

Grizzly *Industrial, Inc.*®

MODEL G0505 12½" LEAN & MEAN PORTABLE PLANER OWNER'S MANUAL



COPYRIGHT © DECEMBER, 2002 BY GRIZZLY INDUSTRIAL, INC. REVISED MAY, 2018 (HE)
**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
(FOR MODELS MANUFACTURED SINCE 4/04) #TR4887 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	2	SECTION 5: ACCESSORIES	20
Manual Accuracy	2	SECTION 6: MAINTENANCE	22
Contact Info.....	2	Schedule	22
Functional Overview	2	Cleaning.....	22
Identification.....	3	Knife Sharpening	22
Machine Data Sheet	4	Lubrication	23
SECTION 1: SAFETY	6	Motor Brushes.....	23
Safety Instructions for Machinery	6	Feed Rollers.....	24
Additional Safety Instructions for Planers.....	8	SECTION 7: SERVICE	25
SECTION 2: CIRCUIT REQUIREMENTS	9	Troubleshooting	25
110V Operation.....	9	Adjusting Knives	27
SECTION 3: SETUP	10	Replacing Drive Belt	28
Unpacking	10	Adjusting Extension Wing.....	29
Inventory	10	SECTION 8: PARTS	30
Site Considerations.....	11	Head Breakdown	30
Mounting Options.....	11	Motor Assembly Breakdown	32
Assembly	13	Base Breakdown.....	34
Test Run	14	WARRANTY AND RETURNS	37
SECTION 4: OPERATIONS	15		
ON/OFF Switch.....	15		
Reset Button	15		
Depth of Cut.....	16		
Workpiece Inspection.....	16		
Planing Tips	17		
Wood Hardness	17		
Cutting Problems	18		
Basic Operation	19		

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, immediately call our technical support for updates or clarification.

For your convenience, we always keep current Grizzly manuals and most updates available on our website at www.grizzly.com. Any updates to your machine will be reflected in these documents as soon as they are complete. Visit our site often to check for the latest updates!

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

Functional Overview

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

Once the depth of cut is set, the workpiece is placed on the table and fed into the infeed roller, as shown in **Figure 1**, 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.



Figure 1. Typical planing operation setup.

NOTICE

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



Identification

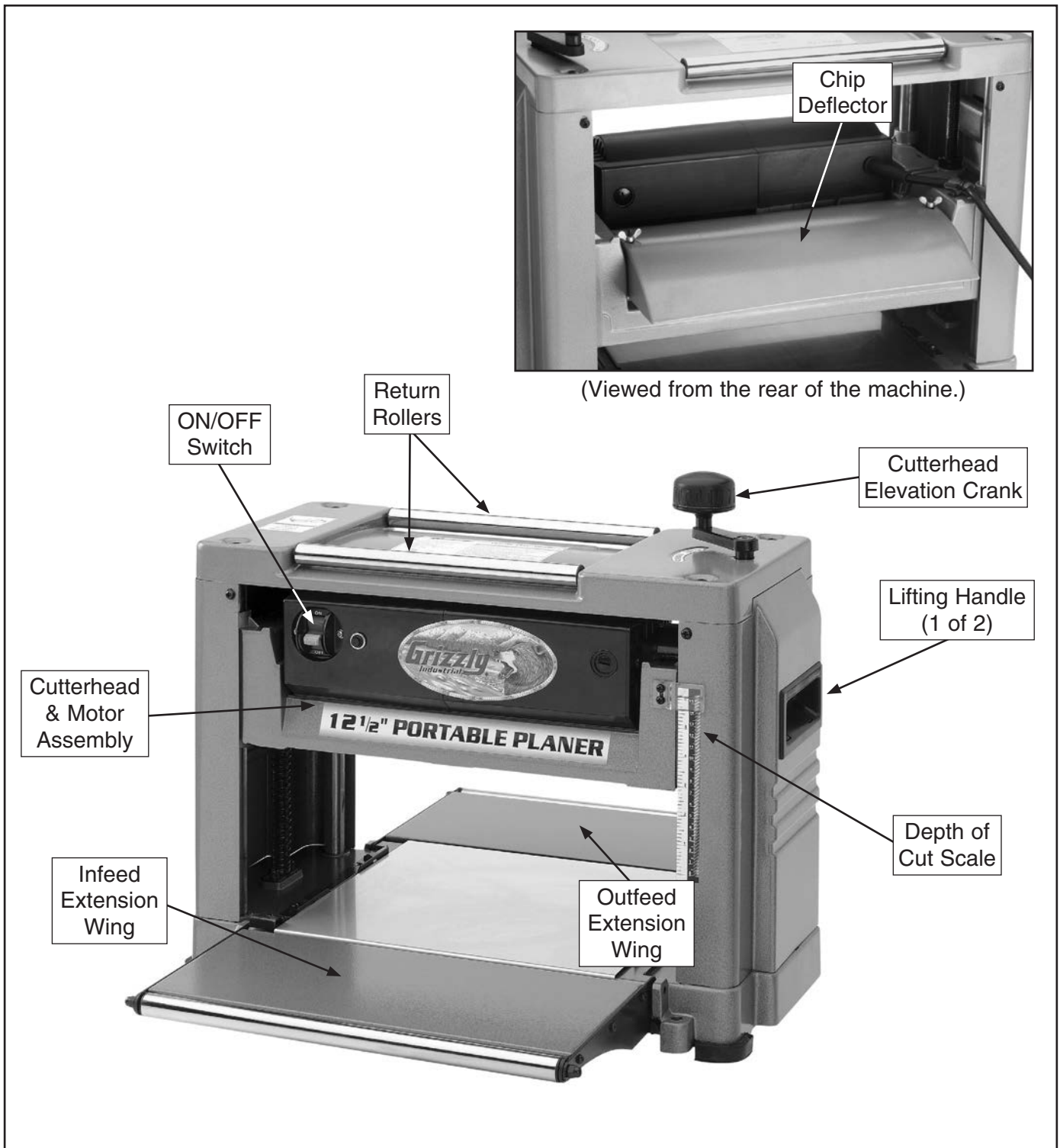


Figure 2. Model G0505 identification.





MACHINE DATA SHEET

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

MODEL G0505 12-1/2" PLANER

Product Dimensions:

Weight..... 71 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 21-3/4 x 27-3/8 x 18-3/4 in.
Footprint (Length x Width)..... 20-7/8 x 10-1/2 in.

Shipping Dimensions:

Type..... Cardboard Box
Content..... Machine
Weight..... 78 lbs.
Length x Width x Height..... 24 x 14 x 18 in.
Must Ship Upright..... No

Electrical:

Power Requirement..... 110V, Single-Phase, 60 Hz
Prewired Voltage..... 110V
Full-Load Current Rating..... 15A
Minimum Circuit Size..... 20A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 7 ft.
Power Cord Gauge..... 14 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Toggle Safety Switch w/Removable Key

Motors:

Main

Horsepower..... 2 HP
Phase..... Single-Phase
Amps..... 15A
Speed..... 19,000 RPM
Type..... Universal
Power Transfer..... Belt Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... N/A

Main Specifications:

Main Specifications

Planer Size..... 12.5 in.
Max. Cut Width..... 12-1/2 in.
Min. Stock Length..... 6 in.
Min. Stock Thickness..... 13/64 in.
Max. Stock Thickness..... 6 in.
Number of Cuts Per Inch..... 52
Number of Cuts Per Minute..... 20,000
Cutterhead Speed..... 10,000 RPM
Planing Feed Rate..... 32 FPM
Max. Cut Depth Planing Full Width..... 1/16 in.
Max. Cut Depth Planing 6-Inch Wide Board..... 3/32 in.



Cutterhead Info

Cutterhead Type.....	2 Knife
Cutterhead Diameter	1-7/8 in.
Number of Knives.....	2
Knife Type.....	HSS, Reversible, Solid
Knife Size Length.....	12-1/2 in.
Knife Size Width.....	23/32 in.
Knife Size Thickness.....	1/8 in.
Knife Adjustment.....	Springs

Table Info

Table Bed Size Length.....	11-1/2 in.
Table Bed Size Width.....	12-1/2 in.
Roller Ext. Table Size Length.....	7-1/2 in.
Roller Ext. Table Size Width.....	14-1/2 in.

Construction

Table.....	Precision-Ground Cast Iron
Body.....	Sheet Metal
Cutterhead Assembly.....	Steel
Infeed Roller.....	Rubber
Outfeed Roller.....	Rubber
Paint Type/Finish.....	Epoxy

Other

Measurement Scale.....	Inch & Metric
Number of Dust Ports.....	0

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	15 Minutes
Serial Number Location	ID Label on Top of Machine
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Features:

- 2 Double-Edged Knife Cutterhead
- Cogged Drive Belt
- Board Return Rollers
- Handwheel Depth Adjustment
- Inch and Metric Measuring Scale
- Toggle Switch with Safety Key
- Precision-Ground Cast-Iron Table & Fold-Down Extension Tables
- Green Powder Coated Paint
- Thermal Overload Protection
- One Feed Speed
- Convenient Carry Handles on Side
- 1/8" Thick Knives
- Knife Setting Jig and Wrench Included



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.



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



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



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 observing 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 spinning knives, never remove guards or reach inside the planer while it is connected to power.
- 4. INFEEED 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.
- 5. BODY PLACEMENT.** There is always the possibility of the cutterhead kicking back the workpiece at a high rate of speed. To avoid getting hit, 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** for this planer.
 - Maximum Depth of Cut Full Width.. $\frac{1}{16}$ "
 - Minimum Board Length..... 6"
 - Minimum Thickness $\frac{13}{64}$ "
 - Maximum # of Boards at One Time.... 1
- 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 knives. 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. DULL/DAMAGED KNIVES.** Kickback may occur and the cutting results will be poor if the planer is operated with dull or damaged knives.
- 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.

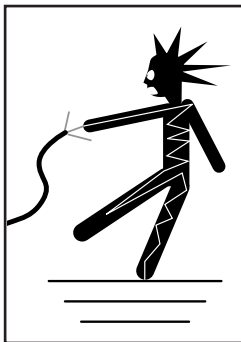


SECTION 2: CIRCUIT REQUIREMENTS

110V 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:

Amp Draw..... 15 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.**

Minimum Circuit Size..... 20 Amps

Power Connection Device

The Model G0505 comes with a 5-15 plug, similar to **Figure 3**, to connect the machine to power.

