READ THIS FIRST

Models G0453, G0453Z, G0454, G0454Z

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

For Machines Mfd. Since 09/17 and Owner's Manuals Revised 11/12

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

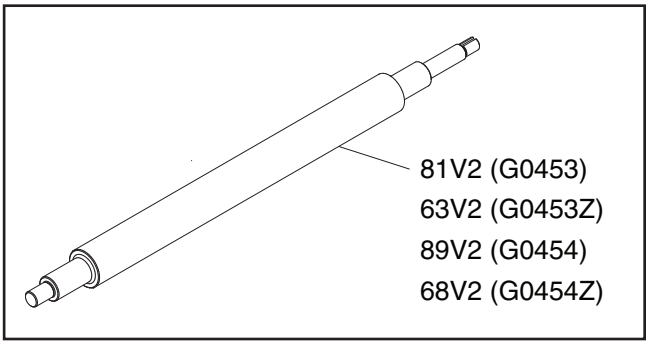
The following change was recently made to these machines since the owner's manuals were printed:

- Outfeed roller changed from serrated steel to rubber.

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.**

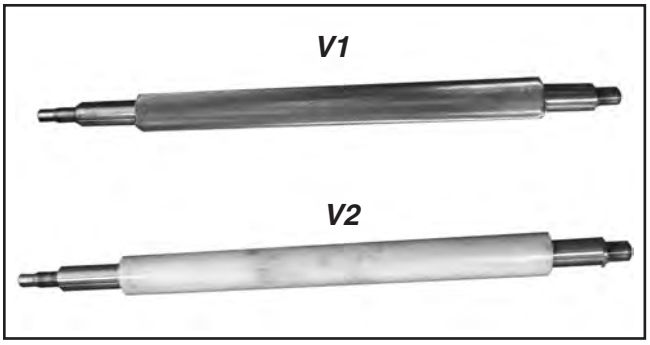
For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

V2 Outfeed Roller



REF	PART #	DESCRIPTION
81V2	P0453081V2	OUTFEED ROLLER (RUBBER) V2.09.17 (G0453)
63V2	P0453Z063V2	OUTFEED ROLLER (RUBBER) V2.09.17 (G0453Z)
89V2	P0454089V2	OUTFEED ROLLER (RUBBER) V2.09.17 (G0454)
68V2	P0454Z068V2	OUTFEED ROLLER (RUBBER) V2.09.17 (G0454Z)

V1 & V2 Outfeed Roller Photos



#BL19140 PRINTED IN CHINA

READ THIS FIRST

Model G0453Z & G0454Z

IMPORTANT UPDATE

For Machines Mfd. Since 04/15
and Owner's Manual Printed 11/12

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

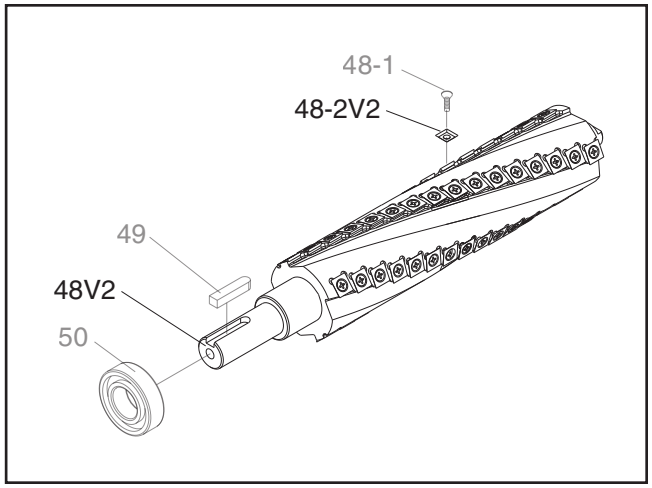
The following changes were recently made to this machine since the owner's manual was printed:

- Changed spiral cutterhead and indexable inserts.

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.**

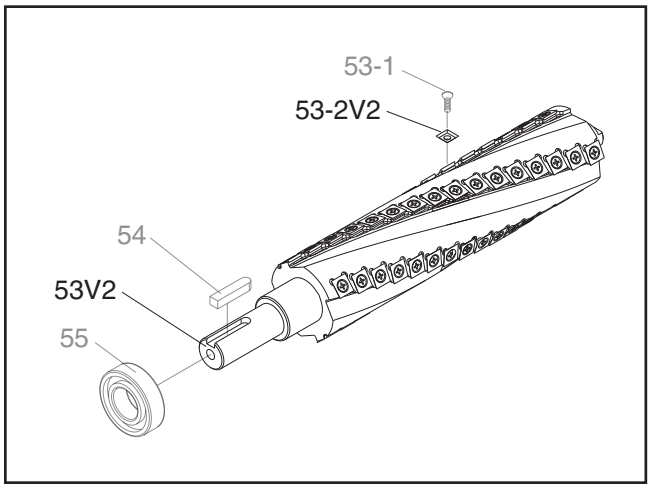
For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

G0453Z Revised Parts



REF	PART #	DESCRIPTION
48V2	P0453Z048V2	SPIRAL CUTTERHEAD 15" V2.04.15
48-2V2	P0453Z048-2V2	INDEXABLE CARBIDE INSERT 14 X 14 X 2MM V2.04.15

G0454Z Revised Parts



REF	PART #	DESCRIPTION
53V2	P0454Z053V2	SPIRAL CUTTERHEAD ASSY V2.04.15
53-2V2	P0454Z053-2V2	INDEXABLE CARBIDE INSERT 14 X 14 X 2MM V2.04.15

#MN17653 PRINTED IN CHINA

READ THIS FIRST

Models G0453, G0453P, G0453PX, G0453Z, G0454, G0454Z

******IMPORTANT NOTICE******

For shipping purposes, many inventory components are packed inside the cabinet. Check here before assuming machine components are missing!

Remove the front and rear cabinet access panels, shown in **Figure 1**, to access all the shipped components. Re-install panels before operating machine.

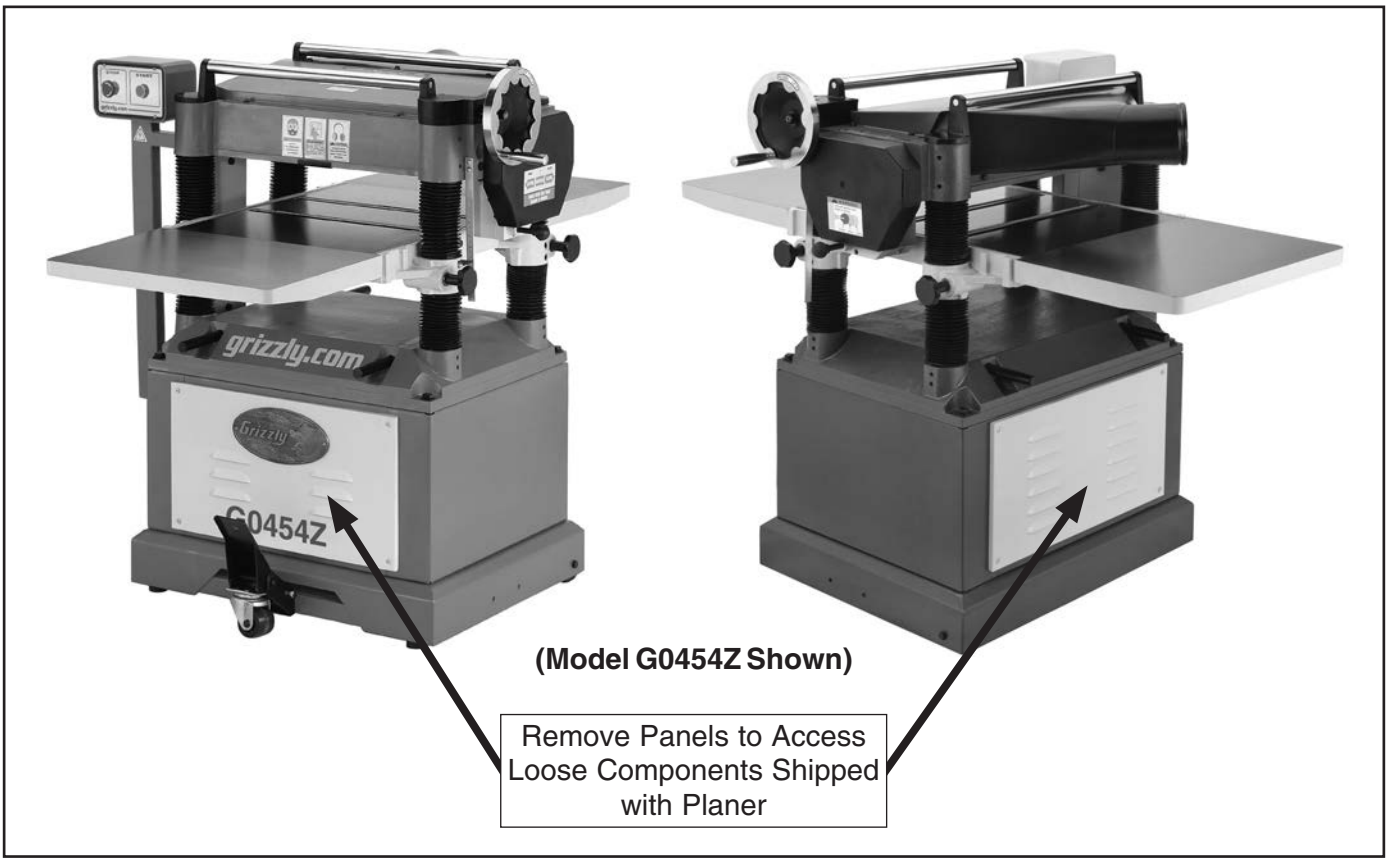


Figure 1. Locations to access packaged components.

This document provides relevant updates to the owner's manual. Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety.

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

#BL15802 PRINTED IN CHINA

READ THIS FIRST

Model G0453P/G0453PX/ G0453Z/G0454Z

IMPORTANT UPDATE

For Machines Mfg. Since August, 2012 and Owner's Manual Printed February, 2010

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

- Now CSA certified to meet CSA 22.2 #71.2-10 and UL 987-7th standards.
- Changed the motor nominal voltage specifications from 220V to 240V.
- Added a plug to the power cord.

This document provides relevant updates to portions of the owner's manual that no longer apply and additional information required by CSA—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.

Changed Specifications

Electrical

Power Requirement	240V, Single-Phase, 60 Hz
Circuit Size (G0453P/PX/Z)	20A
Circuit Size (G0454Z)	30A
Switch Voltage	240V
Included Plug Type (G0453P/PX/Z)	NEMA 6-20
Included Plug Type (G0454Z)	NEMA L6-30

Motor

Voltage	240V
Amps (G0453P/PX/Z)	15A
Amps (G0454Z)	19A

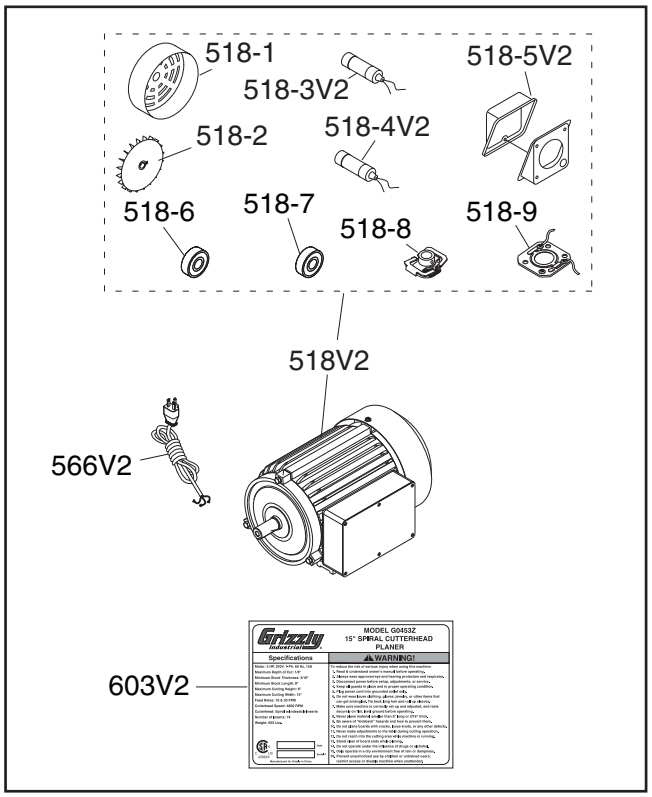
Operation Info

Cutterhead Speed	4800 RPM

C US
208624

#BL15162 PRINTED IN CHINA

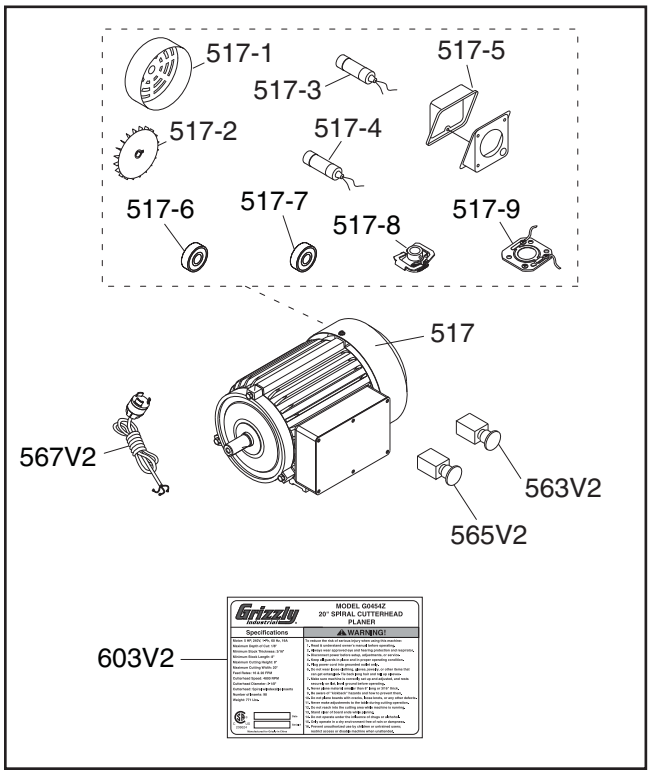
New/Revised G0453P/PX/Z Parts



REF	PART #	DESCRIPTION
518V2	P0453Z518V2	MOTOR 3HP 240V 1-PH V2.05.08
518-1	P0453Z518-1	MOTOR FAN COVER
518-2	P0453Z518-2	MOTOR FAN
518-3V2	P0453Z518-3V2	S CAPACITOR 250M 250V 1-3/4 X 3-1/2
518-4V2	P0453Z518-4V2	R CAPACITOR 40M 450V 1-3/8 X 2-3/8
518-5V2	P0453Z518-5V2	JUNCTION BOX V2.05.08
518-6	P6205ZZ	BALL BEARING 6205ZZ
518-7	P6203ZZ	BALL BEARING 6203ZZ
518-8	P0453430A-9	CENTRIFUGAL SWITCH 16MM 3450
518-9	P0453430A-10	CONTACT PLATE 16MM
566V2	P0453119V2	POWER CORD 12G 3W 72" 6-20P V2.08.12
603V2	P0453Z603V2	MACHINE ID LABEL CSA V2.08.12
* 603V2	P0453P603V2	MACHINE ID LABEL CSA V2.08.12
* 603V2	P0453PX603V2	MACHINE ID LABEL CSA V2.08.12

* Not shown

New/Revised G0454Z Parts



REF	PART #	DESCRIPTION
517	P0454429	MOTOR 5HP 240V 1-PH
517-1	P0454429-1	FAN COVER
517-2	P0454429-2	MOTOR FAN
517-3	P0454Z517-3	S CAPACITOR 300M 300V 2 X 3-3/4 V1
517-4	P0454Z517-4	R CAPACITOR 60M 400V 2 X 4-1/2 V1
517-5	P0454429-6	MOTOR WIRING JUNCTION BOX
517-6	P6206ZZ	BALL BEARING 6206ZZ
517-7	P6204ZZ	BALL BEARING 6204ZZ
517-8	P0454429-9	CENTRIFUGAL SWITCH 19MM 3450
517-9	P0454429-10	CONTACT PLATE 19MM
563V2	P0453Z562V2	START BUTTON CLEAR V2.01.11
565V2	P0453Z563V2	E-STOP BUTTON 3-ARROW V2.01.11
567V2	P0454124V2	POWER CORD 12G 3W 72" L6-30P V2.08.12
603V2	P0454Z603V2	MACHINE ID LABEL CSA V2.08.12

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 judgement.

⚠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 **This symbol is used to alert the user to useful information about proper operation of the machine.**

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 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 avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and 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!

INTENDED USAGE. Only use machine for its intended purpose and never make modifications not approved by Grizzly. Modifying machine or using it differently than intended may result in malfunction or mechanical failure that can lead to serious 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.

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.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

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

PLANER INJURY RISKS. Familiarize yourself with the main injury risks associated with planers—always use common sense and good judgement to reduce your risk of injury. **Main injury risks from planers:** amputation/lacerations from contact with the moving cutterhead, entanglement/crushing injuries from getting caught in moving parts, blindness or eye injury from flying wood chips, or impact injuries from workpiece kickback.

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

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

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

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

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

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

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

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

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

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

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

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

SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectles 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 electrican or qualified service personnel in accordance with all applicable codes and standards.

⚠WARNING

Electrocution, fire, or equipment damage may occur if machine is not correctly grounded and connected to the 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.

Model G0453P/PX/Z.....15A
Model G0454Z.....19A

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

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

Circuit Information

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

Grounding Requirements

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.

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.

⚠WARNING

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

Circuit Requirements, G0453P/PX/Z

Nominal Voltage 240V
Cycle.....60 Hz
Phase..... Single-Phase
Circuit Rating.....20A
Plug/Receptacle ..... NEMA 6-20

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

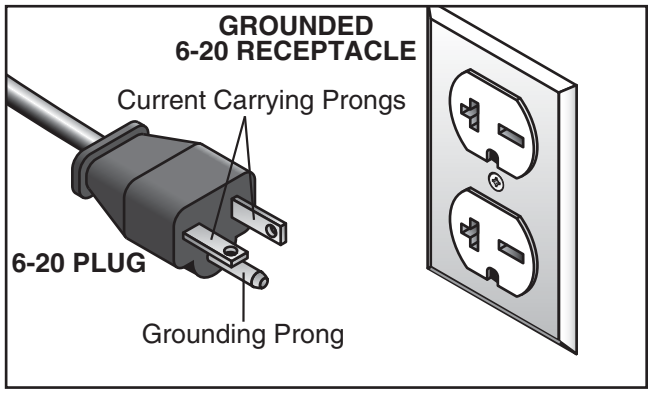
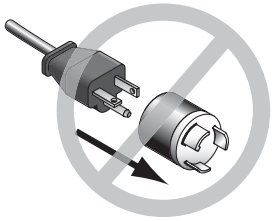


Figure 1. Typical 6-20 plug and receptacle.

⚠CAUTION



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

Circuit Requirements, G0454Z

Nominal Voltage 240V
Cycle.....60 Hz
Phase..... Single-Phase
Circuit Rating.....30A
Plug/Receptacle .....NEMA L6-30

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

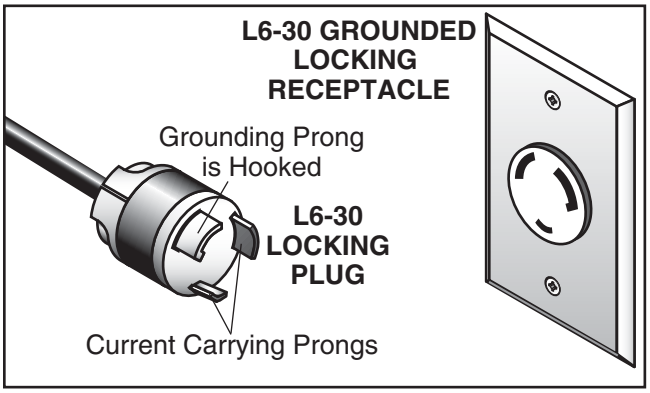


Figure 2. Typical L6-30 plug and receptacle.

Extension Cords

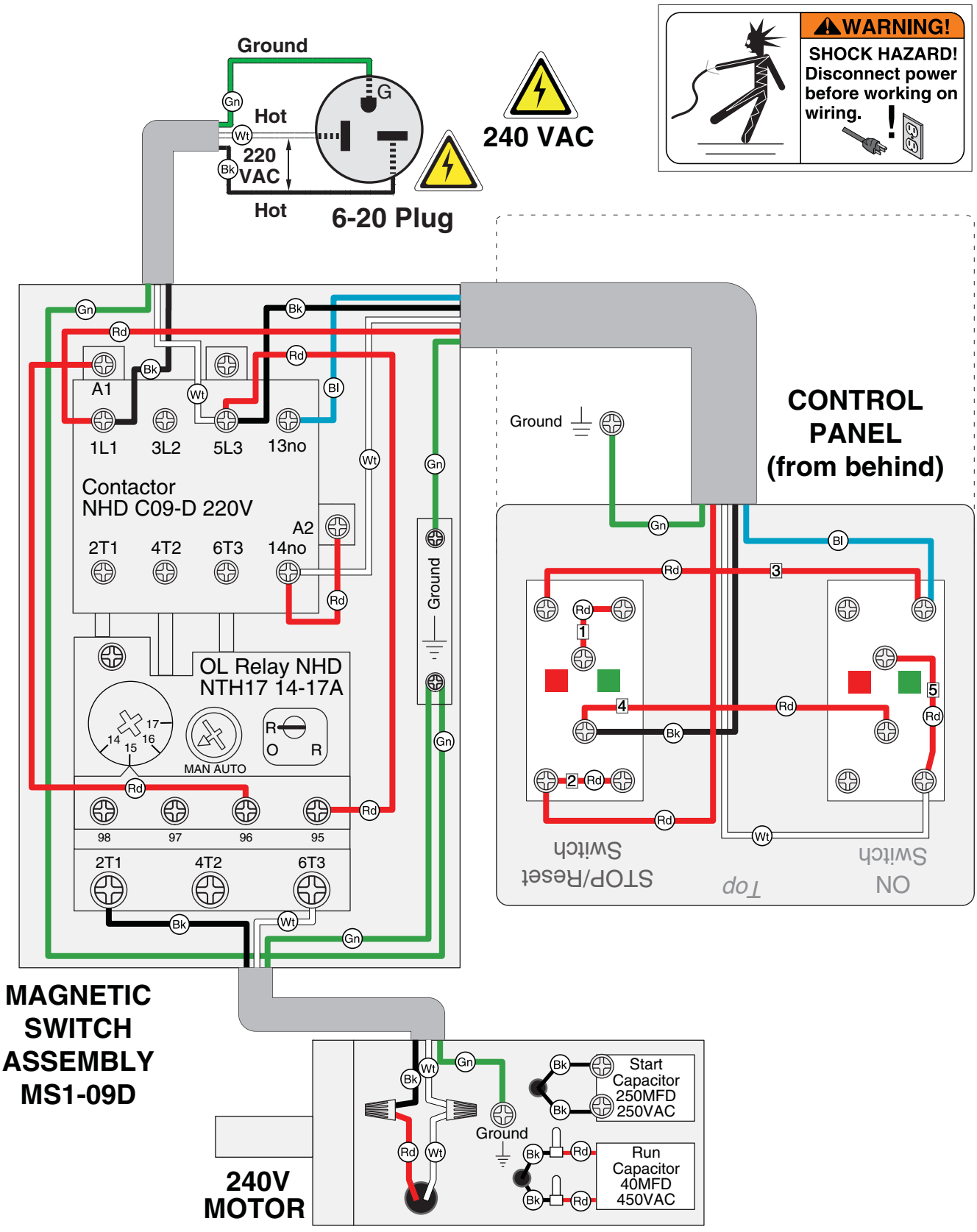
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

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

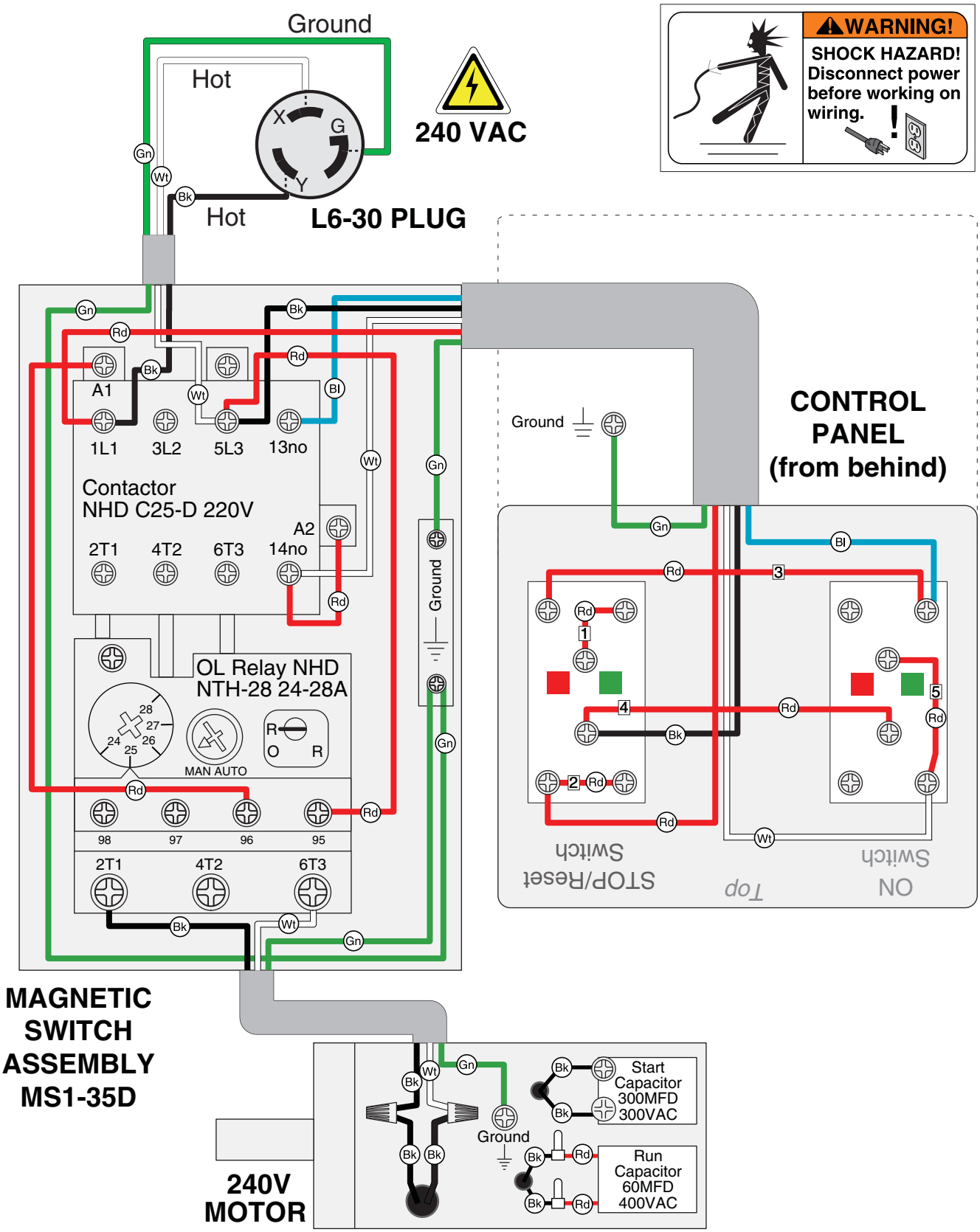
Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

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

G0453P/PX/Z Wiring Diagram



G0454Z Wiring Diagram



Grizzly Industrial, Inc.®

MODEL G0453Z/G0454Z
15" & 20" MOBILE PLANER w/SPIRAL CUTTERHEAD
OWNER'S MANUAL

Model G0454Z Shown

(FOR MODELS MANUFACTURED SINCE 1/09) #TS11416 PRINTED IN CHINA

⚠ 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

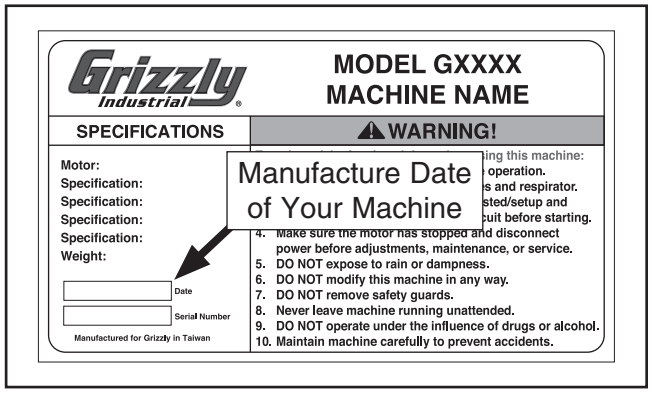
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Machine Description

A planer is designed to remove material in precise increments from the surface of natural wood stock to make the workpiece flat.

