

MODEL G0513/G0514 17" & 19" HEAVY DUTY BANDSAWS OWNER'S MANUAL



COPYRIGHT © AUGUST, 2002 BY GRIZZLY INDUSTRIAL, INC. REVISED NOVEMBER, 2010 (BL) 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 8/02) #DS4607 PRINTED IN TAIWAN



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

SECTION 5: ACCESSORIES	36
SECTION 6: MAINTENANCE Schedule Cleaning Unpainted Cast Iron Wheel Brush Lubrication	38 38 38 38
SECTION 7: SERVICE Troubleshooting Checking V-Belt Tensioning V-Belt Replacing V-Belt Adjusting Tension Lever Adjusting Wheel Brush Blade Lead Aligning Wheels Adjusting Lower Wheel Adjusting Guide Post Travel	40 44 45 46 46 47 48 50
SECTION 8: WIRING	53
SECTION 9: PARTS	55 57 58 59 61
WARRANTY AND RETURNS	64

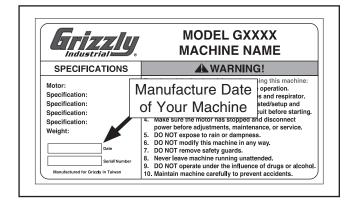
INTRODUCTION

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

The bandsaw is a versatile cuting tool that can be used to perform a wide variety of cuts in wood workpieces.

The bandsaw features a flexible steel band with teeth on one edge that fits around two wheels, which rotate during operation to drive the blade.

When a workpiece is pushed against the moving blade, the downward force of the blade teeth scrape across the workpiece and, in effect, cut it. Blade guides on both sides of the cutting area keep the blade from flexing or being pushed off the wheels from the horizontal pressure of the workpiece while cutting.

Identification

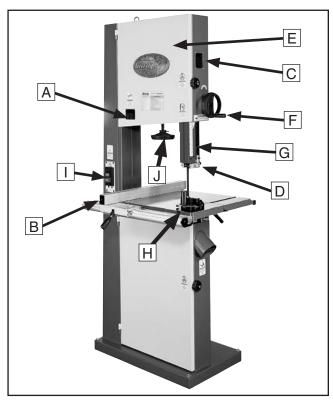


Figure 1. Bandsaw front view.

- A. Tension Indicator Window
- B. Rip Fence
- C. Blade Tracking Window
- D. Ball Bearing Roller Guides
- E. Hinged Wheel Cover
- F. Guide Post Handwheel
- G. Cutting Height Scale
- H. Miter Gauge
- I. On/Off Switch
- J. Blade Tension Handwheel



AWARNING

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

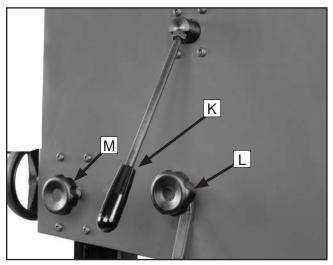


Figure 2. Back, top-side of the bandsaw.

- K. Quick Release Blade Tension Lever
- L. Blade Tracking Knob
- M. Guide Post Lock Knob

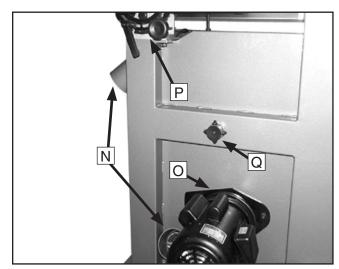


Figure 3. Back, lower-side of the bandsaw.

- N. (2) 4" Dust Ports
- O. 2 HP Motor
- P. Table Tilt Controls
- Q. Lower Blade Tracking Adjustment

Blade Tension Scale

The upper wheel housing contains the blade tension scale as shown in **Figure 4**. The scale is visible through a clear window positioned on the lower left side of the hinged wheel cover. The scale is used to aid in correctly tensioning the saw blade.

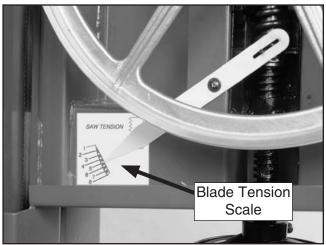


Figure 4. The blade tension scale is located behind the upper wheel.

Tension Lever Adjustment Screw

The tension lever adjustment screw (**Figure 5**) allows the user to adjust the tension lever for use with different blade sizes, when the tension lever is tightened.

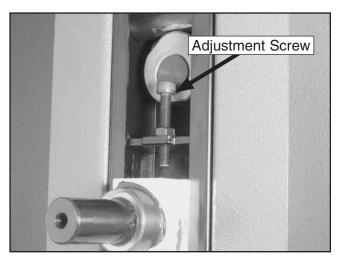


Figure 5. The tension lever adjustment screw is located above the upper wheel.

Wheel Brush

The lower wheel compartment contains the wheel brush as shown in **Figure 6**. This brush is designed to sweep sawdust from the wheel tire as the bandsaw is operating.

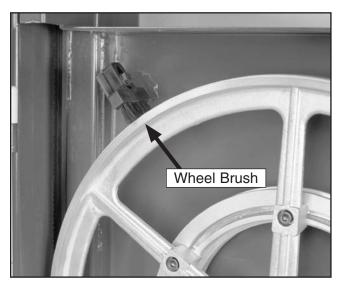


Figure 6. The wheel brush is located behind the lower hinged wheel cover.



MACHINE DATA SHEET

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

MODEL G0513 17" BANDSAW - 2 HP

Product Dimensions:	
Weight	
Length/Width/Height	
Foot Print (Length/Width)	27 x 17-3/4 in.
Shipping Dimensions:	
Type	
Content	
Weight	
Length/Width/Height	20 x 30 x 81 III.
Electrical:	
Power Requirement	
Minimum Circuit Size	
SwitchSwitch Voltage	
Cord Length	
Cord Gauge	
Plug Included	5 5
Recommended Plug/Outlet Type	
Motors:	
Main	
Man	
-	TEEO O
Type	•
Horsepower	2 HP
Horsepower Voltage	2 HP 110/220V
HorsepowerVoltagePrewired	2 HP 110/220V 220V
Horsepower Voltage	2 HP 110/220V 220V Single
HorsepowerVoltagePrewiredPhase	2 HP
Horsepower Voltage Prewired Phase Amps	
Horsepower Voltage Prewired Phase Amps Speed	
Horsepower Voltage Prewired Phase Amps Speed Cycle Number Of Speeds Power Transfer	
Horsepower Voltage Prewired Phase Amps Speed Cycle Number Of Speeds	
Horsepower Voltage Prewired Phase Amps Speed Cycle Number Of Speeds Power Transfer	
Horsepower Voltage Prewired Phase Amps Speed Cycle Number Of Speeds Power Transfer Bearings	
Horsepower. Voltage Prewired Phase Amps Speed Cycle Number Of Speeds Power Transfer Bearings Main Specifications:	
Horsepower Voltage Prewired Phase Amps Speed Cycle Number Of Speeds Power Transfer Bearings Main Specifications: Operation Blade Speeds	
Horsepower Voltage	
Horsepower. Voltage	2 HP

Blade Information Table Information Table Thickness.......1-1/2 in. **Fence Information** Locks in Rear No Adjustable for Blade Lead......Yes Construction Table Construction......Precision Ground Cast Iron Rip Fence Deluxe Extruded Aluminum Other Related Information Wheel Diameter 16-3/4 in. Other Specifications: ISO FactoryISO 9001 Country Of Origin Taiwan Serial Number LocationLabel on Top Cover

Features:

Hinged Wheel Covers

European Style Roller Disc Blade Guides with Full Enclosure Protection and Ball Bearing Design Quick Change Blade Release/Tensioner
Magnifying Window Over Fence Scale
Micro Adjusting Geared Table
Height Scale Measurement
Blade Tracking Window
Two 4" Dust Ports



MACHINE DATA SHEET

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

MODEL G0514 19" HEAVY-DUTY BANDSAW - 2 HP

Product Dimensions:	
Weight	
Length/Width/Height	
Foot Print (Length/Width)	29-1/2 x 17-3/4 ln.
Shipping Dimensions:	
Type	
Content	
WeightLength/Width/Height	
Electrical:	
Minimum Circuit Size	30 amps @ 110V 15 amps @ 220V
Switch	· · · · · · · · · · · · · · · · · · ·
Switch Voltage	
Cord Length	6 ft.
Cord Gauge	9 9
Plug Included	
Recommended Plug/Outlet Type	L5-30 @110V, 6-15@220V
Motors:	
Main	
Туре	TEFC Capacitor Start Induction
Horsepower	2 HP
Voltage	110/220V
Prewired	
	Single
·	20/10A
·	1725 RPM
,	
'	Belt Drive
	Shielded and Permanently Lubricated
Main Specifications:	
Operation	
•	
Table Tilt	Left 10, Right 45 deg.
Cutting Capacities	
Maximum Cutting Height	12-1/4 in.
	12 in.
Max Capacity Left of Blade	18-1/4 in.

Blade Information

biade information	
Standard Blade Length	143 in.
Blade Width Range	1/8 - 1-1/4 in.
Upper Blade Guides	
Lower Blade Guides	Roller Disc/Ball Bearing
Guide Post Size	,
Guide Post Type	Sq. Tubing, 0.075 in. Wall Thickness
Table Information	
Table Length	
Table Width	19 in.
Table Thickness	1-1/2 in.
Floor to Table Height	37-1/2 in.
Fence Information	
Locks in Front	Yes
Locks in Rear	No
Adjustable for Blade Lead	Yes
Construction	
Table Construction	Precision Ground Cast Iron
Rip Fence	
Base Construction	
Body Construction	
Upper Wheel	
Lower Wheel	•
Tire Material	·
Wheel Cover	•
Paint	
Other Related Information	
Wheel Diameter	18-7/8 in.
Wheel Width	1-1/4 in.
Number of Dust Ports	2
Dust Port Size	4 in.
er Specifications:	
ISO Factory	ISO 9001
Country Of Origin	
Warranty	
Serial Number Location	
Assembly Time	
Assembly Time	45 minutes

Features:

Miter Gauge
Quick Change Blade Release/Tensioner
Blade Tension Indicator
Rack and Pinion Adjustable Upper Guide
Magnifying Window Over Fence Scale
Micro Adjusting Geared Table
Height Scale Measurement
Hinged Wheel Covers

SECTION 1: SAFETY

AWARNING

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, **! DANGER** Indicates an imminently nazardous site WILL result in death or serious injury.

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

ACAUTION

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.

AWARNING 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 ANSIapproved 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.

AWARNING 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.

Additional Safety for Bandsaws

AWARNING

BLADE CONDITION. Do not operate with dull, cracked or badly worn blade. Dull blades require more effort to use and are difficult to control. Inspect blades for cracks and missing teeth before each use.

HAND PLACEMENT. Placing hands or fingers in the blade path greatly increases the probability of serious injury. Always keep hands or fingers out of the blade path when cutting.

GUARDS. Do not operate this bandsaw without the blade guard in place.

BLADE REPLACEMENT SAFETY. Besides disconnecting power when replacing blades, make sure teeth face down toward the table. The force of the cut is always down. Also, make sure the blade is properly tensioned after installing so it will not fly off the wheels.

WORKPIECE HANDLING. Never hold small workpieces with your fingers during a cut. Always support/feed the workpiece with push stick, table support, vise, or some type of clamping fixture.

CUTTING TECHNIQUES. Plan your cuts so you always cut out of the wood. DO NOT back the workpiece away from the blade while the saw is running. If you need to back the work out, turn the bandsaw OFF and wait for the blade to come to a complete stop, and DO NOT twist or put excessive stress on the blade while backing work away.

BLADE SPEED. Allow blade to reach full speed before cutting.

UNATTENDED MACHINE. Machines left unattended while running present multiple hazards, including visitor danger, fire, and self-inflicted damage. Always turn your machine OFF before leaving it.

DO NOT FORCE THE MACHINE. To minimize your risk of personal injury, work at the speed for which the machine or accessory was designed. Always feed stock evenly and smoothly. DO NOT force or twist blade while cutting, especially when sawing small radii.

CUTTING PROPER MATERIAL. This machine is not designed to cut metal or any material except wood. Attempting to cut other materials may exceed the limits of the machine and increase the risk of personal injury.

MAINTENANCE/SERVICE. All inspections, adjustments, and maintenance are to be done with the power OFF and the plug removed from the outlet. Wait for all moving parts to come to a complete stop.

BLADE CONTROL. Do not attempt to stop or slow the blade with your hand or a workpiece. Allow the blade to stop on its own, unless your machine is equipped with a brake.

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.

AWARNING

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

SECTION 2: CIRCUIT REQUIREMENTS

AWARNING

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.



AWARNING

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!

NOTICE

The Model G0513/G0514 is prewired for 220V. If you plan to operate the machine at 110V, the motor must be rewired (see Page 54) and a 110V plug must be installed.

Full Load Amperage Draw

This machine draws the following amps under maximum load:

Amp	Draw	at	220V	(prewired)	10 Amp	วร
Amp	Draw	at	110V.		20 Amp	วร

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	(220V)15 Amps
Minimum Circuit	Size	(110V))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 one of the plugs shown in **Figure 7**.

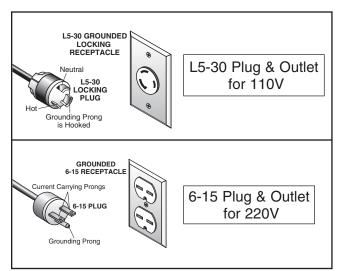


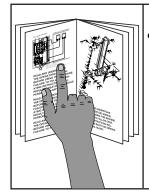
Figure 7. Recommended plug types.

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:

- For 110V, use at least a 12 gauge cord that does not exceed 50 feet in length.
- For 220V, use at least a 14 gauge cord that does not exceed 50 feet in length.
- The extension cord must have a ground wire and plug pin.

SECTION 3: SETUP



AWARNING

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



WARNING

Wear safety glasses during the entire setup process!