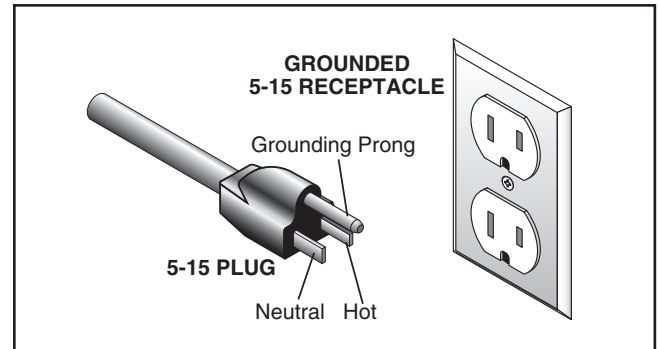
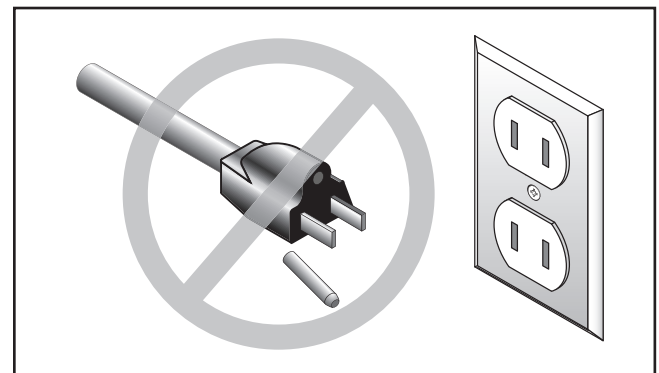


Figure 3. Typical 5-15 plug and receptacle.



⚠️ CAUTION

This machine **MUST** have a ground prong in the plug to help ensure that it is grounded. **DO NOT** remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

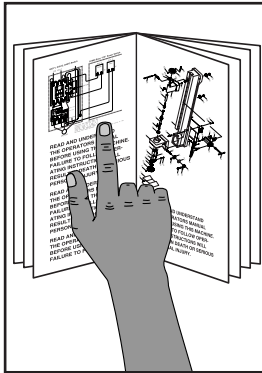
Extension Cords

We do not recommend using extension cords, but if you find it absolutely necessary:

- Use at least a 12 gauge cord that does not exceed 50 feet in length!
- The extension cord must have a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.



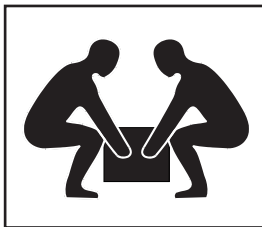
SECTION 3: SETUP



!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
This machine and its components are very heavy. Get lifting help to move heavy items.

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.*

Inventory: (Figure 4)	Qty
A. Chip Deflector.....	1
B. Knife Gauge	1
C. Lock Washer 6mm	1
D. Cap Screw M6-1 x 20.....	1
E. Hex Wrench 5mm.....	1
F. Double-End Wrench 8mm.....	1
G. Cutterhead Elevation Crank	1
H. Rubber Machine Feet.....	4

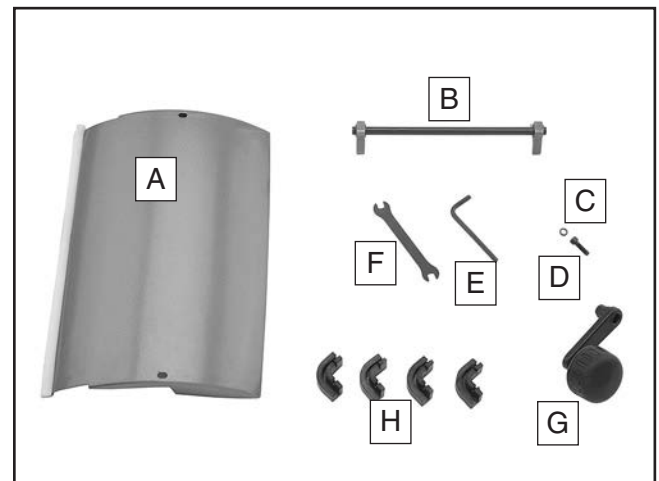
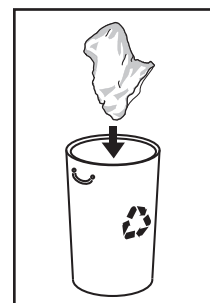


Figure 4. Model G0505 inventory.



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



Site Considerations

Workbench Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support both the machine and workpiece.

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 5** for the minimum working clearances.

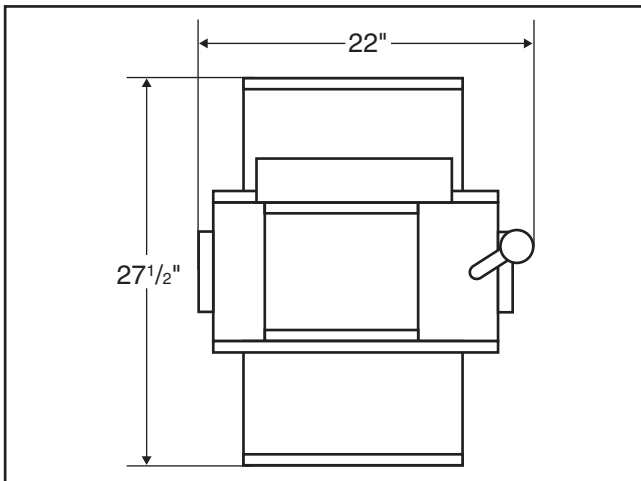
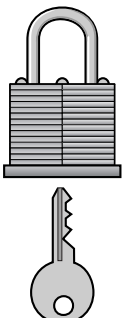


Figure 5. Minimum working clearances.

	<p>⚠ CAUTION</p> <p>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.</p>
---	--

Mounting Options

Your planer has three options for mounting it to the workbench: 1) The included rubber feet, 2) adjustable machine mounts, and 3) bolts installed through the planer base and into the workbench (see **Figure 6**).

- If you intend to move the planer about consistently, use the rubber feet.
- If the planer will be moved only occasionally, we recommend the machine mounts.
- If the planer will be used in only one location, bolt the machine to your workbench.

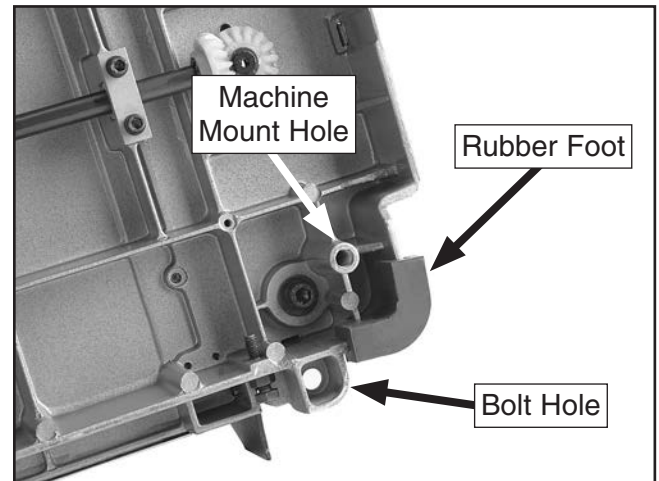


Figure 6. Machine mounting options.

Using Rubber Feet

With assistance, turn the machine over and install the four included rubber feet, as shown in **Figure 6**.



Using Machine Mounts

Using machine mounts, shown in **Figure 7**, gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.

The machine mounting holes (see **Figure 6** on the previous page) accept M8-1.25 threads.



Figure 7. Machine mount example.

Mounting to the Workbench

If you choose to permanently mount your planer to the workbench, use the four bolts holes in the base (see **Figure 6** on the previous page) to mount it to the workbench.

The strongest mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the planer to the workbench, as shown in **Figure 8**.

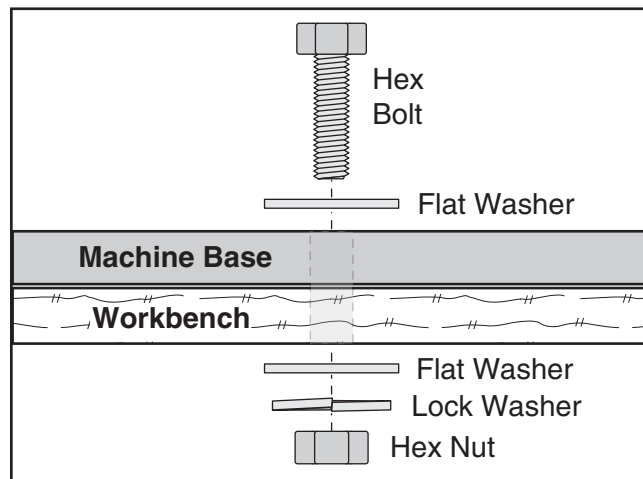


Figure 8. Example of a through mount setup.

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw, as shown in **Figure 9**.

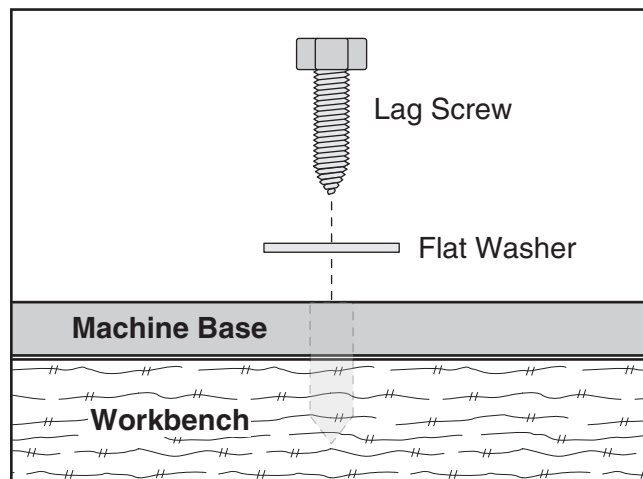


Figure 9. Example of a direct mount setup.



Assembly

To assemble your planer:

1. Align the flat portion inside the crank bore with the flat portion on the elevation leadscrew, as shown in **Figure 10**, then place the crank onto the leadscrew.



Figure 10. Attaching the elevation crank.

2. Thread the M6-1 x 20 cap screw and lock washer through the crank and into the leadscrew to secure the crank. DO NOT overtighten.

!WARNING

Accidental contact with the cutterhead during operation could cause serious personal injury. The chip deflector **MUST** be securely in place when the planer is connected to power!

3. Use the elevation crank to lower the cutterhead so that you can access the top of the cutterhead assembly from the rear.
4. Remove the two wing nuts, position the chip deflector with the foam cushion against the motor housing, then re-install the wing nuts to secure the chip deflector, as shown in **Figure 11**. DO NOT over-tighten the wing nuts.

Note: The chip deflector directs wood chips away from the cutterhead during operation, and it covers the cutterhead and outfeed roller for operator safety.

