece twists in machine.	1. Feed rollers not parallel with table.	1. Adjust feed rollers (**Page 43**).

Tensioning/ Replacing V-Belts

NOTICE

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

Three V-belts transfer 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-belts are always properly tensioned and in good condition.

If the V-belts are worn, cracked, or damaged, replace them. Always replace the V-belts with a matched set of three, or belt tension may not be even among the belts, causing premature belt failure.

⚠CAUTION

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

Items Needed	Qty
Phillips Screwdriver #2	1
Open-End Wrench 16mm	1

To tension/replace V-belts:

1. DISCONNECT MACHINE FROM POWER!

2. Remove V-belt cover from left side of machine to expose belts, as shown in **Figure 50**.

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

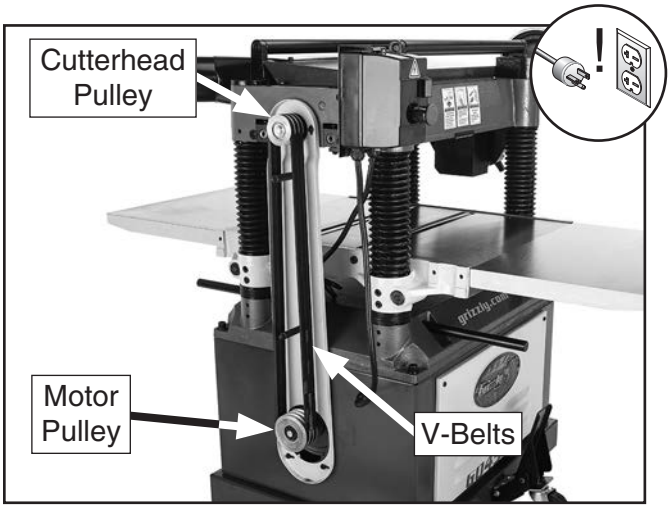


Figure 50. Example of belt cover removed to expose V-belts and pulleys.

3. Remove front cabinet cover to access motor, as shown in **Figure 51**.

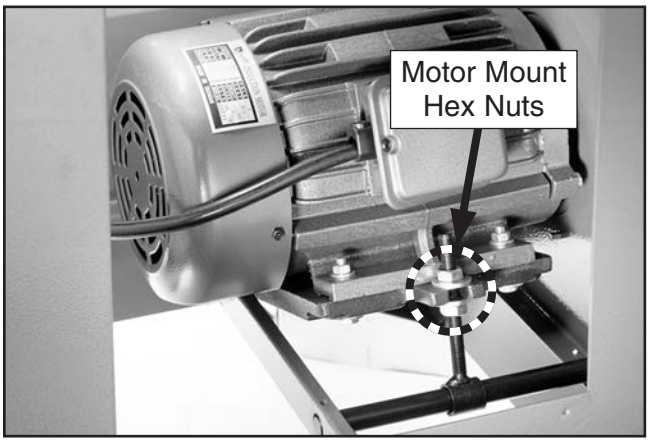


Figure 51. Example of front cabinet cover removed to access motor.

4. If V-belts need to be replaced, raise motor to release belt tension (see next step for instructions), roll them off pulleys, then replace with a matched set of 3.

5. To adjust V-belt tension, loosen top motor mount hex nut (see **Figure 51** on **Page 41**), then adjust bottom hex nut to raise or lower motor.

   Note: *V-belts are correctly tensioned when there is approximately ¾" deflection when moderate pressure is applied to them midway between pulleys, as illustrated in* ***Figure 52****.*

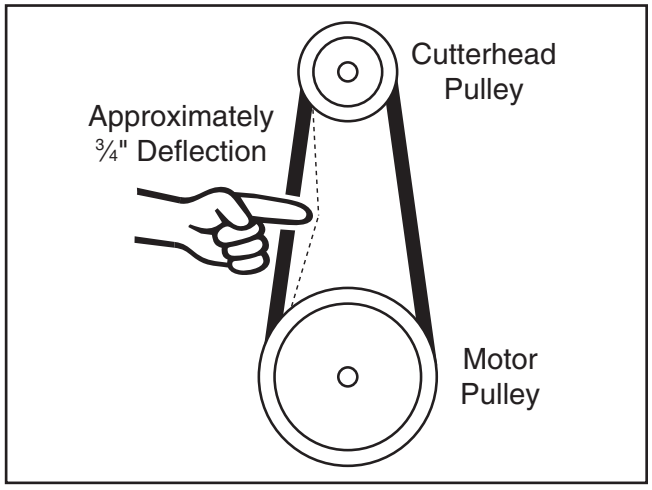


Figure 52. Belt deflection when V-belts are correctly tensioned.

6. After V-belts are correctly tensioned, tighten top motor mount hex nut, then re-install cabinet cover and belt cover.

Pulley Alignment

Proper pulley alignment prevents premature V-belt wear and unnecessary load on the motor. The pulleys are properly aligned when they are parallel and in the same plane as each other.

Items Needed	**Qty**
Straightedge 3'	1
Wrench or Socket 14mm, 17mm	2 Ea.

To check/re-align pulleys:

1. DISCONNECT MACHINE FROM POWER!

2. Remove belt cover, then use straightedge to check pulley alignment, as shown in **Figure 53**.

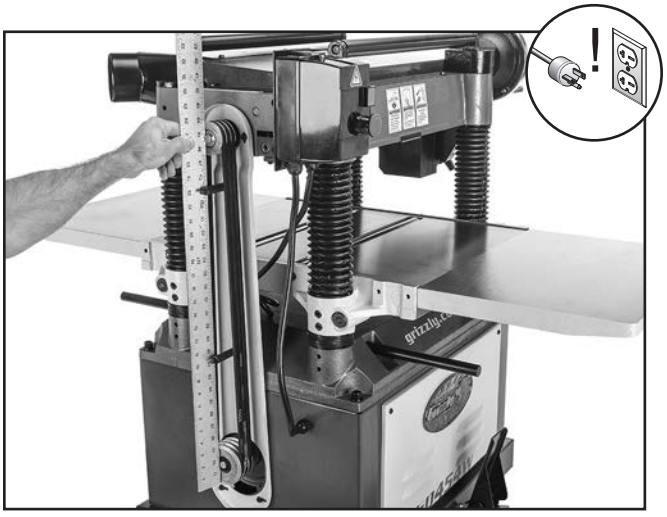


Figure 53. Example of checking pulley alignment.

   — If pulleys are parallel and in the same plane, no adjustment is necessary. Re-install belt cover.

   — If pulleys are not parallel or in the same plane, remove motor access panel, then proceed to **Step 3**.

3. Loosen four motor mount bolts, shift motor until pulleys are properly aligned, then re-tighten motor mount bolts.

4. Re-check pulleys and repeat **Step 3** as necessary until you are satisfied with pulley alignment, then re-tighten all fasteners, and replace belt cover and motor access panel.

Feed Rollers & Chip Breaker Heights

It is essential that the feed rollers and chip breaker 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.

Dist. Below Knife/Insert at BDC (Figure 54)

A. Infeed Roller ..... 0.040"
B. Chip Breaker..... 0.040"
C. Outfeed Roller ..... 0.020"

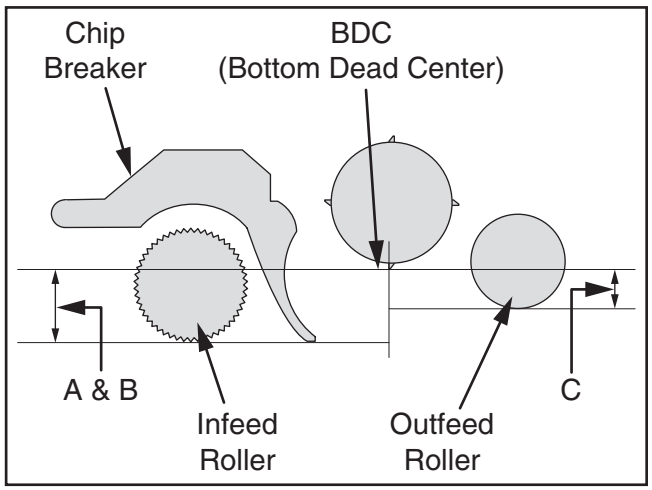


Figure 54. Planer component recommended clearances (illustration is not to scale).

Using a Rotacator

Items Needed	Qty
Phillips Screwdriver #2	1
Hex Wrenches 3mm, 5mm	1 Ea.
Wrench or Socket 10mm	1 Ea.
Rotacator (see **Page 32**)	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 28** for detailed instructions). If machine is helical cutterhead, make sure all inserts are properly installed (refer to **Rotating/ Replacing Cutterhead Inserts** on **Page 31** for detailed instructions).

3. Lower table at least 4" below head casting, then lock it in place.

4. Remove dust port, top cover, belt cover, and drive chain 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 55**).

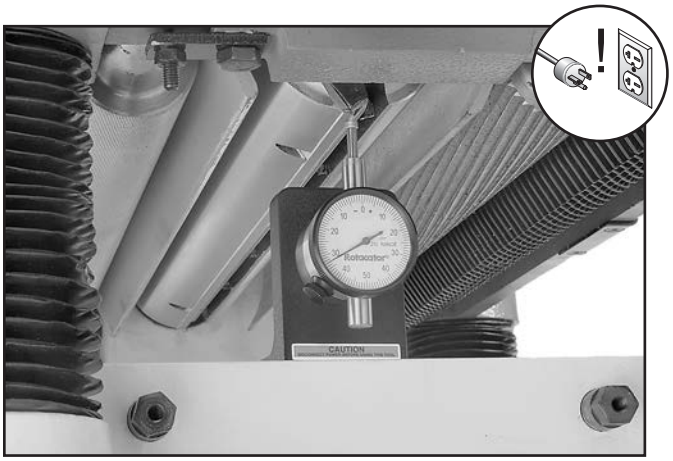


Figure 55. Example of using a Rotacator to find BDC.

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.

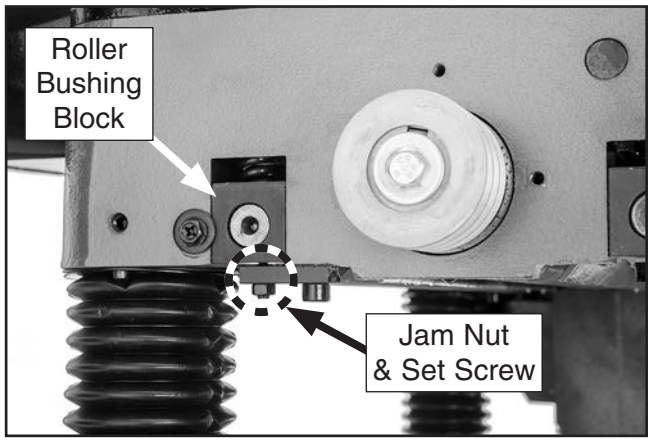


Figure 56. Example of infeed roller bushing block and height adjustment controls.

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 out-feed roller, but adjust it until it is 0.020" below BDC of cutterhead knife.

12. Using same "0" reference on Rotacator dial from **Step 5**, perform similar steps as described previously to adjust height of chip breaker to its recommended specification given at beginning of this subsection. The adjustment controls are shown below.

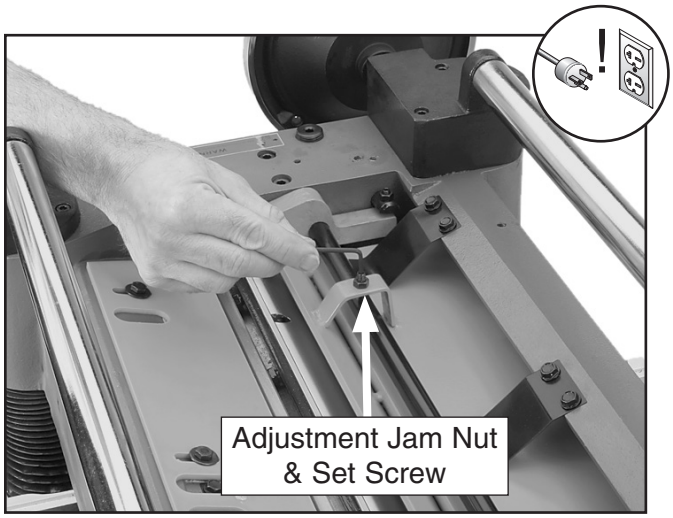


Figure 57. Example of adjusting chip breaker height.