WARNING

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

Needed for Setup

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

Des	scription Qty
•	Safety Glasses1
•	Cleaner/Degreaser (Page 16) As Needed
•	Disposable Shop Rags As Needed
•	Forklift, 1000 Lb Capacity 1
•	Chain or Strap w/Hook, 1000 Lb Capacity. 1
•	Additional People1
•	Straightedge 3' 1
•	Dust Collection System 1
•	Dust Hose 4" 1
•	Hose Clamps 4"2

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	(1: (Figures 8-9)	Qty
A.	Bandsaw (not shown)	1
B.	Table	1
C.	Miter Gauge	1
D.	Back Square Tube	
E.	Front Rail	
F.	Fence Assembly	
G.	Guide Post Handwheel	
Har	dware and Tools (not shown):	Qty
•	Eye Bolt M10-1.5 (may be installed)	1
•	Flat Washers 8mm	
	(Table)	4
•	Lock Washers 8mm (Table)	4
•	Hex Bolts M8-1.25 x 16 (Table)	4
•	Hex Bolt M8-1.25 x 90 (Pos. Stop)	1
•	Hex Nuts M8-1.25 (Pos. Stop, Fence)	2
•	Table Pin	1
•	Table Insert	1
•	Cap Screws M6-1 x 16 (Fence)	2
•	Hex Bolts M6-1 x 20 (Fence)	2
•	Fence Handle M8-1.25 x 22 (Fence)	1
•	Lock Washers 6mm (Fence)	
•	Flat Washers 6mm (Fence)	2
•	Rail Pad M6 x 18 (Fence)	
•	Hex Nut M6-1 (Fence)	1
•	Hex Wrench 5mm & 8mm	.1 Ea
•	Open End Wrench 10 x 13mm	1

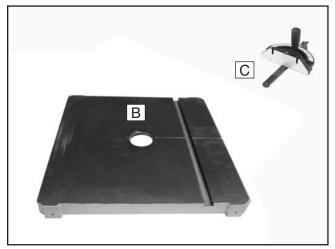


Figure 8. Inventory A.

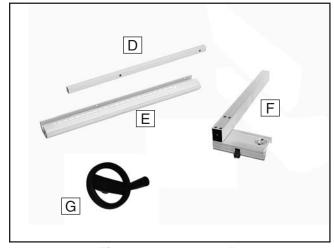
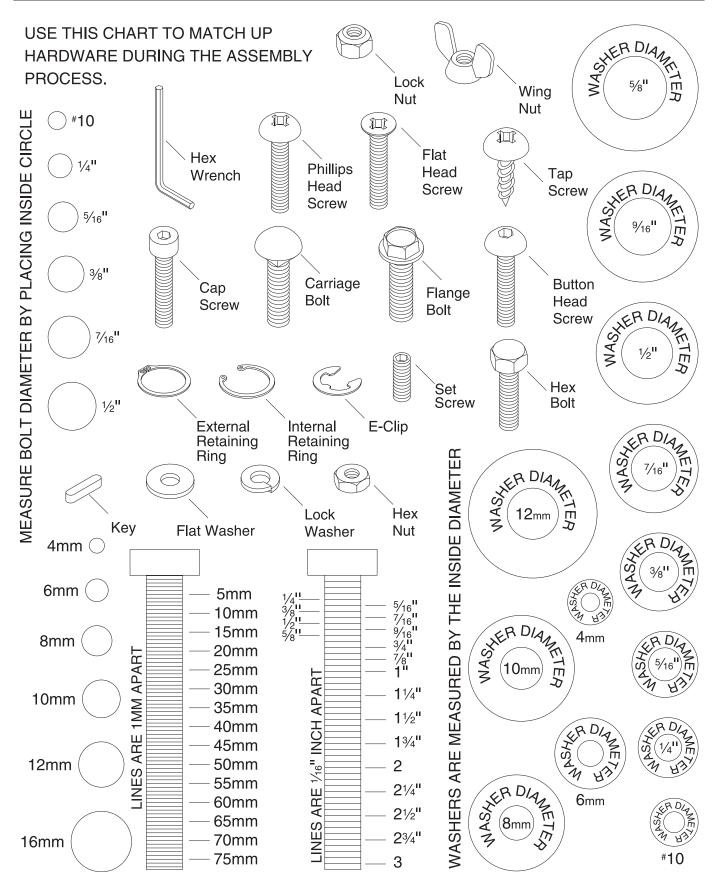


Figure 9. Inventory B.

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.



Hardware Recognition Chart



-15-

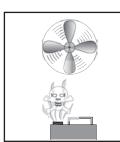
Clean Up

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 10**. For thorough cleaning, some parts must be removed. **For optimum performance, clean all moving parts or sliding contact surfaces.** 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.



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.



ACAUTION

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.



Figure 10. Cleaner/degreasers available from Grizzly.

Site Considerations

Floor Load

Refer to the **Machine Data Sheet** 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 **Figures 11** & **12** for the minimum working clearances.

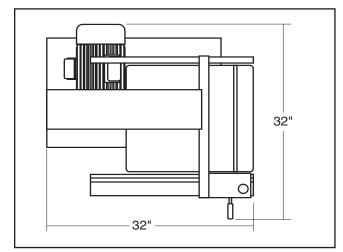


Figure 11. G0513 minimum working clearances.

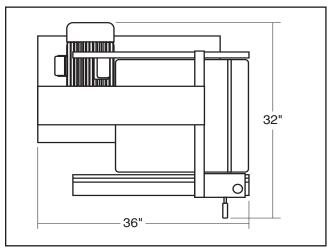


Figure 12. G0514 minimum working clearances.

Moving & Placing Base Unit

The Model G0513/G0514 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.

To move and place the bandsaw:

- **1.** Unbolt the bandsaw from the pallet.
- Install the eye bolt shown in Figure 13 if it is not already installed (make sure it is threaded all the way in), then place the lifting hook through the eye bolt and lift slowly with a forklift.

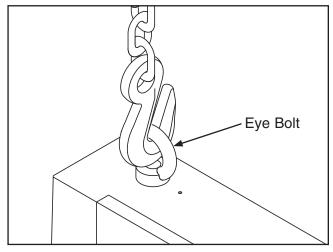


Figure 13. Lifting the bandsaw.

3. Remove the pallet and slowly set the bandsaw into position.

Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. You can either bolt your machine to the floor or mount your machine to a mobile base that has wheel locking or wheel retracting capabilities that keeps the mobile base from rolling when not in use. Whichever option you choose, it is necessary to level your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts (**Figure 14**) and anchor studs are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.



Figure 14. Typical fasteners for mounting to concrete floors.

Guide Post Handwheel

To install the guide post handwheel:

 Insert the guide post handwheel onto the shaft, and secure it with the cap screw on the flat side of the shaft, as shown in Figure 15

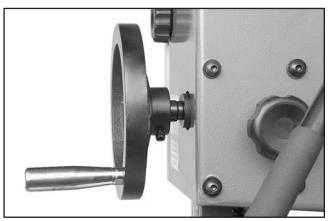


Figure 15. Guide post handwheel installed.

Table

The table is heavy and requires two people to lift it onto the trunnions. Remove the saw blade to make table installation easier.

To install the table:

 Loosen blade tension by rotating the quick release tension lever clockwise as shown in Figure 16.

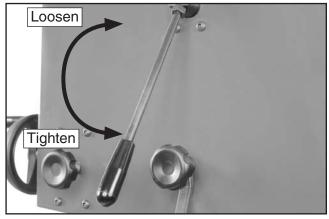


Figure 16. Quick release tension lever.

2. Adjust the upper and lower blade guides away from the blade. Refer to **Blade Guides** on **Page 24** for more details.



ACAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

3. Open the upper and lower wheel covers, and slide the blade off of both wheels.



ACAUTION

Personal injury may occur if the table is lifted without assistance. Get help when installing the table.

- With the help of another person, lift the table onto the trunnions.
- Secure the table to the trunnions as shown in Figure 17 with the (4) M8-1.25 x 16 hex bolts, 8mm lock washers, and 8mm flat washers.

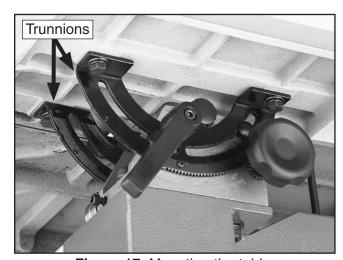
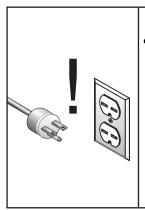


Figure 17. Mounting the table.

- **6.** Remove the table insert and the table pin from the table, if these are pre-installed.
- 7. With the blade teeth pointing downward, slide the blade through the table slot.
- Slide the blade through the upper and lower blade guides, and mount it over the upper and lower wheels.
- **9.** Tighten the quick release tension lever, then install the table insert and table pin.
- 10. Keep the upper and lower blade guides adjusted away from the blade until the blade tracking and tension have been adjusted.

Blade Tracking



AWARNING

Personal injury or death can occur if the machine starts while your hand is touching the bandsaw wheel during tracking adjustments. Disconnect power from the bandsaw before performing blade tracking adjustments.

During operation, the blade needs to ride on the center of the upper and lower wheels. Adjusting the path the blade travels on is called blade tracking.

To adjust the blade tracking:

- 1. Make sure the upper and lower blade guides are adjusted away from the blade.
- **2.** Tension the blade (refer to the "Tensioning Blade" procedure on **Page 23**).
- 3. DISCONNECT BANDSAW FROM POWER!
- **4.** Open the upper wheel cover.

Loosen the tracking control lock lever shown in Figure 18 by turning it counter-clockwise.

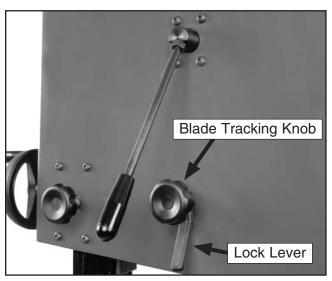


Figure 18. Release lock lever before adjusting tracking.



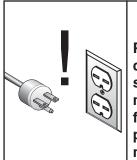
ACAUTION

Be careful when turning the bandsaw wheel by hand in the next step. The spokes may have sharp edges and blade teeth may extend beyond the edge of the wheel and cause injury.

- Turn the blade tracking knob clockwise or counterclockwise while turning the upper wheel by hand until the blade tracks centered on the wheel.
- Turn the upper wheel by hand three aditional rotations to ensure the blade tracks on the center of the wheel.
- **8.** Tighten the tracking control lock lever.
- **9.** Close the wheel cover.
- **10.** Reconnect the bandsaw to power.

-19-

Positive Stop



AWARNING

Personal injury or death can occur if the bandsaw starts during table adjustments. Disconnect power from the bandsaw before performing table adjustments.

The positive stop allows the table to be quickly and accurately returned to the horizontal (0°) position after being adjusted to a different angle.

To set up the positive stop:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Locate the positive stop bolt under the table as shown in **Figure 19**.
- Loosen the jam nut on the positive stop bolt.
- **4.** Raise the upper blade guide to the highest position.

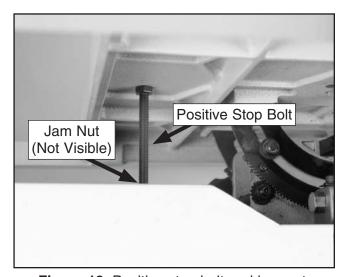


Figure 19. Positive stop bolt and jam nut.

- **5.** Place a 6" square on the table surface and determine if the blade is square to the table surface as shown in **Figure 19**.
 - —If the blade is square with the table surface: Lock the table into position, tighten the jam nut on the positive stop bolt, and adjust the scale pointer to the 0° position. Continue to the next page.
 - —If the blade is NOT square to the table surface: Raise or lower the positive stop bolt until the blade is square to the table surface. When square, lock the table into position, tighten the jam nut on the positive stop bolt, and adjust the scale pointer to the 0° position. Continue to the next page.

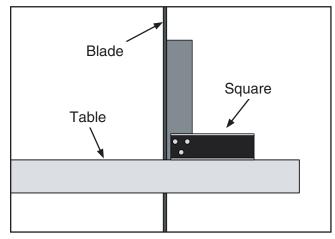


Figure 20. Squaring side of blade and table.

Dust Collection

ACAUTION

DO NOT operate this bandsaw without an adequate dust collection system. This saw 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 Each Dust Port: 400 Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or wyes, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you

are unsure of your system, consult an expert or

purchase a good dust collection "how-to" book.

To connect a dust collection hose:

- 1. Fit a 4" dust hose over each dust port, as shown in **Figure 21**, and secure in place with a hose clamp.
- 2. Tug each hose to make sure it does not come off. **Note:** A tight fit is necessary for proper performance.

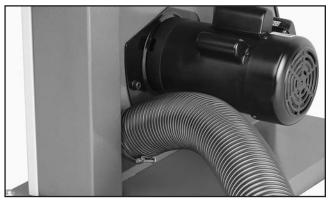


Figure 21. Example of dust hose attached to dust port.

3. Attach the dust hoses to a dust collector.

Fence Assembly

The threaded holes on the front and back of the table are mounting holes for the fence rails.

To assemble the fence:

- 1. Mount the rear fence rail to the table with (2) M6-1 x 16 cap screws. If a cap screw falls inside of the rear fence rail, remove the rail end plug to retrieve it.
- 2. Install the front fence rail to the table with (2) M6-1 x 20 hex bolts and (2) 6mm lock washers. Make sure the scale is face up.
- 3. Set the fence on the front and rear rails. The fence should easily slide across the rails. If the fence rubs on the table surface, the height adjustment screw on the bottom of the fence needs to be threaded out a small amount. This raises the riding height of the fence.



Figure 22. Fence assembly.

4. Thread the handle onto the fence.

-21-

Fence Adjustment

The fence face needs to be parallel to the table miter slot.

To adjust the fence parallel to the miter slot:

- Move the fence to the right side of the saw blade.
- **2.** Loosen the 4 cap screws located on the top face of the fence.
- Adjust the fence face parallel with the edge of the miter slot. Carefully tighten down the 4 cap screws.

NOTICE

Adjusting the fence parallel to the miter slot does not guarantee straight cuts. The miter slot may need to be adjusted parallel to the side of the blade. Refer to the "Table Alignment" instructions.