Once the depth of cut is set, the workpiece is placed on the table and moved into the infeed roller, which pulls the workpiece under the rotating cutterhead where the material is removed. After the workpiece is completely free from the outfeed roller, the depth of cut is increased and the workpiece is passed through the planer again. This process continues until the workpiece is flat and of the correct thickness.

Identification

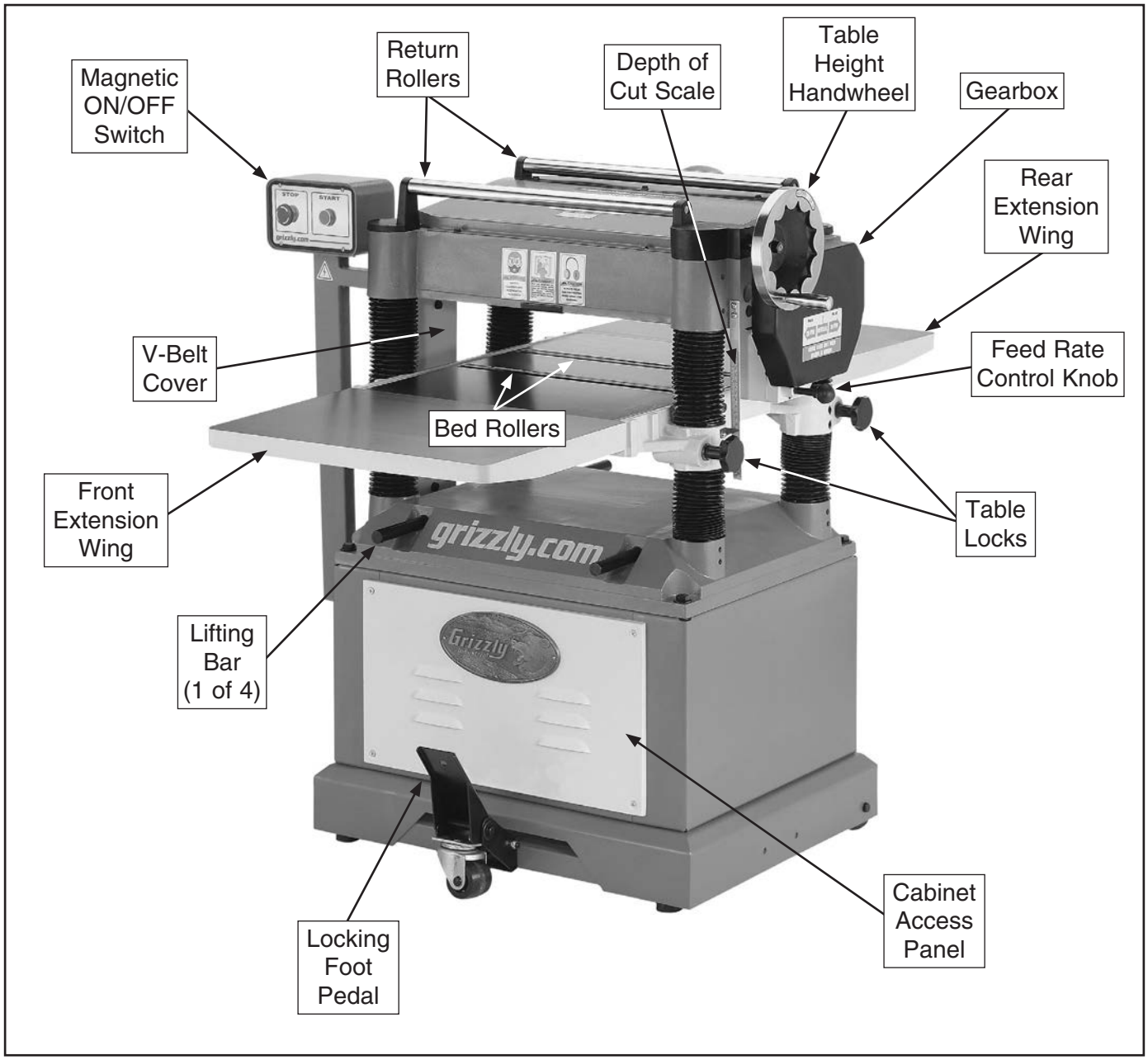


Figure 1. Identification.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade 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.

Internal Components

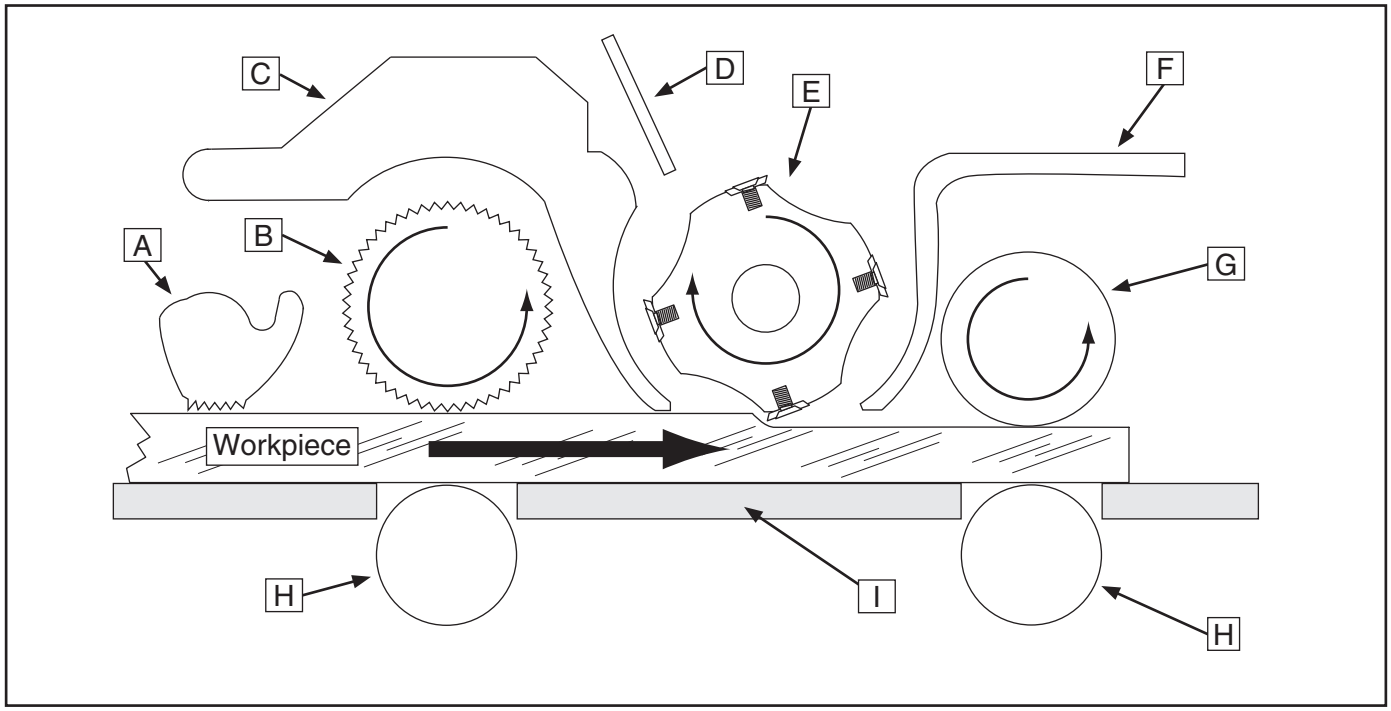


Figure 2. Workpiece path and major planing components (side cutaway view).

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

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

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

D. Chip Deflector: Directs chips into the dust hood.

E. Cutterhead: Holds the indexable carbide inserts that remove material from the workpiece.

F. Pressure Bar: Stabilizes the workpiece as it leaves the cutterhead and assists in deflecting wood particles toward the dust hood (G0454Z only).

G. Outfeed Roller: Pulls the workpiece through the planer.

H. Table Rollers: Provide a rolling surface to enable the feed rollers to pull the workpiece along.

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

MACHINE DATA SHEET

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

MODEL G0453Z 15" 3 HP 240V PLANER WITH SPIRAL CUTTERHEAD

Product Dimensions:

Weight	655 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	32-1/2 x 42 x 45-7/8 in.
Footprint (Length x Width)	22-1/2 x 22 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	672 lbs.
Length x Width x Height	36 x 29 x 47 in.
Must Ship Upright	Yes

Electrical:

Power Requirement	240V, Single-Phase, 60 Hz
Prewired Voltage	240V
Full-Load Current Rating	15A
Minimum Circuit Size	20A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	5 ft.
Power Cord Gauge	12 AWG
Plug Included	No
Recommended Plug Type	6-20
Switch Type	Button Controls w/Magnetic Switch Protection

Motors:

Main

Horsepower	3 HP
Phase	Single-Phase
Amps	15A
Speed	3450 RPM
Type	TEFC Capacitor-Start Induction
Power Transfer	Triple V-Belt Drive
Bearings	Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type	External

Main Specifications:

Main Specifications

Planer Size	15 in.
Max. Cut Width	15 in.
Min. Stock Length	8 in.
Min. Stock Thickness	3/16 in.
Max. Stock Thickness	8 in.
Number of Cuts Per Inch	104, 56
Number of Cuts Per Minute	20,000
Cutterhead Speed	4800 RPM
Planing Feed Rate	16, 30 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	Spiral
Cutterhead Diameter	3 in.
Number of Cutter Spirals	4
Number of Indexable Cutters	74
Cutter Insert Type	Indexable Carbide
Cutter Insert Size Length	14 mm
Cutter Insert Size Width	14 mm
Cutter Insert Size Thickness	2 mm

Table Info

Table/Headstock Movement	8 in.
Table Bed Size Length	20 in.
Table Bed Size Width	15 in.
Table Bed Size Thickness	1-3/4 in.
Number of Bed Rollers	2
Floor-to-Table Height	27 – 35 in.
Roller Ext. Table Size Length	42 in.
Roller Ext. Table Size Width	15 in.
Roller Ext. Table Size Thickness	1-3/4 in.

Construction

Table	Precision-Ground Cast Iron
Body	Cast Iron
Stand	Steel
Cutterhead Assembly	Steel
Infeed Roller	Serrated Steel
Outfeed Roller	Rubber-Coated
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	Built-In

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	ID Label on Upper Cover
ISO 9001 Factory	No
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 G0454Z 20" 5 HP PLANER W/ SPIRAL CUTTERHEAD

Product Dimensions:

Weight	783 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	39 x 55-5/8 x 45-7/8 in.
Footprint (Length x Width)	29-1/2 x 23-1/2 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	932 lbs.
Length x Width x Height	43 x 30 x 48 in.
Must Ship Upright	Yes

Electrical:

Power Requirement	240V, Single-Phase, 60 Hz
Prewired Voltage	240V
Full-Load Current Rating	25A
Minimum Circuit Size	30A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	6-1/2 ft.
Power Cord Gauge	12 AWG
Plug Included	Yes
Included Plug Type	L6-30
Switch Type	Button Controls w/Magnetic Switch Protection

Motors:

Main

Horsepower	5 HP
Phase	Single-Phase
Amps	19A
Speed	3450 RPM
Type	TEFC Capacitor-Start Induction
Power Transfer	Triple V-Belt Drive
Bearings	Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type	External

Main Specifications:

Main Specifications

Planer Size	20 in.
Max. Cut Width	20 in.
Min. Stock Length	8 in.
Min. Stock Thickness	3/16 in.
Max. Stock Thickness	8 in.
Number of Cuts Per Inch	104, 83
Number of Cuts Per Minute	20,000
Cutterhead Speed	4800 RPM
Planing Feed Rate	16, 20 FPM
Max. Cut Depth Planing Full Width	1/8 in.
Max. Cut Depth Planing 6-Inch Wide Board	1/8 in.

Cutterhead Info

Cutterhead Type	Spiral
Cutterhead Diameter	3-1/8 in.
Number of Cutter Rows	4
Number of Indexable Cutters	98
Cutter Insert Type	Indexable Carbide
Cutter Insert Size Length	14 mm
Cutter Insert Size Width	14 mm
Cutter Insert Size Thickness	2 mm

Table Info

Table/Headstock Movement	8 in.
Table Bed Size Length	25-3/4 in.
Table Bed Size Width	20 in.
Table Bed Size Thickness	1-3/4 in.
Number of Bed Rollers	2
Floor-to-Table Height	26-1/2 – 34-1/2 in.
Roller Ext. Table Size Length	55-1/2 in.
Roller Ext. Table Size Width	20 in.
Roller Ext. Table Size Thickness	1-3/4 in.

Construction

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

Other

Table/Headstock Locks	Yes
Measurement Scale	Inch & Metric
Number of Dust Ports	1
Dust Port Size	5 in.
Mobile Base	Built-In
Gear Box	2 Speed

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ID Label Top of Headstock
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

SECTION 1: SAFETY

⚠WARNING

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.

⚠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 **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING

Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

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.

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

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 avoid accidental slips which could cause a loss of workpiece control.

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

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

⚠WARNING
Safety Instructions for Machinery

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

INTENDED USE. Only use the machine for its intended purpose and only use recommended accessories. Never stand on machine, modify it for an alternative use, or outfit it with non-approved accessories.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

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

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

REMOVING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

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.

DANGEROUS ENVIRONMENTS. Do not use machinery in wet locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well lighted to minimize risk of injury.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine ***OFF*** and ensure all moving parts completely stop before walking away.

MAINTENANCE & INSPECTION. A machine that is not properly maintained may operate unpredictably. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. Regularly inspect machine for loose bolts, alignment of critical parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or misadjusted parts before operating machine.

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

⚠WARNING
Additional Safety Instructions for Planers

1. **OWNER'S MANUAL.** This machine presents significant safety hazards to untrained users. Read and understand this entire manual before starting the planer.

2. **KICKBACK.** Be familiar with kickback. Kickback happens when the workpiece is thrown towards the operator at a high rate of speed. *Until you have a clear understanding of kickback and how it occurs, DO NOT operate this planer!*

3. **REACHING INSIDE PLANER.** To avoid serious personal injury from the cutterhead, never remove guards or reach inside the planer while it is connected to power.

4. **DULL/DAMAGED INSERTS.** Only use sharp, undamaged inserts. Kickback may occur and the cutting results will be poor if the planer is operated with dull or damaged inserts.

5. **BODY PLACEMENT.** To avoid getting hit if a kickback occurs, always stand to one side of the planer during the entire operation.

6. **PLANING CORRECT MATERIAL.** Only plane natural wood stock with this planer. DO NOT plane MDF, plywood, laminates or other synthetic materials that can break up inside the planer and cause injury hazards.

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

8. **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 the planer during operation.

9. **CUTTING LIMITATIONS.** To reduce the risk of kickback hazards or damage to the machine, always operate within the published capacities found in the **Data Sheet** (beginning on **Page 5**) for this planer.

10. **CLEAN STOCK.** Planing stock with nails, staples, or loose knots may cause debris to be thrown at the operator at a high rate of speed and will damage the cutterhead. To avoid these hazards, always thoroughly inspect and prepare the workpieces.

11. **CLEARING JAMS.** To avoid serious personal injury from the spinning cutterhead, always stop the planer and disconnect it from power before removing jammed workpieces.

12. **INFEED ROLLER CLEARANCE.** The infeed roller is designed to pull material into the spinning cutterhead. To avoid serious personal injury, always keep hands, clothing, jewelry, and long hair away from the infeed roller during operation.

13. **DISCONNECT BEFORE ADJUSTMENTS.** To avoid unexpected start-up and serious personal injury, always disconnect the planer from power before performing adjustments, maintenance, or service.

⚠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.

SECTION 2: CIRCUIT REQUIREMENTS

220V Single-Phase Operation

⚠WARNING

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

⚠WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance MUST be verified by a qualified electrician!

Full Load Amperage Draw

This machine draws the following amps under maximum load:

G0453Z Amp Draw ..... 15 Amps
G0454Z Amp Draw..... 25 Amps

Power Supply Circuit Requirements

The power supply circuit for your machine MUST be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

G0453Z Minimum Circuit Size ..... 20 Amps
G0454Z Minimum Circuit Size..... 30 Amps

Power Connection Device

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plugs shown in **Figure 3**.

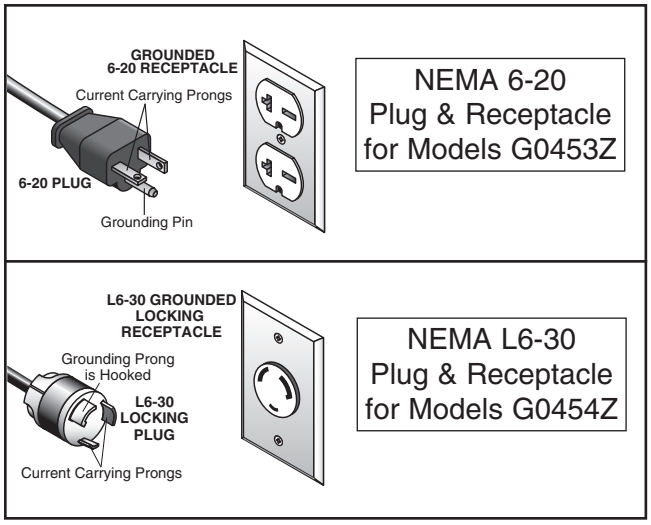


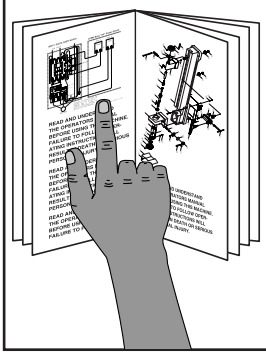
Figure 3. Recommended connection types.

Extension Cords

Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Model G0453Z: Use at least a 12 gauge cord that does not exceed 50 feet in length.
- Model G0454Z: Use at least a 10 gauge cord that does not exceed 50 feet in length.
- Ensure that the extension cord contains a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

SECTION 3: SETUP

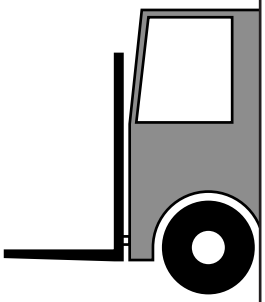


⚠WARNING

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

The Model G0453Z/ G0454Z is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine:

Description	Qty
• Assistant	1
• Safety Glasses	1 Per Person
• Forklift (rated for at least 1000 lbs.)	1
• Shop Rags & Cleaning Solvent	As Needed
• Floor Mounting Hardware	As Needed
• Straightedge 4'	1
• Dust Collection System	1
• 4" or 5" Dust Hose w/Clamps	1

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.

Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.*

Box Inventory: (Figure 4) **Qty**

A. Planer (Not Shown) 1
B. Dust Hood 1
C. Foot Pedal 1
D. Handwheel 1
E. Caster 1
F. Extension Wings 2

G0453Z Hardware and Tools (not shown)

- Set Screws M8-1.25 x 20 (Wings) 4
- Hex Bolts M8-1.25 x 30 (Wings) 6
- Flat Washers 8mm (Wings) 6
- Lock Washers 8mm (Wings) 6
- Handwheel Bushing 1
- Handwheel Handle 1
- Hex Nut M12-1.75 (Handwheel) 1
- Flat Washer 12mm (Handwheel) 1
- Hex Bolts M6-1 x 10 (Dust Hood) 3
- Cap Screws M8-1.25 x 20 (Dust Hood) 3
- Flat Washers 6mm (Dust Hood) 6
- Hex Nuts M6-1 (Dust Hood) 3
- Hex Wrenches 2.5, 3, 4, 6mm ..... 1 Each
- Wrenches 10/12, 14/17, 17/19mm ..... 1 Each

G0454Z Hardware and Tools (not shown)

- Set Screws M8-1.25 x 20 (Wings) 6
- Hex Bolts M8-1.25 x 30 (Wings) 6
- Flat Washers 8mm (Wings) 6
- Lock Washers 8mm (Wings) 6
- Handwheel Bushing 1
- Handwheel Handle 1
- Hex Nut M12-1.75 (Handwheel) 1
- Flat Washer 12mm (Handwheel) 1
- Flange Bolts M6-1 x 12 (Dust Hood) 6
- Hex Wrenches 3, 4, 5, 6mm ..... 1 Each
- Wrenches 8/10, 12/14, 17/19mm ..... 1 Each

If any nonproprietary 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.

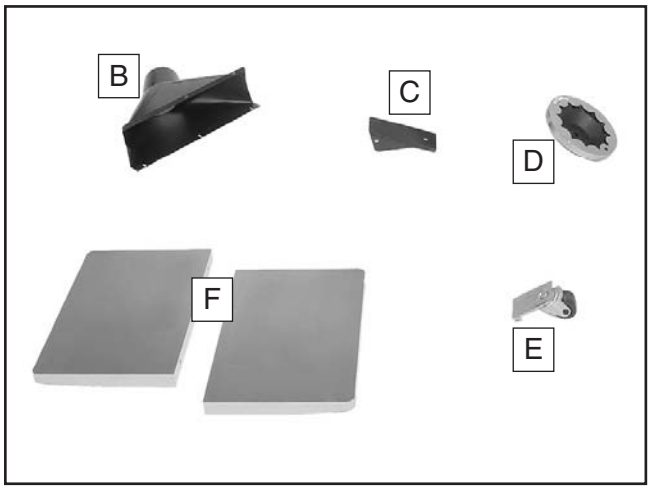
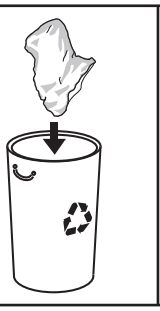


Figure 4. Model G0453/G0454 inventory.



⚠WARNING

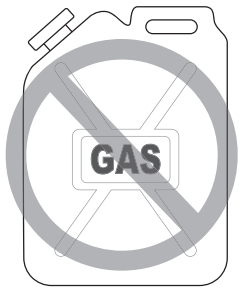
SUFFOCATION HAZARD!

Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.

Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 5**. Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.

You MUST clean the cutterhead (remove the top cover), table, feed rollers, and the extension wings before assembly to ensure proper operation of your planer.



⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.

⚠CAUTION

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

G2544—Solvent Cleaner & Degreaser
H9692—Orange Power Degreaser
Great products for removing shipping grease.

Call
1-800-523-4777
To Order

Figure 5. Cleaner/degreasers available from Grizzly.

Site Considerations

Floor Load

Refer to the **Machine Data Sheets** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 6** for the minimum working clearances.