13. Re-install belt cover, top cover, drive chain cover, and dust port.

Using Wood Blocks

Items Needed	Qty
Phillips Screwdriver #2	1
Hex Wrench 3mm, 5mm	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. **G1021Z Only:** Make sure knives are set to correct height (refer to **Adjusting/Replacing Knives** on **Page 28** for detailed instructions).

3. DISCONNECT MACHINE FROM POWER!

4. Lower bed rollers below table surface (refer to **Bed Roller Height** on **Page 27** for detailed instructions).

5. Place wood blocks along sides of table, as illustrated in **Figure 58**.

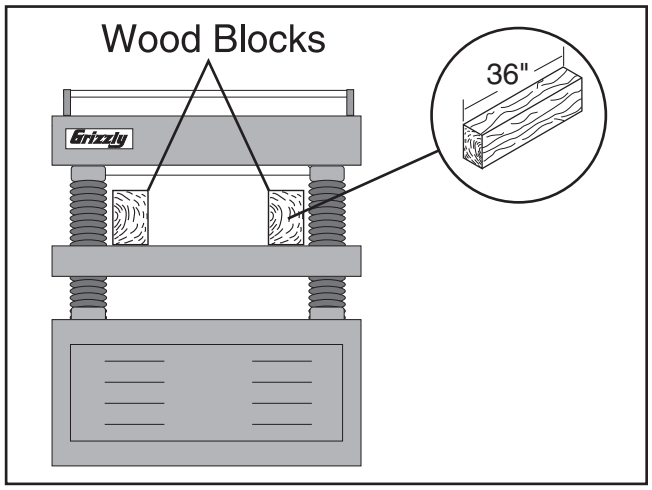


Figure 58. Wood blocks properly positioned on the planer table.

6. Remove dust port, top cover, belt cover, and drive chain cover.

7. Raise table until wood blocks get close to cutterhead.

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

9. Lock table in place. Upward pressure of wood blocks will be holding infeed and outfeed rollers, chip breaker, and pressure bar at same level as knife/insert at BDC.

10. Loosen jam nuts and set screws on each side of infeed roller (see **Figure 59**).

11. Using a feeler gauge, adjust set screw so it is 0.040" from roller bushing block (see **Figure 59**), then tighten jam nut. Repeat on other side of infeed roller.

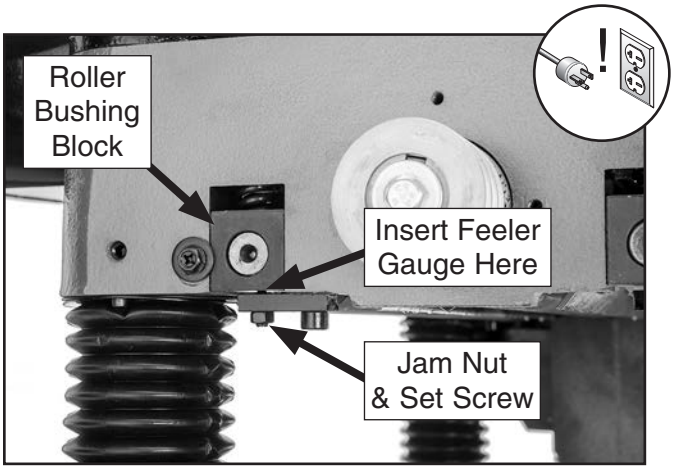


Figure 59. Example of feeler gauge location for adjusting infeed roller height when using wood blocks (one of two locations shown).

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

13. Loosen jam nuts and set screws on each side of chip breaker (see **Figure 60**).

14. Using a feeler gauge, adjust set screw so it is 0.040" from cross bar (see **Figure 60**), then tighten jam nut. Repeat on other side of chip breaker.

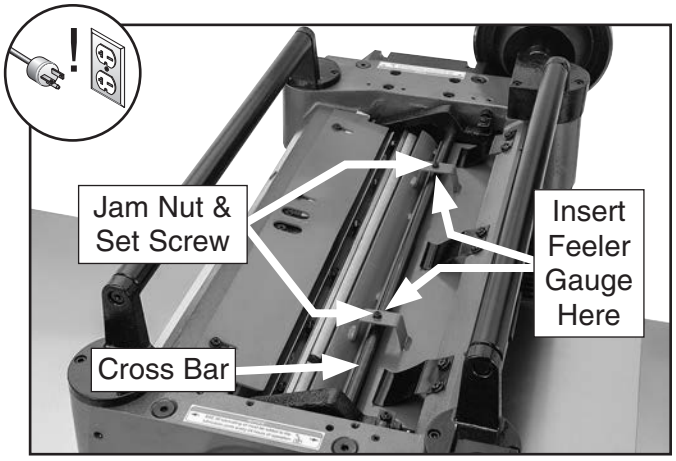


Figure 60. Example of feeler gauge locations for adjusting chip breaker height when using wood blocks.

15. Re-install belt cover, top cover, drive chain cover, and dust port.

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 5mm..... 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.

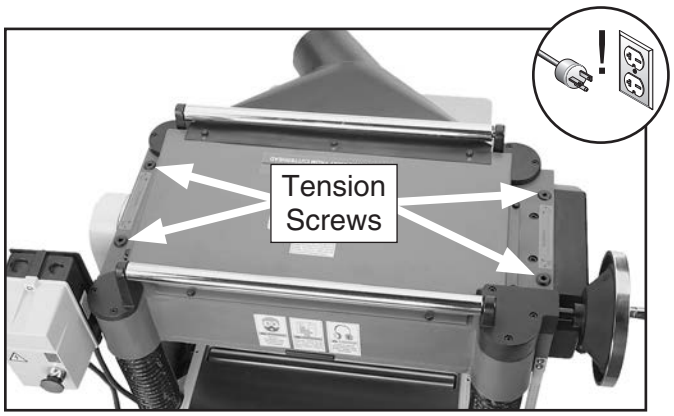


Figure 61. Example of roller spring tension adjustment screws.

Positioning Chip Deflector

Chip Deflector Gap Setting
If Planer Used w/Dust Collector ..... ¼"
If Planer Used w/o Dust Collector ..... 1/16"

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
Hex Wrench 5mm	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.

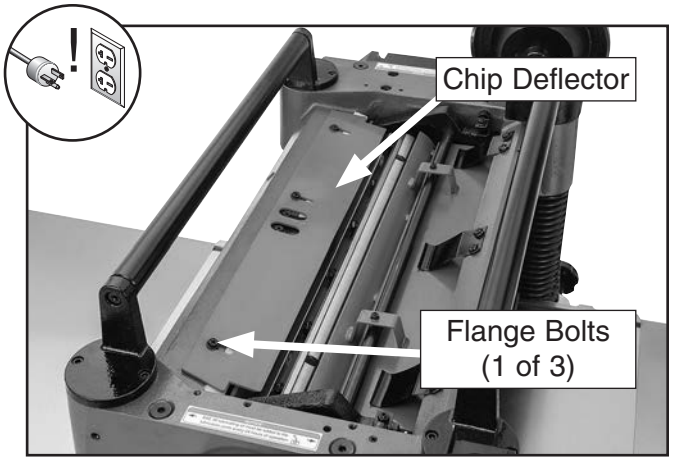


Figure 62. Example of chip deflector and mounting hardware.

4. If distance measured in **Step 3** is *not* equal to correct chip deflector gap setting, then loosen flange bolts (see **Figure 62**) 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 Table Elevation Scale

Although correctly set at the factory, the table 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 table 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 table elevation scale, loosen the screw shown in **Figure 63**, adjust scale as necessary, then re-tighten screw.

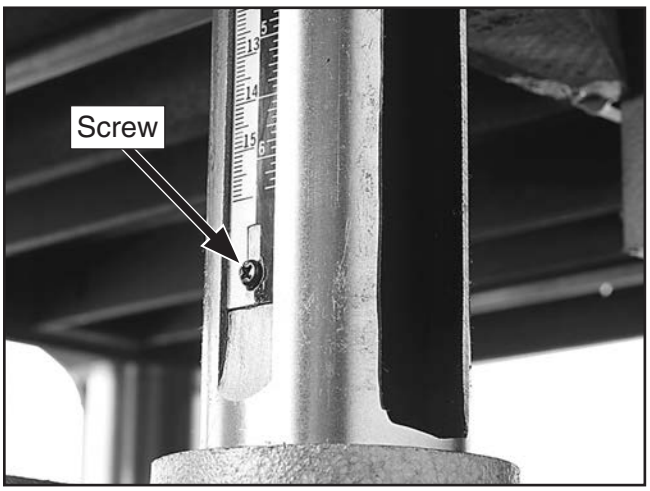


Figure 63. Location of adjustment screw for table elevation scale.

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.

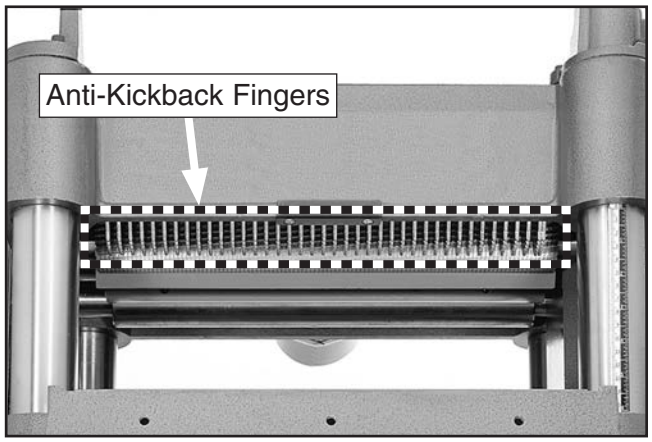


Figure 64. Anti-kickback fingers.

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 Table Height Chain

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

Items Needed	**Qty**
Phillips Screwdriver #2	1
Wrench or Socket 12mm	1

To adjust table height chain tension:

1. DISCONNECT MACHINE FROM POWER!

2. Remove motor access panel to access table height to chain (see **Figure 65**).

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 65**).

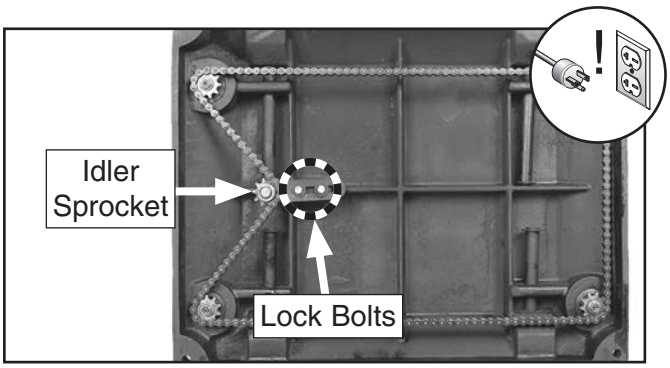


Figure 65. Table height chain adjustment (shown without stand for purpose of illustration).

4. Clean and lubricate chain and sprockets (refer to **Table Height Chain & Sprockets** on **Page 36** 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 Table Parallelism

Maximum Allowable Tolerances:
Cutterhead/Table Side-to-Side.....0.002"
Head Casting/Table Front/Back .....0.020"

Table parallelism is critical to the operation of the machine. As such, it is essential that the table is parallel with the cutterhead (within 0.002") from side-to-side, as illustrated in **Figure 66.**

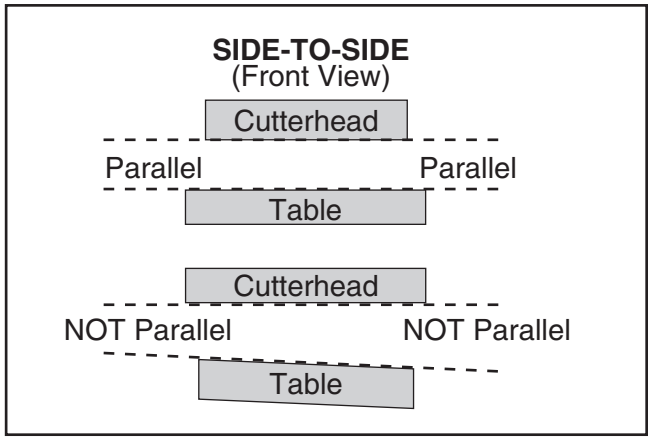


Figure 66. Side-to-side parallelism of table and cutterhead.