Table Alignment

Correct table alignment is needed to achieve accurate cuts.

To adjust the miter slot square to the blade:

- Loosen the trunnion bolts underneath the table.
- Place a straightedge along the side of the blade. The straightedge should touch the front and the back of the blade.
- 3. Use a fine ruler to gauge the distance between the blade and the miter slot as shown in **Figure 23**. The distance you measure should be the same at both the front and the back of the table.

4. Adjust the table in the desired direction and secure it in position by retightening the trunnion bolts.

The table should also be 90° to the back of the blade as shown in **Figure 24**. If the table is not perpendicular to the back of the blade, shim the table in the desired direction by placing washers between the table and the two trunnions.

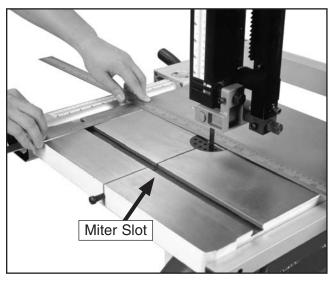


Figure 23. Squaring miter slot to blade.

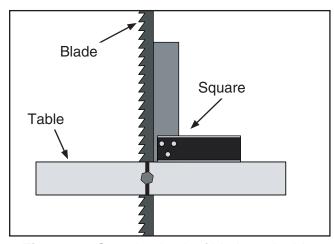


Figure 24. Squaring back of blade and table.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 40**.

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 set up properly.
- **2.** Make sure all tools and objects used during setup are cleared away from the machine.
- Make sure the blade has been tracked and tensioned according to the "Blade Tracking" instructions on Page 19.
- **4.** Connect the machine to the power source.
- 5. Turn the machine ON.
- Listen to and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.
 - —Strange or unusual noises should be investigated and corrected before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
- 7. Turn the machine OFF.

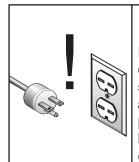
Tensioning Blade

A properly tensioned blade is essential for making accurate cuts and is required before making many bandsaw adjustments. (Everytime you replace the blade, you should perform this procedure because all blades tension differently.)

To tension the bandsaw blade:

- 1. Complete the **Test Run** procedure and make sure the blade is tracking properly.
- 2. Raise the upper blade guide assembly as high as it will go, and adjust the upper and lower guide blocks as far away from the blade as possible. Note: This procedure will NOT work if the guide blocks have any contact with the blade.
- **3.** Engage the quick tension lever to the tightened position and turn the blade tension handwheel until the tension scale reads between 4 and 6.
- **4.** Turn the bandsaw **ON**.
- Slowly release the tension one quarter of a turn at a time. When you see the bandsaw blade start to flutter, stop decreasing the tension.
- 6. Now, slowly increase the tension until the blade stops fluttering, then tighten the tension another quarter turn.
- 7. Look at what the tension gauge reads and use that as a guide for tensioning that blade in the future. **Note:** Always detension the blade after use to increase blade life and reduce strain on the bandsaw components.
- **8.** Re-adjust the blade tracking as instructed on **Page 19**.

Blade Guides



AWARNING

Personal injury or death can occur if the bandsaw starts during blade guide adjustments. Disconnect power from the bandsaw before performing blade guide adjustments.

Once the blade is tracking correctly, the upper and lower blade guides need to be adjusted.

To adjust the upper blade guide:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen cap screw #1 shown in Figure 25 and slide the support bearing away from the blade.

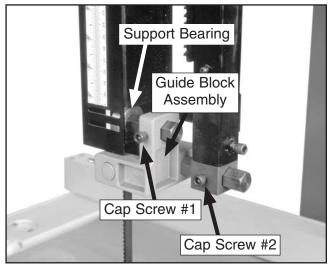


Figure 25. Back of upper blade guide.

- Loosen the thumb screws shown in Figure 26 and slide the guide bearings away from the blade.
- 4. Loosen cap screw #2 shown in Figure 25 and adjust the guide block assembly until the front edge of the guide bearings are aligned ½16" behind the gullet line as shown in Figure 27. Retighten cap screw #2.

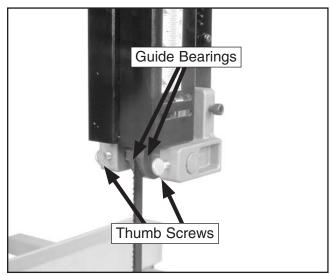


Figure 26. Front of upper blade guide.

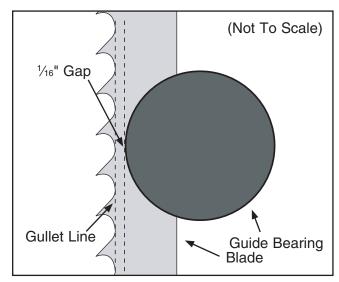


Figure 27. Correct guide bearing alignment against the blade.

5. Slide the guide bearings against the side of the blade. Make sure the front edge of the bearings are still behind the gullet line. The gap between the face of each guide bearing and the side of the blade needs to be the same as the thickness of a dollar bill or approximately 0.004" as shown in Figure 28. Tighten the thumb screws once the guide bearings are correctly set.

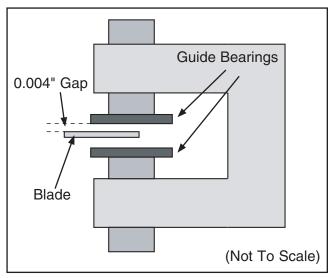


Figure 28 Correct gap between the guide bearings and the blade.

6. Slide the support bearing forward against the back edge of the blade and then back the bearing off approximately 0.016" as shown in Figure 29. Tighten cap screw #1 to secure the bearing in place.

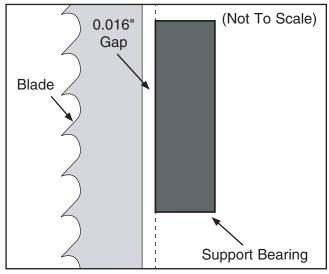
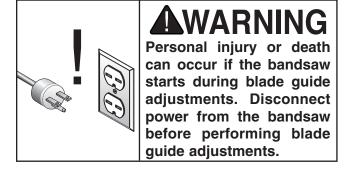


Figure 29. Correct gap between the support bearing and the blade.



To adjust the lower blade guide:

- 1. DISCONNECT BANDSAW FROM POWER!
- Loosen cap screw #1 shown in Figure 30 and rotate the adjustment knob to slide the support bearing away from the blade.

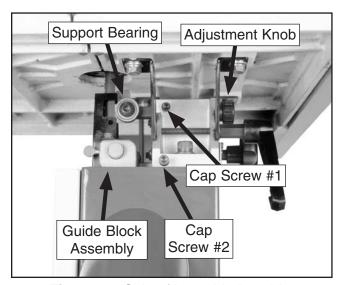


Figure 30. Side of lower blade guide.

3. Remove the cap screws shown in **Figure 31** and remove the blade guards.

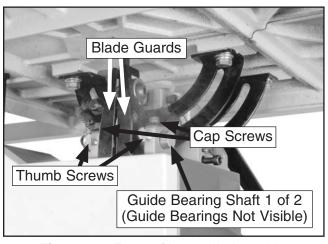


Figure 31. Front of lower blade guide.

- Loosen the thumb screws shown in Figure
 and slide the guide bearings away from the blade.
- 5. Loosen cap screw #2 shown in Figure 30 and adjust the guide block assembly until the front edge of the guide bearings are aligned ½6" behind the gullet line as shown in Figure 32. Retighten cap screw #2.
- 6. Slide the guide bearings against the side of the blade. Make sure the front edge of the bearings are still behind the gullet line. The gap between the face of each guide bearing and the side of the blade needs to be the same as the thickness of a dollar bill or approximately 0.004" as shown in Figure 33. Tighten the thumb screws once the guide bearings are correctly set.
- 7. Turn the adjustment knob shown in **Figure**30 to slide the support bearing forward against the back edge of the blade and then back the bearing off approximately 0.016" as shown in **Figure 29**. Tighten cap screw #1 to secure the bearing in place.
- 8. Re-install the blade guards.

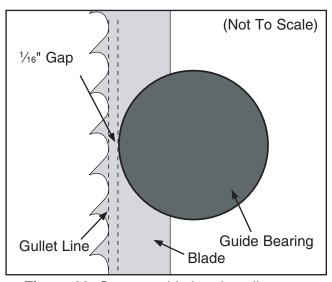


Figure 32. Correct guide bearing alignment against the blade.

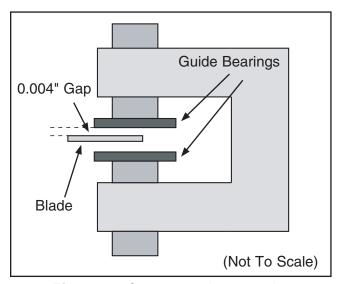


Figure 33. Correct gap between the guide bearings and the blade.

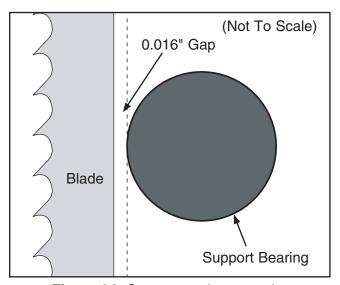
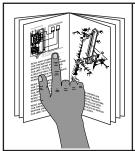


Figure 34. Correct gap between the support bearing and the blade.

SECTION 4: OPERATIONS



AWARNING

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

AWARNING

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







AWARNING

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 REC-OMMEND 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.

Overview

The bandsaw is one of the most versatile wood cutting tools in the shop. It is capable of performing many different cutting functions including:

Straight Cuts

- Miters
- Angles
- Compound Angles
- Resawing
- Ripping
- Crosscutting

Irregular Cuts

- Simple and Complex Curves
- Duplicate Parts
- Circles
- Beveled Curves

A properly adjusted and tuned bandsaw can be safer to operate than most other saws and performs many functions with ease and accuracy.

Basic Cutting Tips

Here are some basic tips to follow when operating the bandsaw:

- Replace, sharpen, and clean blades as necessary and make adjustments periodically to keep the saw always running in top condition.
- Use light and even pressure while cutting.
 Light contact with the blade will permit easier line following and prevent undue friction.
- Avoid trying to turn tight corners because this will twist the blade. Remember, you must saw around corners.
- Misuse of the saw or using incorrect techniques is unsafe and results in frustration and poor cuts. Remember—the blade does the cutting with the operator's guidance.

START/STOP Switch

The START/STOP switch on the Model G0513/G0514 is located on the column for easy access (**Figures 35**). Immediately turn the machine *OFF* if there is a safety hazard.



Figure 35. G0513 START/STOP switch.

Guide Post

The guide post, shown in **Figure 36**, connects the upper blade guide assembly to the bandsaw. The guidepost allows the blade guide assembly to move up or down via a rack and pinion. In order to cut accurately, the blade guide assembly must be no more than 1" from the top of the workpiece at all times—this positioning provides the best support for the blade.

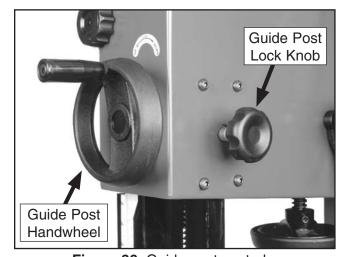


Figure 36. Guide post controls.

To adjust guide post:

- **1.** Make sure that the blade tension, blade tracking, support bearing, and blade guides are adjusted correctly.
- 2. Loosen the guide post lock knob shown in Figure 36.
- Turn the guide post handwheel to raise or lower the guide post until the upper blade guide assembly is within 1" from the top of the workpiece.
- Lock the guide post in place with the lock knob.

Fine Tune Tracking

NOTICE

Adjusting the final blade tracking setting requires the machine to be turned *ON*.

To fine tune the tracking:

- Perform the Blade Tracking procedure on Page 19.
- 2. Close the wheel covers and turn the bandsaw *ON*.
- **3.** Observe the blade tracking path through the clear window on the right edge of the bandsaw as shown in **Figure 37**.

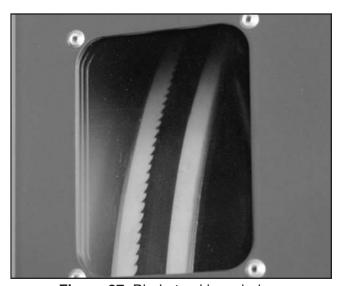
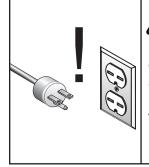


Figure 37. Blade tracking window.

- 4. Loosen the tracking control lock lever (refer to Page 19, Figure 18), then use the tracking knob to adjust the blade so it tracks on the center of the wheel.
- When you are satisfied with the blade adjustment, tighten the lock lever so the knob cannot move.

Table Tilt



AWARNING

Personal injury or death can occur if the bandsaw starts during table adjustment. Disconnect power from the bandsaw before performing table adjustments.

The bandsaw table will tilt 10° left and 45° right to provide a wide range of cutting options. Remove the positive stop bolt to tilt the table to the left.

To tilt the table:

- DISCONNECT BANDSAW FROM POWER!
- Loosen the lock handle on the table trunnion shown in Figure 38.

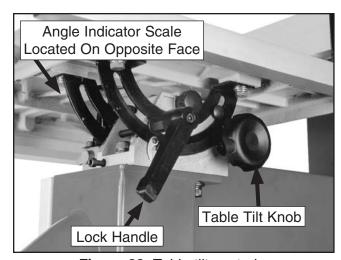


Figure 38. Table tilt controls.

- Turn the table tilt knob to position the table to the desired angle of tilt. Refer to the angle gauge on the front table trunnion for the tilting angle.
- Retighten the lock handle to secure the table.

Ripping

Ripping is the process of cutting with the grain of the wood stock. For plywood and other processed wood, ripping simply means cutting down the length of the workpiece.

To make a rip cut:

- Adjust the fence to match the width of the cut on your workpiece and lock the fence in place.
- **2.** Adjust the blade guide assembly to the correct height.
- **3.** After all safety precautions have been met, turn the bandsaw *ON*. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. **Figure 39** shows a typical ripping operation. **Note:** If you are cutting narrow pieces, use a push stick to protect your fingers.