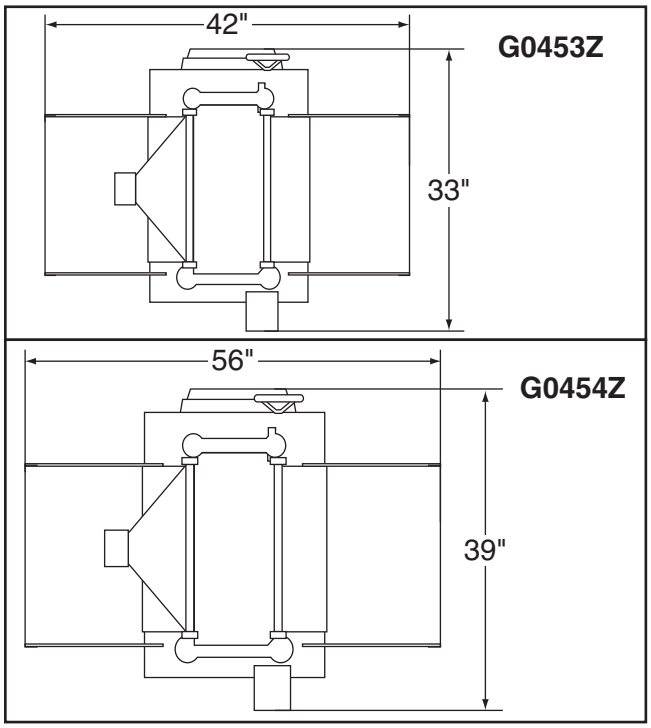
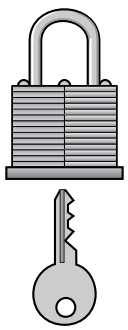


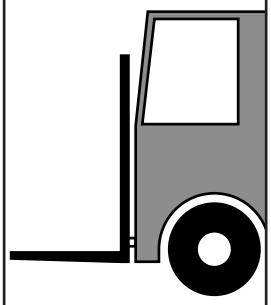
Figure 6. Minimum working clearances.



⚠CAUTION

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.

Lifting & Moving Planer



⚠WARNING

The Model G0453Z/ G0454Z is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

The cabinet stand on your planer is equipped with four lifting bars that pull out in order to lift and place the planer, as shown in **Figure 7**.

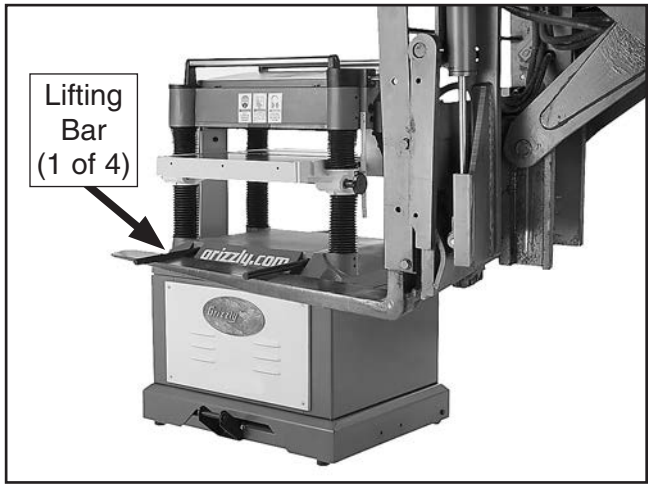


Figure 7. Lifting the planer with a forklift.

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

Assembly

To assemble your planer:

1. Install (3) M8-1.25 x 20 set screws in the holes in the bottom of the wings (see **Figure 8**).

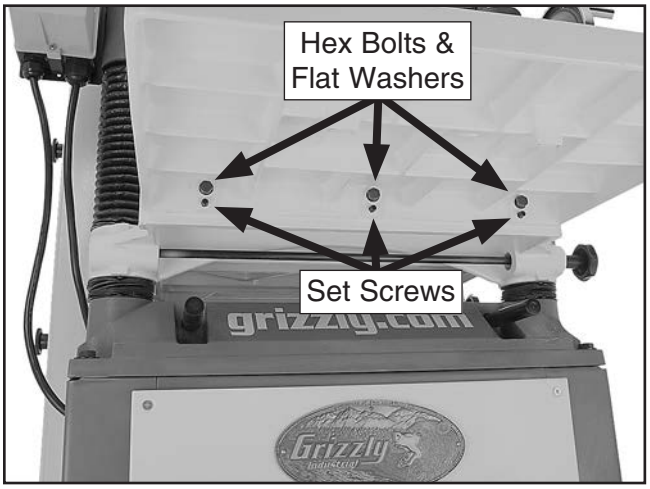


Figure 8. Front extension wing installed (Model G0454 shown).

2. Attach the table extension wings to the planer table with (3) M8-1.25 x 30 hex bolts, 8mm lock washers, and 8mm flat washers, as shown in **Figure 8**, but do not fully tighten the bolts at this time.

3. Using a straightedge as a guide and the set screws for leveling control, position the extension wings evenly with the table, then fully tighten the hex bolts.

Note: *Do not rest the straightedge on the table rollers which would give you a false reading.*

4. Place the bushing on the handwheel shaft.

5. Insert the key into the shaft keyway.

6. Screw the handle into the handwheel.

7. Place the handwheel on the shaft and secure it with the M12-1.75 hex nut and 12mm flat washer, as shown in **Figure 9**.

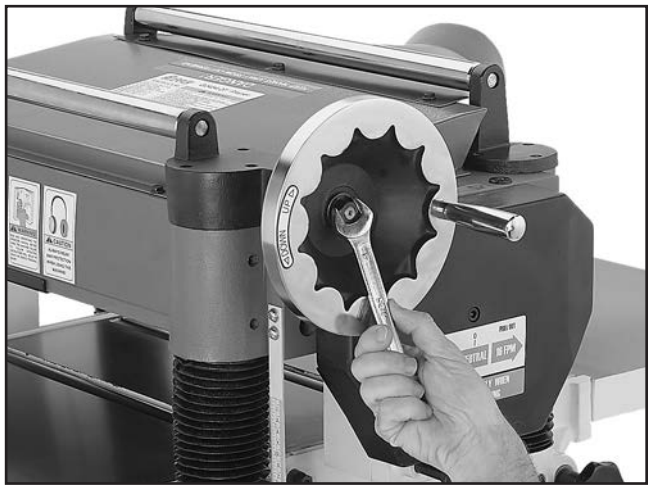


Figure 9. Installing the table height handwheel.

8. **Model G0453Z:** Attach the dust hood to the top of the planer with (3) M6-1 x 10 hex bolts, 6mm flat washers, and M6-1 hex nuts as shown in **Figure 10**, then attach the bottom of the dust hood to the planer with the M8-1.25 x 20 cap screws.

   Note: *You will need to reach into the dust hood to hold the hex nuts while tightening the hex bolts.*

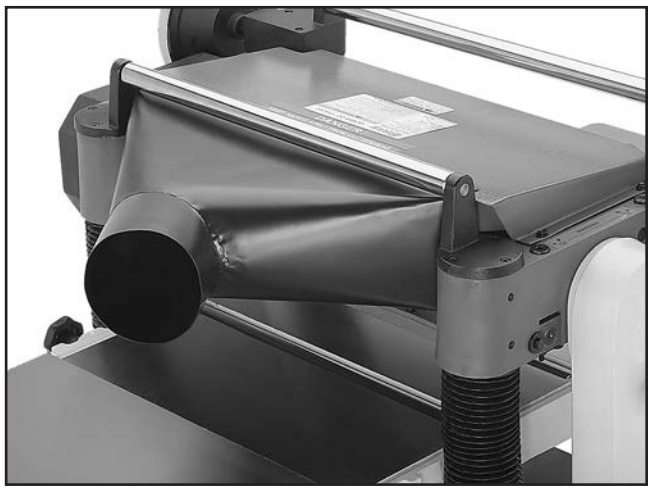


Figure 10. Dust hood attached.

Model G0454Z: Attach the dust hood with the provided (6) M6-1 x 12 flange bolts.

9. Remove the hex bolt, and hex nut that are pre-installed in the foot pedal bracket (see **Figure 11**).

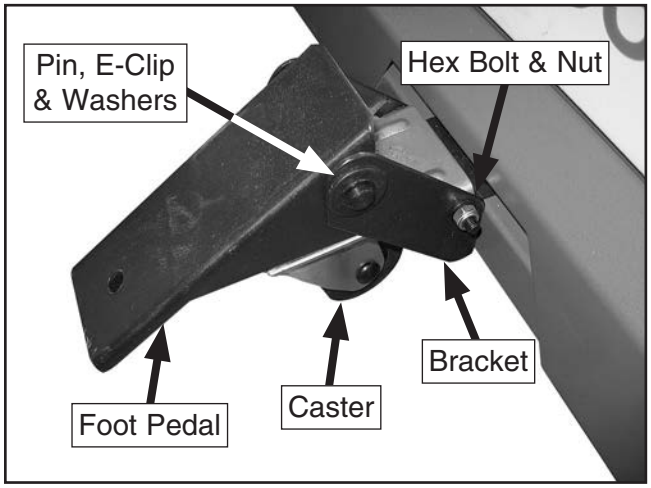


Figure 11. Foot pedal and caster installed.

10. Align the holes of the caster assembly and foot pedal bracket with those of the mounting flange, then insert the hex bolt through the holes and secure it with the hex nut.

    Note: *Tighten the hex bolt just enough for it to be snug without hampering the pivot action of the bracket.*

11. Remove the pin, flat washers, and E-clip from the foot pedal bracket, align the foot pedal holes with the bracket, then re-install the pin, flat washers, and E-clip.

Dust Collection

⚠CAUTION

DO NOT operate the Model G0453Z/G0454Z without an adequate dust collection system. This planer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port

- G0453Z .....400 CFM
- G0454Z .....625 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.

Check Gearbox Oil

It is critical that you make sure there is oil in the gearbox before proceeding with the test run. Refer to the **Lubrication** instructions for the gearbox on **Page 30** for more details on which type of oil to use, how much to use, and where to put it.

To check the gearbox oil reservoir:

1. Remove the gearbox fill plug (see **Figure 12**).

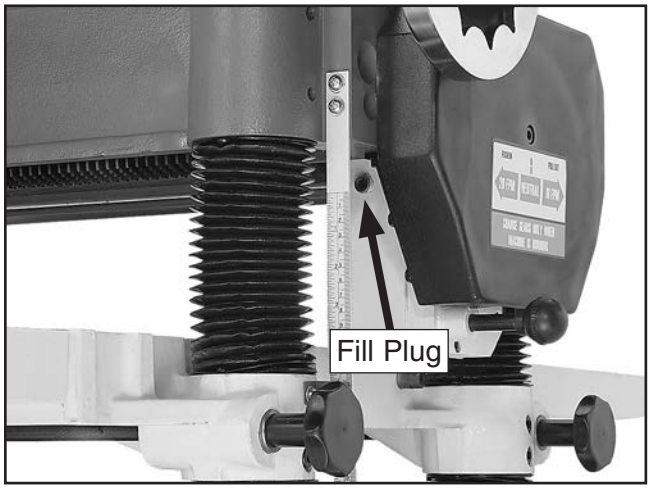


Figure 12. Gearbox fill plug.

2. Using the short end of a clean hex wrench, dip it inside the fill hole and 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 skip to the next step.

   —If the end of the hex wrench is not coated with oil, then you need to add more oil. Refer to **Page 30** for instructions on how to do this.

NOTICE

Replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the stop button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 31**.

If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

⚠WARNING

Before starting the planer, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is set up properly.

2. Make sure all tools and objects used during setup are cleared away from the machine.

3. Make sure the gearbox has the correct amount of oil (refer to **Gearbox Oil** on **Page 30** for detailed instructions).

4. Push the OFF button in, then twist it clockwise so it pops out. When the OFF button pops out, the switch is reset and ready for operation (see **Figure 13**).

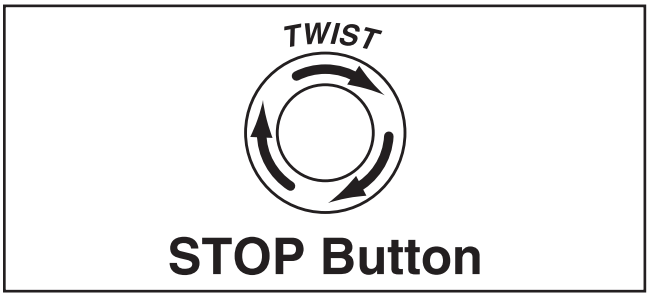


Figure 13. Resetting the switch.

5. Pull the feed rate control knob out to engage the feed rollers in the low speed (refer to **Feed Rate** on **Page 24** for detailed instructions).

6. Verify that the machine is operating correctly by pushing the ON button.

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

7. Press the OFF button to stop the machine.

8. WITHOUT resetting the switch, press the ON button. The machine should not start.

   —If the machine does not start, the OFF button safety feature is working correctly. The **Test Run** is complete.

   —If the machine does start (with the OFF button pushed in), immediately disconnect power to the machine. The OFF button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Re-Tension V-Belts

The final step of the setup process must be done after approximately 16 hours of operation. During this period, the V-belts will stretch and seat into the pulley grooves and need to be properly tensioned to avoid severely reducing the life of the V-belts. Refer to **V-Belts** on **Page 35** for detailed instructions.

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory.

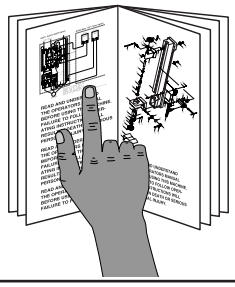
However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine.

Step-by-step instructions for these adjustments can be found in the **SERVICE** section starting on **Page 31**.

Factory adjustments that should be verified:

- Table height chain tension (**Page 37**).
- Chip breaker height (**Page 38**).
- Pressure bar height (**Page 38**).
- Infeed/outfeed roller height (**Page 38**).
- Roller spring tension (**Page 41**).
- Chip deflector positioning (**Page 41**).

SECTION 4: OPERATIONS

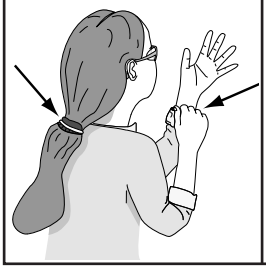


WARNING

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

WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



WARNING

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade 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.

Basic Controls

Use **Figure 14** and the following descriptions to become familiar with the basic controls of your planer.

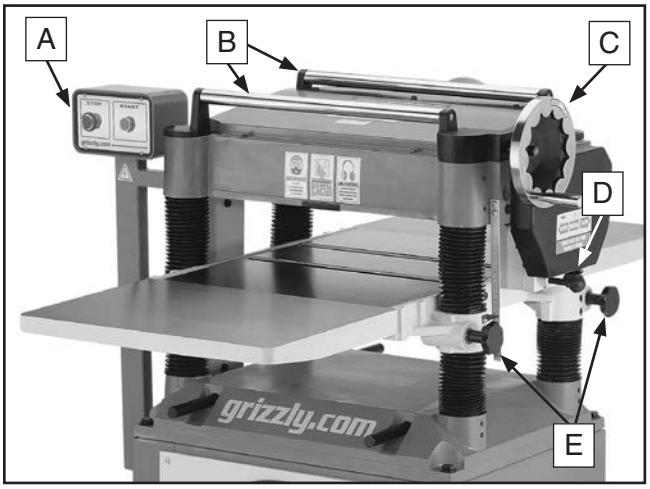


Figure 14. Basic controls.

A. Magnetic ON/OFF Switch: Starts/stops the planer.

B. Return Rollers: Provide a convenient method for returning workpieces to the infeed side of the planer.

C. Table Height Handwheel: Controls the elevation of the table under the cutterhead.

D. Feed Rate Control Knob: Switches the feed rollers between high and low feed rates or, in the center position, stops the feed rollers.

E. Table Locks: Locks the table in position so it does not move during operations.

Operation Overview

This overview gives you the basic process that happens during an operation with this machine. Familiarize yourself with this process to better understand the remaining parts of the **Operation** section.

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

1. Makes sure the workpiece is clean and free of any defects or foreign materials that might cause kickback or damage the sander.

2. Adjusts the height of the table for the correct depth of cut.

3. Starts the dust collection system.

4. Connects the planer to power and turns it ***ON***.

5. While standing to the side of the machine, lays the workpiece on the infeed table and feeds it into the machine until the infeed roller engages it and moves it past the cutterhead.

6. When the workpiece exits the planer, returns it to the infeed table and makes as many passes as necessary, then turns the planer ***OFF***.

Planing Tips

- Use the full width of the planer. Alternate the cutting path between the left, the right and the middle of the table to evenly distribute the wear across all inserts.
- Scrape all glue off of joined boards before planing.
- Plane ONLY natural wood. Do not plane wood composites or any other man-made material.
- Plane the workpiece with the grain. NEVER feed end-cut or end-grained lumber into your planer.
- Keep your work area clear.
- Always true any cupped or warped stock on a jointer before planing.
- When making multiple passes through the planer on long stock, use the stock return rollers on top of the machine to move the material back to the infeed side.
- When possible, plane both faces of the workpiece so that they will be parallel with one another.

Workpiece Inspection

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

- **Material Type:** This machine is only intended for planing workpieces of natural wood. Attempting to plane workpieces of any other material, including wood composites, could lead to serious personal injury and property damage.

- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, imbedded 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 the planing operation. Large knots can cause kickback and machine damage. Always choose workpieces that do not have large/loose knots when planing.

- **Wet or "Green" Stock:** Avoid planing 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 plane poorly and cause excessive wear to the cutterhead and motor. Excess moisture can also hasten rust and corrosion of the planer 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 planed. DO NOT use workpieces with these characteristics!

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

Wood Hardness

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 **Figure 15** shows the Janka Hardness Rating for a number of commonly used species. The larger the number, the harder the workpiece, and the less material to 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 Pin	420
Basswood	410
Eastern White Pine	380
Balsa	100

Figure 15. Janka Hardness Rating for some common wood species.

Feed Rate

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.

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

Use the two feed rates as stated below:

Low Feed Rate ..... Dimension Pass
High Feed Rate ..... Finishing Pass

Figure 16 illustrates the three different positions of the feed rate control knob:

- Push the knob in to use the high feed rate (30 FPM for Model G0453Z, and 20 FPM for Model G0454Z).
- Pull the knob out to use the low feed rate of 16 FPM.
- Move the knob to the center position to place the gearbox in neutral.

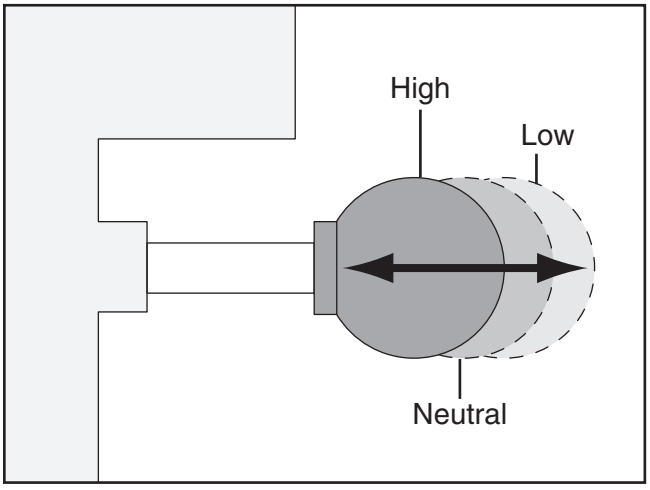


Figure 16. Feed rate control knob positions.

Depth of Cut

The planing depth of cut is controlled by using the table height handwheel on the right side of the machine. Rotating the handwheel clockwise raises the table.

The depth of cut is read directly from the inch/millimeter scale on the front of the planer, as shown in **Figure 17**.

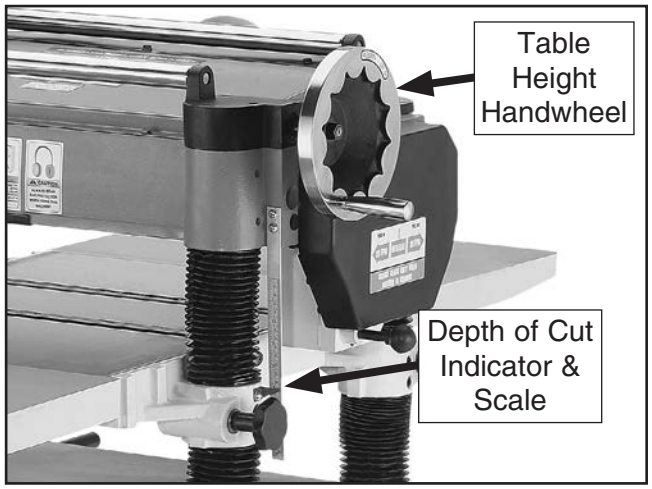


Figure 17. Depth of cut indicator and scale.

One complete turn of the handwheel raises or lowers the table approximately 1/16". The range of material thickness that can be planed is 3/16"–8".

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

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

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 18**.

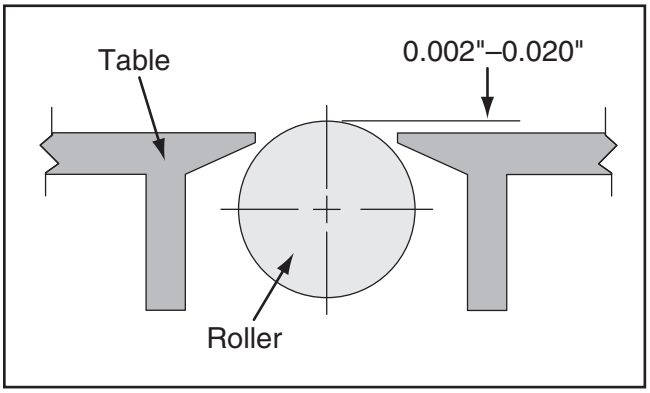


Figure 18. Recommended bed roller height above the table surface.

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 **Accessories** on **Page 27**) 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.

Tools Needed	Qty
Hex Wrench 3mm	1
Wrench 14mm	1
Rotacator	1

To adjust the bed rollers:

1. DISCONNECT PLANER FROM POWER!

2. Lower the table all the way to give yourself room to work.

3. Loosen the set screws above each of the four roller adjustment hex bolts—two on each side (see **Figure 19**).

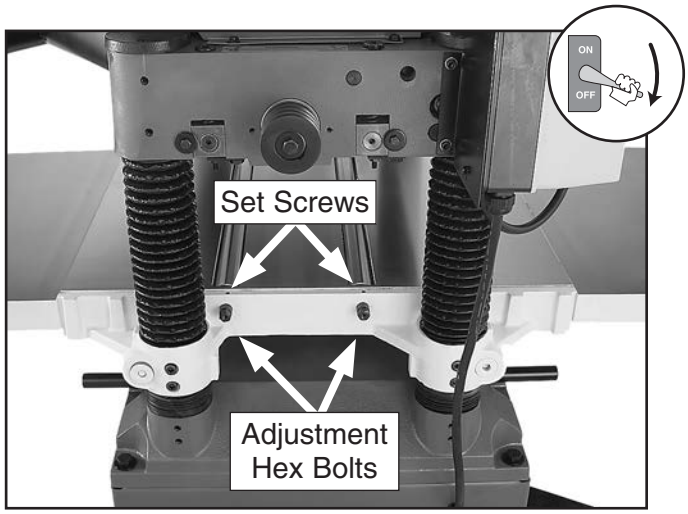


Figure 19. Bed roller height controls.

4. Rotate the eccentric adjustment hex bolts to raise or lower the bed rollers until they are the desired height above the table surface.

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

6. Re-check the roller heights to make sure they did not change when you secured them.

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

SECTION 5: ACCESSORIES

G1738—Rotacator™ Precision Planer Tool
The Rotacator is a dial indicator on a magnetic base and is designed for quickly and accurately setting the critical tolerances needed when adjusting any planer, so that nasty surprises such as non-parallel and chattered cuts can be eliminated. Helps adjust 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°

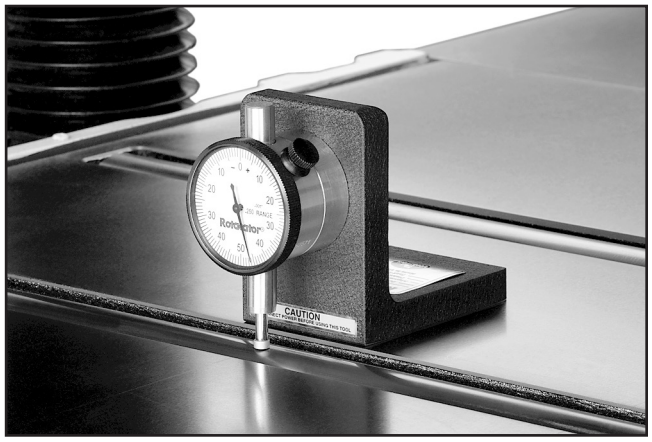


Figure 20. Rotacator™ Precision Planer Tool.

G8983—Tilting Roller Stand
Adjusts from 26" to 44", 0º-45º. 150 lb. capacity.
G8984—Single Roller Stand
Adjusts from 26 5/8" to 45". 250 lb. capacity.
G8985—5 Roller Stand
Adjusts from 26" to 44 5/8". 250 lb. capacity.
These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment.

Figure 21. SHOP FOX® Roller Stands.

H7319—Carbide Indexable Inserts, 10 Pk.

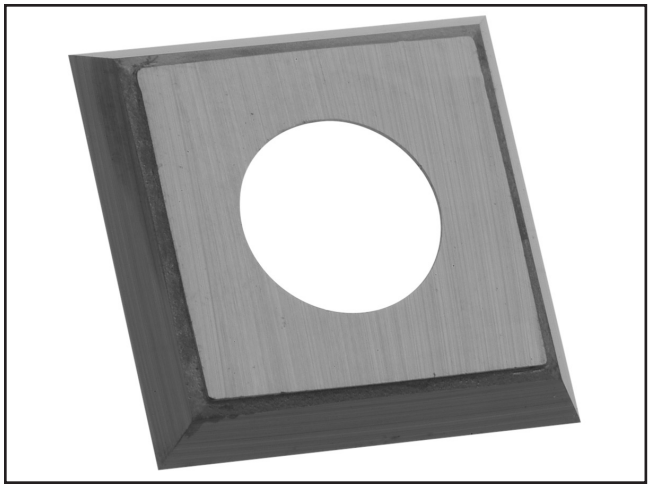


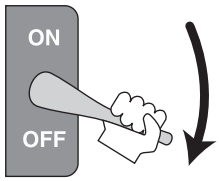
Figure 22. H7319 solid carbide inserts, 10 Pk.