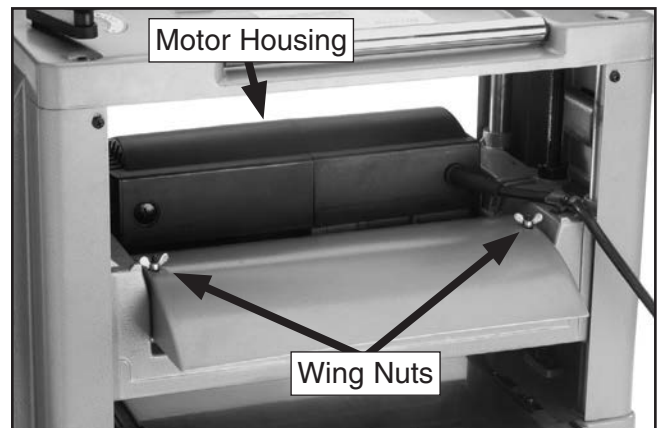


Figure 11. Chip deflector properly installed.



Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling mechanism 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 25**.

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

To test run the machine:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is setup properly.
2. Make sure all tools and objects used during setup are cleared away from the machine.
3. Connect the machine to the power source.
4. Verify that the machine is operating correctly by turning the machine **ON**.

—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.

5. Turn the machine **OFF**.
6. Remove the switch disabling key, as shown in **Figure 12**.

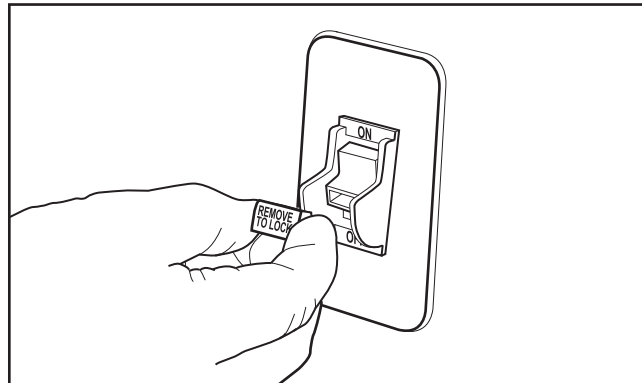
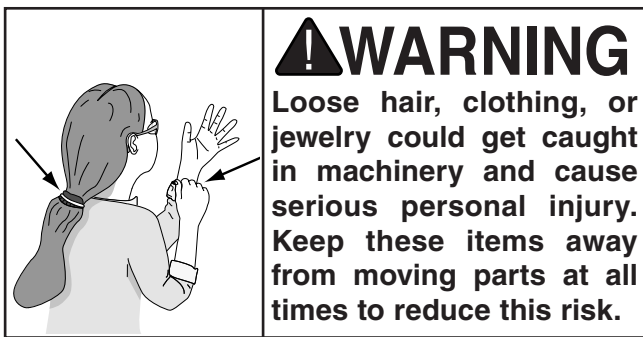
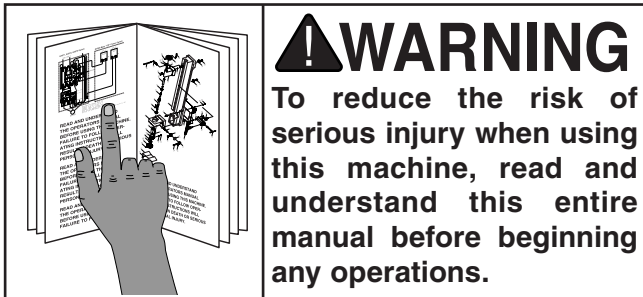


Figure 12. Removing switch key from toggle switch.

7. Try to start the machine by flipping the toggle switch to the ON position.
 - If the machine does not start, the switch disabling feature is working as designed.
 - If the machine starts, immediately stop the machine. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.



SECTION 4: OPERATIONS



ON/OFF Switch

The ON/OFF switch is located on the front, left of the machine, as shown in **Figure 13**.

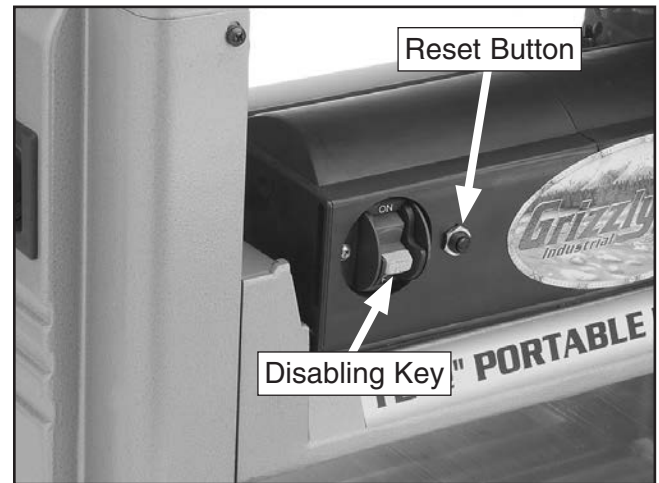


Figure 13. ON/OFF switch with disabling key and reset button.

The switch is equipped with a switch disabling key that, when the switch is in the OFF position, can be removed to prevent accidental or unauthorized start-up of the planer.

Should the key be removed when the planer is **ON**, it can still be turned **OFF**, but you have to replace the key before turning the machine back **ON**.

Reset Button

The Model G0505 Planer has a motor thermal overload protection switch, which will trip if the motor becomes too hot. To reset the switch, move the ON/OFF switch to OFF, wait a few minutes to allow the motor to cool, then press the reset button (see **Figure 13**). If the reset button does not stay depressed, wait longer for the motor to cool before pressing it again.



Depth of Cut

The planing depth of cut is controlled by using the elevation crank on top of the machine. Rotating the crank clockwise raises the cutterhead.

Depth of cut is read directly from the inch/millimeter scale on the front of the planer, as shown in **Figure 14**.

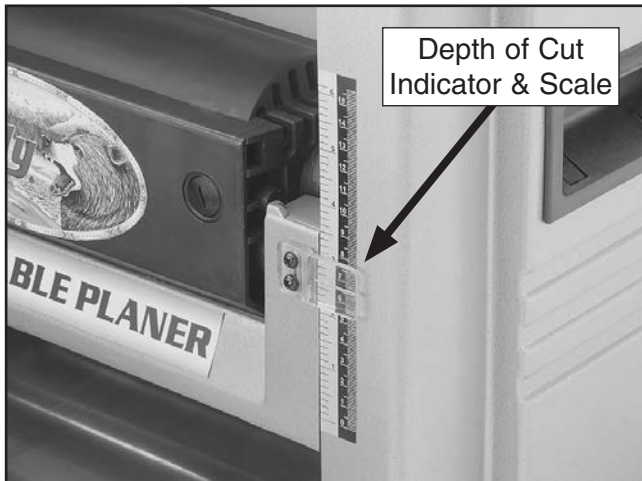


Figure 14. Depth of cut indicator and scale.

One complete turn of the crank raises or lowers the cutterhead approximately $\frac{5}{64}$ " (2mm). The range of material thickness that can be planed is $\frac{13}{64}$ " – 6" (5mm–152mm).

Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend a maximum depth of cut no more than $\frac{1}{32}$ ". 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.

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 fiber. Attempting to plane workpieces of any other material 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 knives 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 Warping:** 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 kickback or severe injury.



Planing Tips

- Use the full width of the planer. Alternate between the left, the right and the middle when feeding lumber into the planer. Your knives will remain sharp much longer.
- Scrape all glue off of joined boards before planing.
- Plane ONLY natural wood fiber. DO NOT plane wood composites.
- Surface 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.

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 planer depth of cut to be taken for good results.

Note: *The Janka Hardness Rating is expressed in the 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.



Cutting Problems

Below is a list of problematic workpiece characteristics you may encounter when planing with some possible reasons and solutions.

- **Chipped Grain**

Reason: Usually a result of cutting against the grain, planing lumber with knots or excessive amount of cross-grain, or using dull or damaged knives.

Solution: Decrease depth of cut. Inspect your lumber and determine if the grain pattern is causing the problem. If the lumber does not show substantial cross-grain, inspect the knives for dullness or damage.

- **Fuzzy Grain**

Reason: Usually caused by planing lumber with too high of a moisture content. Sometimes fuzzy grain is an unavoidable characteristic of the wood species, such as basswood. Fuzzy grain can also be caused by dull knives.

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

- **Glossy Surface**

Reason: Usually caused by dull knives. Surface gloss will usually be accompanied by overheating, resulting in workpiece scorching and knife damage.

Solution: Use sharp knives.

- **Snipe**

Reason: Occurs when the board ends have more material removed than the rest of the board. Snipe is usually caused when the workpiece is not properly supported as it goes through the planer. However, a small amount of snipe is typically unavoidable.

Solution: The best way to deal with snipe is by planing lumber longer than your finished workpiece length, then cutting off the excess after the planing is done.

- **Wavy Surface**

Reason: Caused by poor knife height adjustment. The wavy surface appears when one knife is taking deeper cuts than the rest of the knives.

Solution: Correctly adjust the height of the knives.

- **Pitch & Glue Build-up**

Reason: Pitch and glue build-up on the rollers and cutterhead will cause overheating by decreasing the knife sharpness while increasing drag in the feed mechanism. The result can include scorched lumber, as well as uneven knife marks and chatter patterns in the workpiece.

Solution: Thoroughly clean the rollers and cutterhead. Scrape off pitch and glue marks from the workpiece before planing it.

- **Chip Marks or Indentations**

Reason: Chip indentation or chip bruising is the result of wood chips not being removed from around the cutterhead. Instead, they are deposited on the planed surface and crushed into the workpiece by the outfeed roller. This condition can be caused by a number of reasons, some of which are:

- a. The type of lumber being planed. Certain species have a tendency to chip bruise.
- b. A high moisture content (20% or higher) and/or surface moisture. Typically found in air-dried lumber where the surface is dry but the interior of the stock needs more time to season.
- c. Dull knives.
- d. Depth of cut too much.

Solution:

- a. Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT plane partially-air-dried (PAD) lumber.
- b. Make sure the planer knives are sharp.
- c. Reduce the depth of cut and make more passes.



Basic Operation

To use the planer:

1. DISCONNECT PLANER FROM POWER!
2. Make sure you read and understand this entire manual before beginning the planing operation.
3. Put on safety glasses or a face shield.
4. If your workpiece does not have one flat face, use a jointer to create one.
5. Place the flat surface of the workpiece facing down on the infeed extension wing and table, and under the cutterhead, as shown in **Figure 16**.