Figure 39. Ripping with a push stick.

WARNING

NEVER place fingers or hands in the line of cut. In the event that something unexpected happens, your hands or fingers may be pulled into the blade. ALWAYS use a push stick when ripping narrow pieces. Failure to follow these warnings may result in serious personal injury!

Crosscutting

Crosscutting is the process of cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material.

To make a 90° crosscut:

- **1.** Mark the workpiece on the edge where you want to begin the cut.
- Adjust the blade guide assembly to the correct height and make sure the miter gauge is set to 90°.
- **3.** Move the fence out of the way. Place the workpiece evenly against the miter gauge.
- **4.** Hold the workpiece against the miter gauge and line up the mark with the blade.
- 5. After all safety precautions have been met, turn the bandsaw ON. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. Figure 40 shows a typical crosscutting operation.

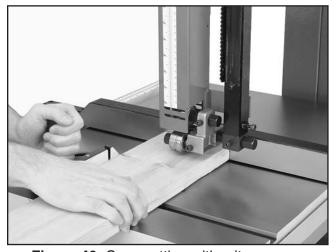


Figure 40. Crosscutting with miter gauge.

Resawing

NOTICE

Resawing requires the blade to be perpendicular to the table surface. Instructions on making the blade perpendicular to the table surface are in SECTION 3: SETUP.

Resawing, as shown in **Figure 41**, is cutting a board into two thinner pieces. The width and length dimensions remain the same. The maximum width workpiece that can be resawn is limited to 12" on the Model G0513 & G0514.

To make a resaw cut:

- Install the widest blade available for your bandsaw when performing resaw operations. The cut will be straighter and more accurate. The best tooth style is a hook or a skip tooth and should have between 3 and 6 teeth-perinch.
- **2.** Adjust the guide post/blade guide assembly to the desired height.
- **3.** Joint one face of the workpiece on a jointer.
- 4. Using a push paddle, slowly feed the workpiece through the saw blade as shown in Figure 35. The jointed face of the workpiece must be against the fence during this operation.

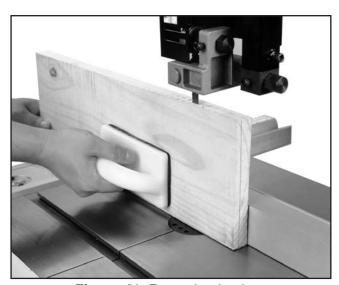


Figure 41. Resawing lumber.

Cutting Curves

When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without twisting. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, use either a narrower blade or a blade with more TPI (teeth per inch), or make more relief cuts.

Always make short cuts first, then proceed to the longer cuts. Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade. Relief cuts also make backing the workpiece out easier, if needed.

NOTICE

The list below displays blade widths and the corresponding minimum radii for those blade widths.

Width	Radius
1/8"	1/8"
³ / ₁₆ "	³ /8"
1/4''	5/8''
3/811	
1/2''	2 ½''
5/8''	33/4"
3/4"	5½''

Stacked Cuts

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking a number of workpieces together. Before making stacked cuts, ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded.

To complete a stacked cut:

- 1. Align your pieces from top to bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.
- 2. Secure all the pieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Be careful not to cut into the brads or you may break the blade!)
- **3.** On the face of the top piece, lay out the shape you intend to cut.
- 4. Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could strain the woodgrain or cause the blade kerf to bind.
- 5. Cut the stack of pieces as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line as shown in **Figure 42**.

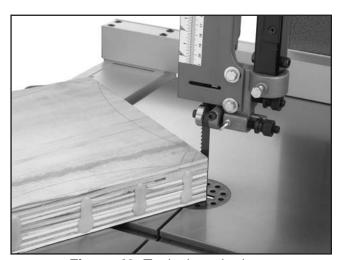


Figure 42. Typical stacked cut.

Blade Speed

The blade speed can be adjusted to 1700 or 3500 FPM. Speed adjustments are made by moving the V-belt position on the motor and wheel pulleys.

Most woodcutting can be performed successfully at the higher blade speeds. Slower blade speeds generally produce better results when cutting hardwoods, intricate curves, or when an exceptionally smooth cut is desired.

To adjust the blade speed:

- 1. DISCONNECT BANDSAW FROM POWER!
- Loosen the motor mount cap screws shown in Figure 43 and rotate the motor to loosen the V-belt.

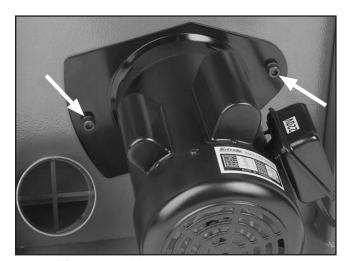


Figure 43. Motor mount cap screws.

3. Refer to **Figure 44** to locate the correct V-belt position for the desired blade speed.

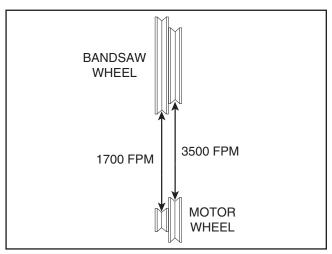


Figure 44. V-belt speeds.

- **4.** Move the V-belt to the desired pulley.
- **5.** Rotate the motor to tension the V-belt, then tighten the motor mount cap screws.
- 6. Check the V-belt tension. When tensioned correctly, the V-belt can be deflected approximately ³/₄" (see **Figure 45**).

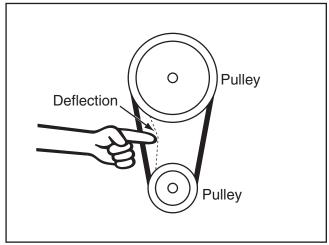


Figure 45. V-belt deflection.

Blade Information

Selecting the right blade requires a knowledge of the various blade characteristics to match the blade with the particular cutting operation.

Blade Length

Measured by the circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between wheels. The Model G0513 is designed for blades that are 131½" long and the Model G0514 is designed for blades that are 143" long. Refer to **Page 36** for blade replacements.

Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line.

The Model G0513 can use blades from $\frac{1}{8}$ " to 1" in width. The Model G0514 can use blades from $\frac{1}{8}$ " to $\frac{1}{4}$ " in width. Always pick the size of blade that best suits your application.

 Curve Cutting: Use the chart in Figure 46 to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width.

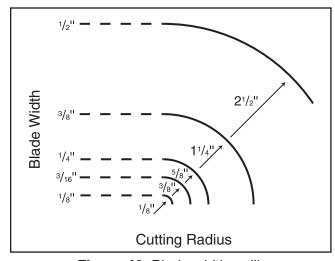


Figure 46. Blade width radii.

 Straight Cutting: Use the largest width blade that you own. Narrow blades can cut tight curves (a small radius) but are not very good at cutting straight lines because they naturally wander (blade lead). However, larger blades are much better at cutting straight lines, but function poorly at cutting small curves because of their size.

Tooth Style

When selecting blades, another option to consider is the shape, gullet size, teeth set and teeth angle—otherwise known as "Tooth Style."

Figure 47 shows the three main categories of tooth style:

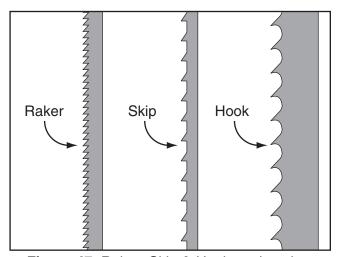


Figure 47. Raker, Skip & Hook tooth styles.

- Raker: This style is considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on Raker blades usually are very numerous, have no angle, and produce cuts by scraping the material; these characteristics result in very smooth cuts, but do not cut fast and generate more heat while cutting.
- Skip: This style is similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate more heat. However, these blades also leave a rougher cut than raker blades.

Hook: The teeth on this style have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.

Tooth Pitch

Usually measured as TPI (teeth per inch), tooth pitch determines the size of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster. As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder woods and coarse pitched blades on softer woods.

Blade Care

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation.

Be sure to select blades with the proper width, style, and pitch for each application. The wrong choice of blades will often produce unnecessary heat which will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat.

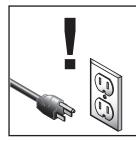
Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades are subjected to. Blade breakage is also due to avoidable circumstances. Avoidable breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

The most common causes of blade breakage are:

- Faulty alignment and adjustment of the quides.
- Forcing or twisting a wide blade around a curve of short radius.
- Feeding the workpiece into the blade too fast
- Tooth dullness or absence of sufficient set.
- Incorrect tension.
- Top blade guide assembly set too high above the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.

Blade Changes



WARNING

Always disconnect power to the machine when changing blades. Failure to do this may result in serious personal injury.



ACAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

To remove a blade:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Release the blade tension by turning the blade tension quick release lever to the left.

- **3.** Remove the table insert and the table pin. Adjust the upper and lower guide bearings as far away as possible from the blade.
- Open the upper and lower wheel covers, and with gloved hands, slide the blade off of both wheels.
- **5.** Rotate the blade 90° and slide it through the slot in the table.

To replace a blade:

- 1. Slide the blade through the table slot, ensuring that the teeth are pointing down toward the table. **Note:** If the teeth will not point downward in any orientation, the blade is inside-out. Put on heavy gloves, remove the blade, and twist it right side-out.
- 2. Slip the blade through the guides, and mount it on the upper and lower wheels (**Figure 48**), then tighten the blade tension lever.

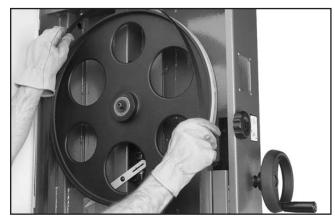


Figure 48. Placing blade on the wheels.

- 4. Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed.
- 5. Adjust tension as described Page 23.
- **6.** Adjust the upper/lower guide bearings and the support bearings.
- **7.** Close the wheel covers, then replace the table insert and table pin.

SECTION 5: ACCESSORIES

Replacement Blades

These replacement blades are milled for exact tooth set and are made with high quality tool steel.

131½" Carbon Steel Replacement Blades for the Model G0513

MODEL	WIDTH	TPI
H4803	1/8"	14 RAKER
H4804	1/4"	6 HOOK
H4805	1/4"	18 RAKER
H4806	3/8"	10 RAKER
H4807	1/2"	6 HOOK
H4808	1/2"	10 RAKER
H4809	3/4"	3 HOOK
H4810	1"	6 HOOK
H4811	1"	2 HOOK

G1163—1HP Dust Collector

Effective dust collection not only keeps your shop cleaner and more pleasant to work in, it can also keep you healthier. Our systems feature powerful motors and convenient collection bags - so they're ideal for just about any-sized woodworking operation.



Figure 49. G1163 1HP dust collector.

143" Carbon Steel Replacement Blades for the Model G0514.

MODEL	WIDTH	TPI
H4826	1/8"	14 RAKER
H4827	1/4"	6 HOOK
H4828	1/4"	18 RAKER
H4829	3/8"	10 RAKER
H4830	1/2"	6 HOOK
H4831	1/2"	10 RAKER
H4832	3/4"	3 HOOK
H4833	1"	6 HOOK
H4834	1"	2 HOOK
H4835	1 ½"	1.3 HOOK

G7314Z—Heavy-Duty SHOP FOX® Mobile Base

Make your machine mobile with this popular patented mobile base. The unique outrigger type supports increase stability and lower machine height. This heavy duty mobile base is rated for up to a 700 lb. capacity.

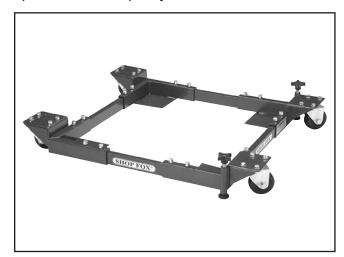


Figure 50. G7314Z SHOP FOX® Mobile Base.

Gall 1-800-523-47777 To Order

T10117—Big Mouth Dust Hood with Stand

Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 163/8" x 127/8" hood adjusts from 23" to 43" high. Every shop needs one of these!



Figure 51. T10117 Big Mouth Dust Hood.

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 52. Eye protection assortment.

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

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



Figure 53. Half-mask respirator with disposable cartridge filters.

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



Figure 54. Recommended products for protecting unpainted cast iron/steel on machinery.

Call 1-800-523-4777 To Order

SECTION 6: MAINTENANCE



AWARNING

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.

Daily Check:

- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.
- Clean wheel brushes.
- Clean bearings.

Monthly Check:

- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside cabinet and off motor.

Cleaning

Cleaning the Model G0513/G0514 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

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 (see **Section 5: Accessories** on **Page 36** for more details).

Wheel Brush

The bandsaw is equipped with lower wheel brushes. The brushes should be checked daily and cleaned when it becomes dirty. Each brush has an adjustment bracket that allows it to be adjusted for bristle wear. Refer to **Adjusting Wheel Brush** on **Page 46** for adjustment details.

Lubrication

Most of the bearings on this bandsaw are sealed and permanently lubricated and require no lubrication. The bearings are standard sizes and can be purchased from the Grizzly Parts Department when they need to be replaced.

The Oil Lite bearings require cleaning and relubricating after every 8 hours of continuous use.

To remove and clean the bearings:

- DISCONNECT BANDSAW FROM POWER!
- **2.** Loosen the thumb screws in **Figure 55**.
- **3.** Slide the Oil Lite bearings out of the blade guide assembly.
- 4. Clean the Oil Lite bearings with a solvent cleaner.
- **5.** Apply a small amount of SAE 10wt oil to the inside surface of the Oil Lite bearings.
- **6.** Reverse the above steps to re-assemble the guide bearings.

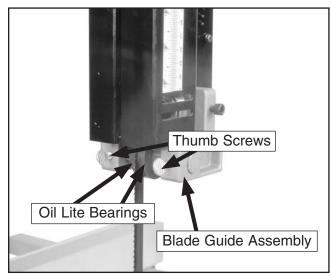


Figure 55. Front of upper blade guide.