How the table sits in relation to the head casting from front-to-back is also important (see **Figure 67**). Because the feed rollers, pressure bar, 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".

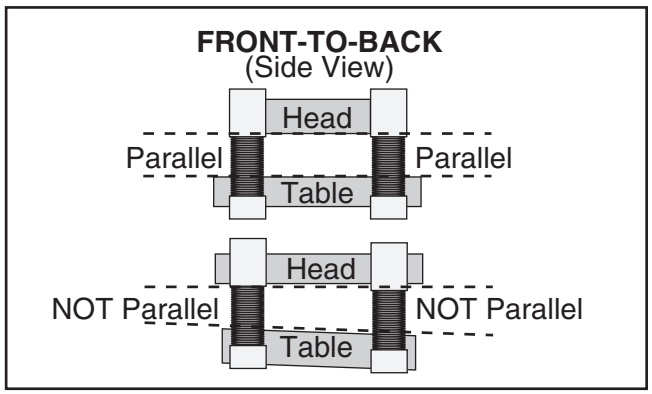


Figure 67. Front-to-back parallelism of table and cutterhead.

Table Parallelism Inspection

Use your Rotacator to inspect the table 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 table is not within the maximum allowable tolerances, it must be adjusted.

Table Parallelism Adjustments

The table is adjusted by turning the chain sprockets underneath the table for movements over 0.008" or by adjusting how the table 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 table 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 36**).

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 table is adjusted equally.*

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

6. Carefully rotate sprocket (clockwise to lower table; counterclockwise to raise table) 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 table position by loosening cap screws shown in **Figure 68** and raising or lowering table until it is properly aligned with cutterhead.

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

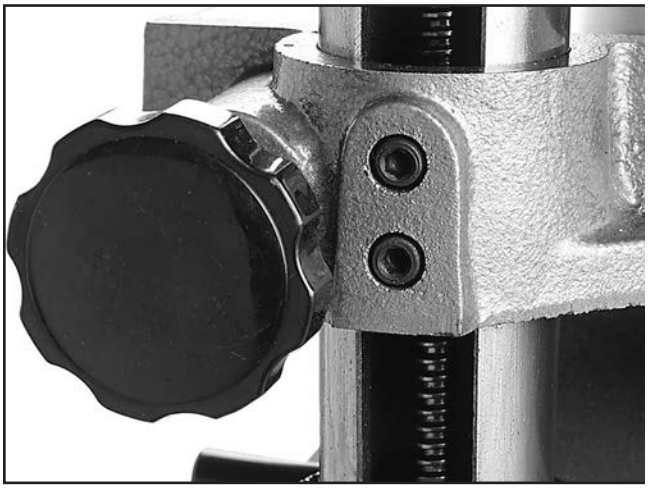


Figure 68. Location of table micro-adjustment screws (one side shown only).

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.

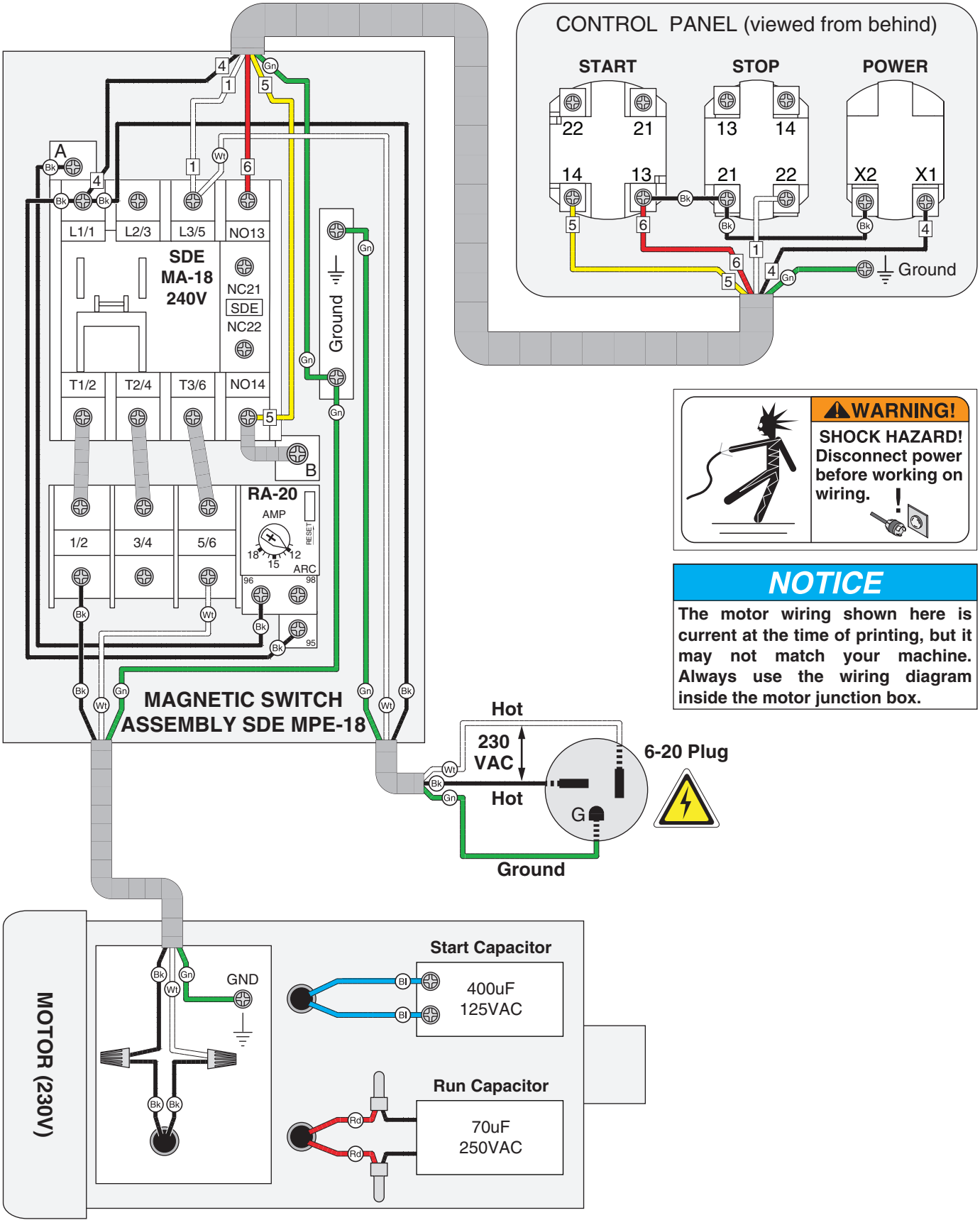
NOTICE

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		

G1021X2 Wiring Diagram



⚠WARNING!

SHOCK HAZARD!
Disconnect power before working on wiring.

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 51!*

G1021X2 Electrical Components

Figure 69. G1021X2 magnetic switch with cover removed.

Figure 70. G1021X2 motor junction box.

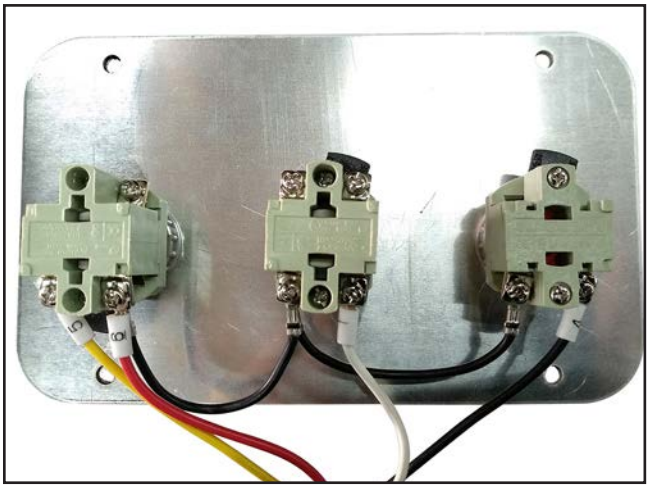
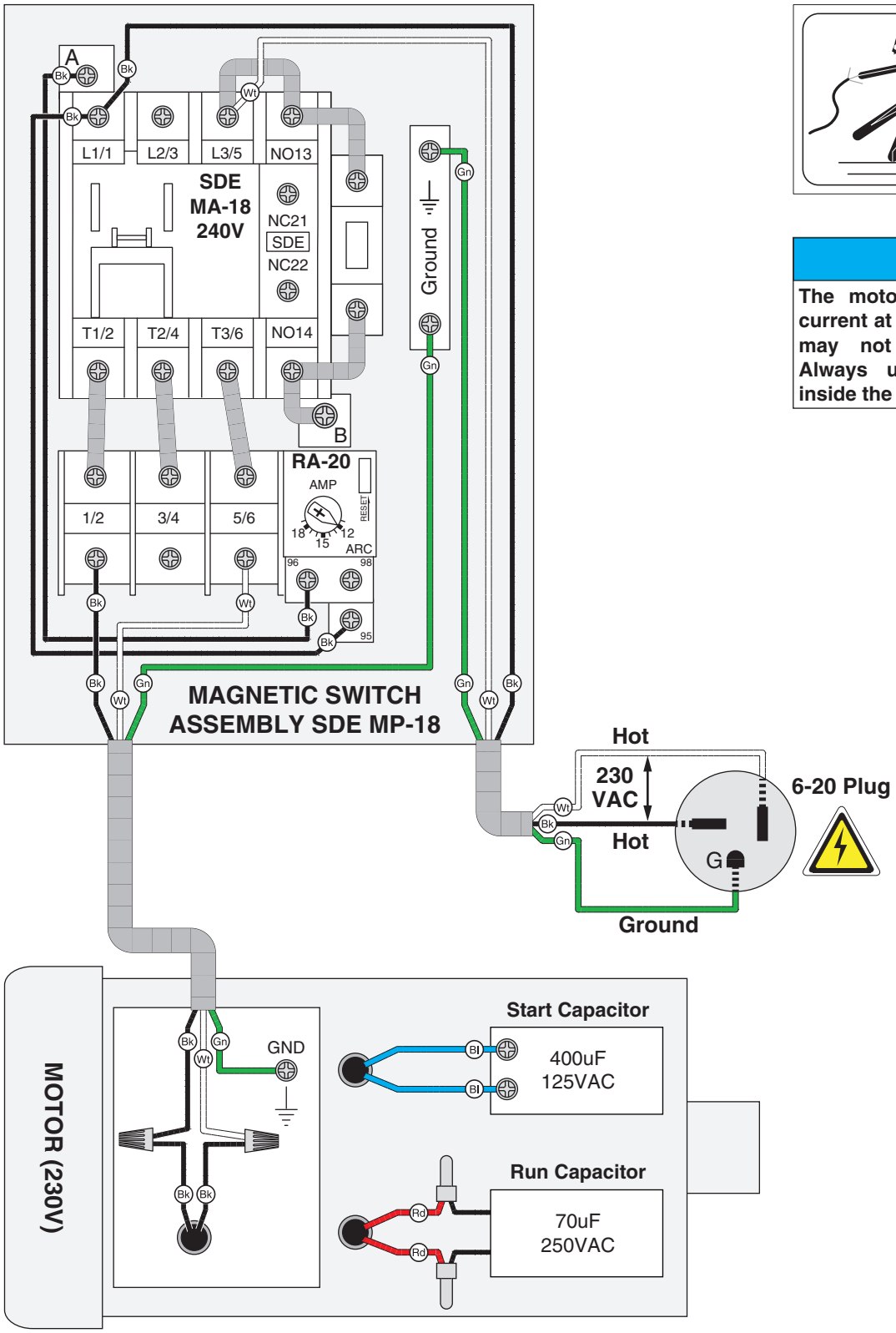


Figure 71. G1021X2 control panel.

G1021Z 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.