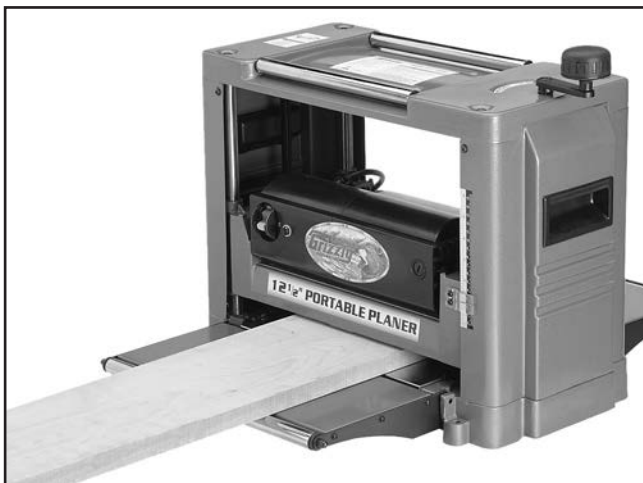


Figure 16. Basic planing operation setup.

6. Use the elevation crank to lower the cutterhead until the bottom edge of the cutterhead assembly just touches the workpiece, as shown in **Figure 16**.

Note: Anytime you switch directions with the cutterhead elevation crank, there will be a small amount of backlash—the amount the crank moves before the cutterhead begins to move. However, as long as you move the handle in the same direction during operation, backlash will not be a factor.

7. Rotate the elevation crank clockwise slightly less than $\frac{1}{4}$ turn to raise the cutterhead above the workpiece surface approximately $\frac{1}{32}$ " for the first pass, then remove the workpiece from the machine.
8. If the workpiece is longer than can be supported by the extension wings and table, arrange for assistance or use roller accessories to support the workpiece.
9. Connect the planer to power and turn it **ON**.
10. Stand to one side of the planer path, then, with the flat surface of the workpiece facing down, feed the workpiece into the planer until the infeed roller grabs it.

Note: The infeed and outfeed rollers will control the feed rate of the workpiece through the planer. Do not push or pull on the workpiece during operation.

—If the depth of cut is too much and the planer bogs down, immediately turn it **OFF**. Allow the cutterhead to come to a complete stop, then raise it to remove the workpiece. Reduce the depth of cut and repeat **Step 10**.

11. Once the workpiece is clear of the outfeed roller, measure the workpiece thickness.

—If further planing is needed, rotate the elevation crank counterclockwise slightly less than $\frac{1}{4}$ turn ($\frac{1}{32}$ ") to lower the cutterhead, then repeat **Step 10** until you are satisfied with the results.



SECTION 5: ACCESSORIES

G8983—Tilting Roller Stand

Adjusts from 26" to 44", 0°-45°. 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 17. SHOP FOX® Roller Stands.

H7516—Dust Hood for Model G0505 Planer

Made especially for the Model G0505 Planer, this complementing dust hood takes the place of the rear chip deflector. 4" dust port.

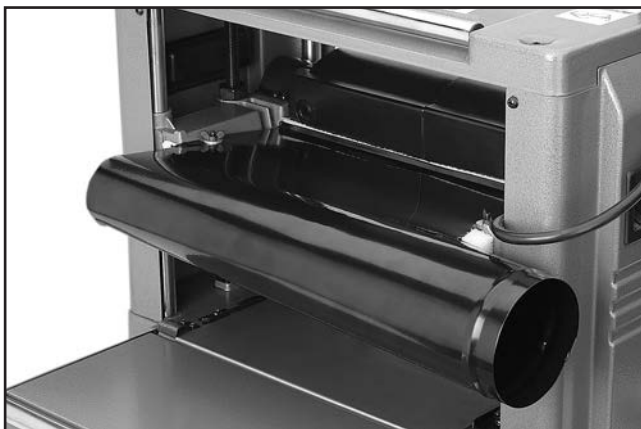


Figure 18. Model H7516 Dust Port installed on the Model G0505 Planer.

G9256—6" Dial Caliper

G9257—8" Dial Caliper

G9258—12" Dial Caliper

These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock resistant construction and a dust proof display. An absolute treat for the perfectionist!

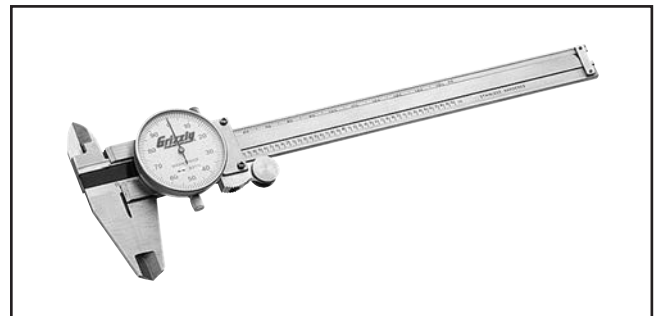
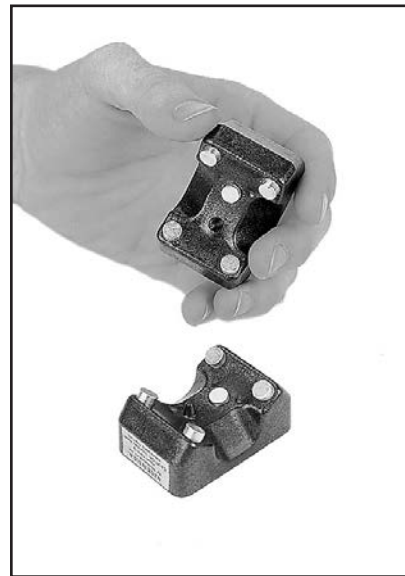


Figure 19. Grizzly® Dial Calipers.

G3641—Mini Planer Pal®



Save time and increase the cutting accuracy of your Model G0505 Planer with Mini Planer Pal® jigs. These devices use precision magnets to hold knives to within ±0.001" of the correct height setting. Sold in pairs only.

Figure 20. Mini Planer Pal® .

Call 1-800-523-4777 To Order



- T20501—Face Shield Crown Protector 4"
- T20502—Face Shield Crown Protector 7"
- T20503—Face Shield Window
- T20452—"Kirova" Anti-Reflective S. Glasses
- T20451—"Kirova" Clear Safety Glasses
- H0736—Shop Fox® Safety Glasses
- H7194—Bifocal Safety Glasses 1.5
- H7195—Bifocal Safety Glasses 2.0
- H7196—Bifocal Safety Glasses 2.5



Figure 21. Eye protection assortment.

G7313—SHOP FOX Tool Table

Get your planer off your workbench and put it on this sturdy Shop Fox® stand instead! Flared legs and adjustable rubber feet ensure stability and reduce machine vibration. Butcher block finished table top measures 13" x 23" and is 30½" from the floor. Bottom measures 22" x 32".



Figure 22. SHOP FOX Tool Table.

H5038—Double-Edged HSS Replacement Knives for Model G0505, Set of 2

G2790—Universal Knife Grinder

This dry-type Knife Grinder is ideal for sharpening planer and jointer knives. High quality cast iron construction, together with large knife holding capacity (will sharpen up to 20" planer/jointer knives) makes this grinder an excellent investment. Features a heavy-duty ½ HP 110V motor, knife holding angle adjustable from 20° to 70°, and adjustable-height 120 grit grinding wheel.



Figure 23. Model G2790 Universal Knife Grinder.

G8982—Roller Table

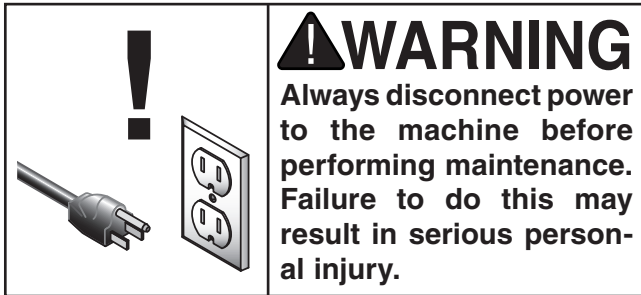
Use this versatile roller table wherever you need extra workpiece support. Features all steel welded construction and measures 19" x 65" long. Comes with 9 ball bearing rollers and has four independently adjustable legs for any leveling requirement. Adjustable in height from 26¾" to 44¼".



Figure 24. SHOP FOX Roller Table.



SECTION 6: MAINTENANCE



Schedule

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

Daily Maintenance:

- Check/tighten loose mounting bolts.
- Sharpen/replace damaged or worn knives (**Page 27**).
- Check/adjust knife height (**Page 27**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

Each 40 Hours of Operation:

- Lubricate elevation leadscrews (**Page 23**).
- Lubricate feed roller chain drive (**Page 23**).
- Check/replace motor brushes (**Page 23**).
- Check/replace drive belt (**Page 28**).
- Check/clean feed rollers (**Page 24**).

Cleaning

Cleaning the Model G0505 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Knife Sharpening

Knife sharpness is one of the most important factors in getting good results with your planer. Knives can last a long time if care is taken in checking the condition of the workpiece before putting into the machine. The biggest problem for the knives comes from stock with nails, pebbles, or other hard embedded objects. These items will nick or chip the knives, causing permanent damage. Another wear factor is sand, grit, or other debris on the workpiece surface. At the speed the cutterhead is rotating, this type of surface contamination can have a very abrasive affect on the knives.

You can use machines such as the Model G2790 Universal Grinder (refer to **Page 21**) to sharpen the knives yourself, or you can use a professional sharpening service that has the equipment to ensure that the knife cutting geometry is ground correctly.

Your planer is shipped with knives that have a grind angle of 40°, which is a setting that should suit most general planing needs.

Always grind the knives as a set so they are matched in weight. Unequal material removal can result in an unbalanced cutterhead that can affect not only planing quality, but, ultimately, the life of the cutterhead bearings.

The optimal grinding process is a compromise between cutting ability (the smaller the angle, the better the cutting action) and edge life (the larger the angle, the more the edge is supported, and thus, the longer it will last).

To avoid downtime, we recommend having an extra set of knives on hand (Model H5038 Replacement Knives in the Grizzly catalog or website).

Note: Refer to **Adjusting Knives** on **Page 27** for detailed instructions on removing the knives.



Lubrication

There are two primary assemblies that require lubrication—the cutterhead elevation leadscrews and the feed roller chain drive. The bearings of the motor and cutterhead are factory lubricated and sealed, and require no other attention unless they need to be replaced.

Tools Needed	Qty
Phillips Screwdriver	1
Hex Wrench 5mm.....	1

To lubricate the planer:

1. DISCONNECT PLANER FROM POWER!
2. Remove the elevation crank, the top cover, both side panels, and the inner cover, as shown in **Figure 25**.