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

Symptom	Possible Cause	Possible Solution
start or a breaker	Break or short in wiring; or loose or corroded connections.	Trace/replace broken or corroded wires; fix loose connections.
trips.t	2. Plug or receptacle is corroded or miswired.	2. Correct the wiring.
	Power supply switched off/has incorrect voltage.	3. Switch power supply on/verify voltage.
	4. Motor connection wired incorrectly.	4. Wire motor correctly. Refer to inside junction box cover or Page 54 .
		5. Test all legs for power, test field coil, and fix contacts
	5. Contactor has poor contacts or is at fault.	or replace if at fault.
		6. Replace/reset fuse or circuit breaker. Repair possible
	6. Blown fuse/tripped circuit breaker.	short or circuit overload.
		7. Replace switch.
	7. Motor ON/OFF switch at fault.	8. Test/replace if at fault.
	8. Start capacitor has blown.	Adjust/replace centrifugal switch.
	9. Centrifugal switch at fault.	10. Test for shorted windings or bad bearings; repair or
	10. Motor at fault.	replace.
Main motor chatters during startup or during operation.	Power supply has incorrect voltage on one or more legs.	Contact electrician to check incoming voltage.

Symptom	Possible Cause	Possible Solution
Machine has	V-belt tension incorrect.	1. Tighten V-belt. See Page 44.
excessive vibration	2. Bent, dull, or damaged blade.	2. Replace blade (Page 35).
or noise.	3. Loose or damaged blade.	3. Tighten or replace blade.
	4. Blade weld contacting support bearing or	4. Use file or stone to smooth and round the back of the
	blade guides.	blade.
	5. Loose machine component.	5. Tighten loose component.
	6. Machine incorrectly mounted on floor.	6. Level/shim base; tighten/adjust mounting hardware or feet.
	7. Motor fan rubbing on fan cover.	7. Fix/replace fan cover; replace loose or damaged fan.
	8. V-belt worn or damaged.	8. Replace V-belt. (Use link belts if possible.) See Page 45.
	9. Wheels not coplanar.	9. Adjust wheels coplanar (Page 48).
	10. V-belt has a high spot.	10. Replace/adjust the V-belt (Page 45).
	11. Centrifugal switch out of adjustment; at fault.	
	12. Pulley loose or not in alignment; shaft bent.	12. Replace worn pulley, key, and shaft, and realign.
	13. Worn wheel bearing.	13. Check/replace wheel bearing.
	14. Wheel tires worn or incorrectly installed.	14. Replace or re-install tires.
	15. Wheels out of balance.	15. Replace wheels.
	16. Motor bearings worn or damaged.	16. Replace motor bearings or replace motor.
Machine stalls or slows when	Too much pressure when feeding workpiece.	Reduce pressure when feeding workpiece.
operating.	2. Workpiece too moist or material not suitable for machine.	2. Only cut wood and ensure moisture is below 20%.
	3. Workpiece is warped.	3. Straighten workpiece or use a different one.
	4. Fence incorrectly adjusted.	4. Adjust/calibrate fence.
	5. Belt(s) slipping.	5. Tension/replace belt(s); ensure pulleys are aligned.
	6. Run capacitor at fault.	6. Test/repair/replace.
	7. Motor connection wired incorrectly.	7. Review wiring diagram on motor cover; correct wire connections.
	8. Motor overheated.	8. Let cool, clean motor, and reduce workload.
	Contactor has poor contacts or is at fault.	9. Test all legs for power, test field coil, and fix contacts or replace if at fault.
	10. Centrifugal switch at fault.	10. Adjust/replace centrifugal switch if available.
	11. Motor at fault.	11. Test for shorted windings, bad bearings and repair
		or replace.
Miter bar binds in miter slot.	Miter slot dirty or gummed up.	Carefully clean miter slot.
Table does not tilt to 90 degrees.	Pointer or scale calibrated incorrectly.	Calibrate pointer/scale at true 90 degrees (Page 20).
	2. Positive stop bolt not set correctly.	2. Adjust positive stop bolt.
Table does not tilt	Pointer or scale calibrated incorrectly.	Calibrate pointer/scale at true 45 degrees.
to 45 degrees.	Machine component blocking path.	Remove component blocking table.

Symptom	Possible Cause Possible Solution				
Table hard to tilt.	1. Sawdust or pitch trapped between trunnion	1.	Calibrate pointer/scale at true 45 degrees.		
	and base.				
	2. Metal burrs on trunnion.	2.	Remove burrs.		
The cuts are rough,	Blade is overloaded and twists.	1.	Decrease the feed rate.		
or show scoring.	2. The blade TPI is too coarse.	2.	Use the correct blade for material and speed of cut.		
	3. The blade is loose and slipping on wheels.	3.	Adjust bade tension as required.		
	4. Blade tracking is incorrect.	4.	Adjust the blade tracking back to normal.		
	5. The blade has missing or bent teeth.	5.	Replace the blade (Page 35).		
	6. The blade has a faulty weld.	6.	Replace the blade (Page 35).		
Blade or teeth	Blade tension is incorrect.	1.	Adjust blade tension (Page 23).		
break.	2. Incorrect blade for application.	2.	Use correct blade for application.		
	3. The feed is too heavy or blade speed is	3.	Reduce feed rate or increase blade speed (Page		
	wrong.		27).		
	4. Cutting corners too sharply.	4.	Use a wider arc on outside cuts, or use relief cuts to		
			make tight inside cuts.		
	5. Blade used when dull.	5.	Replace the blade (Page 35).		
	6. Blade tracking is wrong.	6.	Adjust the blade tracking back to normal (Page 19).		
	7. Blade guide adjustment at fault.	7.	Adjust blade guide bearings for correct blade		
			support.		
	8. Inadequate blade support.	8.	Adjust upper blade guide so it is as close as possible		
			to workpiece.		
	9. Blade weld at fault.	9.	Replace with blade from different manufacturer		
			(Page 35).		
	10. Wheel tires worn or incorrectly installed.	ı	. Replace or re-install tires.		
	11. Fence or miter slot out of alignment with	11	. Align table miter slot and fence with blade (Page		
	blade.		22).		
Blade wears on	Blade contacting table insert.	1.	Adjust blade guide bearings to eliminate excess side		
one side, slows,			pressure. Adjust table for correct blade clearance		
smokes or shows overheating.			and miter slot alignment.		
overneating.	2. The blade guides are worn or mis-adjusted.	2.	Tighten the blade guide bracket.		
	3. The blade has insufficient support.	3.	Tighten the blade guide as close to the workpiece as		
			possible.		
	4. Blade is installed backwards.	4.	Check blade rotation as described in Test Run" and		
			reverse blade if necessary.		
	5. Too much side pressure when feeding	5.	Feed workpiece straight into the blade.		
	workpiece.				
	6. The wheels are out of alignment.	6.	Adjust the wheels so they are coplanar (Page 48).		
	7. Dull or incorrect blade.	7.	Replace blade (Page 35).		
	8. Blade is bell-mouthed.	8.	Install new blade.		
	9. Fence not parallel with blade (pressure at blade backside).	9.	Adjust fence parallel with blade (Page 22).		
	10. Table top surface is not parallel or square to	10	. Adjust/shim table/trunnion position until blade and		
	blade.		table are parallel and square.		
Sawdust buildup	Clogged dust port.	1.	Clean out dust port.		
inside cabinet.	2. Low CFM (airflow) from dust collection		Repair ducting for leaks or clogs, move dust collector		
	system.		closer to machine, install a stronger dust collector.		

Symptom	Possible Cause	Possible Solution
Blade tracks	Tracking is not adjusted properly.	1. Adjust tracking (Page 19).
incorrectly, or	2. Wheels are not coplanar.	2. Adjust wheel coplanarity (Page 48).
comes off wheels.	3. Blade tension is too loose.	3. Increase blade tension (Page 23).
	4. Blade guides need adjustment.	4. Adjust blade guides (Page 24).
	5. Feeding workpiece too fast.	5. Feed workpiece slower (Page 27).
	6. Incorrect blade for bandsaw.	6. Install correct blade for machine.
	7. Blade is bell-mouthed, worn or dull.	7. Install new blade, and de-tension blade when not in use.
	8. Rubber tire on wheel is damaged or worn.	8. Replace rubber tires.
The cut is crooked,	1. The feed pressure is too high or the blade	Adjust feed rate and cutting speed as required.
or the blade	speed is wrong.	
wanders (blade	2. The blade tension is low.	2. Increase the blade tension (Page 23).
lead).	3. The blade is dull or damaged.	3. Replace the blade (Page 35).
	4. Inadequate blade support.	4. Adjust upper blade guide so it is as close as possible
		to workpiece (Page 28).
	5. Incorrect blade for application.	5. Use wider blade.
	6. The blade tracking is wrong.	6. Adjust the blade tracking back to normal.
	7. Table is loose.	7. Tighten table trunnion mounting bolts or tilt lock
		lever.
	8. Fence or miter slot out of alignment with	8. Align table miter slot and fence with blade.
	blade.	
	9. Blade guide alignment at fault.	Adjust blade guide bearings for correct blade support.

Checking V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition and operate under proper tension. The belt should be checked for cracks, fraying, and wear. Belt tension should be checked at least every 3 months—more often if the bandsaw is used daily.

To check the V-belt:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Open the lower wheel cover.
- Note the condition of the V-belt. If the V-belt is cracked, frayed, or glazed; it should be replaced as soon as convenient.
- **4.** Push the center of the V-belt. Note the amount of deflection (**Figure 56**). If deflection is more than ³/₄", re-tension the V-belt.

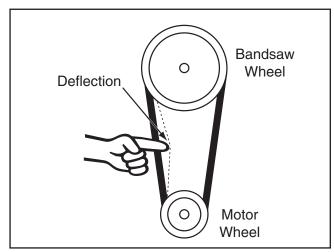


Figure 56. V-belt deflection.

-44-

Tensioning V-Belt

Tools Needed:	Qty
Hex Wrench 8mm	1

To tension the V-belt:

- 1. DISCONNECT BANDSAW FROM POWER!
- **2.** Open the lower wheel cover.
- 3. Loosen the motor mount screws shown in Figure 57.

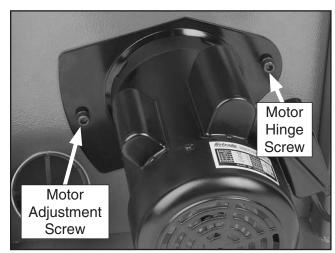


Figure 57. Motor mount screws.

- **4.** Rotate the motor to tension the V-belt, then tighten the motor adjustment screw.
- 5. Push the center of the V-belt. If deflection is approximately ¾" with moderate pressure from your thumb or finger, then the tension is correct. If the deflection is more than ¾", repeat **Steps 3 & 4**.
- **6.** When the V-belt tension is correct, tighten the motor hinge screw and close the lower wheel cover.

Replacing V-Belt

Tools Needed:	Qty
Hex Wrench 6mm	1
Hex Wrench 8mm	1

To replace the V-belt:

- 1. DISCONNECT BANDSAW FROM POWER!
- 2. Open both wheel covers, and remove the blade.
- 3. Loosen the motor mount screws shown in Figure 57.
- **4.** Rotate the motor up to loosen the V-belt, then tighten the motor adjustment screw.
- **5.** Pull the V-belt off of the motor pulley.
- Unthread the wheel mount bolt shown in Figure 58 and slide the lower wheel off of the bearing shaft.

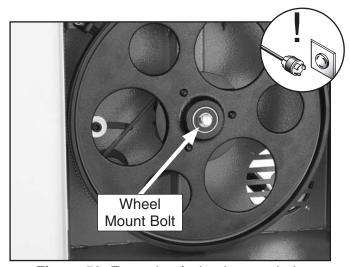


Figure 58. Example of wheel mount bolt.

- 7. Slip the old V-belt off of the wheel pulley and install the new V-belt in its place.
- Install the lower wheel back onto the bearing shaft and replace/tighten the wheel mount bolt.
- 9. Slip the new V-belt onto the motor pulley.
- **10.** Rotate the motor down to tension the V-belt, then tighten the motor adjustment screw.
- 11. Check the V-belt tension and adjust if necessary as described in the **Tensioning V-Belt** instructions on **Page 44**.
- **12.** When the V-belt tension is correct, tighten the motor hinge bolt and close the lower wheel cover.

Adjusting Tension Lever

The quick release tension lever is setup correctly for use with the preinstalled 131½" blade. However, if you install a different length blade, you will need to adjust the tension lever adjustment screw (**Figure 59**) so the quick release tension lever works correctly.

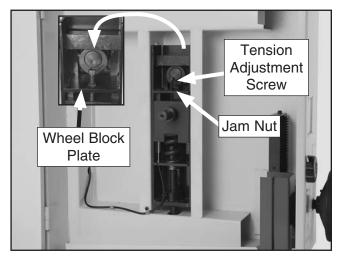


Figure 59. Example of quick release tension lever adjustment screw.

Tools Needed:	Q	ty
Hex Wrench 5mm		. 1
Wrench 10mm		. 1

To adjust the tension lever, do these steps:

- DISCONNECT BANDSAW FROM POWER!
- Open the wheel covers, remove the bandsaw blade, then install the new one (refer to Blade Changes, Page 35).
- **3.** Loosen the jam nut on the tension adjustment screw 7-10 turns.
- **4.** Put the quick release tension lever in the down (engaged) position, then turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale for the appropriate blade thickness.

- Thread the tension adjustment screw (Figure 59) down until it contacts the wheel block plate, then back it off 1-2 turns.
- 6. Tighten the jam nut.

Adjusting Wheel Brush

The lower wheel compartment contains two wheel brushes, one of which is shown in **Figure 60**. These brushes are designed to sweep sawdust off the wheel tire as the bandsaw is operating. In order to work properly each brush must make contact with the wheel.

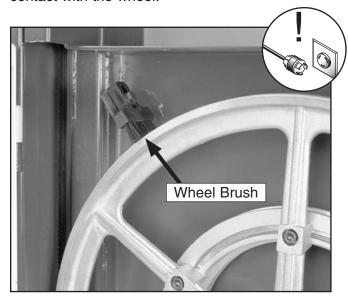


Figure 60. A wheel brush (one of two shown).