G1021Z Electrical Components

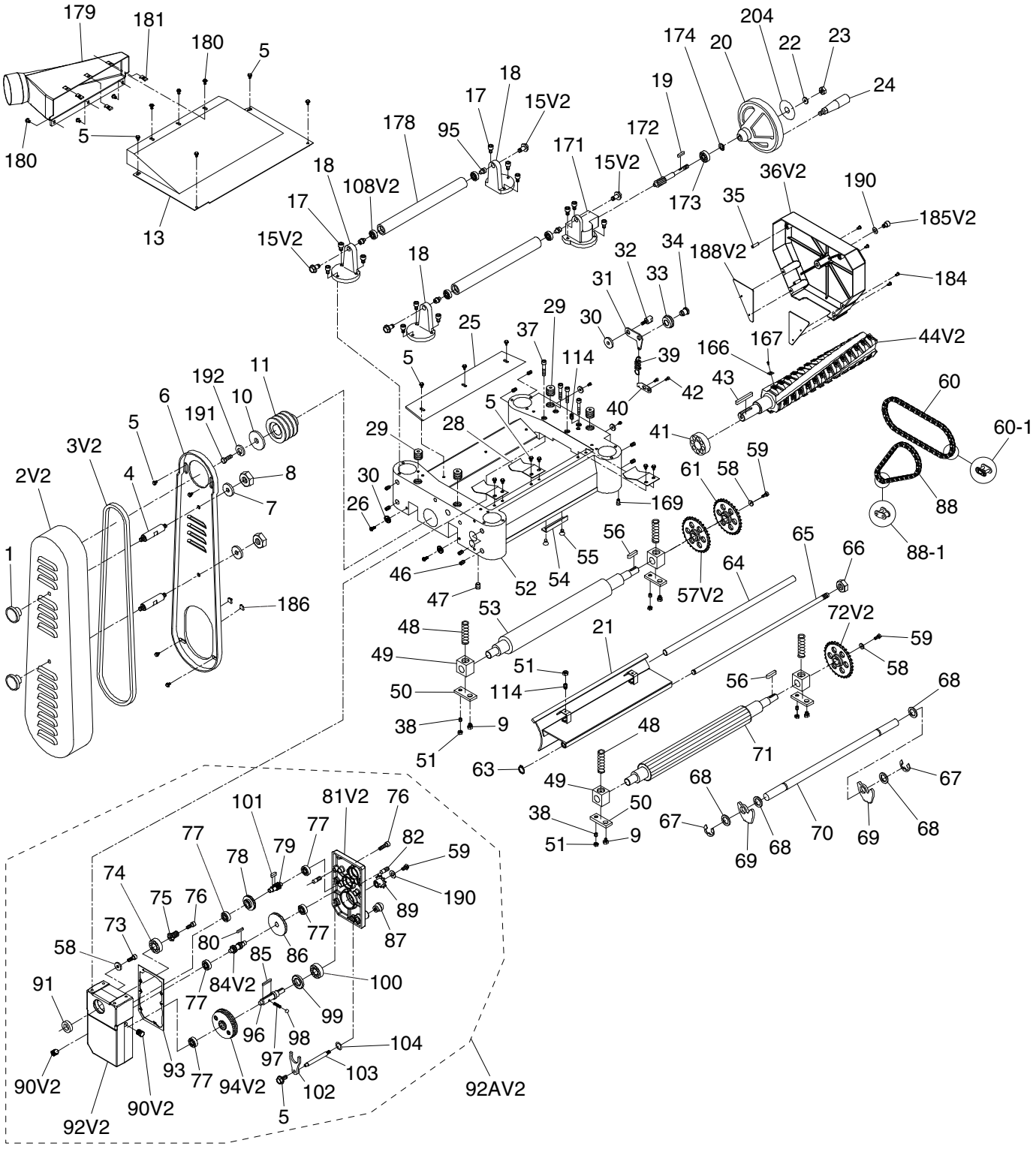
Figure 72. G1021Z magnetic switch with cover removed.

Figure 73. G1021Z 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.

G1021X2 Main



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G1021X2 Main Parts List

REF	PART #	DESCRIPTION
1	P1021X2001	KNOB 5/16-18, D1-3/4, ROUND
2V2	P1021X2002V2	BELT/PULLEY COVER V2.05.18
3V2	P1021X2003V2	V-BELT M58 3L580 V2.05.18
4	P1021X2004	STANDOFF-HEX MM 5/16-18 X 3/8, 3
5	P1021X2005	FLANGE BOLT M6-1 X 12
6	P1021X2006	BELT/PULLEY GUARD
7	P1021X2007	FLAT WASHER 5/16
8	P1021X2008	HEX NUT 5/16-18
9	P1021X2009	HEX BOLT M8-1.25 X 20
10	P1021X2010	FENDER WASHER 8 X 30 X 4MM
11	P1021X2011	CUTTERHEAD PULLEY
13	P1021X2013	UPPER COVER
15V2	P1021X2015V2	FLANGE BOLT M6-1 X 12
17	P1021X2017	CAP SCREW M6-1 X 20
18	P1021X2018	RETURN ROLLER BRACKET
19	P1021X2019	KEY 4 X 4 X 10
20	P1021X2020	HANDWHEEL TYPE-3 151D X 10B-K X 3/8-16
21	P1021X2021	CHIP BREAKER
22	P1021X2022	FLAT WASHER 10MM
23	P1021X2023	HEX NUT M10-1.25
24	P1021X2024	REVOLVING HANDLE 1 X 3-9/16, 3/8-16 X 1/2
25	P1021X2025	CHIP DEFLECTOR
26	P1021X2026	HEX BOLT M6-1 X 12
28	P1021X2028	FLAT SPRING 84 X 46 X 0.6MM
29	P1021X2029	TENSIONING SET SCREW M22-1.5 X 20
30	P1021X2030	SPACER 8.2 X 22 X 3MM
31	P1021X2031	CHAIN TENSIONER
32	P1021X2032	SHOULDER BOLT M8-1.25 X 14, 4 X 12
33	P1021X2033	IDLER WHEEL
34	P1021X2034	IDLER SHAFT
35	P1021X2035	ROLL PIN 6 X 20
36V2	P1021X2036V2	DRIVE CHAIN COVER V2.05.18
37	P1021X2037	CAP SCREW M8-1.25 X 50
38	P1021X2038	SET SCREW M6-1 X 16
39	P1021X2039	EXTENSION SPRING 1 X 8.5 X 33
40	P1021X2040	SPRING BRACKET
41	P1021X2041	BALL BEARING 6205-2RS
42	P1021X2042	CAP SCREW M6-1 X 10
43	P1021X2043	KEY 8 X 8 X 36
44V2	P1021X2044V2	HELICAL CUTTERHEAD 15" V2.05.18
46	P1021X2046	SET SCREW M10-1.5 X 12
47	P1021X2047	SET SCREW M8-1.25 X 12
48	P1021X2048	COMPRESSION SPRING 3.5 X 19.7 X 70
49	P1021X2049	BUSHING BLOCK
50	P1021X2050	BUSHING BLOCK PLATE
51	P1021X2051	HEX NUT M6-1
52	P1021X2052	HEAD CASTING
53	P1021X2053	OUTFEED ROLLER
54	P1021X2054	DEPTH LIMITER
55	P1021X2055	FLAT HD SCR M5-.8 X 8
56	P1021X2056	KEY 5 X 5 X 22

REF	PART #	DESCRIPTION
57V2	P1021X2057V2	SPROCKET 31T V2.05.18
58	P1021X2058	FENDER WASHER 6 X 20 X 3MM
59	P1021X2059	HEX BOLT M6-1 X 16
60	P1021X2060	CHAIN 06B-1 X 63 (31 LINKS)
60-1	P1021X2060-1	MASTER LINK
61	P1021X2061	SPROCKET 31T
63	P1021X2063	EXT RETAINING RING 12MM
64	P1021X2064	CHIP BREAKER ADJUSTMENT ROD
65	P1021X2065	CHIP BREAKER PIVOT ROD
66	P1021X2066	HEX NUT M12-1.75
67	P1021X2067	E-CLIP 15MM
68	P1021X2068	SPACER
69	P1021X2069	ANTI-KICKBACK FINGER
70	P1021X2070	ANTI-KICKBACK SHAFT
71	P1021X2071	INFEED ROLLER
72V2	P1021X2072V2	SPROCKET 31T V2.05.18
73	P1021X2073	CAP SCREW M6-1 X 12
74	P1021X2074	BALL BEARING 6204ZZ
75	P1021X2075	GEAR 16T
76	P1021X2076	CAP SCREW M6-1 X 25
77	P1021X2077	BALL BEARING 6201-2RS
78	P1021X2078	GEAR 47T
79	P1021X2079	GEARED SHAFT 18T
80	P1021X2080	KEY 5 X 5 X 10
81V2	P1021X2081V2	GEARBOX COVER V2.05.18
82	P1021X2082	LOCATING PIN 8 X 7.55 X 7.95
84V2	P1021X2084V2	GEARED SHAFT 28T/18T V2.02.19
85	P1021X2085	KEY 6 X 6 X 40
86	P1021X2086	GEAR 71T
87	P1021X2087	KNOB 3/8-16, D1-1/4, BALL
88	P1021X2088	CHAIN 06B-1 X 47 (23 LINKS)
88-1	P1021X2088-1	HALF LINK
89	P1021X2089	SPROCKET 12T W/KEY
90V2	P1021X2090V2	OIL PLUG 1/4 NPT X 3/4" V2.05.18
91	P1021X2091	OIL SEAL 28 X 40 X 8
92V2	P1021X2092V2	GEARBOX V2.05.18
92AV2	P1021X2092AV2	GEARBOX ASSEMBLY V2.05.18
93	P1021X2093	GASKET
94V2	P1021X2094V2	COMBO GEAR 86T/96T V2.02.19
95	P1021X2095	BEARING SHAFT
96	P1021X2096	GEAR SHAFT
97	P1021X2097	COMPRESSION SPRING 0.6 X 5.9 X 16
98	P1021X2098	STEEL BALL 6MM
99	P1021X2099	OIL SEAL 25 X 47 X 6
100	P1021X2100	BALL BEARING 6204ZZ
101	P1021X2101	KEY 5 X 5 X 12
102	P1021X2102	SHIFTING FORK
103	P1021X2103	SHIFTING SHAFT
104	P1021X2104	O-RING 11.8 X 2.4 P12
108V2	P1021X2108V2	BALL BEARING 608ZZ V2.05.18
114	P1021X2114	SET SCREW M6-1 X 12

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G1021X2 Main Parts List (Cont.)

REF	PART #	DESCRIPTION
166	P1021X2166	CARBIDE INSERTS 15 X 15 X 2.5MM-10 PK
167	P1021X2167	FLAT HEAD TORX 10-32 X 1/2
169	P1021X2169	CAP SCREW M5-.8 X 5
171	P1021X2171	WORM GEAR HOUSING
172	P1021X2172	WORM SHAFT
173	P1021X2173	BALL BEARING 6200ZZ
174	P1021X2174	INT RETAINING RING 30MM
178	P1021X2178	RETURN ROLLER
179	P1021X2179	DUST HOOD
180	P1021X2180	FLANGE SCREW M6-1 X 12

REF	PART #	DESCRIPTION
181	P1021X2181	CLIP-ON NUT M6-1
184	P1021X2184	PHLP HD SCR M4-.7 X 8
185V2	P1021X2185V2	CAP SCREW M8-1.25 X 10
186	P1021X2186	PULLEY GUARD PLATE
188V2	P1021X2188V2	GEARBOX COVER PLATE V2.05.18
190	P1021X2190	FLAT WASHER 8MM
191	P1021X2191	HEX BOLT M8-1.25 X 30
192	P1021X2192	LOCK WASHER 8MM
204	P1021X2204	HANDWHEEL DIRECTION LABEL