G1029Z—2HP Dust Collector
The great combination of price and performance make this one of the most popular dust collectors we sell. Perfect for use as a central dust collector in a small shop or as a "dedicated" dust collector next to an industrial machine. Features 220V single-phase power, 1550 CFM, 2.5 micron filtration, and a 6" main inlet w/included 4" x 2" "Y" fitting.

Figure 23. G1029Z 2HP dust collector.

Call 1-800-523-4777 To Order

SECTION 6: MAINTENANCE



⚠WARNING
Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

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 the machine and protect unpainted cast iron.
- Lubricate the feed rollers bushings (**Page 29**).
- Tighten loose mounting bolts.
- Check/rotate/replace damaged or worn inserts (**Page 34**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

Every 40 Hours of Operation:
- Lubricate the table columns and leadscrews (**Page 29**).
- Clean/vacuum the dust buildup from inside the cabinet and off motor.

Every 160 Hours of Operation:
- Check/tension/replace the V-belts (**Page 35**).
- Lubricate the table height worm gear (**Page 29**).
- Lubricate the table height chain and sprockets (**Page 30**).
- Lubricate the drive chain and sprockets (**Page 30**).

Yearly:
- Change the gearbox oil (**Page 30**).

Cleaning & Protecting

Vacuum excess wood chips and sawdust from the outside of the machine, inside the cabinet, and off the motor. Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 from Grizzly.

Lubrication

NOTICE

Failure to followed reasonable lubrication practices as instructed in this manual for your planer could lead to premature failure of your planer and will void the warranty.

Your 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 (refer to the **Parts Breakdowns** beginning on **Page 46** for bearing identification).

Follow the maintenance schedule on **Page 28** and the procedures listed below to properly lubricate the other planer components, which are essential for long life and trouble-free operation of your planer.

Feed Roller Bushings

The infeed and outfeed rollers rotate inside bushing blocks on both ends of the rollers. Add 2–3 drops of SAE 30W oil to the center hole of the four feed roller tension adjustment bolts on top of the head casting, as shown in **Figure 24**.

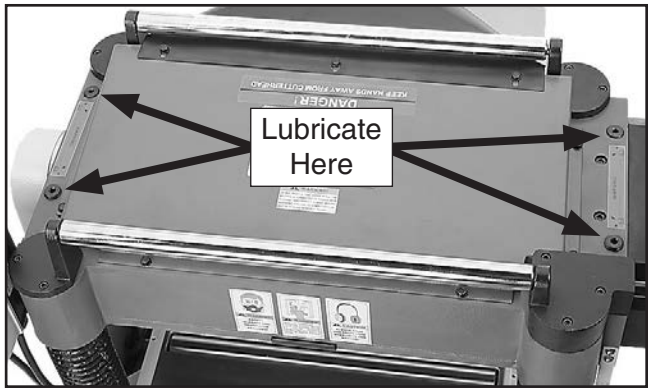


Figure 24. Lubrication locations for the feed roller bushings.

Columns and Leadscrews

The table rides on the columns and is moved by the rotation of the leadscrews inside the columns. For the Model G0454Z, loosen the dust sleeve (see **Figure 25**) to access the columns and leadscrews. Apply a thin coat of SAE 30W 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.

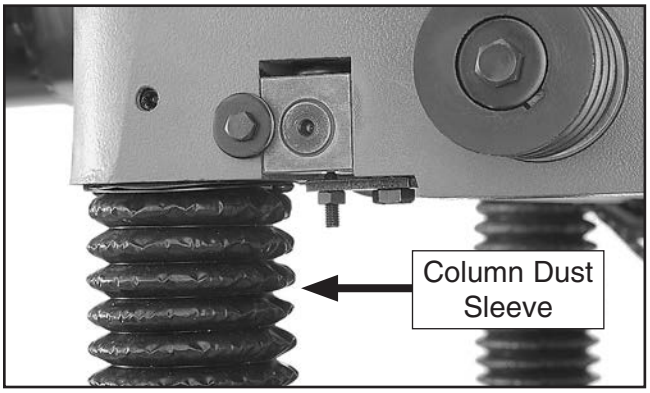


Figure 25. Model G0454Z column dust sleeve.

Table Height Worm Gear

Remove the three cap screws that secure the worm gear housing (see **Figure 26**), 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.

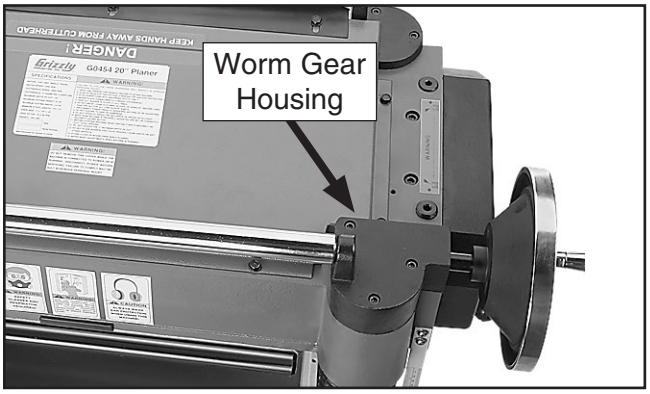


Figure 26. Location of the table height worm gear housing.

Table Height Chain & Sprockets

The table leadscrews are synchronized by the table height chain and sprockets located underneath the base of the planer. Remove the front and rear cabinet panels to access these parts (see **Figure 27**). Use shop rags to clean away debris and grime, then brush on a light coat of SAE 30W oil to the chain and sprockets.

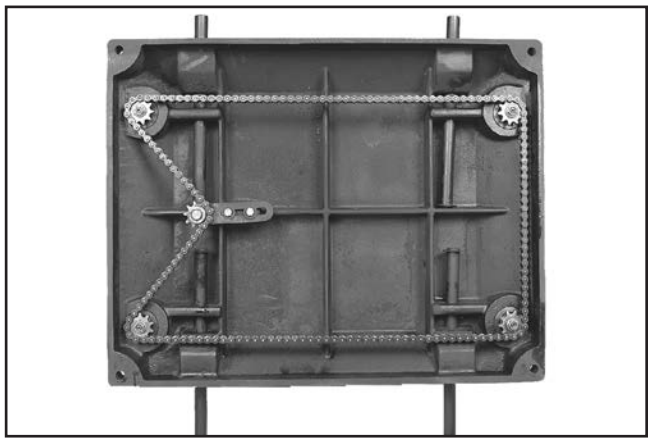


Figure 27. Table height chain and sprockets as viewed from underneath the base.

Drive Chain & Sprockets

The infeed and outfeed rollers receive transferred power from the cutterhead through the drive chain system on the right side of the machine, as shown in **Figure 28**.

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 to clean away any debris and grime, then brush on a light coat of SAE 30W oil to the chain and sprockets.

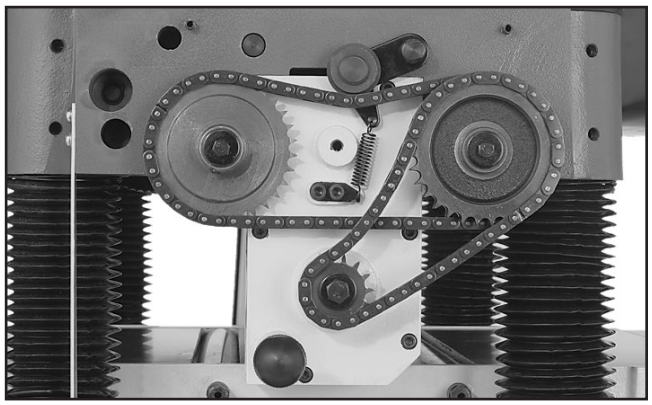


Figure 28. Drive chain and sprockets.

Gearbox Oil

The gearbox oil should be changed after the first 20 hours of operation to clear away any debris inside the gearbox, then changed annually thereafter.

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 29–30**). Replace the gearbox oil with 80W–90W gear oil until it just reaches the fill plug.

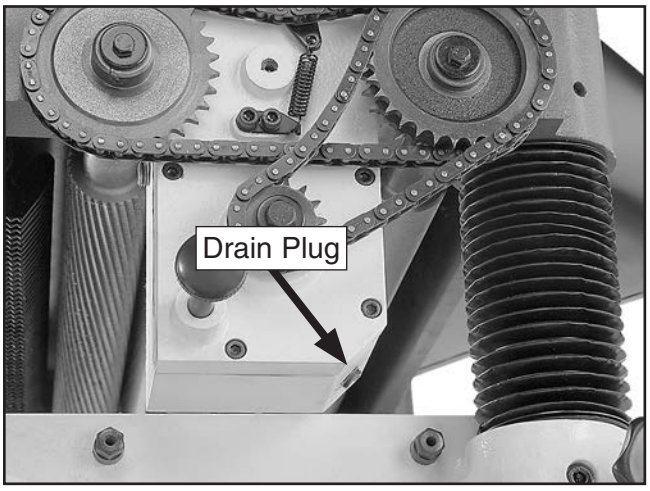


Figure 29. Gearbox drain plug.

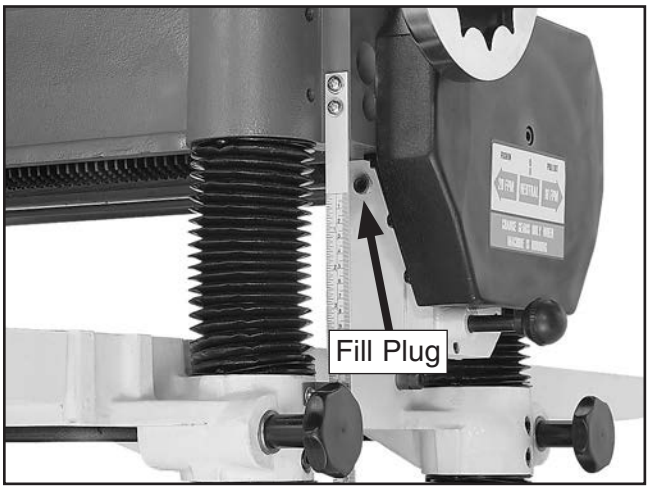
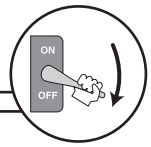


Figure 30. Gearbox fill plug.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

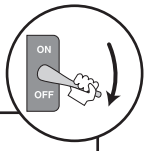
Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Stop push-button engaged/faulty. 2. Power supply switched OFF or at fault. 3. Thermal overload relay has tripped. 4. Wall circuit breaker tripped. 5. Plug/receptacle at fault/wired wrong. 6. Motor connection wired wrong. 7. Contactor not energized/has poor contacts. 8. Wiring open/has high resistance. 9. ON/OFF switch at fault. 10. Start capacitor at fault. 11. Centrifugal switch at fault. 12. Motor at fault.	1. Rotate button to reset/replace it. 2. Ensure power supply is on/has correct voltage. 3. Reset; adjust trip load dial if necessary; replace. 4. Ensure circuit size is correct/replace weak breaker. 5. Test for good contacts; correct the wiring. 6. Correct motor wiring connections (**Pages 44–45**). 7. Test all legs for power/replace if faulty. 8. Check/fix broken, disconnected, or corroded wires. 9. Replace switch. 10. Test/replace if faulty. 11. Adjust/replace centrifugal switch. 12. Test/repair/replace.
Machine stalls or is underpowered.	1. Feed rate too fast. 2. Workpiece material not suitable. 3. Dust collection ducting problem. 4. Motor overheated. 5. Machine undersized for task. 6. V-belt(s) slipping. 7. Motor wired incorrectly. 8. Plug/receptacle at fault. 9. Run capacitor at fault. 10. Pulley/sprocket slipping on shaft. 11. Motor bearings at fault. 12. Contactor not energized/has poor contacts. 13. Motor at fault. 14. Centrifugal switch at fault.	1. Decrease feed rate. 2. Only cut wood/ensure moisture is below 20%. 3. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches. 4. Clean motor, let cool, and reduce workload. 5. Use sharp blades/inserts; reduce feed rate or depth of cut. 6. Tension/replace belt(s) (**Page 35**); ensure pulleys are aligned (**Page 36**). 7. Wire motor correctly (**Pages 44–45**). 8. Test for good contacts/correct wiring. 9. Test/repair/replace. 10. Replace loose pulley/shaft. 11. Test/repair/replace. 12. Test all legs for power/replace if faulty. 13. Test/repair/replace. 14. Adjust/replace centrifugal switch.
Machine has vibration or noisy operation.	1. Belts slapping cover. 2. V-belt(s) worn or loose. 3. Pulley loose. 4. Motor mount loose/broken.	1. Replace/realign belts with a matched set. 2. Inspect/replace belts with a new matched set. 3. Realign/replace shaft, pulley, setscrew, and key. 4. Tighten/replace.

Motor & Electrical (continued)

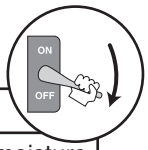


Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	5. Motor fan rubbing on fan cover. 6. Bed rollers protruding unevenly. 7. Motor bearings at fault. 8. Cutterhead bearings at fault. 9. Centrifugal switch is at fault. 10. Chip deflector hitting cutterhead.	5. Fix/replace fan cover; replace loose/damaged fan. 6. Adjust bed rollers (**Page 25**). 7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 8. Replace bearing(s)/realign cutterhead. 9. Replace switch. 10. Check/replace chip deflector and realign (**Page 41**).

Machine Operation

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge at the end of the workpiece that is uneven with the rest of the cut). **Note:** *A small amount of snipe is inevitable with all types of planers—the key is to minimize it.*	1. One or both of the bed rollers are set too high. 2. Rear extension wing slopes down or is not level with main table. 3. Chip breaker or pressure bar set too low. 4. Workpiece is not properly supported as it leaves the planer.	1. Lower the bed rollers (**Page 25**). 2. Adjust the rear extension wing set screws to make the extension level with the main table (**Page 16**). 3. Raise the height of the chip breaker or pressure bar (**Page 38**). 4. Use an assistant or roller beds/stands to properly support the workpiece as it leaves the planer.
Workpiece stops/ slows in the middle of the cut.	1. Depth of cut too deep. 2. Pitch and glue build-up on planer components. 3. One or both of the bed rollers are set too low or too high. 4. Chip breaker or pressure bar set too low. 5. Feed rollers set too low or too high.	1. Reduce the depth of cut (**Page 25**). 2. Clean planer components with a pitch/resin dissolving solvent. 3. Lower/raise the bed rollers (**Page 25**). 4. Raise the height of the chip breaker or pressure bar (**Page 38**). 5. Adjust the feed rollers to the correct height (**Page 38**).
Consistent chipping pattern.	1. Knots or conflicting grain direction in workpiece. 2. Nicked or chipped insert. 3. Feed rate too fast. 4. Depth of cut too deep. 5. Bed rollers set too high or low; not even with each other. 6. Misaligned chip breaker.	1. Inspect workpiece for knots and grain direction; use only clean stock (**Page 23**). 2. Rotate/replace insert (**Page 34**). 3. Reduce feed rate (**Page 24**). 4. Reduce the depth of cut (**Page 25**). 5. Properly adjust the bed roller height (**Page 25**). 6. Adjust both sides of chip breaker to the correct height (**Page 38**).

Machine Operation (continued)



Symptom	Possible Cause	Possible Solution
Fuzzy grain.	1. Workpiece has high moisture content or surface wetness. 2. Dull inserts.	1. Sticker and allow workpiece to dry if moisture content is over 20% or has surface wetness. 2. Rotate/replace inserts (**Page 34**).
Long lines or ridges that run the length of the workpiece.	1. Nicked or chipped inserts.	1. Rotate/replace inserts (**Page 34**).
Uneven cutting marks, wavy surface, or chatter marks across the face of the workpiece.	1. Feed rate too fast. 2. Chip breaker or pressure bar set unevenly. 3. Bed rollers set too high or low; not even with each other. 4. Insert(s) not properly installed. 5. Worn cutterhead bearings.	1. Reduce feed rate (**Page 24**). 2. Adjust the height of the chip breaker or pressure bar (**Page 38**). 3. Properly adjust the bed roller height (**Page 25**). 4. Remove insert(s), then properly clean and install (**Page 34**). 5. Replace cutterhead bearings.
Glossy surface.	1. Inserts are dull. 2. Feed rate too slow. 3. Depth of cut too shallow.	1. Rotate/replace inserts (**Page 34**). 2. Increase feed rate (**Page 24**). 3. Increase depth of cut (**Page 25**).
Inconsistent chip marks.	1. Chips are not being properly expelled from around the cutterhead.	1. Use an adequate dust collection system; adjust the chip deflector in or out, depending upon your setup (**Page 41**).

Rotating/Replacing Cutterhead Inserts

The spiral 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 31**.

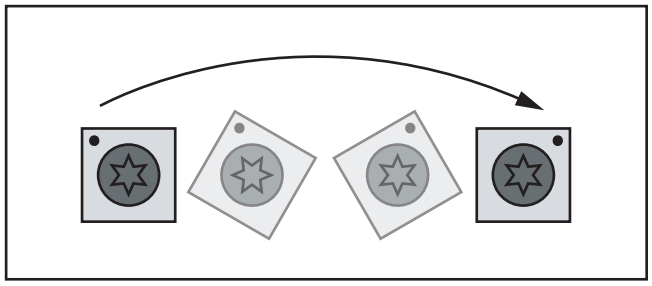


Figure 31. Insert rotating sequence.

Tools Needed	Qty
Torque Wrench	1
T-20 Torx Bit	1
Precision Straightedge	1

To rotate or replace a spiral cutterhead insert:

1. DISCONNECT PLANER FROM POWER!

2. Remove the dust hood, top cover, and the belt cover.

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

4. Remove any sawdust or debris from the head of the insert, Torx screw, and the surrounding area.

⚠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.

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

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

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

6. Replace the insert so that a fresh cutting edge faces outward.

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

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

   Note: *If too much oil is applied to the threads, the excess will attempt to squeeze out of the threaded hole as you install the insert and force it to raise slightly, which will make it out of height alignment.*

V-Belt Tensioning/ Replacement

NOTICE

After the first 16 hours of use, the V-belts will stretch and seat into the pulley grooves. The V-belts must be properly re-tensioned after this period to avoid severely reducing their useful life.

Three cogged V-belts transfer power from the motor to the cutterhead, and then to the infeed and outfeed rollers through the gearbox and drive chains. To ensure efficient transfer of power to these systems, make sure the V-belts are always properly tensioned and in good condition.

If a V-belt is worn, cracked, or damaged, replace all three V-belts at the same time to ensure belt tension is even among the belts, reducing the risk of premature wear on any one belt.

Tools Needed	Qty
Phillips Screwdriver	1
Wrench 19mm	1

To tension/replace the V-belts:

1. DISCONNECT PLANER FROM POWER!

⚠CAUTION

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

2. Remove the V-belt cover from the left side of the machine to expose the belts.

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

3. Remove the front cabinet panel to access the motor, as shown in **Figure 32**.

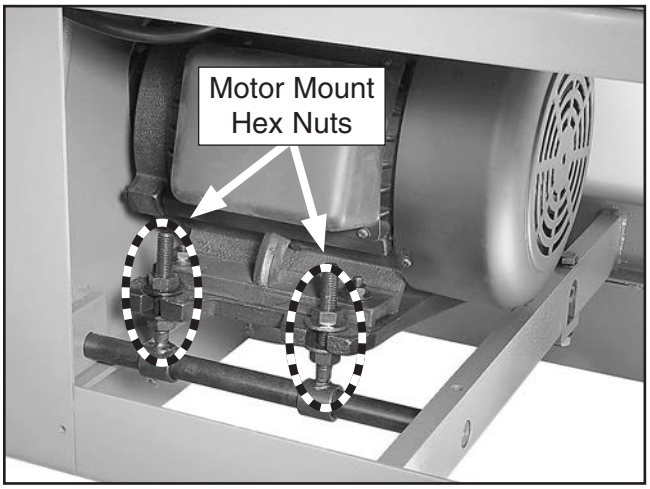


Figure 32. Front cabinet cover removed to expose the motor.

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

5. To adjust the V-belt tension, loosen the top motor mount hex nuts (see **Figure 32**), then adjust the bottom hex nuts to raise or lower the motor.

   Note: *The V-belts are correctly tensioned when there is approximately ¾" deflection when moderate pressure is applied to them midway between the pulleys, as illustrated in* ***Figure 33****.*

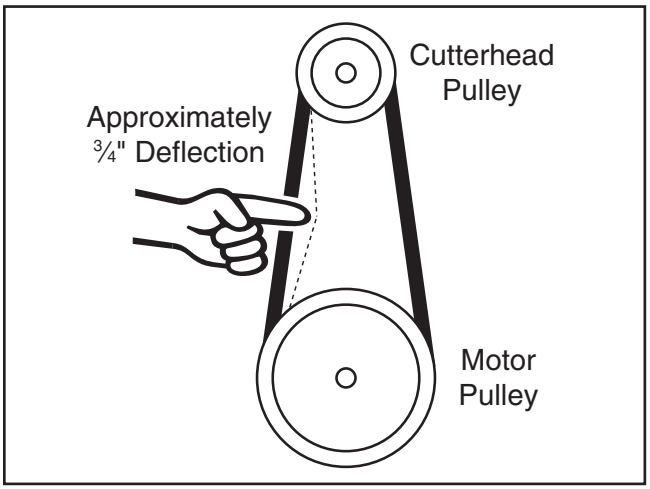


Figure 33. Correct amount of belt deflection.

6. When the V-belts are correctly tensioned, make sure the motor mount hex nuts are tight, then replace the cabinet cover and the 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 coplanar (in the same plane and parallel to each other).

Tools Needed	Qty
Straightedge 3'	1
Hex Wrench 6mm	1
Wrenches or Sockets 14mm	1

To check/re-align pulleys:

1. DISCONNECT PLANER FROM POWER!

2. Remove both cabinet covers and the belt cover, then use the straightedge to check pulley alignment, as shown in **Figure 34**.

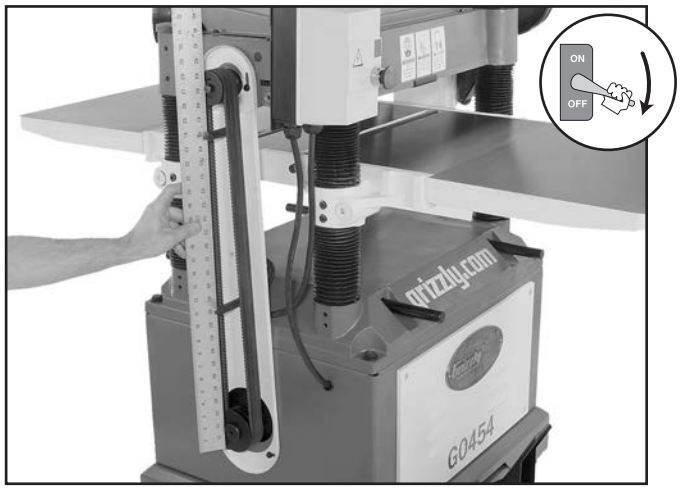


Figure 34. Checking pulley alignment.

—If the pulleys are not in the same plane, loosen the cap screw or hex bolt securing the pulley to the shaft, then adjust the pulleys in or out until they are even with each other.

—If the pulleys are not parallel, loosen the four motor mount hex nuts, then rotate the motor on its mount until they are parallel.

3. Re-check the pulleys and repeat **Step 2** if necessary.

4. When you are satisfied with the pulley alignment, re-tighten all fasteners, then replace the belt cover and cabinet covers.

Table Height Chain Tension

The table height chain transfers movement from the handwheel to elevate the table. This chain can be adjusted to remove slack if it stretches over time or is loosened during table leveling procedures.

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

To adjust the table height chain tension:

1. DISCONNECT PLANER FROM POWER!

2. Remove the front and rear cabinet panels to gain access to the table height chain system underneath the table, as shown in **Figure 35**.

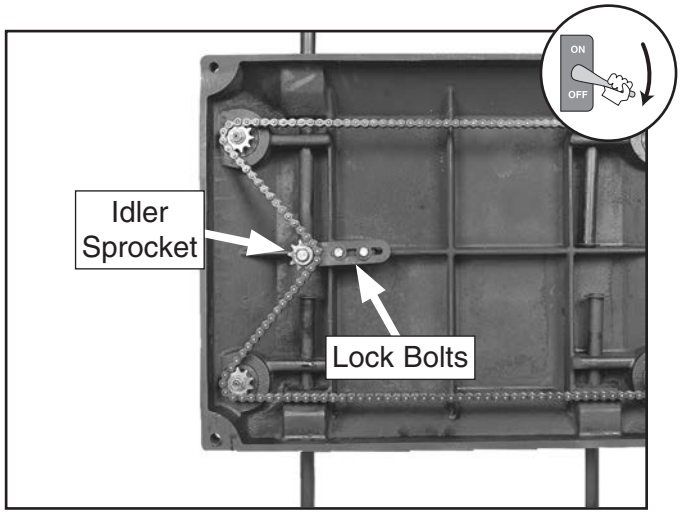


Figure 35. Table height idler sprocket and lock bolts (viewed from underneath the planer base).

NOTICE

During the next step, DO NOT let the chain fall off the sprockets. It can be very difficult to return the chain to its proper location on the sprockets without changing the table adjustments.

Note: *The goal in the next step is to remove looseness in the chain without putting tension on it or the sprockets.*

3. Loosen the lock bolts shown in **Figure 35**, and push the idler sprocket against the chain with moderate hand pressure, then while maintaining the pressure on the idler sprocket, re-tighten both lock bolts.