Tools Needed:	C	Qty
Wrench/Socket	10mm	2

To adjust the wheel brush:

- DISCONNECT BANDSAW FROM POWER!
- 2. Open the lower wheel cover.
- **3.** Loosen the bolt/nut that secures the wheel brush in place.
- **4.** Adjust the wheel brush so it makes good contact with the wheel.
- **5.** Tighten the bolt/nut to secure the wheel brush in place.

Blade Lead

Bandsaw blades commonly wander off the cut line when sawing, as shown in **Figure 61**. This is called blade lead. Blade lead is commonly caused by too fast of a feed rate, a dull or abused blade, or improper tension. If your blade is sharp/undamaged and you still have blade lead, perform the following instructions.

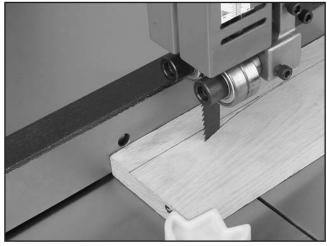


Figure 61. Blade leading away from line of cut.

To correct blade lead:

- Use less pressure when feeding the workpiece through the cut.
- 2. Check that the miter slot or fence is parallel to the blade line, and correct if necessary.
- 3. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table.

To skew your fence:

- 1. Cut a piece of scrap wood approximately ³/₄" thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.
- Cut halfway through the board on the line by pushing it into the blade. Turn the bandsaw OFF and wait for the blade to stop.

- Clamp the board to the bandsaw table without moving it. Now slide the fence over to the board so it barely touches one end of the board.
- **4.** Loosen the four cap screws on top of the fence.
- 5. Skew the fence so it is parallel to the edge of the scrap piece. You may need to re-adjust the fence locking mechanisms to gain maximum adjustment.
- **6.** While maintaining the skew, tighten the cap screws.

To shift the table:

- 1. On a scrap piece of wood, mark a line that is perpendicular to the front edge.
- **2.** Cut halfway through the board on the line by pushing it into the blade.
- Turn the bandsaw *OFF* and wait for the blade to stop.
- 4. Loosen the table mounting bolts. Shift the table to compensate for the blade lead, then retighten the table bolts.
- **5.** Repeat **Steps 1–4** until the blade cuts straight.

Aligning Wheels

Components and Hardware Needed: 56-60" Long 2x4	
Tools Needed:	
Wrench 13mm Tape Measure	
Coplanarity Gauge (see Figure 62)	
Straightedge	
Fine Ruler	1

Wheel alignment is one of the most critical factors for optimal performance from your bandsaw.

Heat, vibration, wandering, blade wear, tire wear and overall bandsaw wear are considerably decreased when the wheels are properly aligned or "coplanar."

Coplanar wheels automatically track the blade by balancing it on the crown of the wheel. This is known as coplanar tracking.

Checking Coplanarity

1. Make the "Coplanarity Gauge" shown in Figure 62.

Note: For best results, straighten the 2x4 with a jointer before cutting.

- 2. DISCONNECT BANDSAW FROM POWER!
- Remove the fence and open both wheel covers.
- **4.** Adjust the blade guides away from the blade, loosen blade tension, remove the table insert and pin, then remove the blade.
- **5.** Remove the table.
- 6. Reinstall the blade (Page 35), making sure the guide bearings and support bearings are away from the blade, then tighten your blade to the tension that it will be used during operation.
- 7. Place your coplanarity gauge up against both wheels in the positions shown in **Figure 63**.

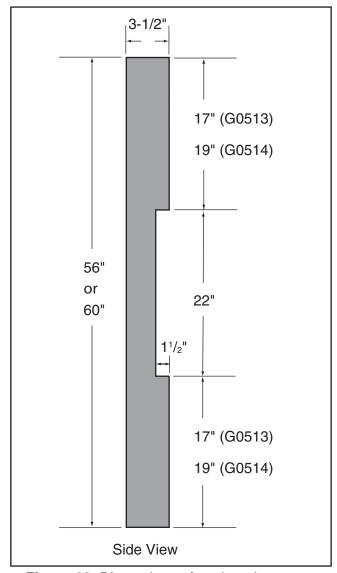


Figure 62. Dimensions of coplanarity gauge.

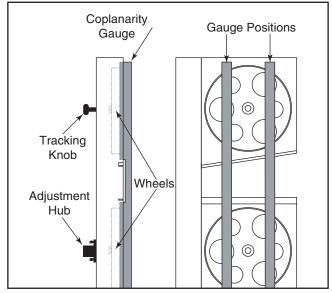


Figure 63. Checking for coplanarity.

- —If the wheels are coplanar (**Figure 1**, **A**), the straightedge will evenly touch the top and bottom of both wheels.
- —If the wheels are not coplanar (Figure 1, B), place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel coplanar and parallel with the lower wheel.
- —If the straightedge does not touch both wheels evenly, the lower wheel needs to be adjusted (Figure 1, C) or the upper wheel needs to be shimmed (Figure 1, D).

Shimming Upper Wheel

- 1. DISCONNECT BANDSAW FROM POWER!
- **2.** Make sure the top wheel is adjusted parallel with the bottom wheel.
- 3. With a straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the wheel that is out of adjustment (see **Figure 2**).
- **4.** Remove the blade from the saw, then remove the wheel that needs to be shimmed.
- Determine how many shim washers you need to compensate for the distance measured in Step 3 and place them on the wheel shaft.
- **6.** Replace the wheel, the original washers, the securing screw, and the blade.
- 7. Tighten the blade, then check the wheels with the coplanarity gauge. (Wheel coplanarity changes as the blade is tightened, so it is best to check the wheel alignment when the blade is tensioned as it would be for normal operations.)
- 8. When the wheels are coplanar, place a mark on each wheel where you held the straightedge. This assures repeated accuracy every time you adjust your wheels.

Note: When wheels are properly coplanar, the blade may not be centered on the crown of the wheel, but it will be balanced.

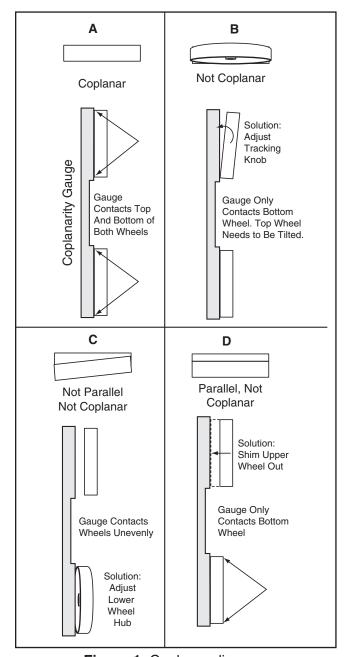


Figure 1. Coplanar diagram.

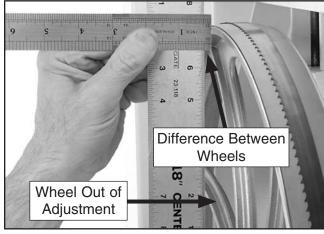


Figure 2. Determining distance needed to shim upper wheel.

Adjusting Lower Wheel

Only do this procedure if you cannot make the wheels coplanar with the tracking knob or by shimming the upper wheel. Make sure the upper wheel is adjusted as close as possible to being coplanar with the lower wheel before beginning. Do this procedure with the blade fully tensioned.

Too	NI	_	_	ᄱ	_	\sim	1

Hex Wrench 4mm	1

To adjust the lower wheel:

- DISCONNECT BANDSAW FROM POWER!
- Loosen the jam nuts on the lower wheel adjustment hub (see Figure 64).

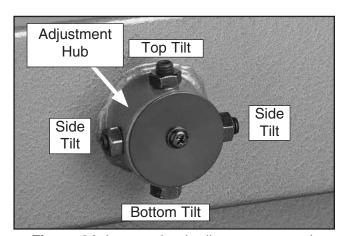


Figure 64. Lower wheel adjustment control.

- Loosen one tilt adjustment set screw, then tighten the opposing set screw approximately an equal amount.
- 4. Check the wheels with the coplanarity gauge, then adjust the lower wheel at the hub as needed until it is parallel and coplanar with the top wheel.
- **5.** Tighten the jam nuts to lock the tilt adjustment set screws in position.

Adjusting Guide Post Travel

The guide post assembly should remain parallel with the blade front-to-back and side-to-side along its length of travel. If it does not, follow these instructions to correctly adjust the guide post.

Tools Needed:

Machinist's Square	
Small Ruler	
Hex Wrench 4mm	
Hex Wrench 5mm	1
Metal Shims	(As Needed)

To check/adjust the guide post parallel sideto-side with the blade:

- DISCONNECT BANDSAW FROM POWER!
- **2.** Tighten the blade to the tension that will be used during operation.
- Loosen the guide post lock knob, raise the guide post and lock it in place, then place a machinist's square on the table next to the side of the blade as illustrated in Figure 65.

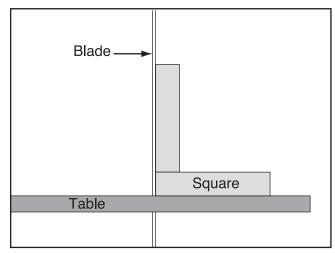


Figure 65. Squaring table to blade.

4. Adjust the table square with the blade using the table tilt knob, then secure it with the table tilt lock lever.

- 5. Loosen the guide post lock knob, lower the guide post to within 1" of the table top, then tighten the knob.
- **6.** Place a machinist's square on the table next to the right hand side of the guide post, as shown in **Figure 66**.

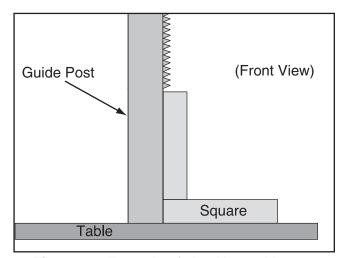


Figure 66. Example of checking guide post squareness.

- —If there is no gap between the square and the guide post along its full length, no adjustments need to be made. Proceed to "To check/adjust if the guide post is parallel with the blade front-to-back."
- —If there is a gap between the square and the guide post, the guide post is not parallel to the blade. Go to **Step 7**.
- 7. Loosen each of the four screws shown in Figure 67 1/4 turn.

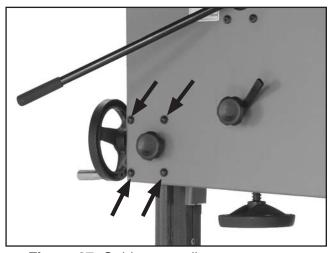


Figure 67. Guide post adjustment screws.

- **8.** Gently tap the lower part of the guide post in the appropriate direction until there is no gap between the square and the guide post.
- 9. Tighten the screws shown in Figure 67.

To check/adjust the guide post parallel with the blade front-to-back:

- DISCONNECT BANDSAW FROM POWER!
- 2. Loosen the guide post lock knob, lower the blade guide assembly to within 1" of the table top, then tighten the lock knob.
- Remove the screws that secure the guide post guard and move it up and out of the way.
- 4. Measure the distance "A" between the top front face of the guide post rack and the back of the blade (see Figure 68).

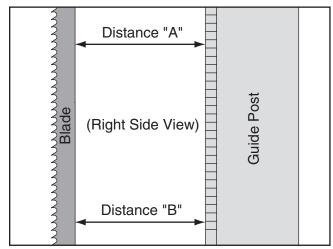


Figure 68. Example of measuring distance between rack and blade at top of guide post.

- **5.** Measure the distance "B" between the bottom front face of the guide post rack and the back of the blade (see **Figure 68**).
 - —If the measurements taken in Steps 4–5 are equal, no adjustments need to be made. Go to Step 9.
 - —If the measurements taken in **Steps 4–5** are not equal, go to **Step 6**.

- **6.** Place the guide post guard on top of the guide post assembly so you can access the guide post bracket.
- Loosen the four screws shown in Figure 67 enough to fit metal shims between the frame and the guide post bracket (see Figure 69).
 - —If the guide post to blade distance is greater at the bottom than at the top, place a shim between the bottom of the bracket and the frame (Shim "A"). This will tilt the bottom of the guide post toward the blade.
 - —If the guide post to blade distance is less at the bottom than at the top, place a shim between the top of the bracket and the frame (Shim "B"). This will tilt the bottom of the guide post away from the blade.

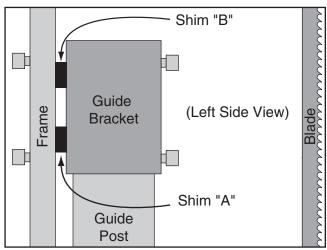


Figure 69. Location for placing shims.

- **8.** Tighten the four screws shown in **Figure 67**, then repeat **Steps 4–5**.
 - —If the measurements are equal, go to **Step**
 - —If the measurements are not equal, continue adding shims as needed until guide post rack to blade distance is the same at the top and bottom.
- **9.** Reinstall the guide post guard with the screws removed in **Step 3**.

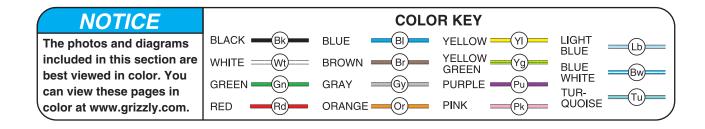
SECTION 8: WIRING

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.