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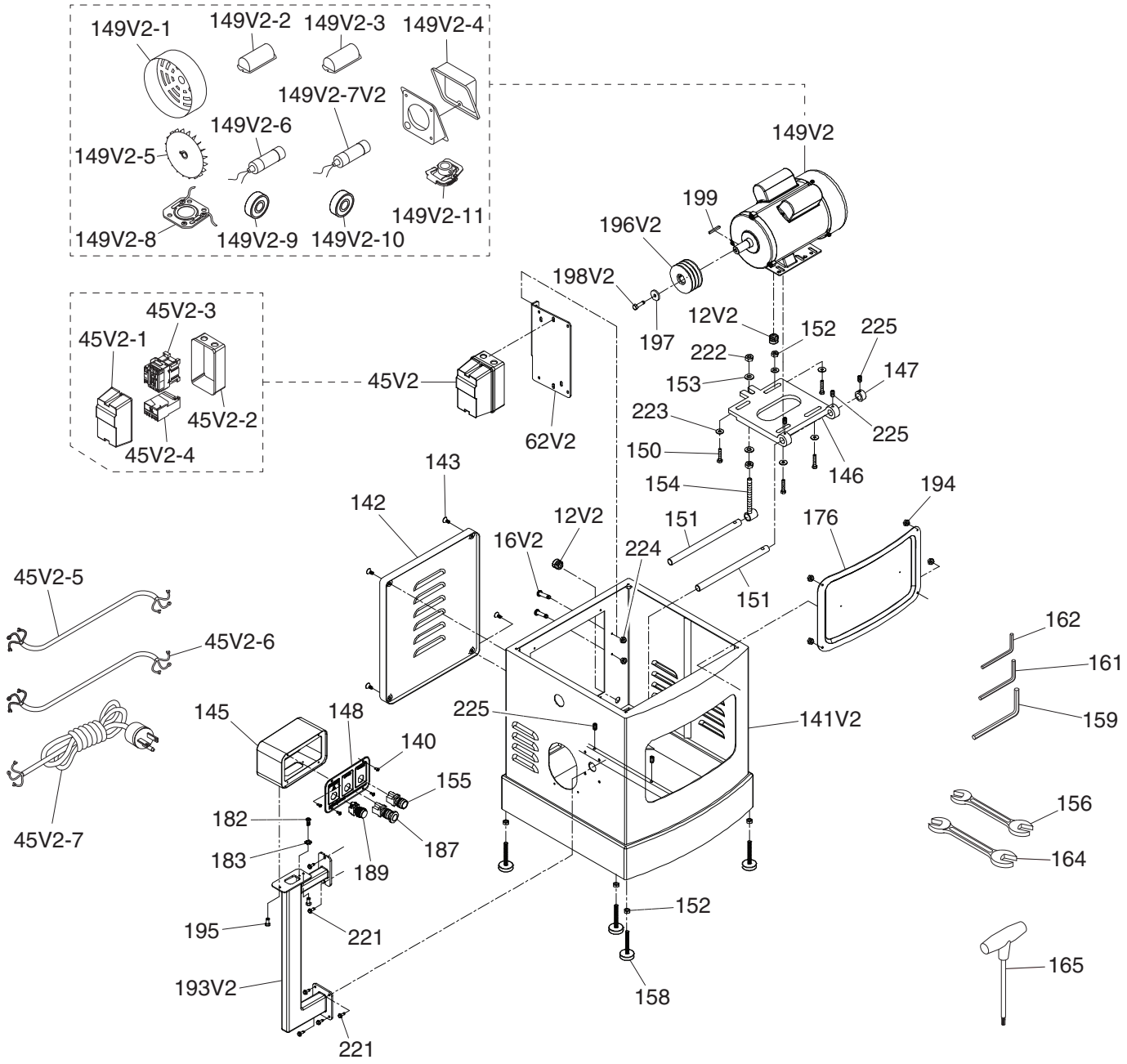
G1021X2 Stand & Motor



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G1021X2 Stand & Motor Parts List

REF	PART #	DESCRIPTION
12V2	P1021X2012V2	STRAIN RELIEF TYPE-1 7/16 V2.05.18
16V2	P1021X2016V2	PHLP HD SCR M6-1 X 16
45V2	P1021X2045V2	MAGNETIC SWITCH ASSY MPE-18 V2.05.18
45V2-1	P1021X2045V2-1	MAGNETIC SWITCH COVER (FRONT)
45V2-2	P1021X2045V2-2	MAGNETIC SWITCH COVER (REAR)
45V2-3	P1021X2045V2-3	CONTACTOR SDE MA-18 220-240V
45V2-4	P1021X2045V2-4	OL RELAY SDE RA-20 12-18A
45V2-5	P1021X2045V2-5	SWITCH CORD 12G 4W 79"
45V2-6	P1021X2045V2-6	MOTOR CORD 12G 3W 33"
45V2-7	P1021X2045V2-7	POWER CORD 12G 3W 138" 6-20P
62V2	P1021X2062V2	SWITCH MOUNTING PLATE V2.05.18
140	P1021X2140	PHLP HD SCR M5-.8 X 10
141V2	P1021X2141V2	STAND V2.05.18
142	P1021X2142	MOTOR ACCESS PANEL
143	P1021X2143	FLAT HD SCR M6-1 X 12
145	P1021X2145	SWITCH BOX
146	P1021X2146	MOTOR MOUNT PLATE
147	P1021X2147	LOCK COLLAR
148	P1021X2148	SWITCH PLATE
149V2	P1021X2149V2	MOTOR 3HP 230V 1-PH V2.05.18
149V2-1	P1021X2149V2-1	MOTOR FAN COVER
149V2-2	P1021X2149V2-2	CAPACITOR COVER (START)
149V2-3	P1021X2149V2-3	CAPACITOR COVER (RUN)
149V2-4	P1021X2149V2-4	MOTOR JUNCTION BOX
149V2-5	P1021X2149V2-5	MOTOR FAN
149V2-6	P1021X2149V2-6	START CAP 400M 125V 1-9/16 X 3-1/2
149V2-7V2	P1021X2149V2-7V2	R CAP 70M 250V 1-9/16 X 3-1/2 V2.09.18
149V2-8	P1021X2149V2-8	CONTACT PLATE
149V2-9	P1021X2149V2-9	BALL BEARING 6205ZZ (FRONT)
149V2-10	P1021X2149V2-10	BALL BEARING 6203ZZ (REAR)
149V2-11	P1021X2149V2-11	CENTRIFUGAL SWITCH

REF	PART #	DESCRIPTION
150	P1021X2150	HEX BOLT M8-1.25 X 40
151	P1021X2151	PLATE CONNECTING ROD
152	P1021X2152	HEX NUT M8-1.25
153	P1021X2153	FLAT WASHER 10 X 28 X 3MM
154	P1021X2154	ROD END BOLT M10-1.5 X 100, ID 16.5MM
155	P1021X2155	START SWITCH
156	P1021X2156	WRENCH 10 X 13MM OPEN-ENDS
158	P1021X2158	FOOT M8-1.25 X 67, D36
159	P1021X2159	HEX WRENCH 6MM
161	P1021X2161	HEX WRENCH 4MM
162	P1021X2162	HEX WRENCH 3MM
164	P1021X2164	WRENCH 12 X 14MM OPEN-ENDS
165	P1021X2165	T-HANDLE TORX DRIVER T-25
176	P1021X2176	FRONT CABINET PANEL
182	P1021X2182	PHLP HD SCR M4-.7 X 8
183	P1021X2183	EXT TOOTH WASHER 4MM
187	P1021X2187	STOP SWITCH
189	P1021X2189	POWER INDICATOR LIGHT 220V 22MM RED
193V2	P1021X2193V2	SWITCH PEDESTAL V2.05.18
194	P1021X2194	HEX NUT M5-.8
195	P1021X2195	HEX BOLT M5-.8 X 10
196V2	P1021X2196V2	MOTOR PULLEY V2.05.18
197	P1021X2197	FENDER WASHER 8 X 30 X 4MM
198V2	P1021X2198V2	HEX BOLT M8-1.25 X 25
199	P1021X2199	KEY 5 X 5 X 30
221	P1021X2221	FLANGE BOLT M6-1 X 12
222	P1021X2222	HEX NUT M10-1.25
223	P1021X2223	SPACER 8.2 X 22 X 3MM
224	P1021X2224	HEX NUT M6-1
225	P1021X2225	SET SCREW M6-1 X 12

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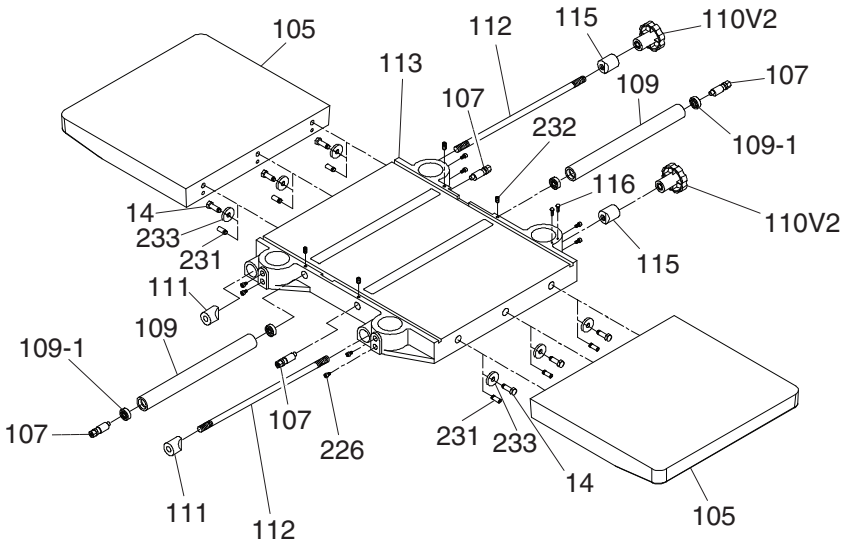
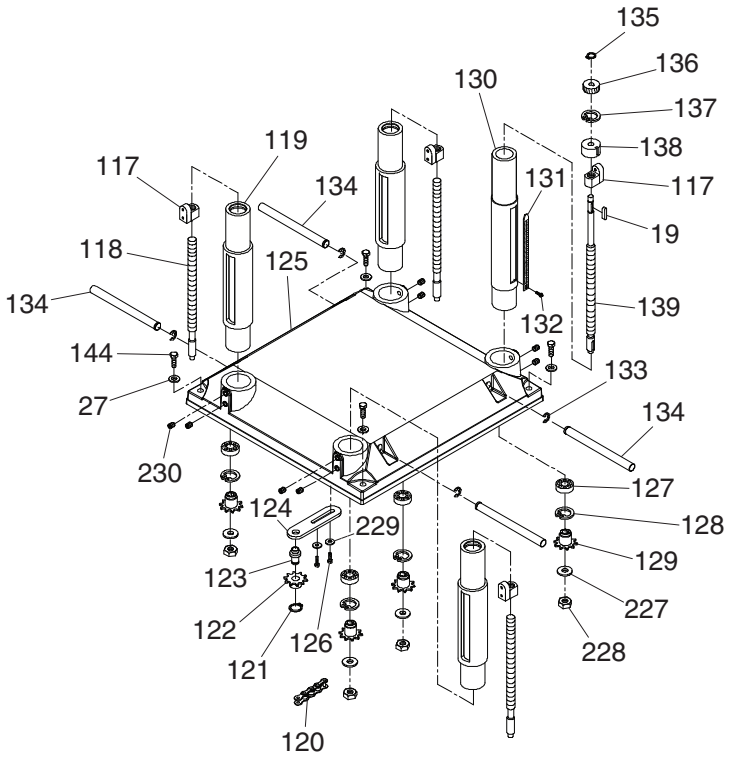
G1021X2 Table & Base





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G1021X2 Table & Base

REF	PART #	DESCRIPTION
14	P1021X2014	HEX BOLT M8-1.25 X 25
19	P1021X2019	KEY 4 X 4 X 10
27	P1021X2027	FLAT WASHER 8MM
105	P1021X2105	EXTENSION TABLE (CAST IRON)
107	P1021X2107	ECCENTRIC SHAFT
109	P1021X2109	TABLE ROLLER
109-1	P1021X2109-1	BALL BEARING 608-2RS
110V2	P1021X2110V2	KNOB 6-LOBE M12-1.75, D53
111	P1021X2111	THREADED GIB
112	P1021X2112	LOCKING ROD
113	P1021X2113	MAIN TABLE
115	P1021X2115	GIB
116	P1021X2116	RIVET 2 X 5MM NAMEPLATE, COPPER
117	P1021X2117	LEADSCREW NUT
118	P1021X2118	LEADSCREW, SECONDARY
119	P1021X2119	COLUMN
120	P1021X2120	CHAIN #410 X 134
121	P1021X2121	EXT RETAINING RING 15MM
122	P1021X2122	IDLER SPROCKET 10T
123	P1021X2123	IDLER SHAFT
124	P1021X2124	IDLER BRACKET
125	P1021X2125	BASE
126	P1021X2126	HEX BOLT M8-1.25 X 25