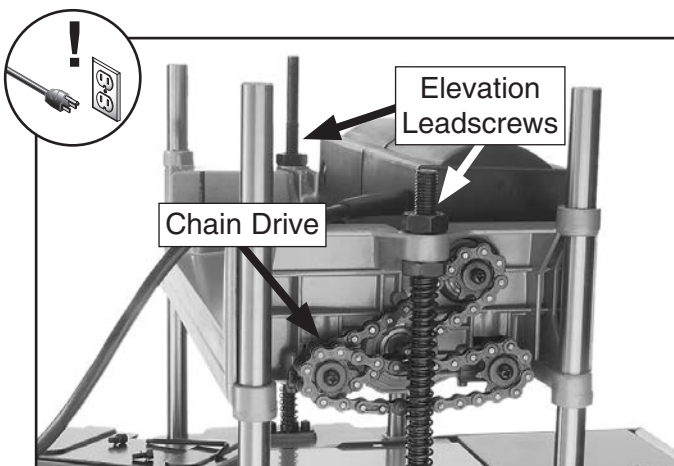


Figure 25. Elevation leadscrews and chain drive exposed for lubrication.

3. Vacuum chips and dust from the leadscrews, chain drive, and the surrounding areas, use a brush and mineral spirits to remove any built-up grime, then use clean shop rags to dry the parts.
4. Brush a light coat of general purpose grease onto both leadscrews.
5. Spray a moderate amount of chain oil onto the chain drive and the cogs, then wipe off the excess with a clean rag.
6. Re-assemble the sides and top cover, then move the cutterhead up and down to distribute the lubricant on the leadscrews.

Model G0505 (Mfg. since 4/04)



Motor Brushes

The motor is equipped with two long-life carbon brushes. The brush life is affected by motor loads and usage. If either brush is worn down to ¼" (6mm) or less, replace both brushes as a set.

Tools Needed	Qty
Standard Screwdriver	1

To check/replace the motor brushes:

1. DISCONNECT PLANER FROM POWER!
2. Unscrew the plastic cover, and remove the front motor brush assembly, as shown in **Figure 26**.

Note: As you remove the brush assembly, make note of the orientation of the carbon tip so that, if found acceptable, you can re-install it the same way.

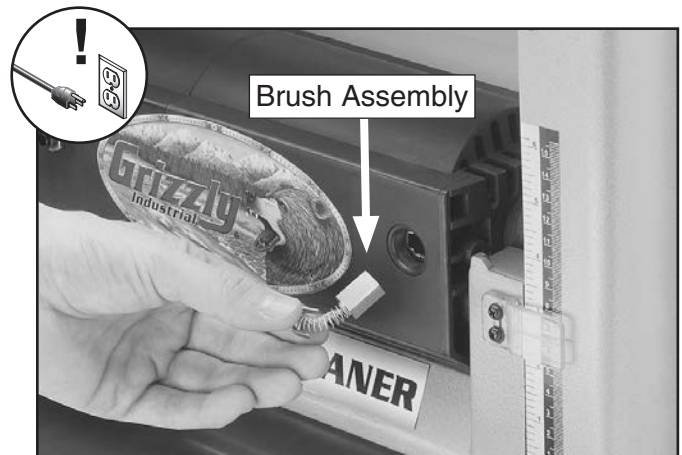


Figure 26. Removing the front motor brush assembly.

3. Measure the length of the carbon tip.
 - If the carbon tip is worn down to ¼" (6mm) or less, replace both brush assemblies with new ones.
4. Repeat **Steps 2–3** with the motor brush found on the right, rear of the motor.
5. After inserting the brush assemblies back into the motor, re-install the plastic caps to hold them in place.

Feed Rollers

The feed rollers rotate in bushing blocks that are spring loaded, as shown in **Figure 27**. The feed rollers ride up on the board while the springs maintain downward pressure. If chips or sawdust build up between the bracket and bushing block, the amount the roller can lift will be reduced and may prevent the workpiece from passing through the planer.

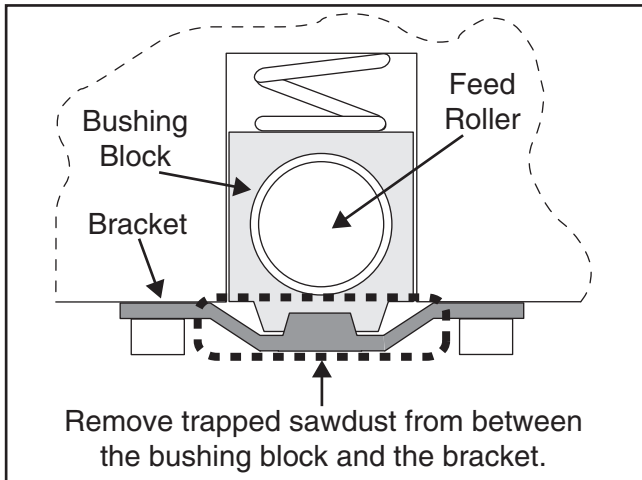


Figure 27. Location of potentially trapped sawdust.

Tools Needed	Qty
Hex Wrench 5mm.....	1
Phillips Screwdriver	1
Wood Block 4x4.....	1

To removed trapped sawdust from the feed rollers:

1. DISCONNECT PLANER FROM POWER!
2. Remove the elevation crank, top cover, and both side panels from the machine, then re-install the crank for use in the next steps.
3. Place the wood block under one of the feed rollers, but not under the cutterhead.
4. Use the elevation crank to lower the cutterhead until the roller bushing block on either side lifts up from the bracket.
5. Vacuum any trapped material from between the bushing block and the bracket, and from around the spring above the bushing block.
6. Raise the cutterhead and remove the wood block.
7. Repeat **Steps 3–6** for the other feed roller.
8. Remove the crank and replace the side panels, top cover, then re-install the crank.



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.	<ol style="list-style-type: none"> 1. Switch disabling key removed. 2. Power supply switched OFF or at fault. 3. Plug/receptacle at fault/wired wrong. 4. Wall circuit breaker tripped. 5. Wiring open/has high resistance. 6. Motor brushes at fault. 7. Motor ON/OFF switch at fault. 8. Motor at fault. 	<ol style="list-style-type: none"> 1. Install switch disabling key. 2. Ensure power supply is on/has correct voltage. 3. Test for good contacts; correct the wiring. 4. Ensure circuit size is correct/replace weak breaker. 5. Check/fix broken, disconnected, or corroded wires. 6. Remove/replace brushes (Page 23). 7. Replace switch. 8. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Workpiece material not suitable for machine. 2. Belt slipping. 3. Plug/receptacle at fault. 4. Motor brushes at fault. 5. Pulley slipping on shaft. 6. Motor bearings at fault. 7. Motor overheated. 8. Motor at fault. 	<ol style="list-style-type: none"> 1. Only plane natural wood; ensure moisture is below 20%. 2. Replace belt (Page 28). 3. Test for good contacts/correct wiring. 4. Remove/replace brushes (Page 23). 5. Replace loose pulley/shaft. 6. Test/repair/replace. 7. Clean motor, let cool, and reduce workload. 8. Test/repair/replace.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Knives at fault. 3. Belt worn or damaged. 4. Pulley loose. 5. Incorrectly mounted to workbench. 6. Motor mount loose/broken. 7. Motor bearings at fault. 8. Chip deflector or dust hood loose or damaged. 	<ol style="list-style-type: none"> 1. Inspect/replace damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Resharpen/replace knives; set knife alignment/height correctly. 3. Inspect/replace belt. 4. Realign/replace shaft, pulley, setscrew, and key. 5. Adjust feet, shim, or tighten mounting hardware. 6. Tighten/replace. 7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 8. Properly re-install/replace.



Planer Operation

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge at the end of the workpiece) <i>A small amount of snipe is inevitable.</i>	<ol style="list-style-type: none"> 1. Outfeed extension wing slopes down or not level with table. 2. Workpiece not supported as it leaves the planer. 	<ol style="list-style-type: none"> 1. Adjust the outfeed extension wing (Page 29). 2. Get assistance or use support accessories to support the workpiece.
Workpiece stops/slow in the middle of the cut.	<ol style="list-style-type: none"> 1. Depth of cut too great. 2. Knives dull or damaged. 3. Pitch or glue build-up on planer components. 	<ol style="list-style-type: none"> 1. Reduce the depth of cut. 2. Check/sharpen/replace knives (Page 27). 3. Clean internal components with a pitch/resin dissolving solvent.
Consistent chipped pattern on workpiece.	<ol style="list-style-type: none"> 1. Knots or conflicting grain direction in workpiece. 2. Nicked or chipped knife. 3. Depth of cut too great. 	<ol style="list-style-type: none"> 1. Inspect workpiece for knots and grain direction (Page 16); only use clean stock. 2. Replace knife (Page 27). 3. Reduce the depth of cut.
Inconsistent chipped pattern on workpiece.	<ol style="list-style-type: none"> 1. Chips are not being expelled from around the cutterhead and are being pushed into workpiece surface by outfeed roller. 	<ol style="list-style-type: none"> 1. Reduce depth of cut; re-adjust chip deflector; use a dust collection system.
Fuzzy grain in workpiece.	<ol style="list-style-type: none"> 1. Workpiece moisture too great. 2. Dull knives. 	<ol style="list-style-type: none"> 1. Check moisture content; allow to dry/season if over 20%. 2. Check/sharpen/replace knives (Page 27).
Long lines or ridges along the workpiece length.	<ol style="list-style-type: none"> 1. Nicked or chipped knife. 	<ol style="list-style-type: none"> 1. Replace knife (Page 27).
Uneven knife marks, wavy pattern, or chatter marks across face of workpiece.	<ol style="list-style-type: none"> 1. Knives not properly installed. 2. Worn cutterhead bearings. 	<ol style="list-style-type: none"> 1. Properly adjust height of knives (Page 27). 2. Check/replace cutterhead bearings.
Glossy workpiece surface.	<ol style="list-style-type: none"> 1. Dull knives. 2. Depth of cut too shallow. 	<ol style="list-style-type: none"> 1. Check/sharpen/replace knives (Page 27). 2. Slightly increase depth of cut.



Adjusting Knives

The Model G0505 Planer is equipped with a two-knife cutterhead. The knives are locked in position by a knife gib with seven bolts that are angled to put pressure on the knives when they are tightened. Adjusting the height of the knives is a balancing process between the springs underneath the blades that are pushing up and the knife gauge that is pushing down.

Note: *The knives have two cutting edges and can be reversed to double their usage.*

⚠ CAUTION

The knives of this planer are extremely sharp and can quickly cause a serious injury to your hands or fingers. Always wear heavy leather gloves when handling these knives to reduce the risk of cutting injuries.

Tools Needed	Qty
Wrench 8mm (included)	1

Removing Knives

1. DISCONNECT PLANER FROM POWER!
2. Lower the cutterhead as far as it will go, then remove the chip deflector or dust hood.
3. Loosen the seven gib bolts for the first knife.