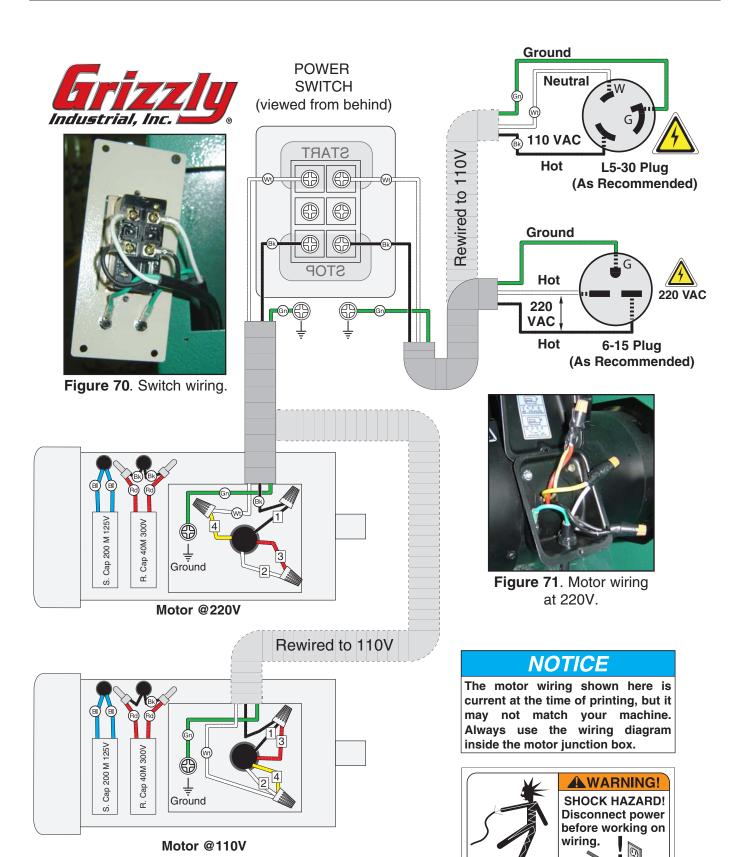
▲WARNING Wiring Safety Instructions

- 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.

- 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.

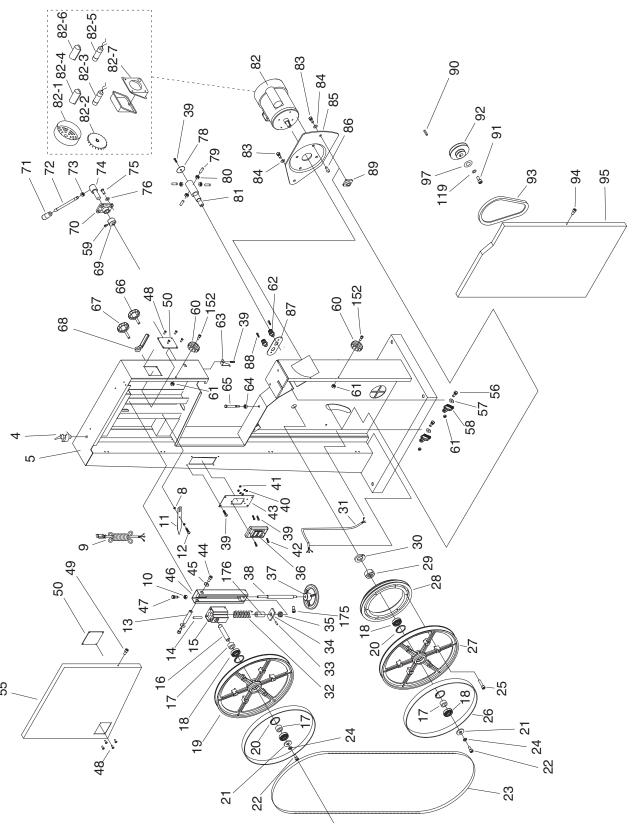


G0513/G0514 Wiring Diagram



SECTION 9: PARTS

Main

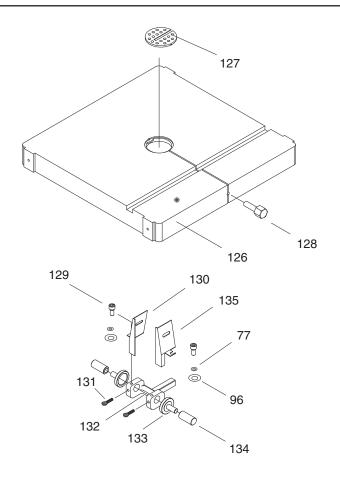


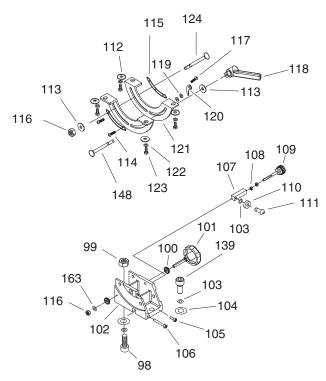
Main Parts List

REF	PART#	DESCRIPTION
4	P0513004	LIFTING RING M10
5	P0513005	MACHINE BODY
5	P0514005	MACHINE BODY
8	PW03M	FLAT WASHER 6MM
9	PWRCRD220L	POWER CORD 12GA 3WIRE
10	PN01M	HEX NUT M6-1
11	P0513011	POINTER
12	P0513012	STEP SCREW M47 X 5
13	P0513013	UPPER SHAFT
14	PRP10M	ROLL PIN 5 X 36
15	P0513015	UPPER WHEEL SHAFT HINGE
16	P0513016	UPPER WHEEL SHAFT
17	P0513017	BUSHING
18	P6204ZZ	BALL BEARING 6204ZZ
19	P0513019	UPPER WHEEL 17"
19	P0514019	UPPER WHEEL 19"
20	PR25M	INT RETAINING RING 47MM
21	PW01M	FLAT WASHER 8MM
22	PB26M	HEX BOLT M8-1.25 X 30
-	-	SAW BLADE 131.7" X 1/2" X 5MM
23 23	P0513023	
	P0514023	SAW BLADE 143" X 3/4" X 5MM LOCK WASHER 8MM
24	PLW04M	
25	PB29M	HEX BOLT M6-1 X 30
26	P0513026	TIRE (GREY) V2.11.06
26	P0514026	TIRE (BLACK)
27	P0513027	LOWER WHEEL 17"
27	P0514027	LOWER WHEEL 19"
28	P0513028	IDLE PULLEY
29	PN32	HEX NUT 1-14
30	PLW09	LOCK WASHER 1"
31	P0513031	MOTOR CORD
32	P0513032	SPRING 7 X 8 X 90
33	PRP02M	ROLL PIN 3 X 16
34	P0513034	LOCATE BLOCK
35	P51201	THRUST BEARING 51201
36	P0513036	SWITCH
37	P0513037	HANDWHEEL
38	P0513038	ADJUSTING ROD
38	P0514038	ADJUSTING BOLT 265
39	PFS07M	FLANGE SCREW M58 X 10
40	PTLW02M	EXT TOOTH WASHER 5MM
41	PN06M	HEX NUT M58
42	PFS08M	FLANGE SCREW M58 X 16
43	P0513043	SWITCH PLATE
44	PB03M	HEX BOLT M8-1.25 X 16
45	PW01M	FLAT WASHER 8MM
46	P0513046	UPPER WHEEL SLIDING BRACKET
47	PB10M	HEX BOLT M6-1 X 25
48	P0513048	RIVET 3.2 X 10
49	PB04M	HEX BOLT M6-1 X 10
50	P0513050	CLEAR WINDOW
55	P0513055	UPPER WHEEL COVER
55	P0514055	UPPER WHEEL COVER
E6	•	

56 PB04M HEX BOLT M6-1 X 10 57 PW03M FLAT WASHER 6MM 58 P0513058 BRUSH 59 PB10M HEX BOLT M6-1 X 25 60 P0513060 STAR HANDLE 61 PLN03M LOCK NUT M6-1 62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 82 P0513081 LOWER WHEEL SHAFT 82	REF	PART #	DESCRIPTION
58 P0513058 BRUSH 59 PB10M HEX BOLT M6-1 X 25 60 P0513060 STAR HANDLE 61 PLN03M LOCK NUT M6-1 62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M10-1.5 X 20 67 P0513066 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513082 MOTOR 2HP 82-1	56	PB04M	HEX BOLT M6-1 X 10
59 PB10M HEX BOLT M6-1 X 25 60 P0513060 STAR HANDLE 61 PLN03M LOCK NUT M6-1 62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M1-2.5 81 P0513082 MOTOR 2HP 8	57	PW03M	FLAT WASHER 6MM
60 P0513060 STAR HANDLE 61 PLN03M LOCK NUT M6-1 62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 P845M HEX BOLT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN 82-2<	58	P0513058	BRUSH
61 PLN03M LOCK NUT M6-1 62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M10-1.5 X 20 66 P0513066 KN0B BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KN0B 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-6 R CAPACITOR COVER 82-5 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M6-8 X 17 84 PLW01M LOCK WASHER SMM 85 P0513082-7 MOTOR BRACKET 86 P0513082-6 R CAPACITOR COVER 87 P0513082-7 MOTOR BRACKET 88 PFS07M FLANGE SCREW M8-1.25 X 20 89 PN513082-6 R CAPACITOR COVER 80-7 P0513082-7 MOTOR BRACKET 80 P0513085 MOTOR BRACKET 80 P0513087 PLATE 81 P0513089 PILLOW BLOCK 82 P0513089 PILLOW BLOCK 83 PB79M HEX BOLT M5-8 X 17 84 PLW01M LOCK WASHER SMM 85 P0513089 PILLOW BLOCK 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513089 PILLOW BLOCK 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0513095 LOWER WHEEL COVER 96 P0513095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 97 P0513095 LOWER WHEEL COVER 98 P0514095 LOWER WHEEL COVER 99 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20	59	PB10M	HEX BOLT M6-1 X 25
62 P0513062 STRAIN RELIEF 16MM 63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M10-1.5 X 20 67 P0513066 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 PO513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR FAN COVER 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-3 S CAPACITOR COVER	60	P0513060	STAR HANDLE
63 P0513063 HEIGHT POINTER 64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 PSS13078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR FAN 82-1 P0513082-1 MOTOR FAN 82-2 P0513082-3 S CAPACITOR COVER <td< td=""><td>61</td><td>PLN03M</td><td>LOCK NUT M6-1</td></td<>	61	PLN03M	LOCK NUT M6-1
64 PN03M HEX NUT M8-1.25 65 PB45M HEX BOLT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P9513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513078 COVER 82-1 P0513081 LOWER WHEEL SHAFT 82-2 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-3 P0513082-5 R CAPACITOR COVER	62	P0513062	STRAIN RELIEF 16MM
65 PB45M HEX BOLT M8-1.25 X 100 66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513071 KNOB 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513078 COVER 82 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR FAN 82-1 P0513082-1 MOTOR FAN 82-2 P0513082-3 S CAPACITOR COVER 82-3 P0513082-4 S CAPACITOR COVER 82-5 <td>63</td> <td>P0513063</td> <td>HEIGHT POINTER</td>	63	P0513063	HEIGHT POINTER
66 P0513066 KNOB BOLT M10-1.5 X 20 67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR FAN 82-1 P0513082-1 MOTOR FAN 82-2 P0513082-2 MOTOR FAN 82-3	64	PN03M	HEX NUT M8-1.25
67 P0513067 KNOB BOLT M10-1.5 X 53 68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-5 R CAPACITOR COVER 82-5 P0513082-6 R CAPACITOR OVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M5-8 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M8-1.25 X 20 87 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M8-1.25 X 20 (LH) 95 P0513095 LOWER WHEEL COVER 96 PO514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM	65	PB45M	HEX BOLT M8-1.25 X 100
68 P0513068 THREADED HANDLE 10MM 69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN COVER 82-3 P0513082-3 S CAPACITOR COVER 82-4 P0513082-5 R CAPACITOR COVER 82-5 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M5-8 X 17 <	66	P0513066	KNOB BOLT M10-1.5 X 20
69 P0513069 CAM 70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN COVER 82-2 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-3 P0513082-3 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-5 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M5-8 X 17 </td <td>67</td> <td>P0513067</td> <td>KNOB BOLT M10-1.5 X 53</td>	67	P0513067	KNOB BOLT M10-1.5 X 53
70 P0513070 PILLOW BLOCK 71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513078 COVER 82 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR COVER 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR WASHER SMM 83 P879M HEX BOLT M5-8 X 17 84 PLW01M LOCK WASHER SMM 85 P0513085 MOTOR BRACKET <th< td=""><td>68</td><td>P0513068</td><td>THREADED HANDLE 10MM</td></th<>	68	P0513068	THREADED HANDLE 10MM
71 P0513071 KNOB 72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR OVER 82-6 P0513082-6 R CAPACITOR BANK 83 P879M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20	69	P0513069	CAM
72 P0513072 SHAFT 73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR WM 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR BANK 82-7 P0513082-7 MOTOR JUNCTION BOX 83 P879M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M	70	P0513070	PILLOW BLOCK
73 PN09M HEX NUT M12-1.75 74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR WM 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR OVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M5-8 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M5-1.25 X 20 87 <	71	P0513071	KNOB
74 P0513074 SHAFT 75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-3 S CAPACITOR COVER 82-5 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513089 PILLOW BLOCK 89 P0513089 <td>72</td> <td>P0513072</td> <td>SHAFT</td>	72	P0513072	SHAFT
75 PSB14M CAP SCREW M8-1.25 X 20 76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR PAN 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P05	73	PN09M	HEX NUT M12-1.75
76 PLW04M LOCK WASHER 8MM 78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M	74	P0513074	SHAFT
78 P0513078 COVER 79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-6 P0513082-6 R CAPACITOR DUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M6-1 X 10 92 P0513092	75	PSB14M	CAP SCREW M8-1.25 X 20
79 PSS09M SET SCREW M8-1.25 X 20 80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-6 P0513082-6 R CAPACITOR DUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 <t< td=""><td>76</td><td>PLW04M</td><td>LOCK WASHER 8MM</td></t<>	76	PLW04M	LOCK WASHER 8MM
80 PN03M HEX NUT M8-1.25 81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M	78	P0513078	COVER
81 P0513081 LOWER WHEEL SHAFT 82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P051309	79	PSS09M	SET SCREW M8-1.25 X 20
82 P0513082 MOTOR 2HP 82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 <td>80</td> <td>PN03M</td> <td>HEX NUT M8-1.25</td>	80	PN03M	HEX NUT M8-1.25
82-1 P0513082-1 MOTOR FAN COVER 82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PV442 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER <t< td=""><td>81</td><td>P0513081</td><td>LOWER WHEEL SHAFT</td></t<>	81	P0513081	LOWER WHEEL SHAFT
82-2 P0513082-2 MOTOR FAN 82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER	82	P0513082	MOTOR 2HP
82-3 P0513082-3 S CAPACITOR 200M 125V 1-3/8 X 2-3/4 82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 1	82-1	P0513082-1	MOTOR FAN COVER
82-4 P0513082-4 S CAPACITOR COVER 82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M<	82-2	P0513082-2	MOTOR FAN
82-5 P0513082-5 R CAPACITOR 40M 300V 1-1/2 X 2-3/4 82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M	82-3	P0513082-3	S CAPACITOR 200M 125V 1-3/8 X 2-3/4
82-6 P0513082-6 R CAPACITOR COVER 82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	82-4	P0513082-4	S CAPACITOR COVER
82-7 P0513082-7 MOTOR JUNCTION BOX 83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	82-5	P0513082-5	R CAPACITOR 40M 300V 1-1/2 X 2-3/4
83 PB79M HEX BOLT M58 X 17 84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	82-6	P0513082-6	R CAPACITOR COVER
84 PLW01M LOCK WASHER 5MM 85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	82-7	P0513082-7	MOTOR JUNCTION BOX
85 P0513085 MOTOR BRACKET 86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	83	PB79M	HEX BOLT M58 X 17
86 PSB14M CAP SCREW M8-1.25 X 20 87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	84	PLW01M	LOCK WASHER 5MM
87 P0513087 PLATE 88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	85	P0513085	MOTOR BRACKET
88 PFS07M FLANGE SCREW M58 X 10 89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	86	PSB14M	CAP SCREW M8-1.25 X 20
89 P0513089 PILLOW BLOCK 90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	87	P0513087	PLATE
90 PK15M KEY 5 X 5 X 35 91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	88	PFS07M	FLANGE SCREW M58 X 10
91 PB81M HEX BOLT M8-1.25 X 20 (LH) 92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	89	P0513089	PILLOW BLOCK
92 P0513092 MOTOR PULLEY 93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	90	PK15M	KEY 5 X 5 X 35
93 PVA42 V-BELT A-42 4L420 94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	91	PB81M	HEX BOLT M8-1.25 X 20 (LH)
94 PB04M HEX BOLT M6-1 X 10 95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	92	P0513092	MOTOR PULLEY
95 P0513095 LOWER WHEEL COVER 95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	93	PVA42	V-BELT A-42 4L420
95 P0514095 LOWER WHEEL COVER 97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	94	PB04M	HEX BOLT M6-1 X 10
97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20		P0513095	
97 PW01M FLAT WASHER 8MM 119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20	95		
119 PW01M FLAT WASHER 8MM 152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20			
152 PB08M HEX BOLT M6-1 X 20 175 PB08M HEX BOLT M6-1 X 20			
175 PB08M HEX BOLT M6-1 X 20			
	176	P0513176	BUSHING