4. Clean and lubricate the chain and sprockets (refer to **Table Height Chain & Sprockets** on **Page 30** for detailed instructions).

Feed Rollers, Chip Breaker & Pressure Bar Heights

It is essential that the feed rollers, chip breaker, and pressure bar are set at the correct distance below the cutterhead to ensure that the workpiece moves through the planer evenly and the correct distance from the cutterhead.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator for these adjustments (refer to **Page 27**).

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 Cutterhead at BDC (Figure 36)

A. Infeed Roller ..... 0.040"
B. Chip Breaker ..... 0.040"
C. Pressure Bar (G0454Z Only) ..... 0.008"
D. Outfeed Roller ..... 0.020"

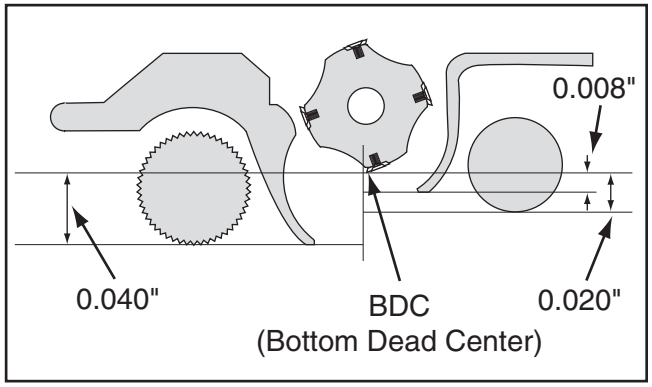


Figure 36. Planer component recommended clearances (illustration is not to scale).

Using a Rotacator

Tools Needed	Qty
Hex Wrenches 3, 5mm	1 Each
Wrench or Socket 10mm	1
Rotacator (see **Page 27**)	1

1. DISCONNECT PLANER FROM POWER!

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

3. Remove the dust hood, top cover, and belt cover.

4. Using a Rotacator as shown in **Figure 37**, find the BDC of any insert edge by slowly rocking the cutterhead pulley back and forth until the Rotacator indicates the lowest point, then set the Rotacator dial to zero.

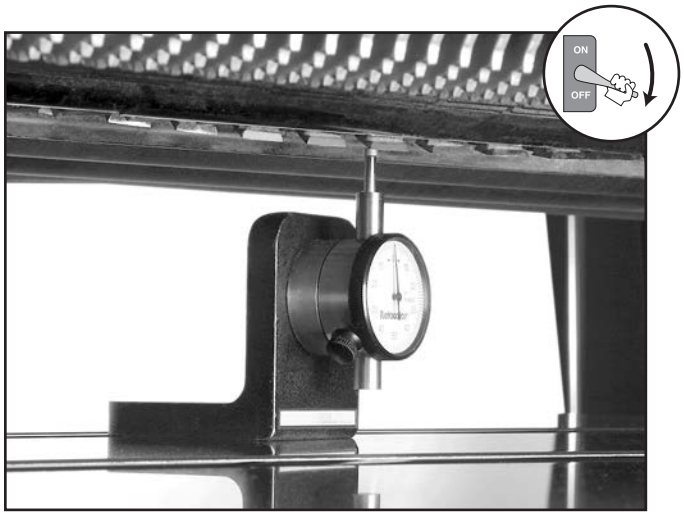


Figure 37. Using a Rotacator to find BDC.

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

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

7. Loosen the jam nut and use the set screw shown in **Figure 38** to adjust the height of the infeed roller bushing block until the Rotacator dial shows 0.040", which is the recommended distance for the infeed roller below the cutterhead.

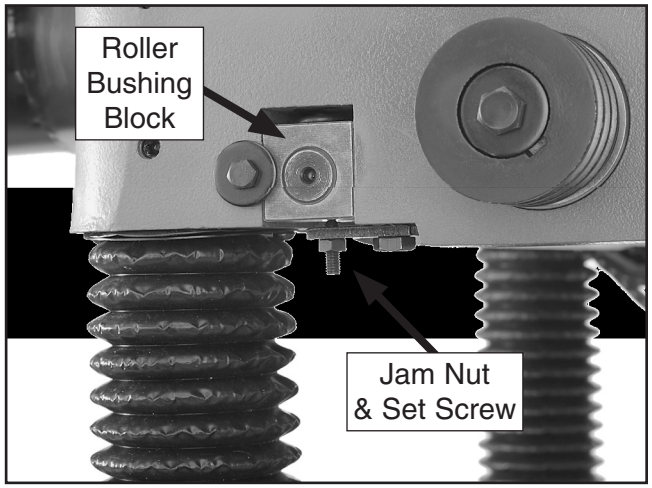


Figure 38. Infeed roller bushing block and height adjustment controls.

8. Repeat **Steps 6–7** on the left-hand side of the infeed roller.

9. Re-check both sides of the infeed roller and, if necessary, make further adjustments until the infeed roller height from side-to-side is 0.040" below the BDC of the cutterhead insert, then re-tighten both jam nuts.

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

11. Use the same zero reference on the Rotacator dial from **Step 5**, perform similar steps as described above to adjust the height of the chip breaker to its recommended specification given at the beginning of this subsection. The adjustment controls are shown in **Figure 39**.

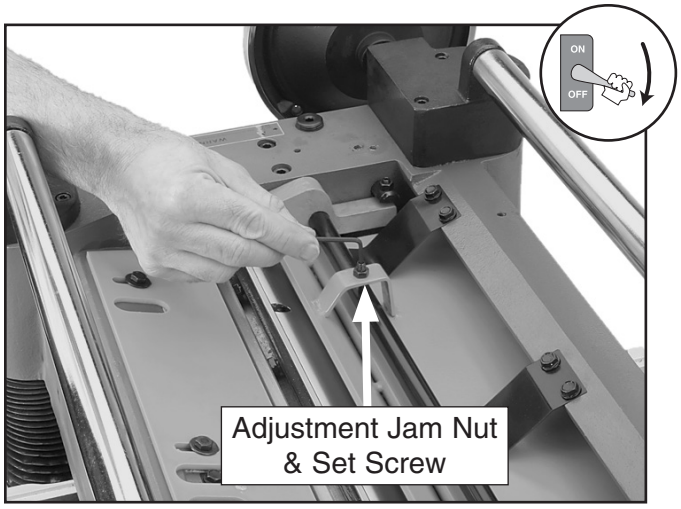


Figure 39. Example of adjusting the chip breaker height.

12. **Model G0454Z Only:** Repeat **Step 11** for the pressure bar height adjustment. The adjustment controls are shown in **Figure 40**.

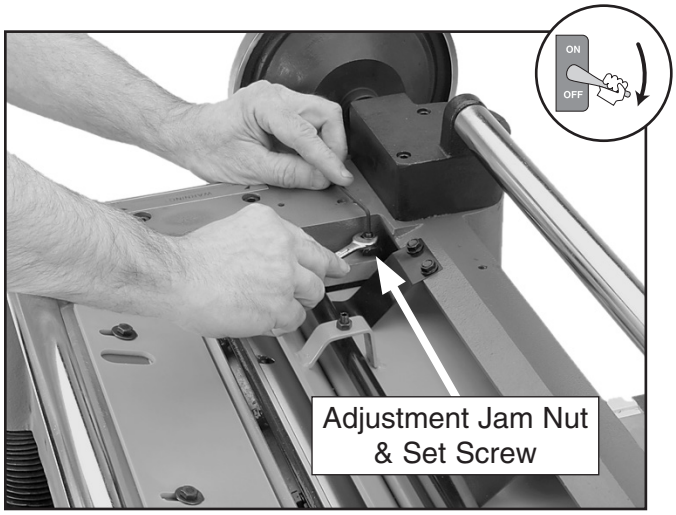


Figure 40. Example of adjusting the pressure bar height.

13. Re-install the belt cover, top cover, and the dust hood.

Using Wood Blocks

Tools Needed	Qty
Hex Wrenches 3, 5mm	1 Each
Wrench or Socket 10mm	1
2x4 6' Long	1
Feeler Gauge Set	1

1. Build the 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. DISCONNECT PLANER FROM POWER!

3. Lower the bed rollers below the table surface (refer to **Bed Roller Height** on **Page 25** for detailed instructions).

4. Place the wood blocks along the sides of the table, as illustrated in **Figure 41**.

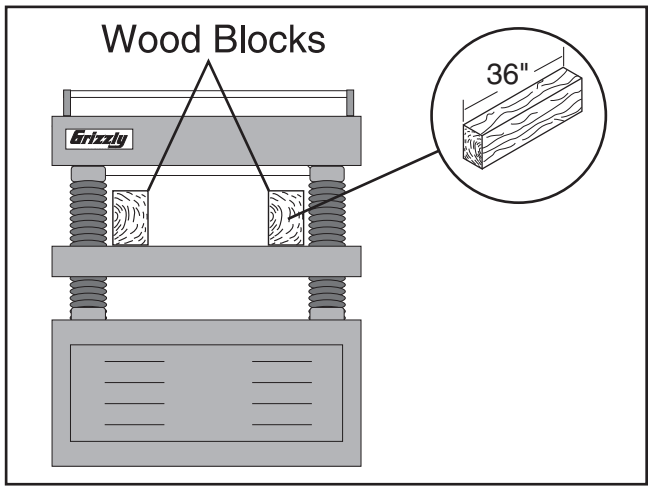


Figure 41. Wood blocks properly positioned on the planer table.

5. Remove the dust hood, top cover, and belt cover.

6. Use a feeler gauge to adjust the table until there is a 0.040" gap between the wood blocks and a cutterhead insert at BDC, which is the recommended distance for the infeed roller below the cutterhead.

7. Lock the table in place, as the wood blocks will now be your reference point.

8. Using the feeler gauges and the wood blocks instead of the Rotacator, perform **Steps 7–13** in the previous **Using a Rotacator** procedure on **Page 38** to set the feed rollers, chip breaker, and the pressure bar to the correct distance below the cutterhead.

Note: *Keep in mind that you will have to repeat **Steps 6–8** above for each change in distance as specified on **Page 38**.*

Roller Spring Tension

Properly adjusting the roller spring tension is crucial to keep the workpiece moving through the planer during operation.

Roller spring tension will vary depending upon the type of wood you are planing. Generally, if you are planing milled lumber with a relatively consistent surface, use less spring tension. 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 roller spring tension may need to be increased. If the roller is leaving indents in the wood as it leaves the planer, then decrease the tension.

Tools Needed	Qty
Hex Wrench 6mm	1

To adjust the roller spring tension to factory recommendations:

1. DISCONNECT PLANER FROM POWER!

2. Adjust tension the #1–#3 cap screws shown in **Figure 42** so that they protrude ⅛" above the head casting, and adjust the #4 cap screw so that it protrudes 5/16" above the head casting.

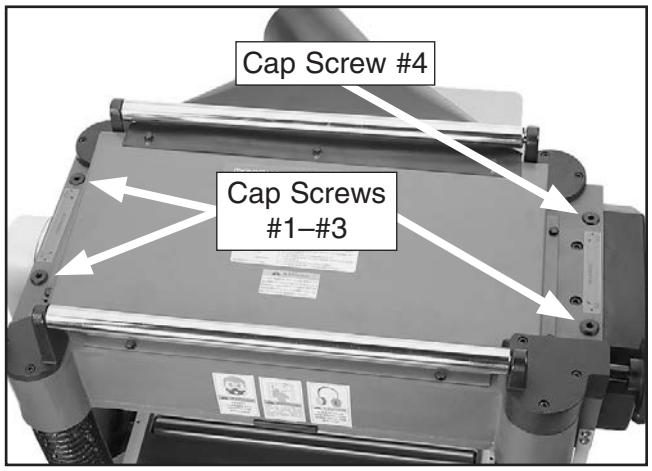


Figure 42. Roller spring tension adjustment cap screws.

Positioning Chip Deflector

Chip Deflector Gap Setting ..... ¼"

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

Tools Needed	Qty
Wrench or Socket 10mm	1
Fine Ruler or Calipers	1

To adjust the chip deflector gap:

1. DISCONNECT PLANER FROM POWER!

2. Remove the dust port, top cover, and belt cover.

3. Rotate the cutterhead pulley until an insert on one end of the cutterhead is nearest the chip deflector, then measure that distance between the chip deflector and the insert (see **Figure 43**).

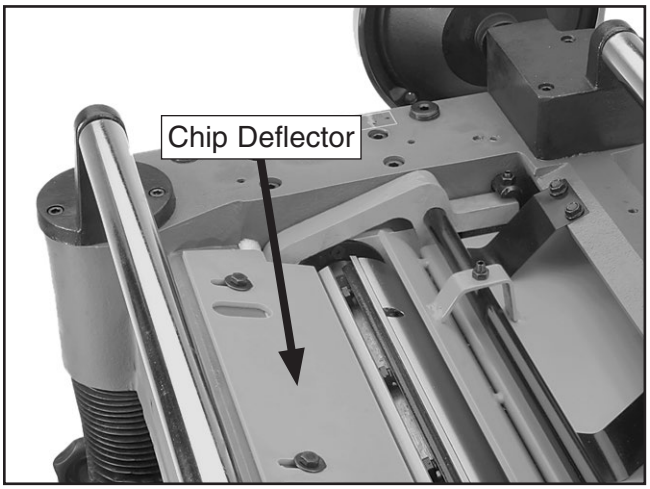


Figure 43. Example of the chip deflector and securing hex bolts.

—If the distance measured in **Step 3** is not equal to ¼", then loosen the four hex bolts that secure the chip deflector and adjust the gap to ¼".

4. Repeat **Step 3** for the other end of the cutterhead.

5. Re-tighten the hex bolts, then replace the belt cover, top cover, and dust hood.

Scale Calibration

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

Tools Needed	Qty
Phillips Screwdriver #2	1
Scrap Piece of Stock	1
Calipers	1

To re-position the scale:

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

   Note: *Turn the board over between each pass to make the surfaces parallel.*

2. Use calipers to measure the board thickness.

3. If there is a discrepancy between the board thickness and the reading on the table height scale, loosen the two screws shown in **Figure 44**, adjust the scale in relation to the pointer, then re-tighten the screws.

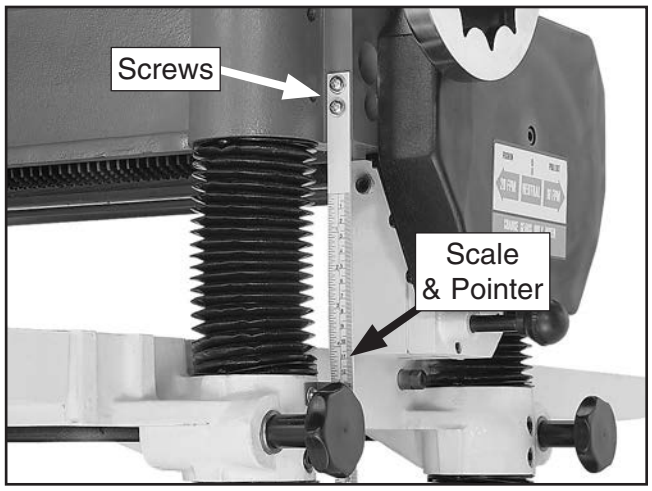


Figure 44. Table height scale.

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 in **Figure 45**. 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.

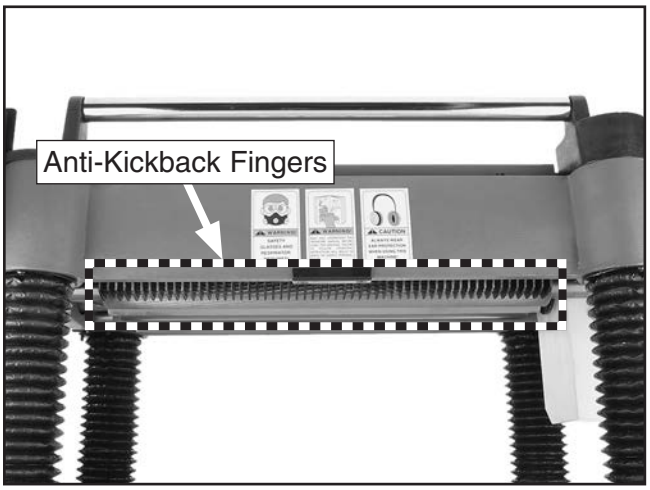


Figure 45. Anti-kickback fingers.

Check the anti-kickback fingers regularly to ensure that they swing freely and easily. If not, 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 the free movement of the fingers.

⚠WARNING

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

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. 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.

⚠WARNING
Wiring Safety Instructions

1. **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!

2. **QUALIFIED ELECTRICIAN.** Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.

3. **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.

4. **WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.

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

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

7. **CAPACITORS.** Some capacitors store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on capacitors.

8. **CIRCUIT REQUIREMENTS.** You MUST follow the requirements on **Page 12** when connecting your machine to a power source.

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

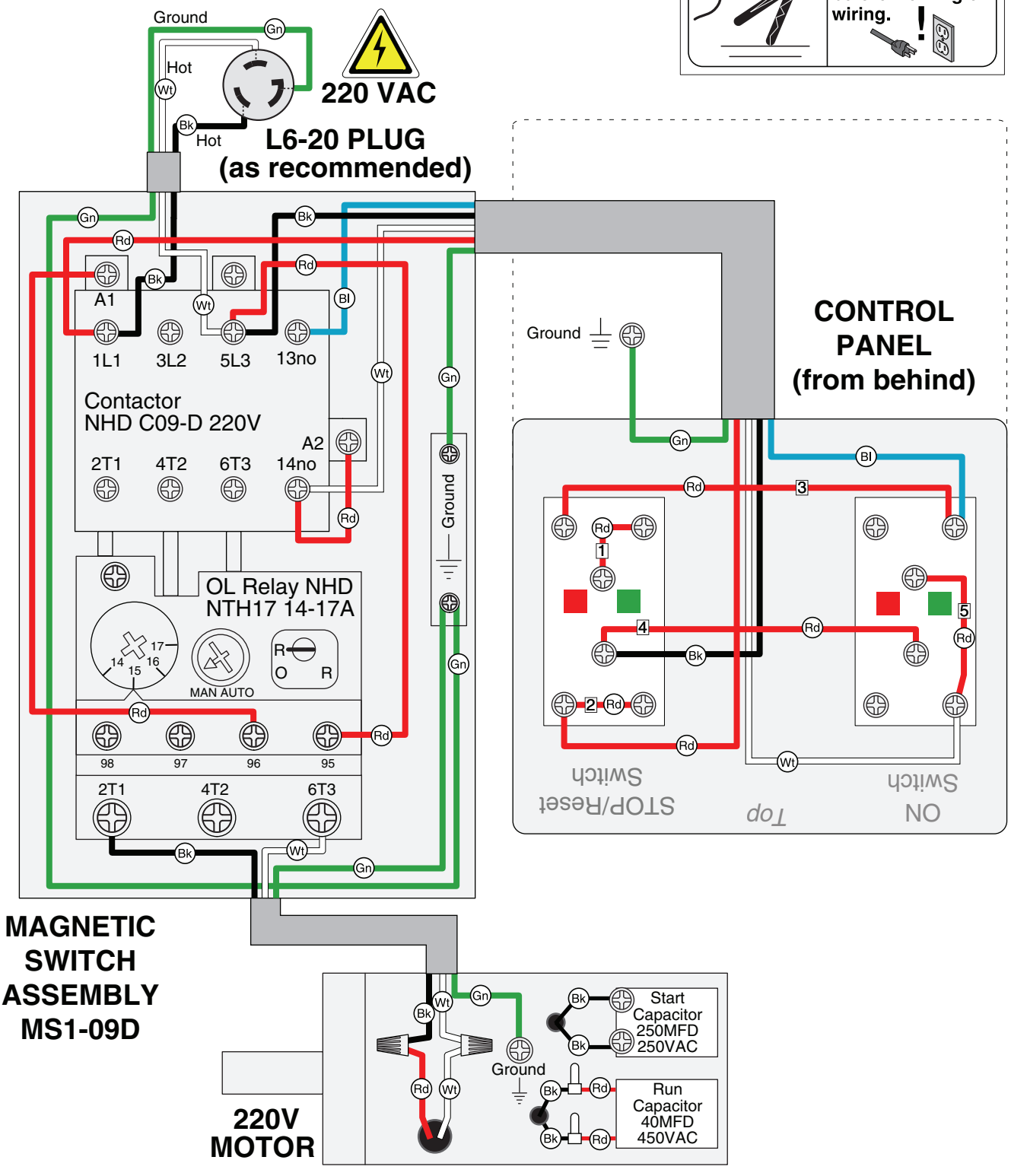
NOTICE

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

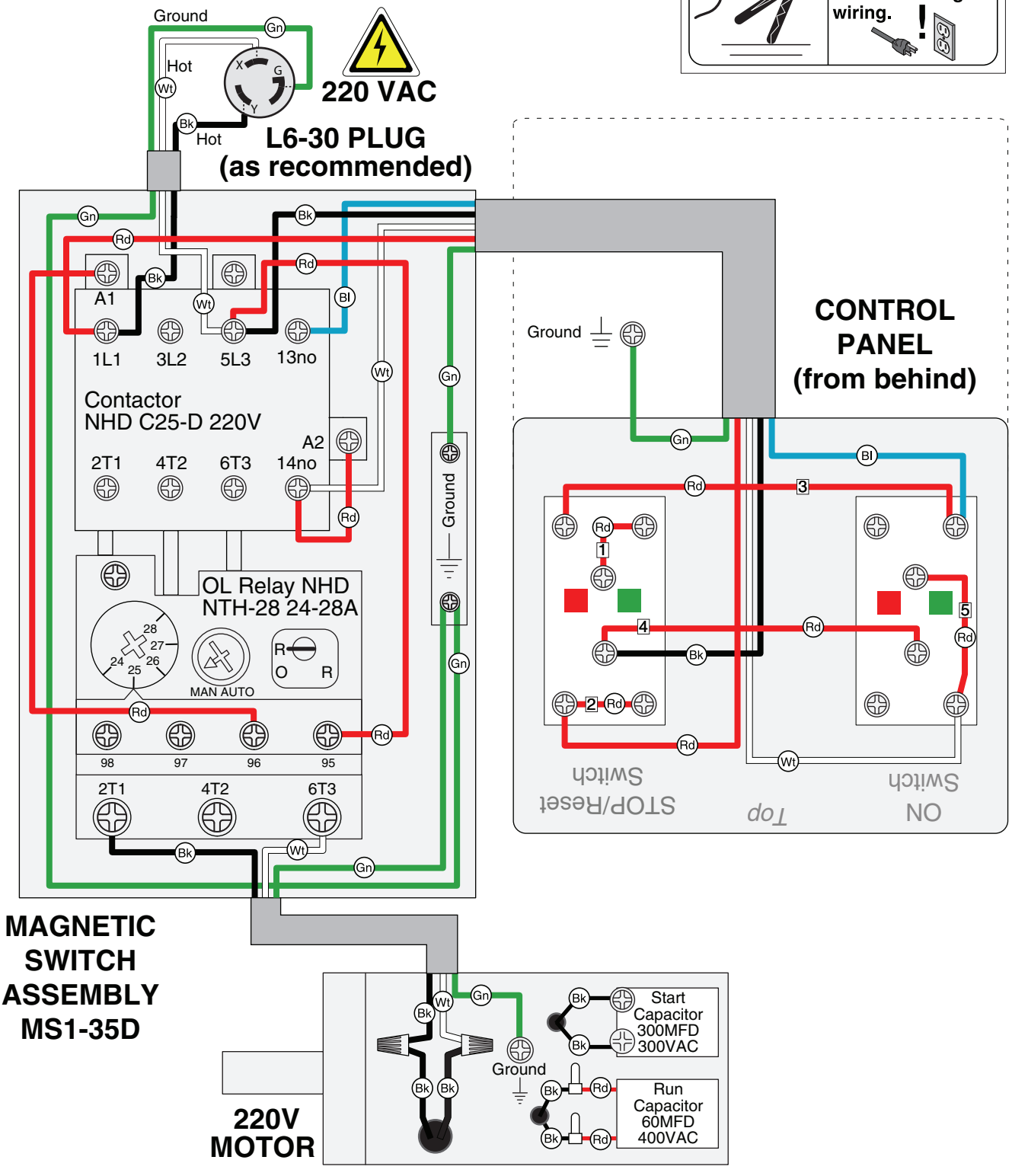
BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TUR-QUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

G0453Z Wiring Diagram



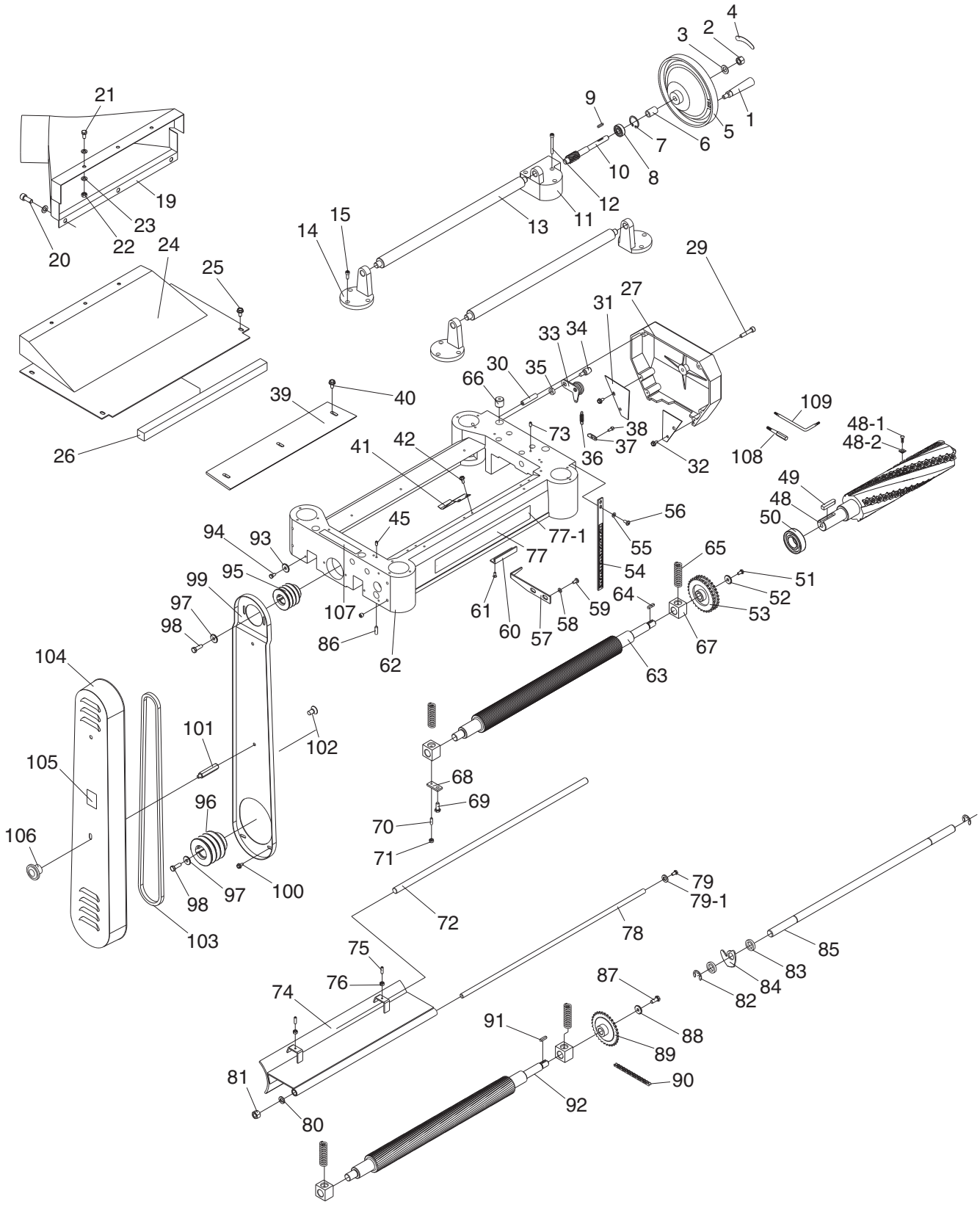
READ ELECTRICAL SAFETY ON PAGE 43!