Note: *To loosen the gib bolts, turn them clockwise—the opposite of the normal direction (see **Figure 28**).*

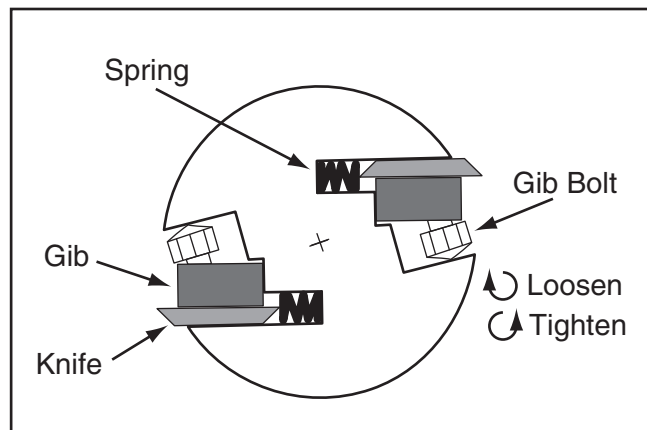


Figure 28. Cutterhead components.

4. With great care, slide the knife out of the cutterhead.

Note: *Make sure the gibs and springs do not fall out of the cutterhead by re-tightening the gib bolts.*

5. Repeat **Steps 3–4** to remove the second knife.

Tools Needed	Qty
Wrench 8mm (included)	1
Knife Gauge (included).....	1

Installing & Adjusting Knives

1. Complete all of the steps in the previous procedure to remove the knives.
2. Rotate the cutterhead so that the first knife slot is facing directly up so that the springs will not fall out, then remove the gib.
3. Use a shop rag and mineral spirits to clean any debris or grime from the knife slot, gib, and knives, then apply a thin coat of light oil to all these parts.
4. Make sure the springs are properly seated, then replace the gib with the bolts oriented as shown in **Figure 29**.

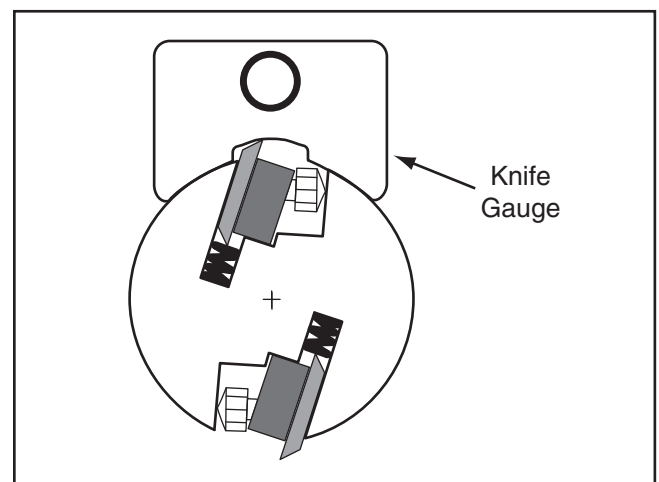


Figure 29. Side view of cutterhead and knife gauge.

5. Position the knife so the beveled edge will be against the cutterhead, then insert it into the space between the gib and the cutterhead.



- Place the knife gauge over the knife, as shown in **Figures 29–30**.

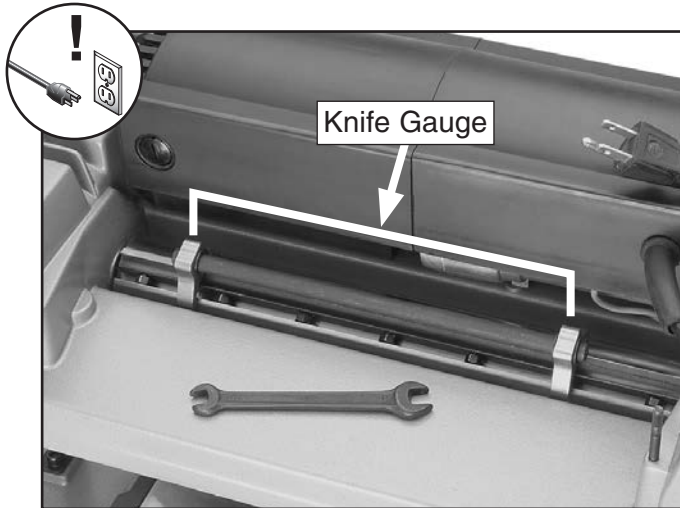


Figure 30. Knife gauge positioned on top of the cutterhead.

- Apply downward pressure on the gauge against the upward pressure of the springs—this will correctly set the knife height at 0.059" (1.5mm) above the cutterhead.
- While maintaining pressure on the knife gauge, tighten (counterclockwise) the gib bolts just enough to hold the knife in place. Start with the middle bolt and work out to the ends, as shown in **Figure 31**.

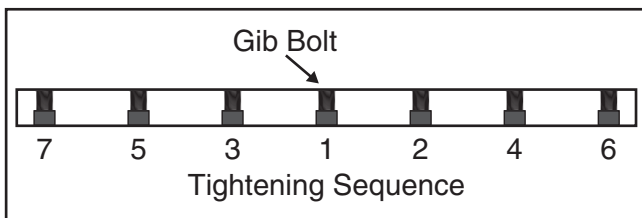


Figure 31. Gib bolt tightening sequence.

- Repeat **Step 8** and tighten the bolts a little more.
- Repeat **Step 8** again, but fully tighten the gib bolts this time.
- Check the knife height again with the gauge. The knife tip should be just touching the arc of the gauge, as shown in **Figure 29** on the previous page.

—If the knife is not set at the correct height, fully loosen the gib bolts (clockwise), then repeat **Steps 6-11** until the knife is set at the correct height.

- Repeat **Steps 2–11** to set the correct height of the second knife.
- Remove all the tools used in this procedure, then re-install the chip deflector or dust hood.

Replacing Drive Belt

The drive belt transfers power from the motor to the cutterhead, and is located on the right side of the planer. The belt is very durable, but eventually it may require replacement.

Tools Needed	Qty
Hex Wrench 5mm.....	1
Phillips Screwdriver	1

To replace the drive belt:

- DISCONNECT PLANER FROM POWER!
- Remove the elevation crank, then remove the top cover, which will allow the side panel to be removed.
- Remove the two Phillips head screws from the front and back of the right-hand side panel, then lift the panel up and away from the machine to expose the drive belt and pulleys, as shown in **Figure 32**.

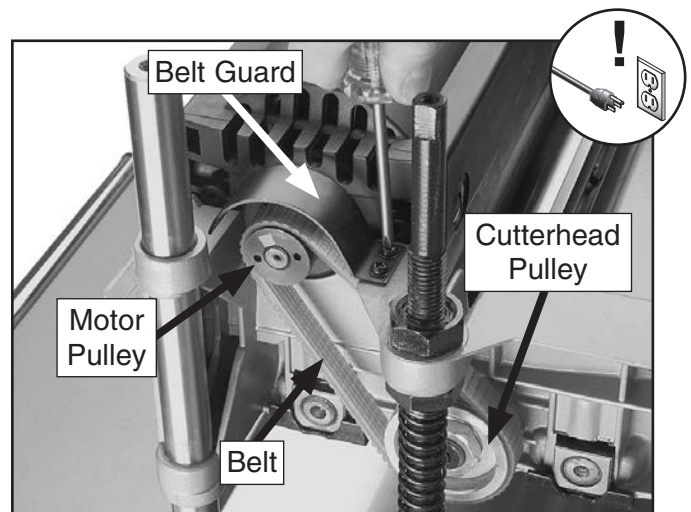


Figure 32. Drive belt and pulleys.



4. Remove the belt guard shown in **Figure 32** by removing the two Phillips head screws that secure it.
5. Roll the old belt off the pulleys.
6. Loop the new belt completely around the motor pulley but only halfway on the cutterhead pulley.

Note: Make sure the ribs of the belt are seated in the pulley indents in this process.

7. While applying pressure to the belt with one hand, slowly rotate the motor pulley.
8. When the belt is fully on both pulleys, rotate them several times to make sure the belt ribs are properly seated in the pulley indents.

—If the belt ribs are not properly seated, roll the belt off the pulleys and repeat **Steps 6–8** until they are.

9. Replace the side panel, secure the top cover, and re-install the elevation crank.

2. Fold both extension wings down, then place a straightedge across the wings and table, as shown in **Figure 33**.

—If the extension wings are level with the table, no further action is required.

—If the extension wings are not level with the table, note which side of the wing is not level, whether it is higher or lower than the table, and by how much.

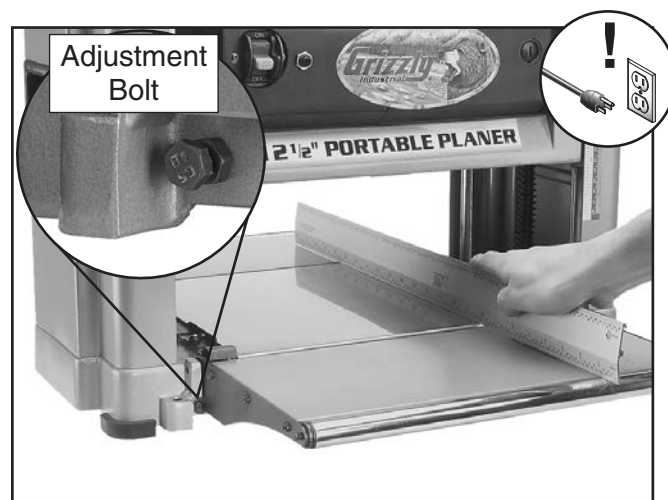


Figure 33. Aligning extension wings.

Adjusting Extension Wing

Your planer is equipped with infeed and outfeed extension wings that can fold up for machine mobility. These wings must be level from side-to-side with the main table to ensure planing accuracy and to help reduce the amount of end snipe.

To check/adjust the extension wings:

1. DISCONNECT PLANER FROM POWER!

3. Loosen the jam nuts on the wing adjustment bolts on either side of the wing (see the inset of **Figure 33**), then loosen or tighten the adjustment bolts for the amount needed.

Note: Loosening an adjustment bolt will raise that side of the wing, and tightening it will lower that side.