REF	PART #	DESCRIPTION
127	P1021X2127	BALL BEARING 6202ZZ
128	P1021X2128	INT RETAINING RING 35MM
129	P1021X2129	SPROCKET 10T
130	P1021X2130	SCALE COLUMN
131	P1021X2131	SCALE
132	P1021X2132	PHLP HD SCR M3-.5 X 6
133	P1021X2133	E-CLIP 12MM
134	P1021X2134	LIFTING BAR
135	P1021X2135	EXT RETAINING RING 10MM
136	P1021X2136	GEAR 14T
137	P1021X2137	INT RETAINING RING 38MM
138	P1021X2138	SPACER
139	P1021X2139	LEADSCREW, PRIMARY
144	P1021X2144	HEX BOLT M8-1.25 X 45
226	P1021X2226	CAP SCREW M6-1 X 20
227	P1021X2227	FLAT WASHER 10MM
228	P1021X2228	HEX NUT M10-1.25
229	P1021X2229	SPACER 8.2 X 22 X 3MM
230	P1021X2230	SET SCREW M10-1.5 X 12
231	P1021X2231	SET SCREW M8-1.25 X 12
232	P1021X2232	SET SCREW M6-1 X 12
233	P1021X2233	FLAT WASHER 8MM

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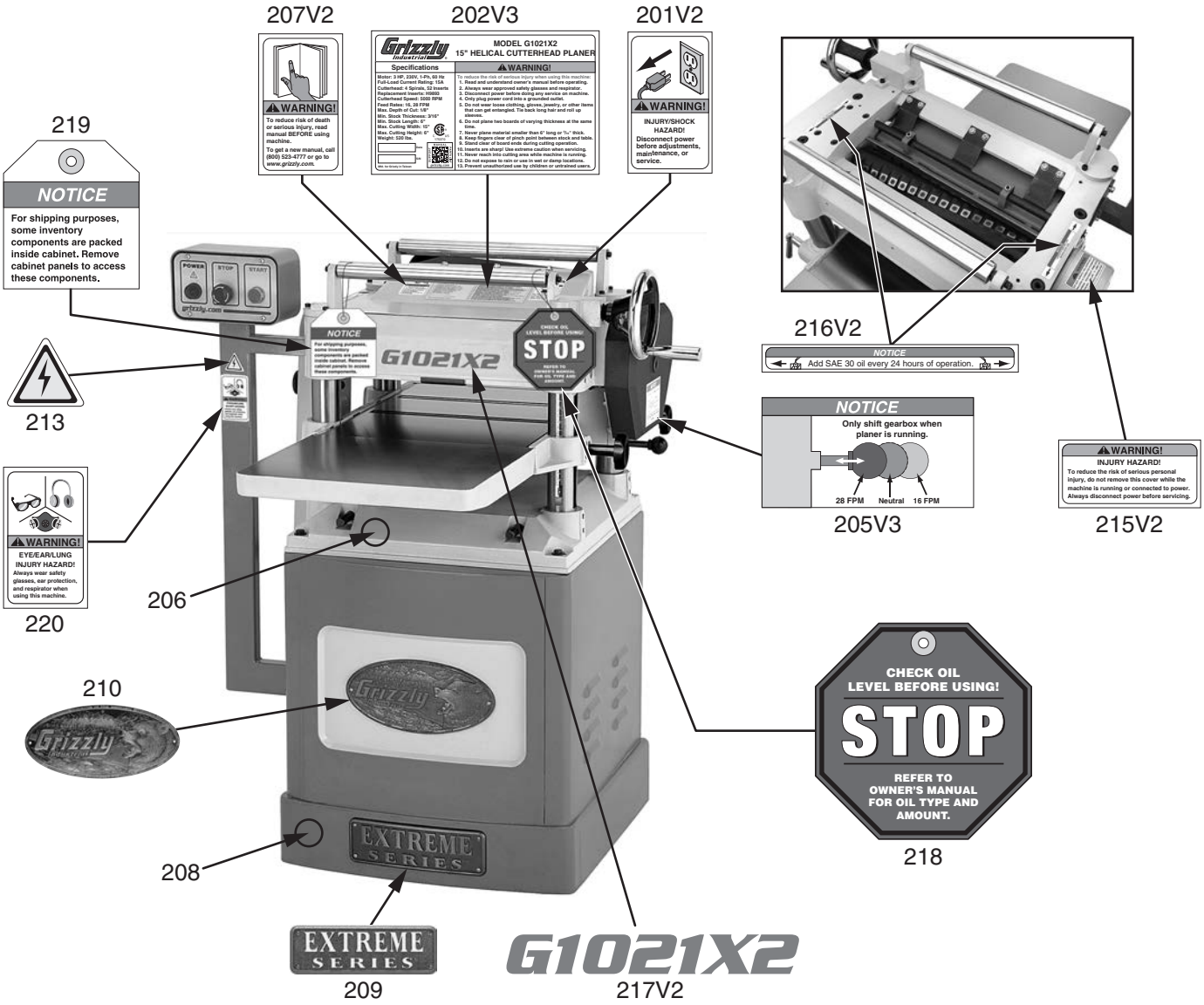
G1021X2 Labels & Cosmetics



REF	PART #	DESCRIPTION
201V2	P1021X2201V2	DISCONNECT POWER LABEL
202V3	P1021X2202V3	MACHINE ID LABEL V3.02.19
205V3	P1021X2205V3	SHIFT GEARBOX NOTICE V3.02.19
206	P1021X2206	TOUCH-UP PAINT, GRIZZLY PUTTY
207V2	P1021X2207V2	READ MANUAL LABEL
208	P1021X2208	TOUCH-UP PAINT, GRIZZLY GREEN
209	P1021X2209	EXTREME SERIES NAMEPLATE
210	P1021X2210	GRIZZLY NAMEPLATE-LARGE

REF	PART #	DESCRIPTION
213	P1021X2213	ELECTRICITY LABEL
215V2	P1021X2215V2	BELT COVER WARNING LABEL V2.05.18
216V2	P1021X2216V2	ADD OIL NOTICE V2.05.18
217V2	P1021X2217V2	MODEL NUMBER LABEL V2.05.18
218	P1021X2218	STOP OIL FILL TAG
219	P1021X2219	INVENTORY SHIPPING NOTICE
220	P1021X2220	EYE/EAR/LUNG INJURY LABEL

⚠WARNING

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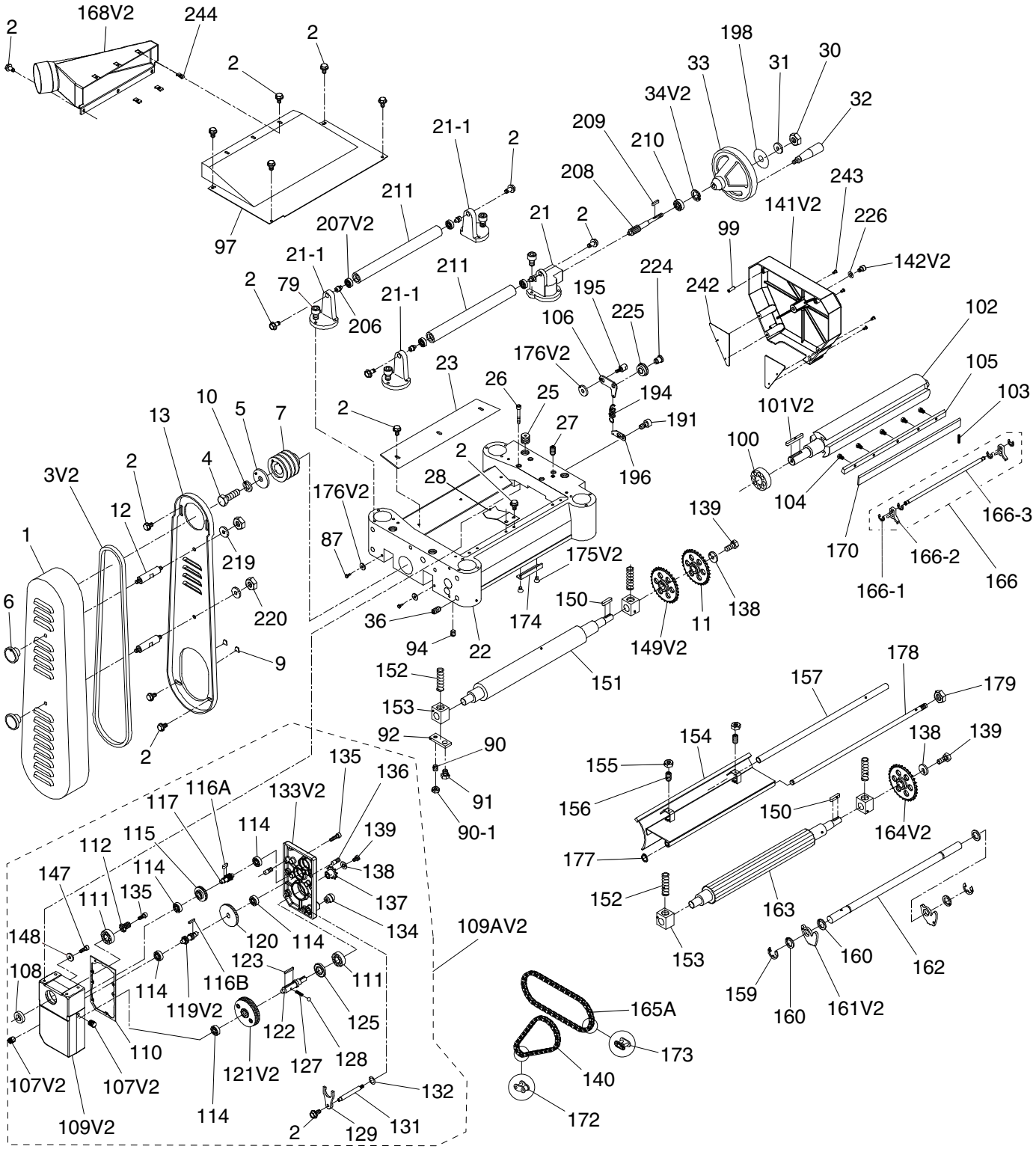
G1021Z Main



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G1021Z Main Parts List

REF	PART #	DESCRIPTION
1	P1021Z001	PULLEY/BELT COVER
2	P1021Z002	FLANGE BOLT M6-1 X 12
3V2	P1021Z003V2	V-BELT M58 3L580
4	P1021Z004	HEX BOLT M8-1.25 X 25
5	P1021Z005	FENDER WASHER 8 X 30 X 4MM
6	P1021Z006	KNOB 5/16-18, D1-3/4, ROUND
7	P1021Z007	CUTTERHEAD PULLEY
9	P1021Z009	PULLEY GUARD PLATE
10	P1021Z010	LOCK WASHER 8MM
11	P1021Z011	SPROCKET 31T
12	P1021Z012	STANDOFF-HEX MM 5/16-18 X 3/8, 3
13	P1021Z013	PULLEY GUARD
21	P1021Z021	WORM GEAR HOUSING
21-1	P1021Z021-1	RETURN ROLLER BRACKET
22	P1021Z022	HEAD CASTING
23	P1021Z023	CHIP DEFLECTOR
25	P1021Z025	TENSIONING SET SCREW M22-1.5 X 20
26	P1021Z026	CAP SCREW M8-1.25 X 50
27	P1021Z027	SET SCREW M6-1 X 12
28	P1021Z028	FLAT SPRING 84 X 46 X 0.6MM
30	P1021Z030	HEX NUT M10-1.25
31	P1021Z031	FLAT WASHER 10MM
32	P1021Z032	REVOLVING HANDLE 1 X 3-9/16, 3/8-16 X 1/2
33	P1021Z033	HANDWHEEL TYPE-3 151D X 10B-K X 3/8-16
34V2	P1021Z034V2	INT RETAINING RING 30MM
36	P1021Z036	SET SCREW M10-1.5 X 12
79	P1021Z079	CAP SCREW M6-1 X 20
87	P1021Z087	HEX BOLT M6-1 X 12
90	P1021Z090	SET SCREW M6-1 X 16
90-1	P1021Z090-1	HEX NUT M6-1
91	P1021Z091	HEX BOLT M8-1.25 X 20
92	P1021Z092	BUSHING BLOCK PLATE
94	P1021Z094	SET SCREW M8-1.25 X 12
97	P1021Z097	UPPER COVER
99	P1021Z099	ROLL PIN 6 X 20
100	P1021Z100	BALL BEARING 6205-2RS
101V2	P1021Z101V2	KEY 8 X 8 X 36 V2.05.18
102	P1021Z102	CUTTERHEAD 15" 3-KNIFE
103	P1021Z103	COMPRESSION SPRING 0.6 X 5.9 X 16
104	P1021Z104	GIB BOLT M8-1.25 X 10
105	P1021Z105	GIB
106	P1021Z106	CHAIN TENSIONER
107V2	P1021Z107V2	OIL PLUG 1/4 NPT X 3/4" V2.05.18
108	P1021Z108	OIL SEAL 28 X 40 X 8
109V2	P1021Z109V2	GEARBOX V2.05.18
109AV2	P1021Z109AV2	GEARBOX ASSEMBLY V2.05.18
110	P1021Z110	GASKET
111	P1021Z111	BALL BEARING 6204ZZ
112	P1021Z112	GEAR 16T
114	P1021Z114	BALL BEARING 6201ZZ
115	P1021Z115	GEAR 47T
116A	P1021Z116A	KEY 5 X 5 X 12
116B	P1021Z116B	KEY 5 X 5 X 10
117	P1021Z117	GEARED SHAFT 18T
119V2	P1021Z119V2	GEARED SHAFT 28T/18T V2.02.19
120	P1021Z120	GEAR 71T