G0454Z Wiring Diagram



SECTION 9: PARTS

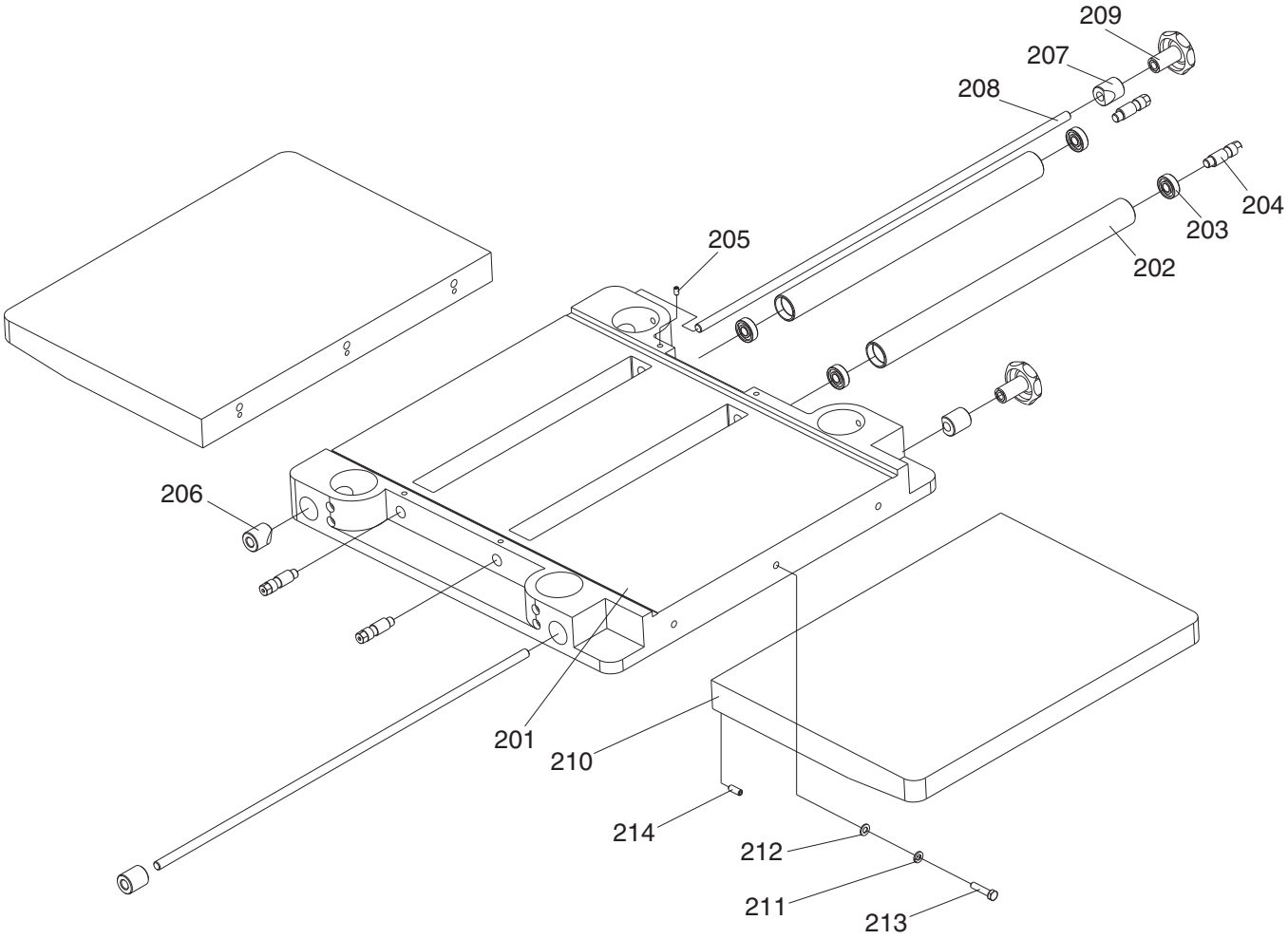
G0453Z Headstock Breakdown



G0453Z Headstock Parts List

REF	PART #	DESCRIPTION
1	P0453Z001	HANDLE
2	P0453Z002	HEX NUT M12-1.75
3	P0453Z003	FLAT WASHER 12MM
4	P0453Z004	HANDWHEEL LABEL
5	P0453Z005	HANDWHEEL
6	P0453Z006	HANDWHEEL COLLAR
7	P0453Z007	INT RETAINING RING 32MM
8	P0453Z008	BALL BEARING 6201ZZ
9	P0453Z009	KEY 4 X 4 X 20
10	P0453Z010	WORM GEAR
11	P0453Z011	WORM HOUSING
12	P0453Z012	CAP SCREW M5-.8 X 55
13	P0453Z013	RETURN ROLLER
14	P0453Z014	ROLLER STAND 3.505" V2.01.08
15	P0453Z015	CAP SCREW M5-.8 X 14
19	P0453Z019	DUST HOOD
20	P0453Z020	CAP SCREW M8-1.25 X 20
21	P0453Z021	HEX BOLT M6-1 X 10
22	P0453Z022	HEX NUT M6-1
23	P0453Z023	FLAT WASHER 6MM
24	P0453Z024	TOP COVER
25	P0453Z025	FLANGE BOLT M6-1 X 10
26	P0453Z026	FOAM PIECE
27	P0453Z027	CHAIN DRIVE COVER
29	P0453Z029	CAP SCREW M8-1.25 X 45
30	P0453Z030	SHAFT
31	P0453Z031	SAFETY HATCH
32	P0453Z032	FLANGE BOLT M6-1 X 10
33	P0453Z033	IDLER PULLEY/BRACKET ASSY
34	P0453Z034	IDLER MOUNTING SHAFT
35	P0453Z035	IDLER BRACKET COLLAR
36	P0453Z036	EXTENSION SPRING
37	P0453Z037	HANGER
38	P0453Z038	CAP SCREW M6-1 X 8
39	P0453Z039	CHIP DEFLECTOR
40	P0453Z040	FLANGE BOLT M6-1 X 12
41	P0453Z041	HOLD DOWN PLATE
42	P0453Z042	FLANGE BOLT M6-1 X 12
45	P0453Z045	SET SCREW M6-1 X 20
48	P0453Z048	SPIRAL CUTTERHEAD W/INSERTS 15"
48-1	P0453Z048-1	FLAT HD TORX T20 M6-1 X 15
48-2	P0453Z048-2	INDEXABLE INSERT 14.2 X 14.2 X 2 V1
49	P0453Z049	KEY 8 X 8 X 36
50	P0453Z050	BALL BEARING 6205ZZ
51	P0453Z051	HEX BOLT M6-1 X 16
52	P0453Z052	FLAT WASHER 6MM
53	P0453Z053	OUTFEED ROLLER SPROCKET
54	P0453Z054	SCALE
55	P0453Z055	FLAT WASHER 6MM
56	P0453Z056	PHLP HD SCR M6-1 X 12
57	P0453Z057	POINTER
58	P0453Z058	FLAT WASHER 6MM
59	P0453Z059	PHLP HD SCR M6-1 X 12
60	P0453Z060	CUT LIMIT PLATE
61	P0453Z061	FLAT HD SCR M6-1 X 8
62	P0453Z062	HEAD CASTING
63	P0453Z063	OUTFEED ROLLER
64	P0453Z064	KEY 5 X 5 X 16
65	P0453Z065	COMPRESSION SPRING
66	P0453Z066	OILER SET SCREW
67	P0453Z067	ROLLER BUSHING BLOCK
68	P0453Z068	PLATE
69	P0453Z069	HEX BOLT M8-1.25 X 16
70	P0453Z070	SET SCREW M5-.8 X 12
71	P0453Z071	HEX NUT M5-.8
72	P0453Z072	CHIP BREAKER SHAFT
73	P0453Z073	SET SCREW M6-1 X 20
74	P0453Z074	CHIP BREAKER
75	P0453Z075	SET SCREW M6-1 X 18
76	P0453Z076	HEX NUT M6-1
78	P0453Z078	LOCKING ROD
79	P0453Z079	HEX BOLT M8-1.25 X 12
79-1	P0453Z079-1	FLAT WASHER 8MM
80	P0453Z080	LOCK WASHER 12MM
81	P0453Z081	HEX NUT M12-1.75
82	P0453Z082	E-CLIP 15MM
83	P0453Z083	ANTI-KICKBACK SHAFT COLLAR
84	P0453Z084	ANTI-KICKBACK FINGER
85	P0453Z085	ANTI-KICKBACK FINGER SHAFT
86	P0453Z086	SET SCREW M8-1.25 X 16
87	P0453Z087	HEX BOLT M6-1 X 16
88	P0453Z088	FLAT WASHER 6MM
89	P0453Z089	INFEED ROLLER SPROCKET
90	P0453Z090	CHAIN 06B-1 X 49 31LINKS
91	P0453Z091	KEY 5 X 5 X 16
92	P0453Z092	INFEED ROLLER
93	P0453Z093	FLAT WASHER 6MM
94	P0453Z094	CAP SCREW M6-1 X 12
95	P0453Z095	CUTTERHEAD PULLEY MX
96	P0453Z096	MOTOR PULLEY MX
97	P0453Z097	COLLAR
98	P0453Z098	HEX BOLT M8-1.25 X 20
99	P0453Z099	BELT GUARD
100	P0453Z100	FLANGE BOLT M6-1 X 10
101	P0453Z101	HEX STANDOFF
102	P0453Z102	FLANGE BOLT M6-1 X 12
103	P0453Z103	COGGED V-BELT MX-60
104	P0453Z104	BELT COVER
105	P0453Z105	DON'T REMOVE COVER LABEL
106	P0453Z106	STAR KNOB M8-1.25
107	P0453Z107	OIL FILL LABEL
108	P0453Z108	DRIVER BIT TORX T20
109	P0453Z109	L-WRENCH TORX T20

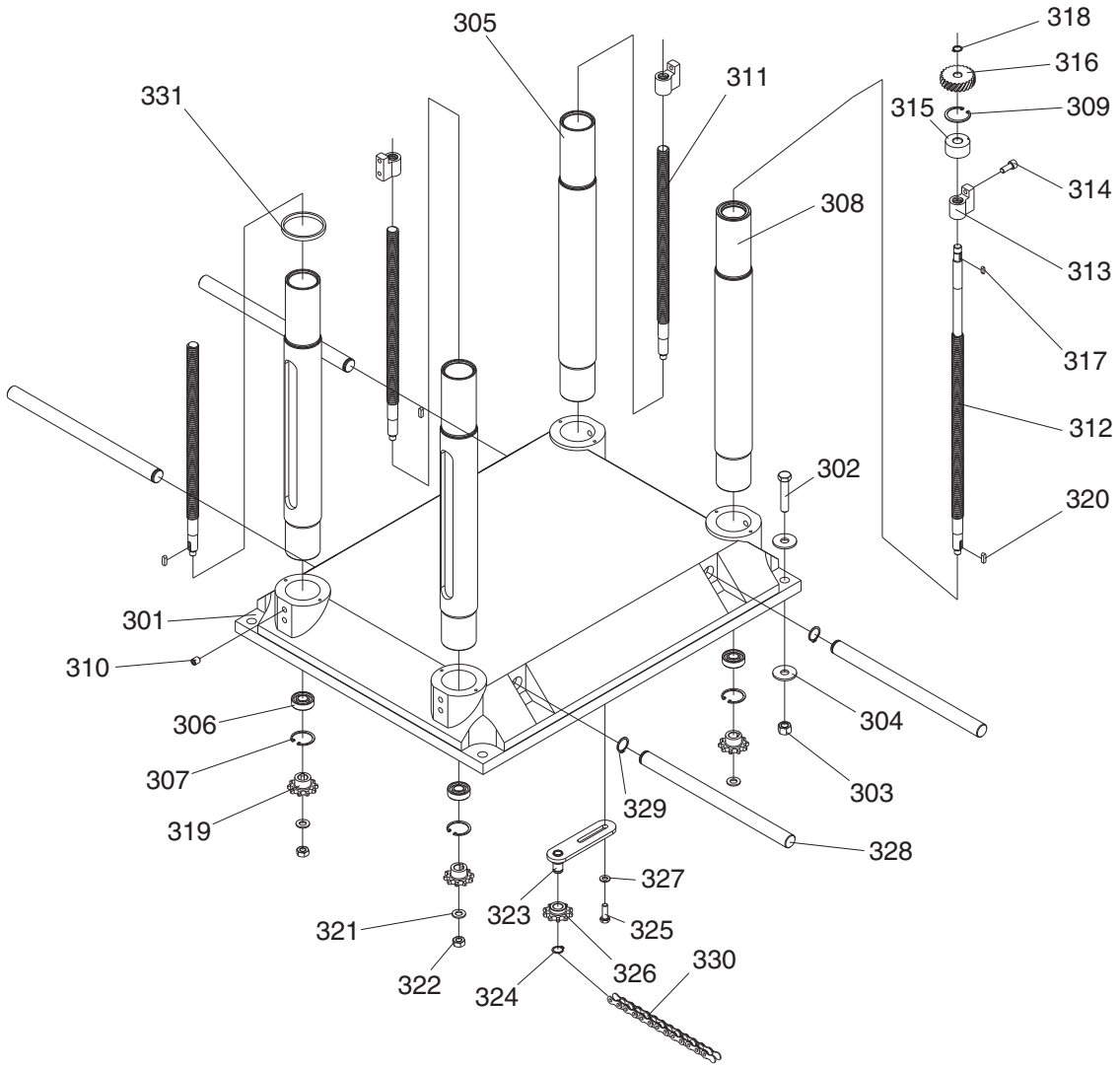
G0453Z Table



REF	PART #	DESCRIPTION
201	P0453Z201	TABLE/BED
202	P0453Z202	ROLLER
203	P0453Z203	BALL BEARING 608-2RS
204	P0453Z204	ECCENTRIC SHAFT
205	P0453Z205	SET SCREW M6-1 X 16
206	P0453Z206	GIB
207	P0453Z207	WEDGE DOG

REF	PART #	DESCRIPTION
208	P0453Z208	LOCK BAR
209	P0453Z209	FEMALE KNOB M12-1.75
210	P0453Z210	EXTENSION WING
211	P0453Z211	LOCK WASHER 8MM
212	P0453Z212	FLAT WASHER 8MM
213	P0453Z213	HEX BOLT M8-1.25 X 30
214	P0453Z214	SET SCREW M8-1.25 X 20

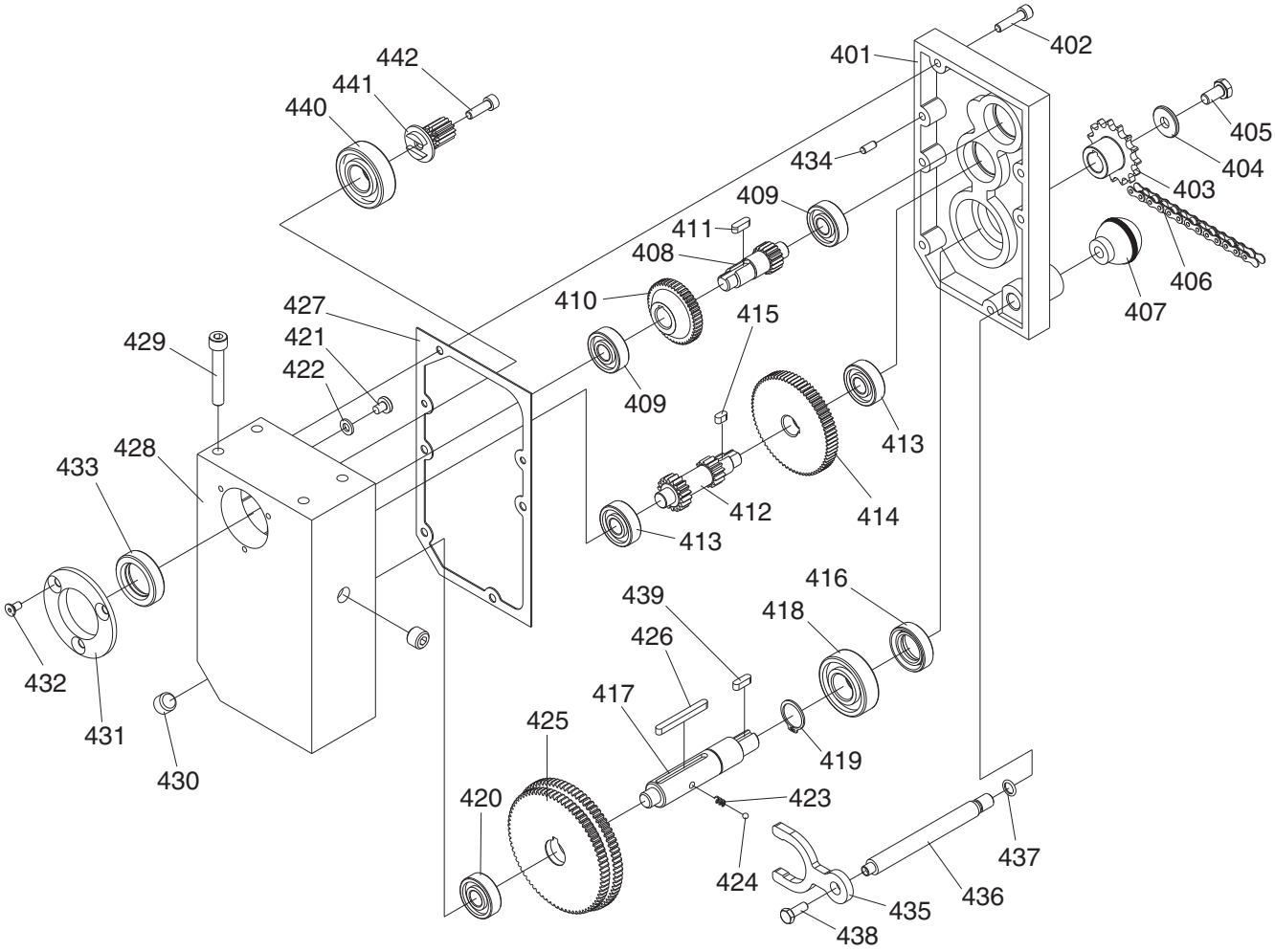
G0453Z Columns



REF	PART #	DESCRIPTION
301	P0453Z301	BASE
302	P0453Z302	HEX BOLT M12-1.75 X 45
303	P0453Z303	HEX NUT M12-1.75
304	P0453Z304	FLAT WASHER 12MM
305	P0453Z305	COLUMN A
306	P0453Z306	BALL BEARING 6302Z
307	P0453Z307	INT RETAINING RING 42MM
308	P0453Z308	COLUMN B
309	P0453Z309	INT RETAINING RING 40MM
310	P0453Z310	SET SCREW M10-1.5 X 12
311	P0453Z311	LEADSCREW A
312	P0453Z312	LEADSCREW B
313	P0453Z313	LEAD NUT
314	P0453Z314	CAP SCREW M6-1 X 20
315	P0453Z315	BUSHING
316	P0453Z316	GEAR

REF	PART #	DESCRIPTION
317	P0453Z317	KEY 4 X 4 X 12
318	P0453Z318	EXT RETAINING RING 12MM
319	P0453Z319	SPROCKET
320	P0453Z320	KEY 5 X 5 X 16
321	P0453Z321	FLAT WASHER 10MM
322	P0453Z322	HEX NUT M10-1.5
323	P0453Z323	BRACKET
324	P0453Z324	EXT RETAINING RING 15MM
325	P0453Z325	HEX BOLT M8-1.25 X 20
326	P0453Z326	IDLER SPROCKET
327	P0453Z327	FLAT WASHER 8MM
328	P0453Z328	LIFTING BAR
329	P0453Z329	EXT RETAINING RING 15MM
330	P0453Z330	CHAIN 12.7A X 134
331	P0453Z331	COLUMN SEAL

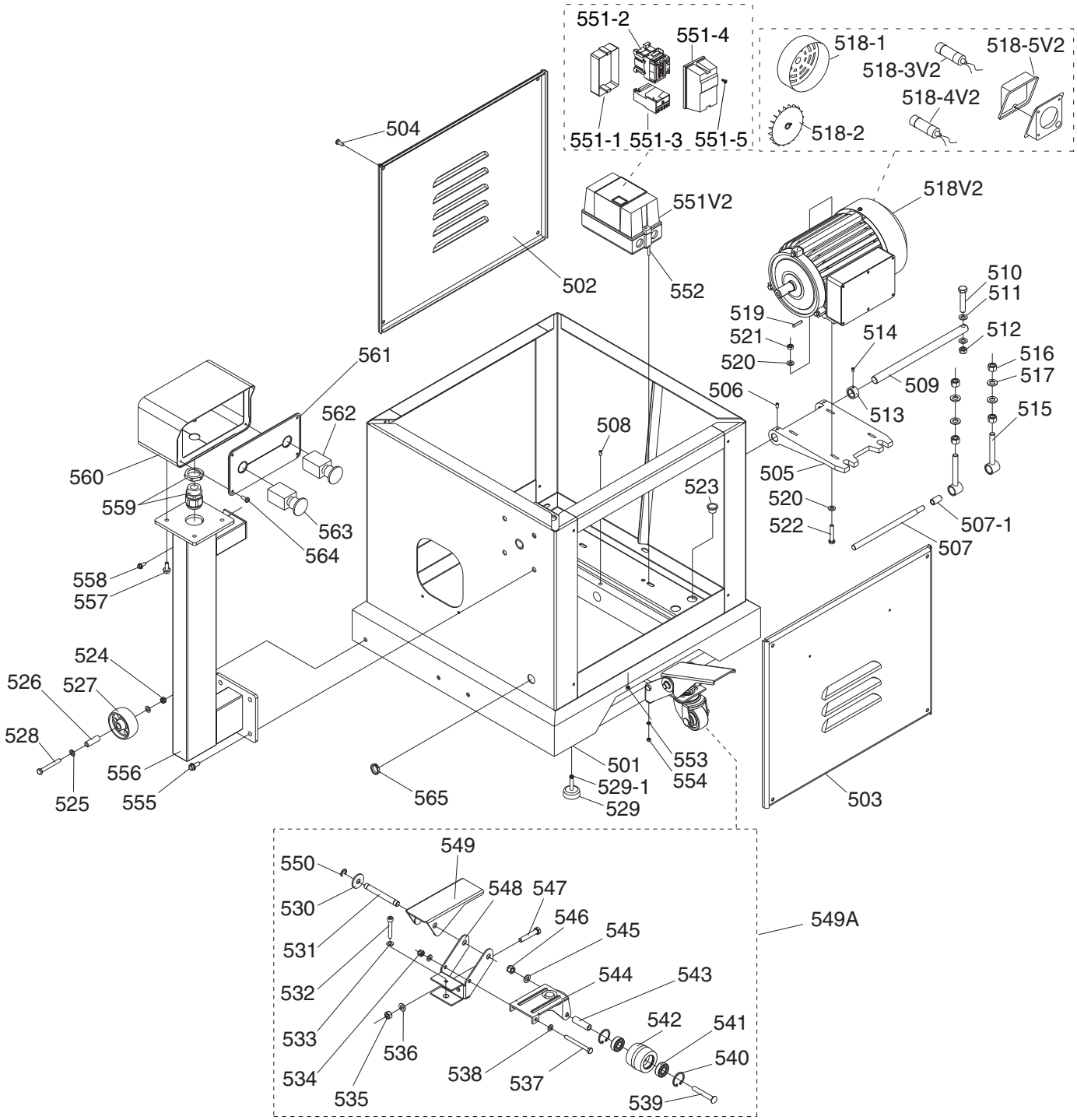
G0453Z Gearbox



REF	PART #	DESCRIPTION
401	P0453Z401	GEARBOX COVER
402	P0453Z402	HEX BOLT M6-1 X 25
403	P0453Z403	COLUMN SPROCKET
404	P0453Z404	FLAT WASHER 8MM
405	P0453Z405	HEX BOLT M8-1.25 X 16
406	P0453Z406	CHAIN 06B-1 X 51
407	P0453Z407	FEMALE KNOB M8-1.25
408	P0453Z408	GEAR SHAFT A
409	P0453Z409	BALL BEARING 6201ZZ
410	P0453Z410	GEAR A
411	P0453Z411	KEY 5 X 5 X 14
412	P0453Z412	SHAFT B
413	P0453Z413	BALL BEARING 6201ZZ
414	P0453Z414	GEAR B
415	P0453Z415	KEY 5 X 5 X 10
416	P0453Z416	OIL SEAL 25 X 32 X 7
417	P0453Z417	SHAFT C
418	P0453Z418	BALL BEARING 6204ZZ
419	P0453Z419	EXT RETAINING RING 20MM
420	P0453Z420	BALL BEARING 6201ZZ
421	P0453Z421	PHLP HD SCR M6-1 X 8