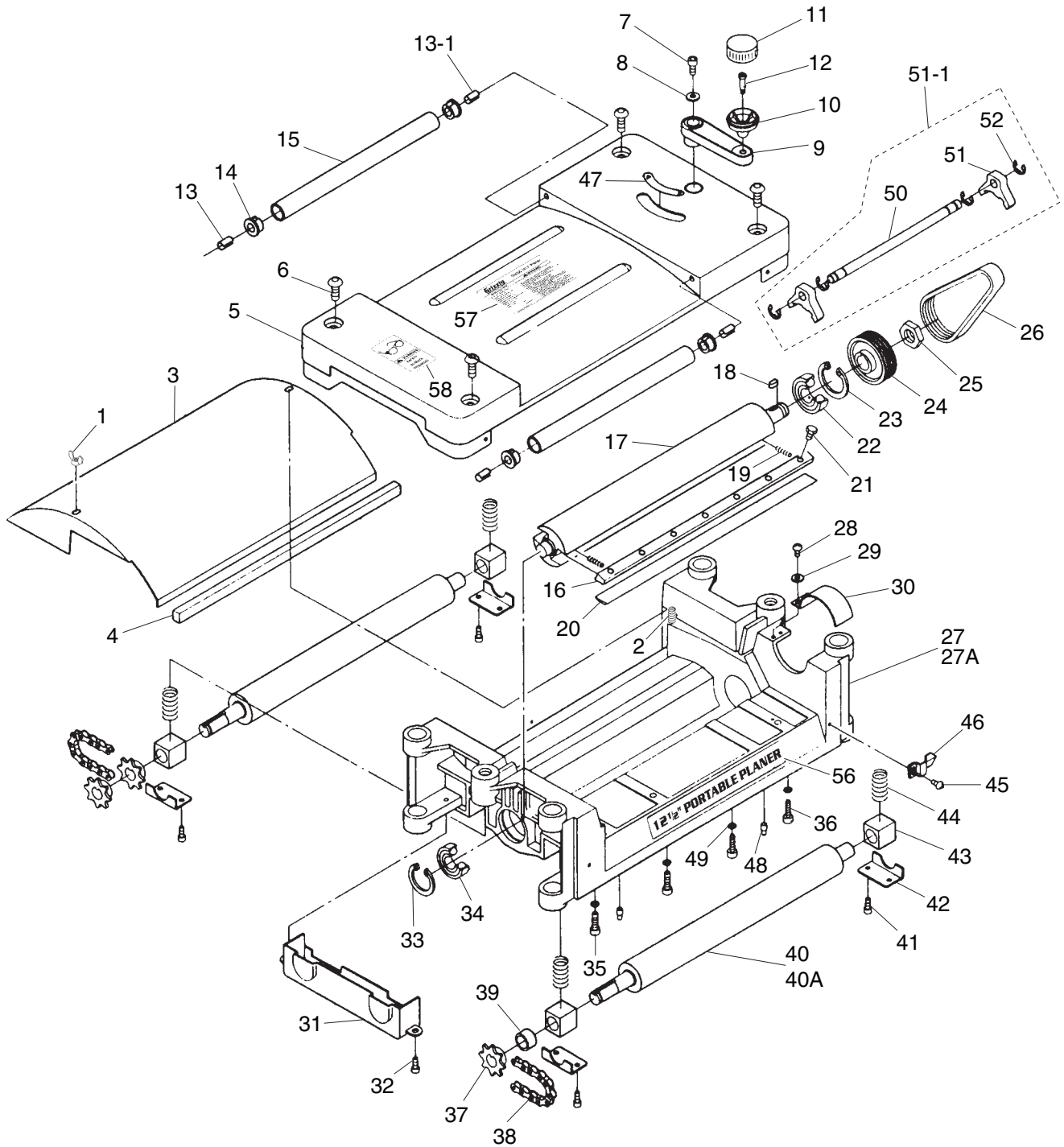
4. Lower the wing and recheck the alignment.

—If the wing is not level with the main table, repeat **Steps 3–4** until it is.
5. When the wings are properly aligned, re-tighten the jam nuts that were loosened.



SECTION 8: PARTS

Head Breakdown



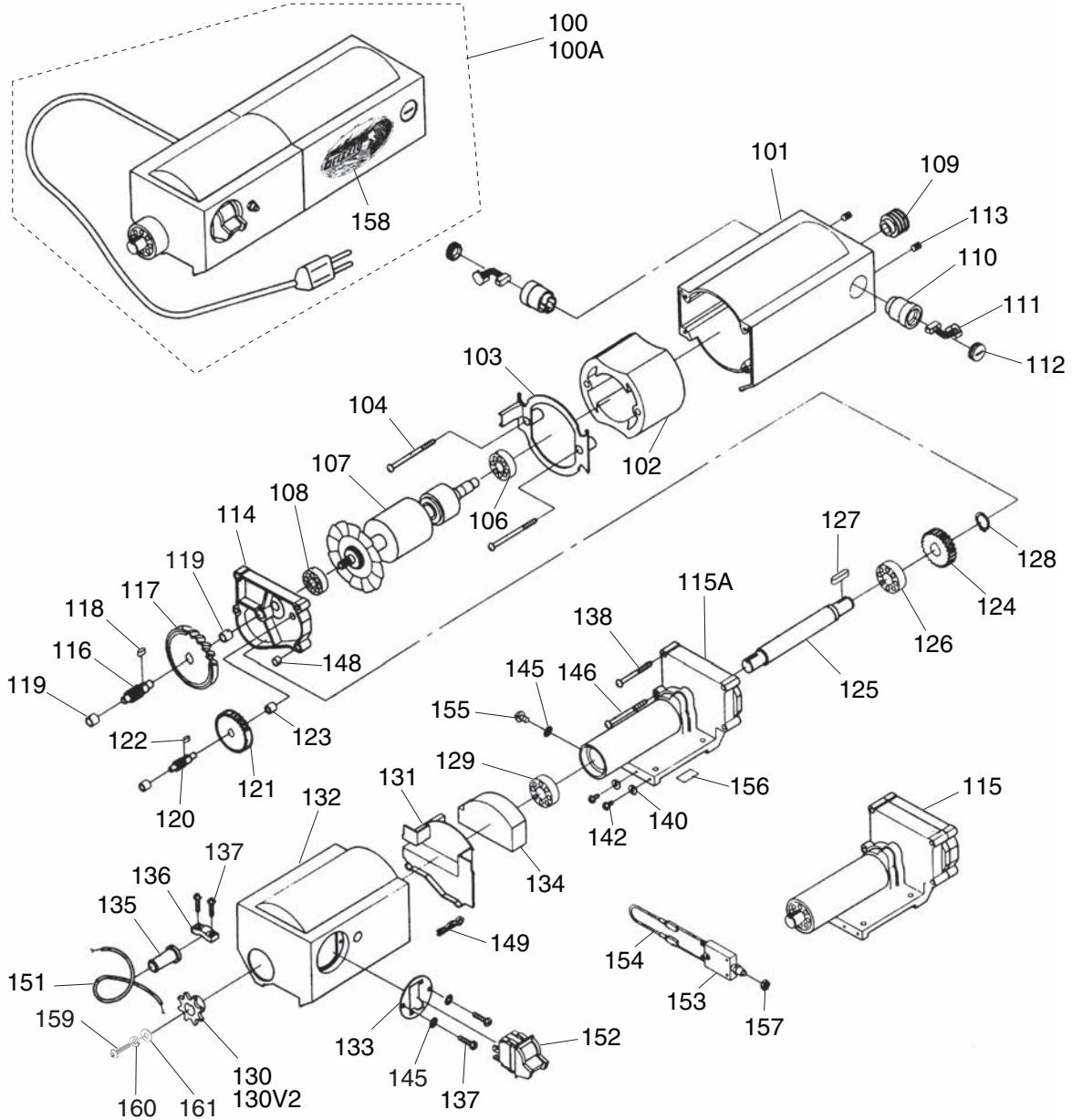
Head Parts List

REF	PART #	DESCRIPTION
1	P0505001	WING NUT M5-.8
2	P0505002	THREADED STUD M5-.8 X 50
3	P0505003	CHIP DEFLECTOR
4	P0505004	SPONGE PIECE
5	P0505005	TOP COVER
6	P0505006	BUTTON HD CAP SCR M8-1.25 X 16
7	P0505007	CAP SCREW M6-1 X 16
8	P0505008	LOCK WASHER 6MM
9	P0505009	ELEVATION CRANK
10	P0505010	HANDLE KNOB BASE
11	P0505011	HANDLE KNOB
12	P0505012	HANDLE SHAFT
13	P0505013	ROLL PIN 6 X 20
13-1	P0505013-1	FLAT HEAD DOWEL PIN 6 X 20
14	P0505014	BUSHING
15	P0505015	ROLLER
16	P0505016	GIB
17	P0505017	CUTTERHEAD
18	P0505018	KEY 5 X 5 X 10
19	P0505019	SPRING D3
20	P0505020	KNIVES DOUBLE SIDED (2PC SET)
21	P0505021	GIB LOCK SCREW M6-1.0
22	P0505022	BALL BEARING 6203ZZ
23	P0505023	INT RETAINING RING 40MM
24	P0505024	CUTTERHEAD PULLEY
25	P0505025	HEX NUT M16-1.5
26	P0505026	RIBBED V-BELT 6 RIB/14" OD
27	P0505027	UPPER FRAME V1.12.02
27A	P0505027A	UPPER FRAME V2.04.04
28	P0505028	PHLP HD SCR M4-.7 X 8

REF	PART #	DESCRIPTION
29	P0505029	FLAT WASHER 4MM
30	P0505030	PULLEY GUARD
31	P0505031	CHAIN GUARD
32	P0505032	PHLP HD SCR M5-.8 x 8
33	P0505033	INT RETAINING RING 35MM
34	P0505034	BALL BEARING 6202ZZ
35	P0505035	CAP SCREW M6-1 X 20
36	P0505036	TAP SCREW M6 X 20
37	P0505037	CHAIN SPROCKET V2.07.04
38	P0505038	CHAIN
39	P0505039	SPACING COLLAR
40	P0505040	FEED ROLLER NO KEYWAY V2.07.04
40A	P0505040A	FEED ROLLER W/KEYWAY V1.12.02
41	P0505041	PHLP HD SCR M5-.8 X 10
42	P0505042	ROLLER BRACKET
43	P0505043	ROLLER BUSHING
44	P0505044	BRACKET SPRING D10
45	P0505045	PHLP HD SCR M4-.7 X 8
46	P0505046	INDICATOR
47	P0505047	DIRECTION LABEL
48	P0505048	FRAME PIN
49	P0505049	LOCK WASHER 6MM
50	P0505050	KNIFE GAUGE ROD
51	P0505051	KNIFE GAUGE
51-1	P0505051-1	COMPLETE KNIFE GAUGE ASSY
52	P0505052	E-CLIP 9MM
56	P0505056	12-1/2" PLANER LABEL
57	P0505057	MACHINE ID LABEL
58	P0505058	SAFETY GLASSES LABEL