REF	PART #	DESCRIPTION
121V2	P1021Z121V2	COMBO GEAR 86T/96T V2.02.19
122	P1021Z122	GEAR SHAFT
123	P1021Z123	KEY 6 X 6 X 40
125	P1021Z125	OIL SEAL 25 X 47 X 6
127	P1021Z127	COMPRESSION SPRING 0.6 X 5.9 X 16
128	P1021Z128	STEEL BALL 6MM
129	P1021Z129	SHIFTING FORK
131	P1021Z131	SHIFTING SHAFT
132	P1021Z132	O-RING 12 X 1.5 S12.5
133V2	P1021Z133V2	GEARBOX COVER V2.05.18
134	P1021Z134	KNOB 3/8-16, D1-1/4, BALL
135	P1021Z135	CAP SCREW M6-1 X 25
136	P1021Z136	LOCATING PIN 8 X 7.55 X 7.95
137	P1021Z137	SPROCKET 12T W/KEY
138	P1021Z138	FENDER WASHER 6.2 X 22 X 3
139	P1021Z139	HEX BOLT M6-1 X 16
140	P1021Z140	CHAIN 06B-1 X 47 (23 LINKS)
141V2	P1021Z141V2	DRIVE CHAIN COVER V2.05.18
142V2	P1021Z142V2	CAP SCREW M8-1.25 X 10
147	P1021Z147	CAP SCREW M6-1 X 12
148	P1021Z148	FENDER WASHER 6 X 20 X 3MM
149V2	P1021Z149V2	SPROCKET 31T V2.05.18
150	P1021Z150	KEY 5 X 5 X 22
151	P1021Z151	OUTFEED ROLLER
152	P1021Z152	COMPRESSION SPRING 3.5 X 19.7 X 70
153	P1021Z153	BUSHING BLOCK
154	P1021Z154	CHIP BREAKER
155	P1021Z155	HEX NUT M6-1
156	P1021Z156	SET SCREW M6-1 X 12
157	P1021Z157	CHIP BREAKER ADJUSTMENT ROD
159	P1021Z159	E-CLIP 15MM
160	P1021Z160	SPACER
161V2	P1021Z161V2	ANTI-KICKBACK FINGER V2.05.18
162	P1021Z162	ANTI-KICKBACK SHAFT
163	P1021Z163	INFEED ROLLER
164V2	P1021Z164V2	SPROCKET 31T V2.05.18
165A	P1021Z165A	CHAIN 06B-1 X 63 (31 LINKS)
166	P1021Z166	KNIFE-SETTING JIG ASSEMBLY
166-1	P1021Z166-1	E-CLIP 9MM
166-2	P1021Z166-2	KNIFE-SETTING JIG FOOT
166-3	P1021Z166-3	KNIFE-SETTING JIG SHAFT
168V2	P1021Z168V2	DUST HOOD V2.05.18
170	P1021Z170	15" X 1" X 1/8" HSS PLANER BLADES (3)
172	P1021Z172	HALF LINK
173	P1021Z173	MASTER LINK
174	P1021Z174	DEPTH LIMITER
175V2	P1021Z175V2	FLAT HD SCR M5-.8 X 8
176V2	P1021Z176V2	SPACER 8.2 X 22 X 3MM V2.05.18
177	P1021Z177	EXT RETAINING RING 12MM
178	P1021Z178	CHIP BREAKER PIVOT ROD
179	P1021Z179	HEX NUT M12-1.75
191	P1021Z191	CAP SCREW M6-1 X 10
194	P1021Z194	EXTENSION SPRING 1 X 8.5 X 33
195	P1021Z195	SHOULDER BOLT M8-1.25 X 14, 4 X 12
196	P1021Z196	SPRING BRACKET

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G1021Z Main Parts List (Cont.)

REF	PART #	DESCRIPTION
198	P1021Z198	HANDWHEEL DIRECTION LABEL
206	P1021Z206	BEARING SHAFT
207V2	P1021Z207V2	BALL BEARING 608ZZ V2.05.18
208	P1021Z208	WORM SHAFT
209	P1021Z209	KEY 4 X 4 X 10
210	P1021Z210	BALL BEARING 6200ZZ
211	P1021Z211	RETURN ROLLER
219	P1021Z219	FLAT WASHER 5/16

REF	PART #	DESCRIPTION
220	P1021Z220	HEX NUT 5/16-18
224	P1021Z224	IDLER SHAFT
225	P1021Z225	IDLER WHEEL
226	P1021Z226	FLAT WASHER 8MM
242	P1021Z242	GEARBOX COVER PLATE
243	P1021Z243	PHLP HD SCR M4-.7 X 8
244	P1021Z244	CLIP-ON NUT M6-1

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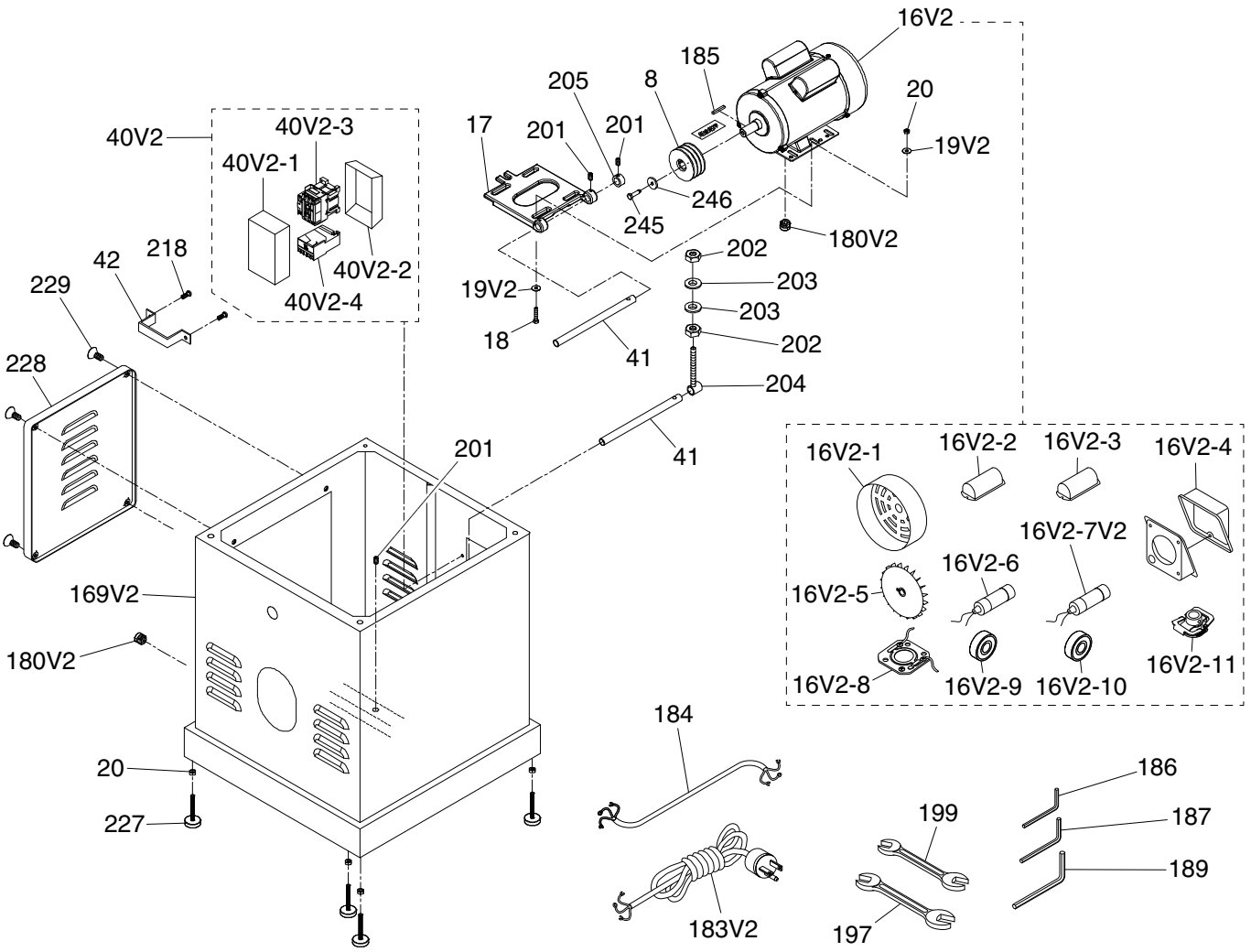
G1021Z Stand & Motor



REF	PART #	DESCRIPTION
8	P1021Z008	MOTOR PULLEY
16V2	P1021Z016V2	MOTOR 3HP 230V 1-PH V2.05.18
16V2-1	P1021Z016V2-1	MOTOR FAN COVER
16V2-2	P1021Z016V2-2	CAPACITOR COVER (START)
16V2-3	P1021Z016V2-3	CAPACITOR COVER (RUN)
16V2-4	P1021Z016V2-4	MOTOR JUNCTION BOX
16V2-5	P1021Z016V2-5	MOTOR FAN
16V2-6	P1021Z016V2-6	START CAP 400M 125V 1-9/16 X 3-1/2
16V2-7V2	P1021Z016V2-7V2	R CAP 70M 250V 1-9/16 X 3-1/2 V2.09.18
16V2-8	P1021Z016V2-8	CONTACT PLATE
16V2-9	P1021Z016V2-9	BALL BEARING 6205ZZ (FRONT)
16V2-10	P1021Z016V2-10	BALL BEARING 6203ZZ (REAR)
16V2-11	P1021Z016V2-11	CENTRIFUGAL SWITCH
17	P1021Z017	MOTOR MOUNT PLATE
18	P1021Z018	HEX BOLT M8-1.25 X 40
19V2	P1021Z019V2	SPACER 8.2 X 22 X 3MM V2.05.18
20	P1021Z020	HEX NUT M8-1.25
40V2	P1021Z040V2	MAGNETIC SWITCH ASSY MP-18 V2.05.18
40V2-1	P1021Z040V2-1	MAGNETIC SWITCH COVER (FRONT)
40V2-2	P1021Z040V2-2	MAGNETIC SWITCH COVER (REAR)
40V2-3	P1021Z040V2-3	CONTACTOR SDE MA-18 220-240V
40V2-4	P1021Z040V2-4	OL RELAY SDE RA-20 12-18A
41	P1021Z041	PLATE CONNECTING ROD