REF	PART #	DESCRIPTION
422	P0453Z422	FLAT WASHER 6MM
423	P0453Z423	COMPRESSION SPRING
424	P0453Z424	STEEL BALL 4MM
425	P0453Z425	GEAR C
426	P0453Z426	KEY 5 X 5 X 50
427	P0453Z427	GASKET
428	P0453Z428	GEARBOX
429	P0453Z429	HEX BOLT M8-1.25 X 50
430	P0453Z430	OIL PLUG
431	P0453Z431	FLANGE COVER
432	P0453Z432	CAP SCREW M5-.8 X 12
433	P0453Z433	OIL SEAL 25 X 40 X 10
434	P0453Z434	PIN 5 X 10
435	P0453Z435	SHIFT FORK
436	P0453Z436	HANDLE SHAFT
437	P0453Z437	O-RING 10.8 X 2.4 P11
438	P0453Z438	FLANGE BOLT M6-1 X 12
439	P0453Z439	KEY 5 X 5 X 16
440	P0453Z440	BALL BEARING 6204ZZ
441	P0453Z441	GEAR D
442	P0453Z442	SET SCREW M6-1 X 20

G0453Z Stand Breakdown

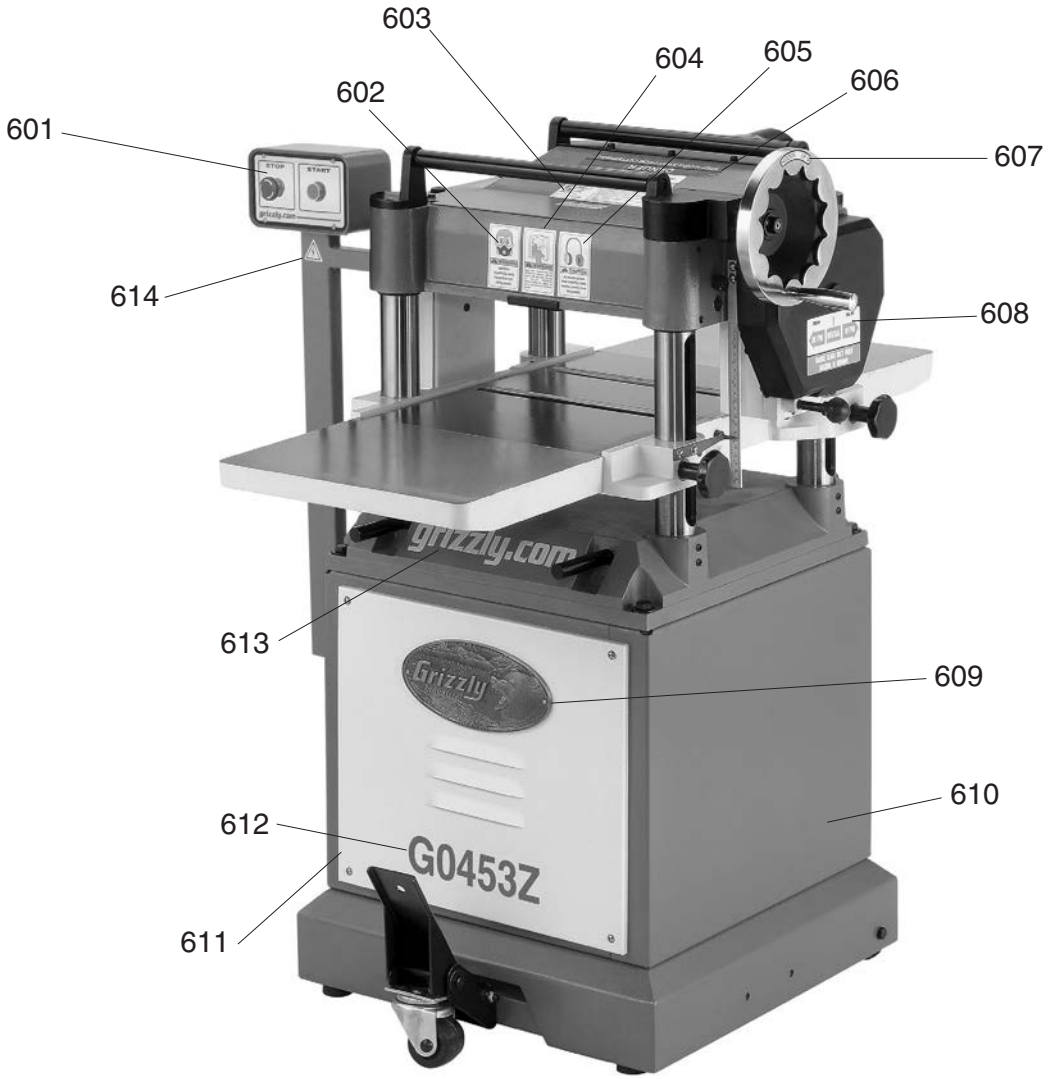


G0453Z Stand Parts List

REF	PART #	DESCRIPTION
501	P0453Z501	STAND ASSEMBLY
502	P0453Z502	BACK CABINET COVER
503	P0453Z503	FRONT CABINET COVER
504	P0453Z504	PHLP HD SCR M6-1 X 20
505	P0453Z505	MOTOR MOUNT PLATE
506	P0453Z506	SET SCREW M6-1 X 12
507	P0453Z507	PLATE CONNECTING ROD
507-1	P0453Z507-1	BUSHING
508	P0453Z508	SET SCREW M8-1.25 X 12
509	P0453Z509	PLATE CONNECTING ROD
510	P0453Z510	HEX BOLT M10-1.5 X 70
511	P0453Z511	FLAT WASHER 10MM
512	P0453Z512	HEX NUT M10-1.5
513	P0453Z513	LOCK COLLAR
514	P0453Z514	SET SCREW M6-1 X 8
515	P0453Z515	ADJUST BOLT
516	P0453Z516	HEX NUT M12-1.75
517	P0453Z517	FLAT WASHER 12MM
518V2	P0453Z518V2	MOTOR 3HP 240V 1-PH V2.05.08
518-1	P0453Z518-1	MOTOR FAN COVER
518-2	P0453Z518-2	MOTOR FAN
518-3V2	P0453Z518-3V2	S CAPACITOR 250M 250V 1-3/4 X 3-1/2
518-4V2	P0453Z518-4V2	R CAPACITOR 40M 450V 1-3/8 X 2-3/8
518-5V2	P0453Z518-5V2	JUNCTION BOX V2.05.08
518-6	P0453Z518-6	BALL BEARING 6205ZZ
518-7	P0453Z518-7	BALL BEARING 6203ZZ
518-8	P0453Z518-8	CENTRIFUGAL SWITCH 16MM 3450
518-9	P0453Z518-9	CONTACT PLATE 16MM
519	P0453Z519	KEY 5 X 5 X 30
520	P0453Z520	FLAT WASHER 8MM
521	P0453Z521	HEX NUT M8-1.25
522	P0453Z522	HEX BOLT M8-1.25 X 45
523	P0453Z523	BALL STRAIN RELIEF
524	P0453Z524	HEX NUT M8-1.25
525	P0453Z525	FLAT WASHER 8MM
526	P0453Z526	SLEEVE
527	P0453Z527	UNIVERSAL WHEEL 78MM DIA
528	P0453Z528	HEX BOLT M8-1.25 X 65
529	P0453Z529	RUBBER FOOT
529-1	P0453Z529-1	HEX NUT M8-1.25
530	P0453Z530	FLAT WASHER 12MM

REF	PART #	DESCRIPTION
531	P0453Z531	SHAFT 12MM
532	P0453Z532	HEX BOLT M8-1.25 X 50
533	P0453Z533	FLAT WASHER 8MM
534	P0453Z534	HEX NUT M8-1.25
535	P0453Z535	HEX NUT M10-1.5
536	P0453Z536	FLAT WASHER 10MM
537	P0453Z537	HEX BOLT M8-1.25 X 100
538	P0453Z538	FLAT WASHER 8MM
539	P0453Z539	TROLLEY WHEEL BOLT
540	P0453Z540	INT RETAINING RING 35MM
541	P0453Z541	BALL BEARING 6202-2RS
542	P0453Z542	TROLLEY WHEEL
543	P0453Z543	TROLLEY WHEEL SLEEVE
544	P0453Z544	TROLLEY UNIVERSAL KIT
545	P0453Z545	FLAT WASHER 10MM
546	P0453Z546	HEX NUT M12-1.75
547	P0453Z547	HEX BOLT M10-1.5 X 55
548	P0453Z548	BRACKET
549	P0453Z549	PEDAL
549A	P0453Z549A	PEDAL ASSEMBLY
550	P0453Z550	EXT RETAINING RING 9MM
551V2	P0453Z551V2	MAGNETIC SWITCH ASSY V2.01.11
551-1	P0453Z551-1	MAG SWITCH COVER ASSEMBLY
551-2	P0453Z551-2	CONTACTOR NHD C-09D 230V
551-3	P0453Z551-3	OL RELAY NHD NTH-17 14-17
551-5	P0453Z551-5	SWITCH COVER SCREW WHITE
552	P0453Z552	FLAT HD SCR M5-.8 X 20
553	P0453Z553	FLAT WASHER 5MM
554	P0453Z554	HEX NUT M5-.8
555	P0453Z555	HEX BOLT M8-1.25 X 20
556	P0453Z556	SUPPORT ARM 22"
557	P0453Z557	HEX BOLT M6-1 X 16
558	P0453Z558	HEX BOLT M6-1 X 16
559	P0453Z559	BALL STRAIN RELIEF
560	P0453Z560	CONTROL BOX
561	P0453Z561	CONTROL PANEL
562V2	P0453Z562V2	START BUTTON CLEAR V2.01.11
563V2	P0453Z563V2	E-STOP BUTTON 3-ARROW V2.01.11
564	P0453Z564	TAP SCREW #10 X 3/8
565	P0453Z565	PLASTIC GROMMET
566V2	P0453Z566V2	POWER CORD 12G 3W 72" 6-20P V2.08.12

G0453Z Label Placement



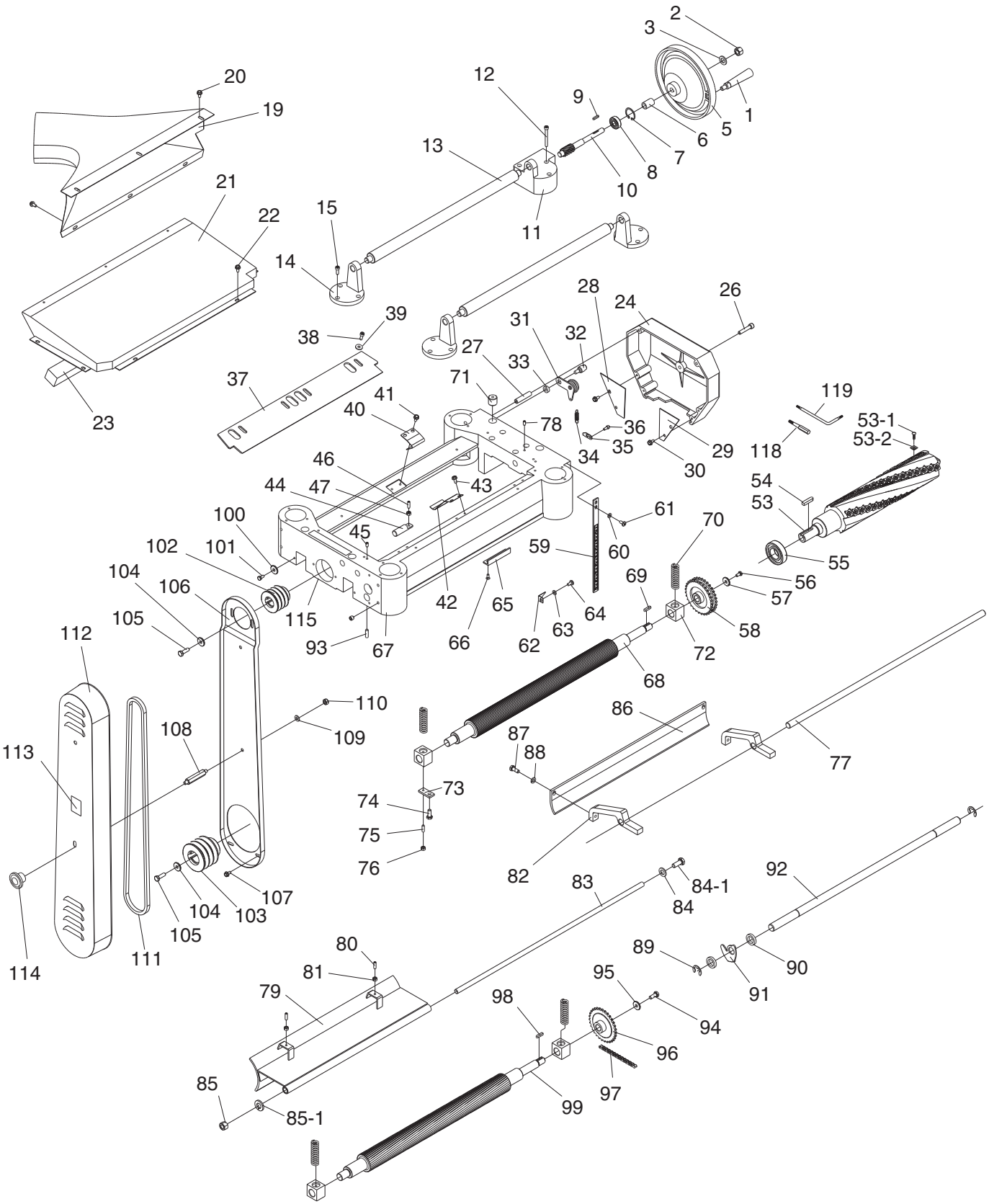
REF	PART #	DESCRIPTION
602	P0453Z602	GLASSES/RESPIRATOR LABEL
603V2	P0453Z603V2	MACHINE ID LABEL CSA V2.08.12
604	P0453Z604	READ MANUAL LABEL
605	P0453Z605	HEARING PROTECTION LABEL
606	P0453Z606	CUTTERHEAD DANGER LABEL
607	P0453Z607	HANDWHEEL DIRECTION LABEL
608	P0453Z608	GEARBOX SPEED LABEL

REF	PART #	DESCRIPTION
609	P0453Z609	GRIZZLY LOGO PLATE
610	P0453Z610	GRIZZLY GREEN TOUCH-UP PAINT
611	P0453Z611	GRIZZLY PUTTY TOUCH-UP PAINT
612	P0453Z612	MODEL NUMBER LABEL
613	P0453Z613	GRIZZLY.COM LABEL 10 X 1-1/2"
614	P0453Z614	ELECTRICITY LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

G0454Z Headstock Breakdown



G0454Z Headstock Parts List

REF	PART #	DESCRIPTION
1	P0454Z001	HANDWHEEL HANDLE
2	P0454Z002	HEX NUT M12-1.75
3	P0454Z003	FLAT WASHER 12MM
5	P0454Z005	HANDWHEEL
6	P0454Z006	HANDWHEEL COLLAR
7	P0454Z007	INT RETAINING RING 32MM
8	P0454Z008	BALL BEARING 6201ZZ
9	P0454Z009	KEY 4 X 4 X 20
10	P0454Z010	WORM GEAR
11	P0454Z011	WORM HOUSING
12	P0454Z012	CAP SCREW M6-1 X 60
13	P0454Z013	RETURN ROLLER
14	P0454Z014	ROLLER STAND
15	P0454Z015	CAP SCREW M6-1 X 16
19	P0454Z019	DUST HOOD
20	P0454Z020	FLANGE BOLT M6-1 X 12
21	P0454Z021	UPPER COVER
22	P0454Z022	FLANGE BOLT M6-1 X 12
23	P0454Z023	TOP COVER GASKET
24	P0454Z024	CHAIN DRIVE COVER
26	P0454Z026	CAP SCREW M8-1.25 X 40
27	P0454Z027	ROLL PIN 6 X 20
28	P0454Z028	REAR SAFETY HATCH
29	P0454Z029	FRONT SAFETY HATCH
30	P0454Z030	FLANGE BOLT M6-1 X 10
31	P0454Z031	IDLER PULLEY/BRACKET ASSY
32	P0454Z032	IDLER MOUNTING SHAFT
33	P0454Z033	IDLER BRACKET COLLAR
34	P0454Z034	EXTENSION SPRING
35	P0454Z035	HANGER
36	P0454Z036	CAP SCREW M6-1 X 10
37	P0454Z037	CHIP DEFLECTOR PLATE
38	P0454Z038	FLANGE BOLT M6-1 X 15
39	P0454Z039	FLAT WASHER 6MM
40	P0454Z040	HOLD DOWN PLATE
41	P0454Z041	FLANGE BOLT M6-1 X 12
42	P0454Z042	PLATE SPRING
43	P0454Z043	FLANGE BOLT M6-1 X 12
44	P0454Z044	ADJUSTING SHAFT
45	P0454Z045	SET SCREW M6-1 X 12
46	P0454Z046	SET SCREW M6-1 X 20
47	P0454Z047	HEX NUT M6-1
53	P0454Z053	SPIRAL CUTTERHEAD ASSY 20"
53-1	P0454Z053-1	FLAT HD TORX T20 M6-1 X 15
53-2V2	P0454Z053-2V2	INDEXABLE INSERT 14 X 14 X 2

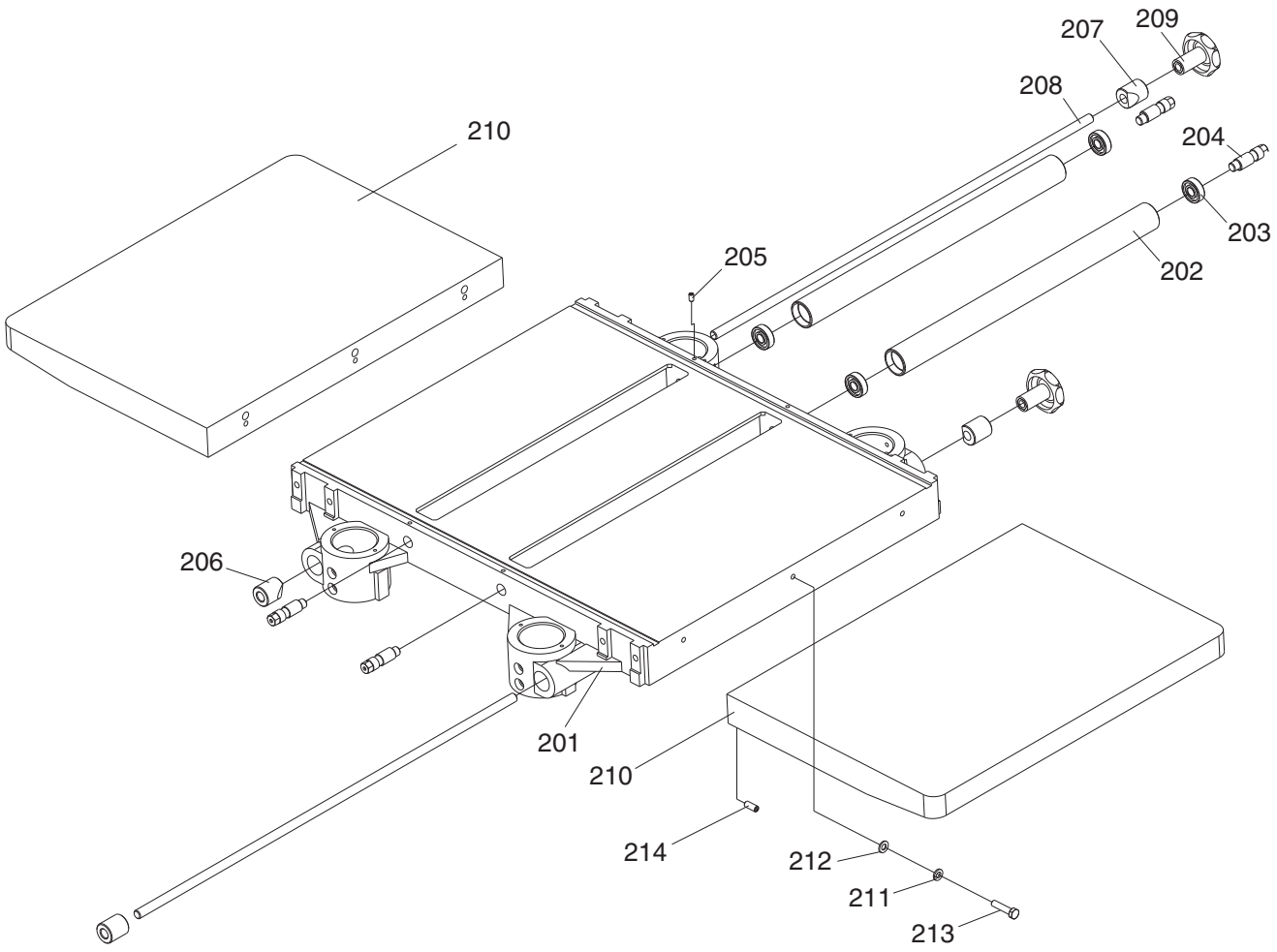
REF	PART #	DESCRIPTION
54	P0454Z054	KEY 8 X 8 X 36
55	P0454Z055	BALL BEARING 6206ZZ
56	P0454Z056	HEX BOLT M6-1 X 16
57	P0454Z057	FLAT WASHER 6MM
58	P0454Z058	OUTFEED ROLLER SPROCKET
59	P0454Z059	HANDWHEEL SCALE
60	P0454Z060	FLAT WASHER 6MM
61	P0454Z061	PHLP HD SCR M6-1 X 12
62	P0454Z062	CUT LIMITER POINTER
63	P0454Z063	FLAT WASHER 6MM
64	P0454Z064	PHLP HD SCR M6-1 X 12
65	P0454Z065	CUT LIMIT PLATE
66	P0454Z066	HEX BOLT M5-.8 X 12
67	P0454Z067	HEAD CASTING
68	P0454Z068	OUTFEED ROLLER
69	P0454Z069	KEY 5 X 5 X 22
70	P0454Z070	COMPRESSION SPRING
71	P0454Z071	OILER SET SCREW
72	P0454Z072	FEED ROLLER BLOCK
73	P0454Z073	ADJUSTMENT PLATE
74	P0454Z074	HEX BOLT M8-1.25 X 20
75	P0454Z075	SET SCREW M6-1 X 20
76	P0454Z076	HEX NUT M6-1
77	P0454Z077	PRESSURE PLATE SHAFT
78	P0454Z078	SET SCREW M6-1 X 16
79	P0454Z079	CHIP BREAKER
80	P0454Z080	SET SCREW M6-1 X 20
81	P0454Z081	HEX NUT M6-1
82	P0454Z082	CHIP BREAKER BRACKET
83	P0454Z083	LOCK ROD
84	P0454Z084	FLAT WASHER 8MM
84-1	P0454Z084-1	HEX BOLT M8-1.25 X 12
85	P0454Z085	HEX NUT M12-1.75
85-1	P0454Z085-1	FLAT WASHER 8MM
86	P0454Z086	PRESSURE BAR
87	P0454Z087	HEX BOLT M8-1.25 X 20
88	P0454Z088	LOCK WASHER 8MM
89	P0454Z089	E-CLIP 15MM
90	P0454Z090	ANTI-KICKBACK SHAFT COLLAR
91	P0454Z091	ANTI-KICKBACK FINGER
92	P0454Z092	ANTI-KICKBACK FINGER SHAFT
93	P0454Z093	SET SCREW M8-1.25 X 12
94	P0454Z094	HEX BOLT M6-1 X 16
95	P0454Z095	FLAT WASHER 6MM
96	P0454Z096	INFEED ROLLER SPROCKET

G0454Z Headstock Parts List

REF	PART #	DESCRIPTION
97	P0454Z097	CHAIN 06B-1 X 67
98	P0454Z098	KEY 5 X 5 X 22
99	P0454Z099	INFEED ROLLER
100	P0454Z100	FLAT WASHER 6MM
101	P0454Z101	HEX BOLT M6-1 X 12
102	P0454Z102	CUTTERHEAD PULLEY MX
103	P0454Z103	MOTOR PULLEY MX V2.09.07
104	P0454Z104	CUTTER PULLEY FLAT WASHER 8MM
105	P0454Z105	HEX BOLT M8-1.25 X 25
106	P0454Z106	BELT GUARD
107	P0454Z107	FLANGE BOLT M6-1 X 10

REF	PART #	DESCRIPTION
108	P0454Z108	HEX STANDOFF
109	P0454Z109	FLAT WASHER 8MM
110	P0454Z110	HEX NUT M8-1.25
111	P0454Z111	COGGED V-BELT MX-60
112	P0454Z112	BELT COVER
113	P0454Z113	DON'T REMOVE COVER LABEL
114	P0454Z114	STAR KNOB M8-1.25
115	P0454Z115	OIL LEVEL LABEL
118	P0454Z118	DRIVER BIT TORX T20
119	P0454Z119	L-WRENCH TORX T20