Motor Assembly Breakdown



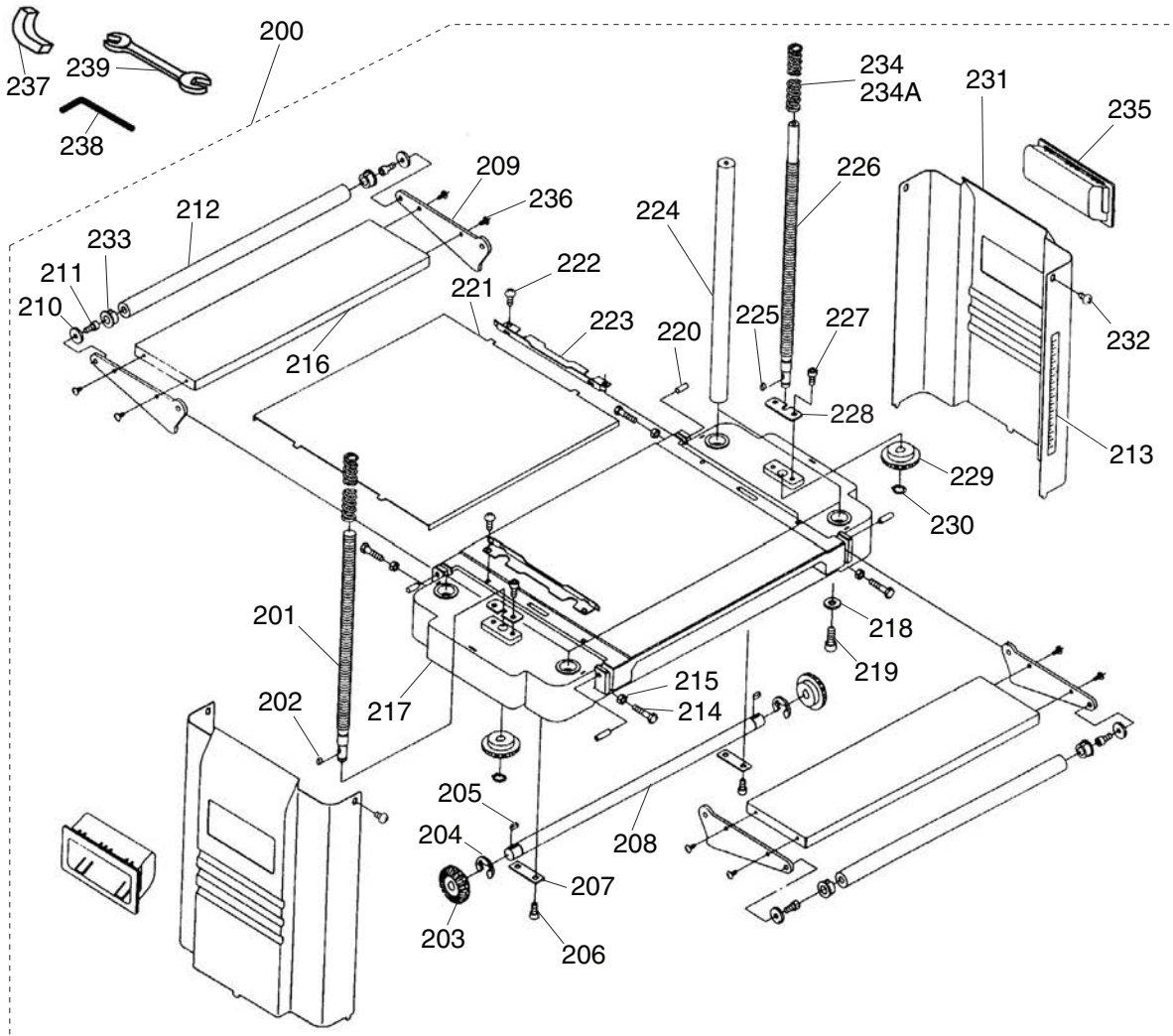
Motor Assembly Parts List

REF	PART #	DESCRIPTION
100	P0505100	MOTOR ASSY W/KEYWAY V1.12.02
100A	P0505100A	MOTOR ASSY NO KEYWAY V2.07.04
101	P0505101	MOTOR CASING
102	P0505102	STATOR ASSEMBLY
103	P0505103	PLATE
104	P0505104	TAP SCREW #10 X 2 3/4
106	P0505106	BALL BEARING 6201ZZ
107	P0505107	ROTOR ASSEMBLY
108	P0505108	BALL BEARING 6200ZZ
109	P0505109	MOTOR PULLEY
110	P0505110	BRUSH HOUSING
111	P0505111	CARBON BRUSH ASSY
112	P0505112	THREADED BRUSH COVER
113	P0505113	SET SCREW M5-.8 X 10
114	P0505114	GEAR BOX COVER
115	P0505115	GEAR BOX ASSEMBLY NO KEYWAY V1.12.02
115A	P0505115A	GEAR BOX HOUSING V2.07.04
116	P0505116	GEAR SHAFT
117	P0505117	GEAR 70T
118	P0505118	KEY 4 X 4 X 8
119	P0505119	BRONZE BUSHING
120	P0505120	GEAR SHAFT
121	P0505121	GEAR 46T
122	P0505122	KEY 3 X 3 X 7
123	P0505123	BUSHING
124	P0505124	GEAR 33T
125	P0505125	SHAFT
126	P0505126	BALL BEARING 6202ZZ
127	P0505127	KEY 4 X 4 X 10

REF	PART #	DESCRIPTION
128	P0505128	EXT RETAINING RING 15MM
129	P0505129	BALL BEARING 6002ZZ
130	P0505130	SPROCKET W/ KEYWAY V1
130V2	P0505130V2	SPROCKET NO KEYWAY V2.07.04
131	P0505131	SPACING PLATE
132	P0505132	GEAR BOX HOUSING
133	P0505133	SWITCH GUARD (BLACK)
134	P0505134	DUST GUARD PLUG
135	P0505135	STRAIN RELIEF
136	P0505136	ELECTRICAL WIRE CLAMP
137	P0505137	TAP SCREW M4 X 16
138	P0505138	TAP SCREW #10 X 2
140	P0505140	FLAT WASHER 4MM
142	P0505142	PHLP HD SCR M4-.7 X 8
145	P0505145	EXT TOOTH WASHER 5MM
146	P0505146	TAP SCREW #10 X 2 5/16
148	P0505148	POSITIONING PIN
149	P0505149	HAIRPIN COTTER PIN
151	P0505151	POWER WIRES
152	P0505152	TOGGLE SAFETY SWITCH
153	P0505153	TEMPERATURE SWITCH
154	P0505154	TEMPERATURE SWITCH WIRE
155	P0505155	PHLP HD SCR M5-.8 x 8
156	P0505156	MOTOR LABEL
157	P0505157	HEX NUT M10-1.5
158	P0505158	GRIZZLY LABEL (COLOR)
159	P0505159	PHLP HD SCR M6-1 X 14
160	P0505160	LOCK WASHER 6MM
161	P0505161	FLAT WASHER 6MM



Base Breakdown



REF	PART #	DESCRIPTION
200	P0505200	BASE ASSEMBLY
201	P0505201	LEFT LEADSCREW M8-1.25 X 60
202	P0505202	KEY 4 X 4 X 8
203	P0505203	BEVEL GEAR
204	P0505204	E-CLIP 8MM
205	P0505205	KEY 4 X 4 X 8
206	P0505206	CAP SCREW M6-1 X 10
207	P0505207	FIXING PIECE
208	P0505208	TRANSMISSION SHAFT
209	P0505209	EXTENSION WING BRACKET
210	P0505210	FLAT WASHER 6MM
211	P0505211	CAP SCREW M6-1 X 10
212	P0505212	EXTENSION WING ROLLER 14-5/16"L
213	P0505213	DEPTH SCALE LABEL
214	P0505214	HEX BOLT M6-1 X 25
215	P0505215	HEX NUT M6-1
216	P0505216	EXTENSION WING
217	P0505217	BASE
218	P0505218	FLAT WASHER 5/16
219	P0505219	CAP SCREW M8-1.25 X 20
220	P0505220	ROLL PIN 6 X 20

REF	PART #	DESCRIPTION
221	P0505221	MAIN TABLE
222	P0505222	PHLP HD SCR M5-.8 x 8
223	P0505223	GUIDE PLATE
224	P0505224	COLUMN
225	P0505225	KEY 4 X 4 X 8
226	P0505226	RIGHT LEADSCREW M10-1.5 X 60
227	P0505227	CAP SCREW M6-1 X 10
228	P0505228	FIXING PIECE
229	P0505229	BEVEL GEAR
230	P0505230	EXT RETAINING RING 10MM
231	P0505231	SIDE PANEL
232	P0505232	PHLP HD SCR M5-.8 x 6
233	P0505233	ROLLER BUSHING
234	P0505234	LEADSCREW SPRING V1.12.02
234A	P0505234A	LEADSCREW SPRING V2.04.04
235	P0505235	CARRYING HANDLE
236	P0505236	PHLP HD SCR M4-.7 X 8
237	P0505237	RUBBER FOOT
238	P0505238	HEX WRENCH 5MM
239	P0505239	DOUBLE-END WRENCH 8 X 8MM





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?

<input type="checkbox"/> Advertisement	<input type="checkbox"/> Friend	<input type="checkbox"/> Catalog
<input type="checkbox"/> Card Deck	<input type="checkbox"/> Website	<input type="checkbox"/> Other:

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

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

3. What is your annual household income?

<input type="checkbox"/> \$20,000-\$29,000	<input type="checkbox"/> \$30,000-\$39,000	<input type="checkbox"/> \$40,000-\$49,000
<input type="checkbox"/> \$50,000-\$59,000	<input type="checkbox"/> \$60,000-\$69,000	<input type="checkbox"/> \$70,000+

4. What is your age group?

<input type="checkbox"/> 20-29	<input type="checkbox"/> 30-39	<input type="checkbox"/> 40-49
<input type="checkbox"/> 50-59	<input type="checkbox"/> 60-69	<input type="checkbox"/> 70+

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

<input type="checkbox"/> 0-2 Years	<input type="checkbox"/> 2-8 Years	<input type="checkbox"/> 8-20 Years	<input type="checkbox"/> 20+ Years
------------------------------------	------------------------------------	-------------------------------------	------------------------------------

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

<input type="checkbox"/> 0-2	<input type="checkbox"/> 3-5	<input type="checkbox"/> 6-9	<input type="checkbox"/> 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.

grizzly.com[®]
TOOL WEBSITE

Buy Direct and Save with Grizzly[®] – Trusted, Proven and a Great Value!
~Since 1983~

*Visit Our Website Today For
Current Specials!*

**ORDER
24 HOURS A DAY!
1-800-523-4777**