REF	PART #	DESCRIPTION
42	P1021Z042	SWITCH MOUNT BRACKET
169V2	P1021Z169V2	CABINET STAND V2.05.18
180V2	P1021Z180V2	STRAIN RELIEF TYPE-1 7/16 V2.05.18
183V2	P1021Z183V2	POWER CORD 12G 3W 150" 6-20P V2.05.18
184	P1021Z184	SWITCH CORD 12G 3W 30"
185	P1021Z185	KEY 5 X 5 X 30
186	P1021Z186	HEX WRENCH 3MM
187	P1021Z187	HEX WRENCH 4MM
189	P1021Z189	HEX WRENCH 6MM
197	P1021Z197	WRENCH 12 X 14MM OPEN-ENDS
199	P1021Z199	WRENCH 10 X 13MM OPEN-ENDS
201	P1021Z201	SET SCREW M6-1 X 12
202	P1021Z202	HEX NUT M10-1.25
203	P1021Z203	FENDER WASHER 10 X 28 X 3MM
204	P1021Z204	ROD END BOLT M10-1.5 X 100, ID 16.5MM
205	P1021Z205	LOCK COLLAR
218	P1021Z218	PHLP HD SCR M6-1 X 12
227	P1021Z227	FOOT M8-1.25 X 67, D36
228	P1021Z228	MOTOR ACCESS PANEL
229	P1021Z229	FLAT HD SCR M6-1 X 12
245	P1021Z245	HEX BOLT M8-1.25 X 25
246	P1021Z246	FENDER WASHER 8 X 30 X 4MM

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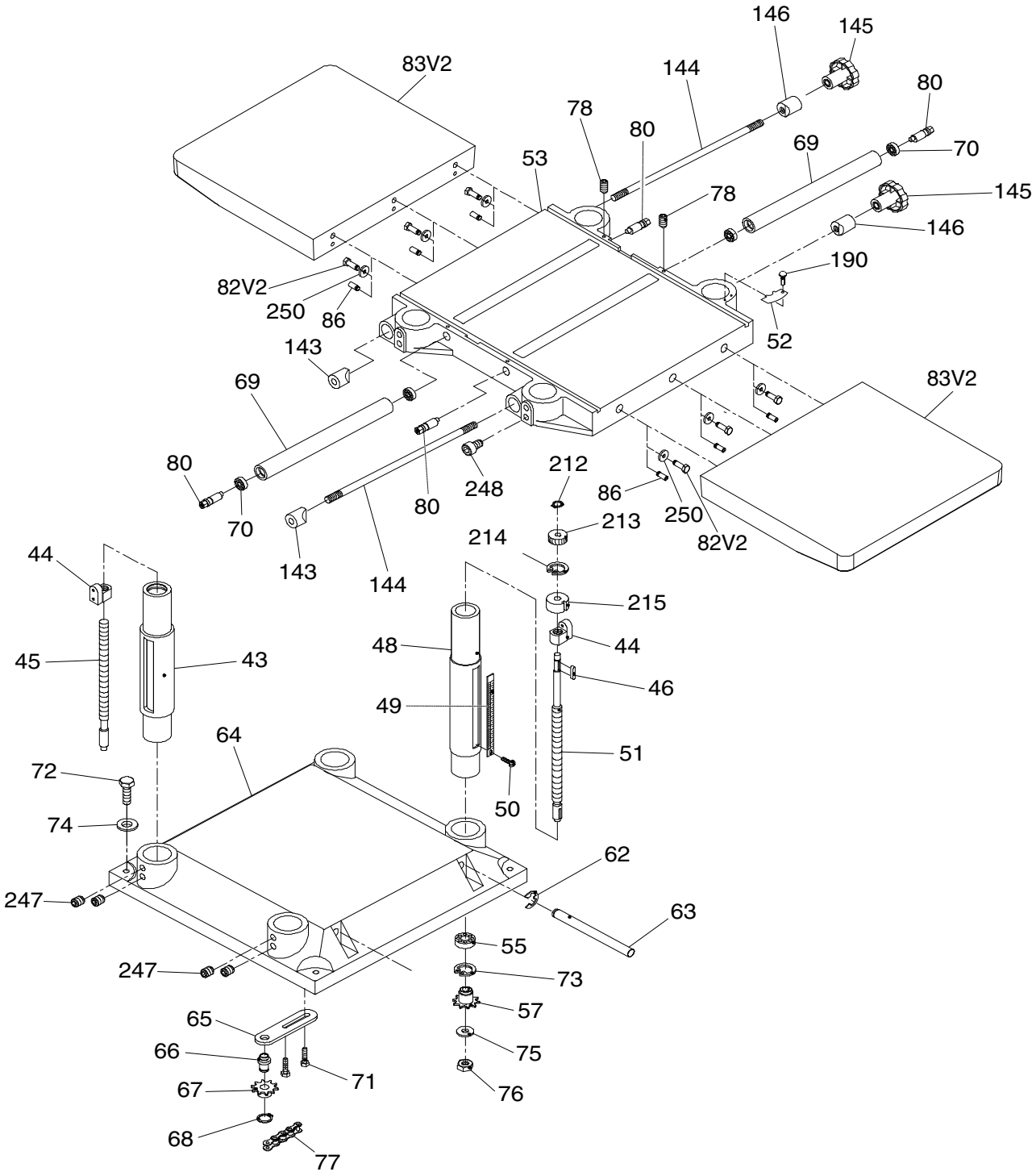
G1021Z Table & Base



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G1021Z Table & Base

REF	PART #	DESCRIPTION
43	P1021Z043	COLUMN
44	P1021Z044	LEADSCREW NUT
45	P1021Z045	LEADSCREW, SECONDARY
46	P1021Z046	KEY 4 X 4 X 10
48	P1021Z048	SCALE COLUMN
49	P1021Z049	SCALE
50	P1021Z050	PHLP HD SCR M3-.5 X 6
51	P1021Z051	LEADSCREW, PRIMARY
52	P1021Z052	POINTER
53	P1021Z053	MAIN TABLE
55	P1021Z055	BALL BEARING 6202ZZ
57	P1021Z057	SPROCKET 10T
62	P1021Z062	E-CLIP 12MM
63	P1021Z063	LIFTING BAR
64	P1021Z064	BASE
65	P1021Z065	IDLER BRACKET
66	P1021Z066	IDLER SHAFT
67	P1021Z067	IDLER SPROCKET 10T
68	P1021Z068	EXT RETAINING RING 15MM
69	P1021Z069	TABLE ROLLER
70	P1021Z070	BALL BEARING 608-2RS
71	P1021Z071	HEX BOLT M8-1.25 X 25
72	P1021Z072	HEX BOLT M8-1.25 X 45

REF	PART #	DESCRIPTION
73	P1021Z073	INT RETAINING RING 35MM
74	P1021Z074	FLAT WASHER 8MM
75	P1021Z075	FLAT WASHER 10MM
76	P1021Z076	HEX NUT M10-1.5
77	P1021Z077	CHAIN #410 X 134
78	P1021Z078	SET SCREW M6-1 X 12
80	P1021Z080	ECCENTRIC SHAFT
82V2	P1021Z082V2	HEX BOLT M8-1.25 X 25 V2.04.20
83V2	P1021Z083V2	EXTENSION TABLE (CAST IRON) V2.04.20
86	P1021Z086	SET SCREW M8-1.25 X 12
143	P1021Z143	THREADED GIB
144	P1021Z144	LOCKING ROD
145	P1021Z145	KNOB 6-LOBE M12-1.75, D53
146	P1021Z146	GIB
190	P1021Z190	RIVET 2 X 5MM
212	P1021Z212	EXT RETAINING RING 10MM
213	P1021Z213	GEAR 14T
214	P1021Z214	INT RETAINING RING 38MM
215	P1021Z215	SPACER
247	P1021Z247	SET SCREW M10-1.5 X 12
248	P1021Z248	CAP SCREW M6-1 X 20
250	P1021Z250	FLAT WASHER 8MM

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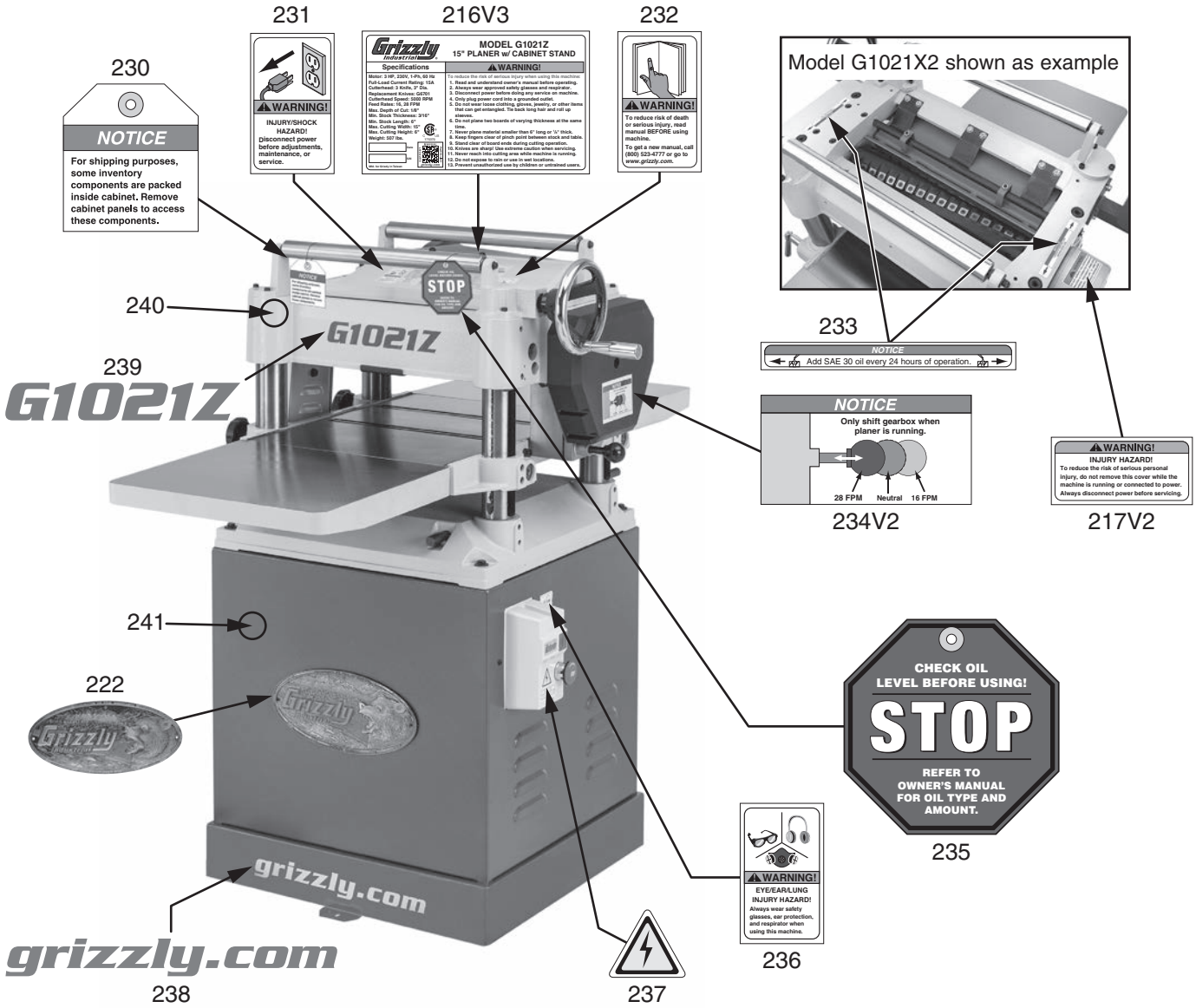
G1021Z Labels & Cosmetics



REF	PART #	DESCRIPTION
216V3	P1021Z216V3	MACHINE ID LABEL V3.02.19
217V2	P1021Z217V2	BELT COVER WARNING LABEL V2.05.18
222	P1021Z222	GRIZZLY NAMEPLATE-LARGE
230	P1021Z230	INVENTORY SHIPPING NOTICE
231	P1021Z231	DISCONNECT POWER LABEL
232	P1021Z232	READ MANUAL LABEL
233	P1021Z233	ADD OIL NOTICE
234V2	P1021Z234V2	SHIFT GEARBOX NOTICE V2.02.19

REF	PART #	DESCRIPTION
235	P1021Z235	STOP OIL FILL TAG
236	P1021Z236	EYE/EAR/LUNG INJURY LABEL
237	P1021Z237	ELECTRICITY LABEL
238	P1021Z238	GRIZZLY.COM LABEL
239	P1021Z239	MODEL NUMBER LABEL
240	P1021Z240	TOUCH-UP PAINT, GRIZZLY PUTTY
241	P1021Z241	TOUCH-UP PAINT, GRIZZLY GREEN

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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.

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