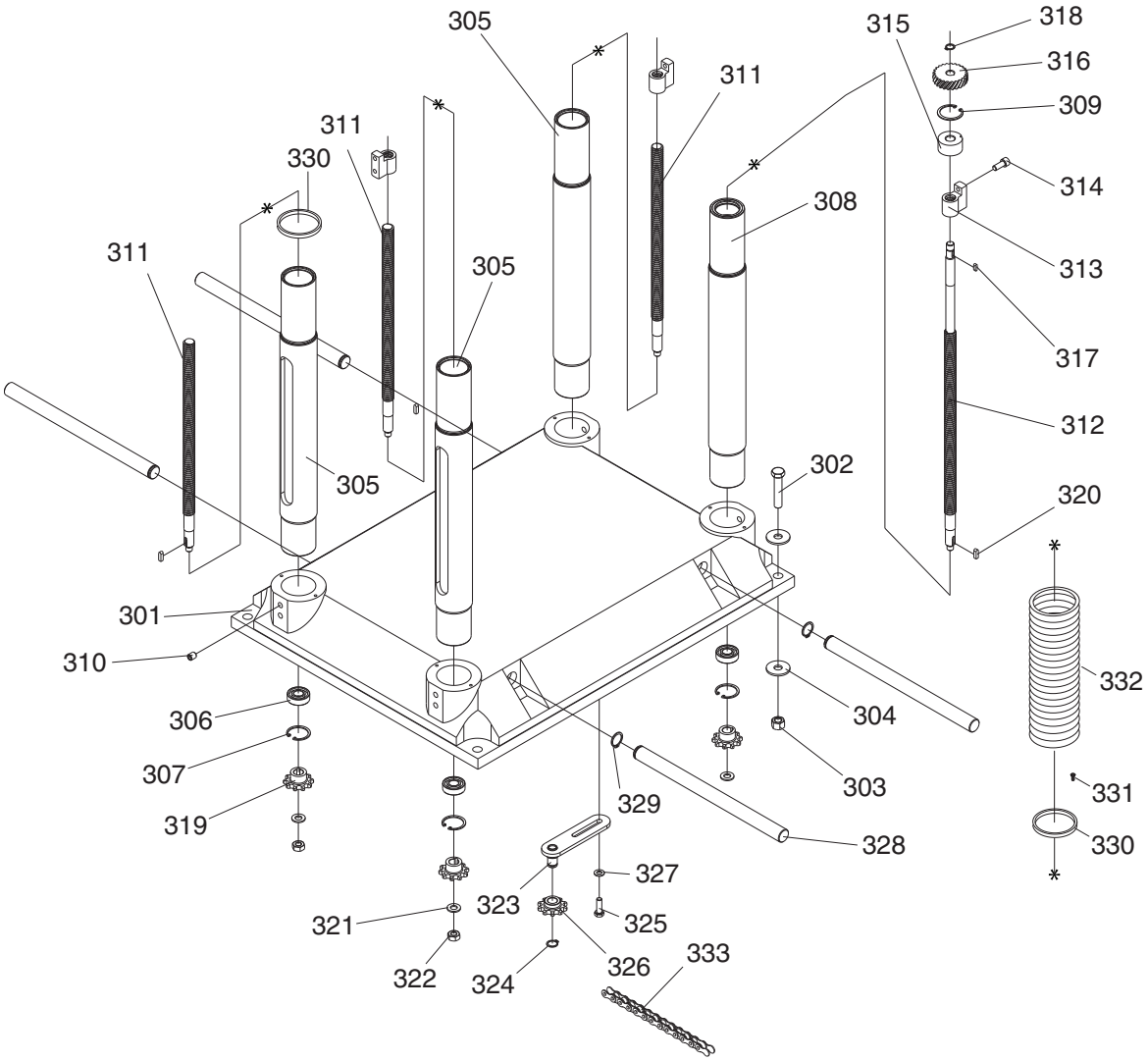
G0454Z Table



REF	PART #	DESCRIPTION
201	P0454Z201	MAIN TABLE
202	P0454Z202	ROLLER
203	P0454Z203	BALL BEARING 6201ZZ
204	P0454Z204	ECCENTRIC SHAFT
205	P0454Z205	SET SCREW M6-1 X 12
206	P0454Z206	GIB
207	P0454Z207	WEDGE DOG

REF	PART #	DESCRIPTION
208	P0454Z208	LOCK BAR
209	P0454Z209	FEMALE KNOB M12-1.75
210	P0454Z210	EXTENSION WING
211	P0454Z211	LOCK WASHER 8MM
212	P0454Z212	FLAT WASHER 8MM
213	P0454Z213	HEX BOLT M8-1.25 X 35
214	P0454Z214	SET SCREW M8-1.25 X 20

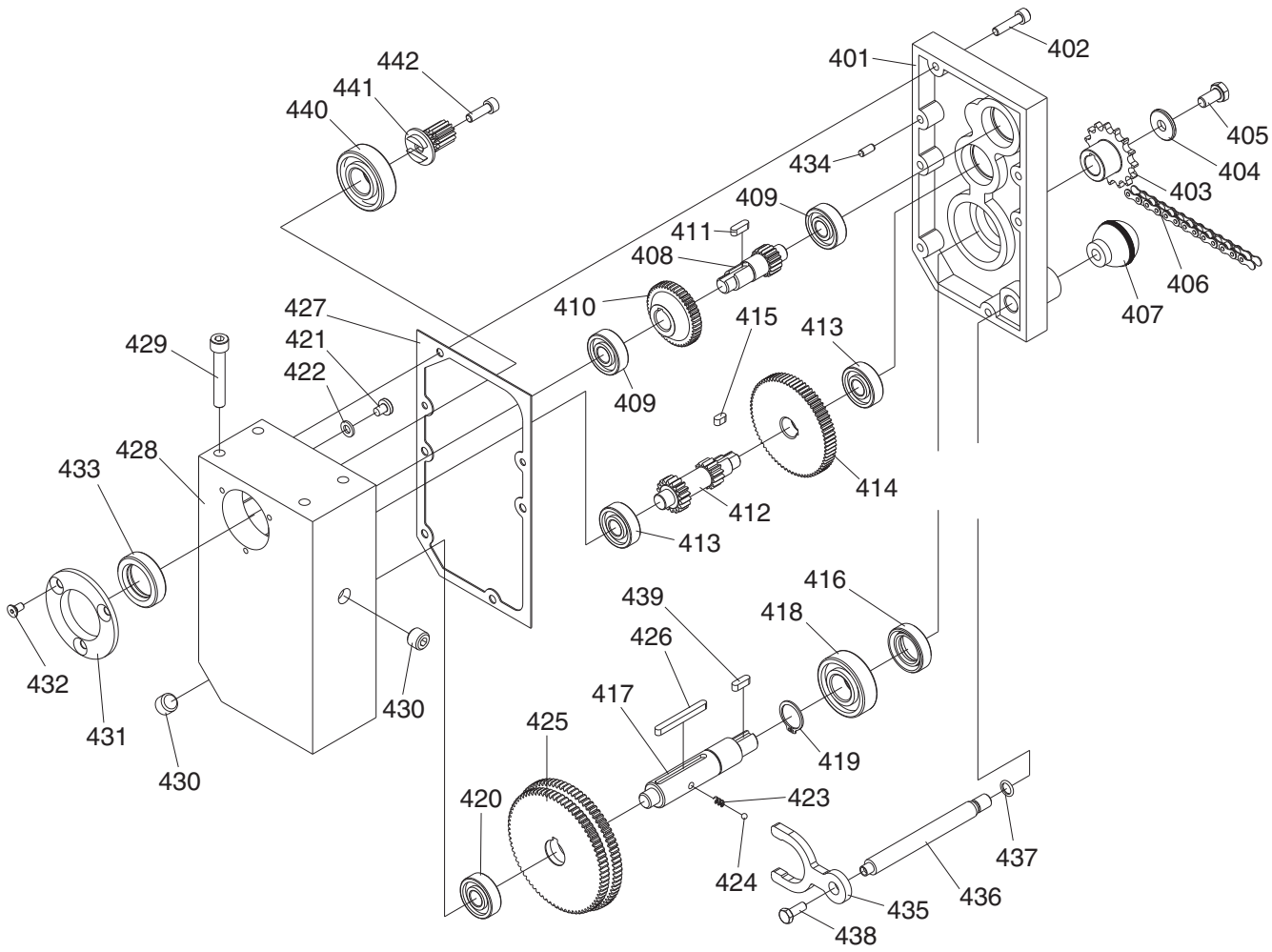
G0454Z Columns



REF	PART #	DESCRIPTION
301	P0454Z301	BASE
302	P0454Z302	HEX BOLT M12-1.75 X 60
303	P0454Z303	HEX NUT M12-1.75
304	P0454Z304	FLAT WASHER 12MM
305	P0454Z305	COLUMN A
306	P0454Z306	BALL BEARING 6202ZZ
307	P0454Z307	INT RETAINING RING 35MM
308	P0454Z308	COLUMN B
309	P0454Z309	INT RETAINING RING 38MM
310	P0454Z310	SET SCREW M10-1.5 X 12
311	P0454Z311	LEADSCREW A
312	P0454Z312	LEADSCREW B
313	P0454Z313	LEAD NUT
314	P0454Z314	CAP SCREW M8-1.25 X 20
315	P0454Z315	LEADSCREW BUSHING
316	P0454Z316	COLUMN GEAR
317	P0454Z317	KEY 4 X 4 X 12

REF	PART #	DESCRIPTION
318	P0454Z318	EXT RETAINING RING 12MM
319	P0454Z319	TABLE LIFTING SPROCKET
320	P0454Z320	KEY 5 X 5 X 16
321	P0454Z321	FLAT WASHER 10MM
322	P0454Z322	HEX NUT M10-1.5
323	P0454Z323	IDLER BRACKET ASSY
324	P0454Z324	EXT RETAINING RING 15MM
325	P0454Z325	HEX BOLT M8-1.25 X 25
326	P0454Z326	IDLER SPROCKET
327	P0454Z327	FLAT WASHER 8MM
328	P0454Z328	LIFTING POST
329	P0454Z329	EXT RETAINING RING 21MM
330	P0454Z330	DUST BOOT SEAL
331	P0454Z331	PHLP HD SCR M5-.8 X 10
332	P0454Z332	DUST BOOT
333	P0454Z333	CHAIN 08A-1 X 66

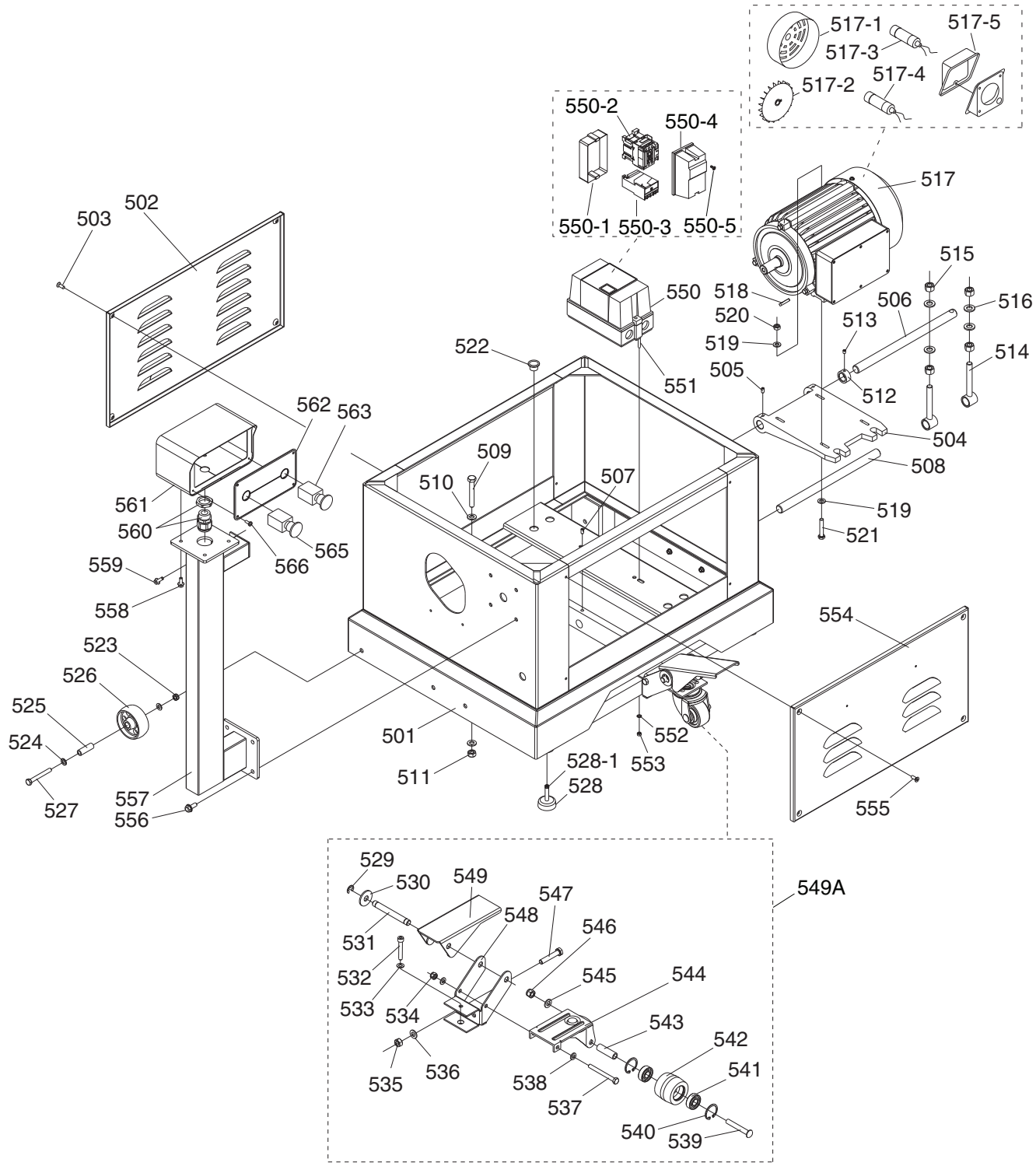
G0454Z Gearbox



REF	PART #	DESCRIPTION
401	P0454Z401	CHAIN DRIVE COVER
402	P0454Z402	CAP SCREW M6-1 X 25
403	P0454Z403	GEARBOX SPROCKET
404	P0454Z404	FLAT WASHER 8MM
405	P0454Z405	HEX BOLT M8-1.25 X 16
406	P0454Z406	CHAIN 06B-1 X 51
407	P0454Z407	BALL KNOB M10-1.5
408	P0454Z408	GEAR SHAFT A
409	P0454Z409	BALL BEARING 6201ZZ
410	P0454Z410	GEAR A
411	P0454Z411	KEY 5 X 5 X 14
412	P0454Z412	SHAFT B
413	P0454Z413	BALL BEARING 6201ZZ
414	P0454Z414	GEAR B
415	P0454Z415	KEY 5 X 5 X 10
416	P0454Z416	OIL SEAL 25 X 32 X 7
417	P0454Z417	SHAFT C
418	P0454Z418	BALL BEARING 6204ZZ
419	P0454Z419	EXT RETAINING RING 20MM
420	P0454Z420	BALL BEARING 6201ZZ
421	P0454Z421	PHLP HD SCR M6-1 X 8

REF	PART #	DESCRIPTION
422	P0454Z422	FLAT WASHER 6MM
423	P0454Z423	COMPRESSION SPRING
424	P0454Z424	STEEL BALL 4MM
425	P0454Z425	GEAR C
426	P0454Z426	KEY 5 X 5 X 50
427	P0454Z427	GEARBOX COVER GASKET
428	P0454Z428	GEARBOX
429	P0454Z429	CAP SCREW M8-1.25 X 50
430	P0454Z430	OIL PLUG
431	P0454Z431	FLANGE COVER
432	P0454Z432	CAP SCREW M5-.8 X 12
433	P0454Z433	OIL SEAL 25 X 40 X 10
434	P0454Z434	PIN 5 X 10
435	P0454Z435	SHIFT FORK
436	P0454Z436	HANDLE SHAFT
437	P0454Z437	O-RING 10.8 X 2.4 P11
438	P0454Z438	FLANGE BOLT M6-1 X 12
439	P0454Z439	KEY 5 X 5 X 16
440	P0454Z440	BALL BEARING 6204ZZ
441	P0454Z441	GEAR D
442	P0454Z442	SET SCREW M6-1 X 20

G0454Z Stand Breakdown

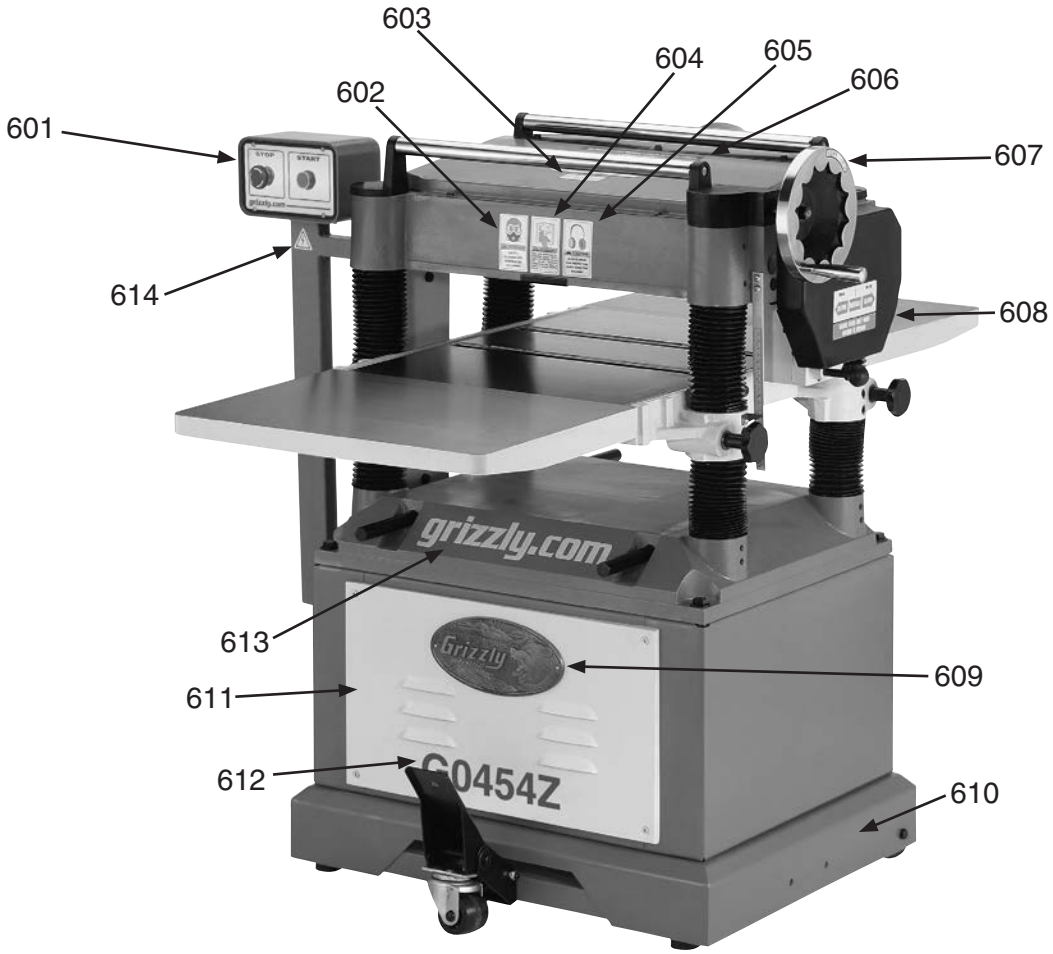


G0454Z Stand Parts List

REF	PART #	DESCRIPTION
501	P0454Z501	ENCLOSED STAND
502	P0454Z502	REAR COVER
503	P0454Z503	FLAT HD SCR M6-1 X 20
504	P0454Z504	MOTOR MOUNT PLATE
505	P0454Z505	SET SCREW M6-1 X 12
506	P0454Z506	PLATE CONNECTING ROD
507	P0454Z507	SET SCREW M8-1.25 X 12
508	P0454Z508	PLATE CONNECTING ROD
509	P0454Z509	HEX BOLT M10-1.5 X 70
510	P0454Z510	FLAT WASHER 10MM
511	P0454Z511	HEX NUT M10-1.5
512	P0454Z512	CONNECTING ROD LOCK COLLAR
513	P0454Z513	SET SCREW M6-1 X 8
514	P0454Z514	ADJUST BOLT
515	P0454Z515	HEX NUT M12-1.75
516	P0454Z516	FLAT WASHER 12MM
517	P0454Z517	MOTOR 5HP 240V 1-PH
517-1	P0454Z517-1	FAN COVER
517-2	P0454Z517-2	MOTOR FAN
517-3V2	P0454Z517-3V	S CAPACITOR 300M 250V
517-4V2	P0454Z517-4V	R CAPACITOR 60M 450V
517-5	P0454Z517-5	MOTOR WIRING JUNCTION BOX
517-6	P0454Z517-6	BALL BEARING 6206ZZ
517-7	P0454Z517-7	BALL BEARING 6204ZZ
517-8	P0454Z517-8	CENTRIFUGAL SWITCH 19MM 3450
517-9	P0454Z517-9	CONTACT PLATE 19MM
518	P0454Z518	KEY 5 X 5 X 30
519	P0454Z519	FLAT WASHER 8MM
520	P0454Z520	HEX NUT M8-1.25
521	P0454Z521	HEX BOLT M8-1.25 X 45
522	P0454Z522	STRAIN RELIEF
523	P0454Z523	HEX NUT M8-1.25
524	P0454Z524	FLAT WASHER 8MM
525	P0454Z525	SLEEVE
526	P0454Z526	UNIVERSAL WHEEL 78MM DIA
527	P0454Z527	HEX BOLT M8-1.25 X 65
528	P0454Z528	RUBBER FOOT
528-1	P0454Z528-1	HEX NUT M8-1.25
529	P0454Z529	EXT RETAINING RING 9MM
530	P0454Z530	FLAT WASHER 12MM

REF	PART #	DESCRIPTION
531	P0454Z531	SHAFT 12MM
532	P0454Z532	HEX BOLT M8-1.25 X 50
533	P0454Z533	FLAT WASHER 8MM
534	P0454Z534	HEX NUT M8-1.25
535	P0454Z535	HEX NUT M10-1.5
536	P0454Z536	FLAT WASHER 10MM
537	P0454Z537	HEX BOLT M8-1.25 X 100
538	P0454Z538	FLAT WASHER 8MM
539	P0454Z539	TROLLEY WHEEL BOLT
540	P0454Z540	INT RETAINING RING 35MM
541	P0454Z541	BALL BEARING 6202-2RS
542	P0454Z542	TROLLEY WHEEL
543	P0454Z543	TROLLEY WHEEL SLEEVE
544	P0454Z544	TROLLEY UNIVERSAL KIT
545	P0454Z545	FLAT WASHER 10MM
546	P0454Z546	LOCK NUT M12-1.75
547	P0454Z547	HEX BOLT M10-1.5 X 55
548	P0454Z548	BRACKET
549	P0454Z549	PEDAL
549A	P0454Z549A	PEDAL ASSEMBLY
550V2	P0454Z550V2	MAGNETIC SWITCH MS1-35D V2.01.11
550V2-1	P0454Z550V2-1	MAG SWITCH COVER ASSY V2.07.12
550V2-2	P0454Z550V2-2	CONTACTOR NHD C-35D 220V
550-3	P0454Z550-3	OL RELAY NHD NTH-28 24-28A
551	P0454Z551	PHLP HD SCR M5-.8 X 20
552	P0454Z552	FLAT WASHER 5MM
553	P0454Z553	HEX NUT M5-.8
554	P0454Z554	FRONT COVER
555	P0454Z555	PHLP HD SCR M6-1 X 20
556	P0454Z556	HEX BOLT M8-1.25 X 20
557	P0454Z557	SUPPORT ARM 26"
558	P0454Z558	HEX BOLT M6-1 X 16
559	P0454Z559	HEX BOLT M6-1 X 16
560	P0454Z560	BALL STRAIN RELIEF
561	P0454Z561	CONTROL BOX
562	P0454Z562	CONTROL PANEL
563V2	P0454Z563V2	START BUTTON CLEAR V2.01.11
565V2	P0454Z565V2	E-STOP BUTTON 3-ARROW V2.01.11
566	P0454Z566	TAP SCREW #10 X 3/8
567V2	P0454Z567V2	POWER CORD 12G 3W 72" L6-30P V2.08.12

G0454Z Label Placement



REF	PART #	DESCRIPTION
602	P0454Z602	GLASSES/RESPIRATOR LABEL
603V2	P0454Z603V2	MACHINE ID LABEL CSA V2.08.12
604	P0454Z604	READ MANUAL LABEL
605	P0454Z605	HEARING PROTECTION LABEL
606	P0454Z606	CUTTERHEAD DANGER LABEL
607	P0454Z607	HANDWHEEL DIRECTION LABEL
608	P0454Z608	GEARBOX SPEED LABEL

REF	PART #	DESCRIPTION
609	P0454Z609	GRIZZLY LOGO PLATE
610	P0454Z610	GRIZZLY GREEN TOUCH-UP PAINT
611	P0454Z611	GRIZZLY PUTTY TOUCH-UP PAINT
612	P0454Z612	MODEL NUMBER LABEL
613	P0454Z613	GRIZZLY.COM LABEL
614	P0454Z614	ELECTRICITY LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinetmaker & FDM
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____Yes _____No

8. Would you recommend Grizzly Industrial to a friend? _____Yes _____No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____Yes _____No

10. Comments: _____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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.

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

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