Table





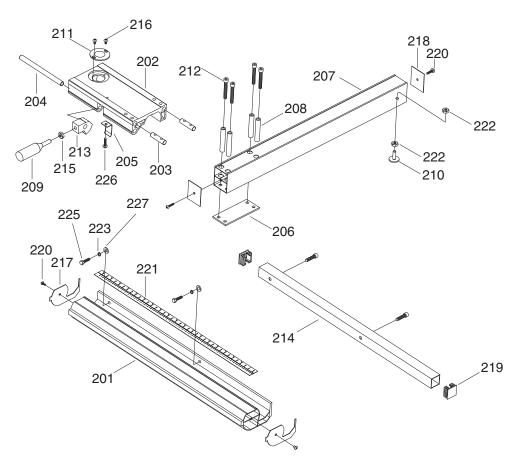
REF PART # DESCRIPTION

		22331III 11311
77	PLW04M	LOCK WASHER 8MM
96	PW01M	FLAT WASHER 8MM
98	PB14M	HEX BOLT M10-1.5 X 35
99	PN02M	HEX NUT M10-1.5
100	P0513100	SMALL GEAR
101	P0513101	STAR HANDLE
102	P0513102	TRUNNION SUPPORT BRACKET
103	PLW06M	LOCK WASHER 10MM
104	PW04M	FLAT WASHER 10MM
105	PB18M	HEX BOLT M6-1 X 15
106	PB39M	HEX BOLT M6-1 X 50
107	P0513107	PILLOW BLOCK
108	PN01M	HEX NUT M6-1
109	P0513109	ADJUST BOLT M6-1
110	P6000	BALL BEARING 6000ZZ
111	PSB61M	CAP SCREW M10-1.5 X 20
112	PW01M	FLAT WASHER 8MM
113	PW01M	FLAT WASHER 8MM
114	PS17M	PHLP HD SCR M47 x 6
115	P0513115	GEAR PLATE
116	PLN04M	LOCK NUT M8-1.25
117	PS17M	PHLP HD SCR M47 x 6

REF PART # DESCRIPTION

118	P0513118	LOCK HANDLE
119	PW01M	FLAT WASHER 8MM
120	P0513120	POINTER
121	P0513121	TRUNNION PLATE
122	PLW04M	LOCK WASHER 8MM
123	PB03M	HEX BOLT M8-1.25 X 16
124	PCB23M	CARRIAGE BOLT M8-1.25 X 80
126	P0513126	TABLE 17" X 17"
126	P0514126	TABLE 19" X 19"
127	P0513X127	TABLE INSERT
128	P0555100	TABLE PIN
129	PB81M	HEX BOLT M8-1.25 X 20 (LH)
130	P0513130	LEFT COVER
131	PTS001M	THUMB SCREW M6-1 X 16
132	P0513132	LOWER BLADE GUIDE SUPPORT
133	P0513133	GUIDE RING
134	P0513134	LOWER ADJUST SHAFT
135	P0513135	RIGHT COVER
139	PB01M	HEX BOLT M10-1.5 X 30
148	PCB10M	CARRIAGE BOLT M8-1.25 X 85
163	PLW04M	LOCK WASHER 8MM

Fence



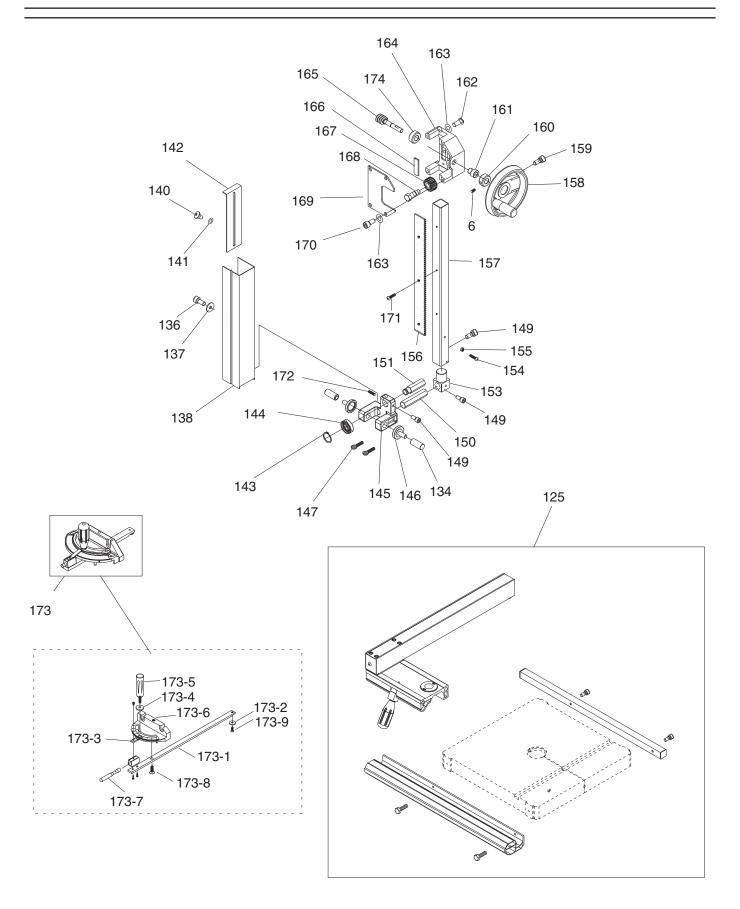
REF PART#	DESCRIPTION
-----------	-------------

111	ΓAIII #	DESCRIPTION
201	P0513201	LARGE FENCE RAIL
201	P0514201	LARGE FENCE RAIL
202	P0513202	ADJUSTABLE BASE
202	P0514202	ADJUSTABLE BASE
203	P0513203	FIXED SHAFT
203	P0514203	FIXED SHAFT
204	P0513204	SHAFT
204	P0514204	SHAFT
205	P0555305	SPRING PIECE
205	P0514205	SPRING PIECE
206	P0513206	BRACKET
206	P0514206	BRACKET
207	P0513207	SUPPORT TUBE
207	P0514207	SUPPORT TUBE
208	P0513208	INTERVAL SHEATH
208	P0514208	INTERVAL SHEATH
209	P0513209	HANDLE
209	P0514209	HANDLE
210	P0513210	ADJ. RUNNER
211	P0513211	CONVEX WINDOW
212	PSB83M	CAP SCREW M6-1 X 55

REF PART # DESCRIPTION

213	P0555313	LOCK MECHANISM
213	P0514213	LOCK MECHANISM
214	P0513214	SMALL FENCE RAIL
214	P0514214	SMALL FENCE RAIL
215	PN01M	HEX NUT M6-1
216	PFS04M	FLANGE SCREW M47 X 6
217	P0513217	LARGE RAIL CAP
217	P0514217	LARGE RAIL CAP
218	P0513218	FENCE CAP
218	P0514218	FENCE CAP
219	P0513219	SMALL RAIL CAP
219	P0514219	SMALL RAIL CAP
220	PHTEK3M	TAP SCREW M3.5 X 8
221	P0513221	SCALE
221	P0514221	SCALE
222	PN01M	HEX NUT M6-1
223	PLW03M	LOCK WASHER 6MM
225	PB08M	HEX BOLT M6-1 X 20
226	PFS05M	FLANGE SCREW M47 X 10
227	PW03M	FLAT WASHER 6MM

Blade Guide



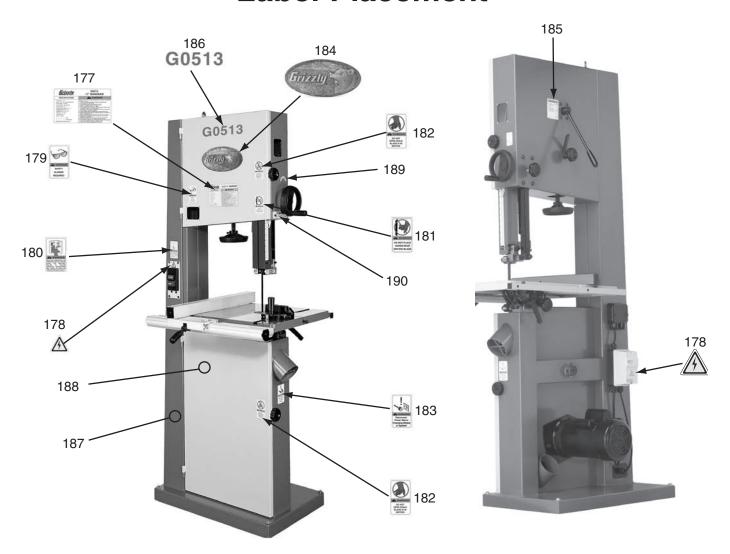
-59-

Blade Guide Parts List

REF	PART#	DESCRIPTION
6	PSS07M	SET SCREW M58 X 5
125	P0513125	COMPLETE FENCE KIT WITH RAILS
125	P0514125	COMPLETE FENCE KIT WITH RAILS
134	P0513134	LOWER ADJUST SHAFT
136	PB82M	HEX BOLT M8-1.25 X 80
137	PW01M	FLAT WASHER 8MM
138	P0513138	PROTECT COVER(ASM)
140	P0513140	STEP SCREW M4 X 5
141	PW04M	FLAT WASHER 10MM
142	P0513142	SLIDING PLATE
143	PR05M	EXT RETAINING RING 15MM
144	P6202ZZ	BALL BEARING 6202ZZ
145	P0513145	UPPER BLADE GUIDE SUPPORT
146	P0513133	GUIDE RING
147	PTS001M	THUMB SCREW M6-1 X 16
149	PB18M	HEX BOLT M6-1 X 15
150	P0513150	ADJUST BAR
151	P0513151	UPPER SPACING SLEEVE
153	P0513153	UPPER GUIDE SUPPORT BLOCK
154	PS38M	PHLP HD SCR M47 X 10
155	PN04M	HEX NUT M47
156	P0513156	RACK
157	P0513157	UPPER GUIDE TUBE
158	P0513158	HANDWHEEL
159	PB08M	HEX BOLT M6-1 X 20

REF	PART #	DESCRIPTION
160	P0513160	LOCATE BUSHING
161	P0513161	BUSHING
162	PSB14M	CAP SCREW M8-1.25 X 20
163	PLW04M	LOCK WASHER 8MM
164	P0513164	GUIDE BRACKET
165	P0513165	WORM CYLINDER
166	P0513166	FIXED PLATE
167	P0513167	GEAR 15T
168	P0513168	FIXED BOLT
169	P0513169	COVER
170	PB03M	HEX BOLT M8-1.25 X 16
171	PS07M	PHLP HD SCR M47 X 8
172	PSS11M	SET SCREW M6-1 X 16
173	P0513173	MITER GAUGE ASSY
173-1	P0513173-1	GUIDE BAR
173-2	P1022029-1	T-SLOT WASHER 3MM
173-3	P0506147	INDICATOR
173-4	P0513173-4	NYLON WASHER 1/4"
173-5	P0513173-5	HANDLE 1/4"
173-6	P0513173-6	MITER GAUGE BODY
173-7	P0513173-7	SHAFT
173-8	PS37M	PHLP HD SCR M6-1 X 6
173-9	PFS01M	FLANGE SCREW M58 X 8
174	P0513174	BUSHING

Label Placement



DEE	DADT "	DECODIDEION
KEF	PART #	DESCRIPTION

177	P0513177	MACHINE WARNING/ID (G0513)	
177	P0514177	MACHINE WARNING/ID (G0514)	
178	PLABEL-14	ELECTRICITY LABEL	
179	PLABEL-11	SAFETY GLASSES 2" X 3 5/16"	
180	PLABEL-12	READ MANUAL 2" X 3 5/16"	
181	PLABEL-19	HANDS/BS BLADE 2"X3 5/16"H	
182	PLABEL-20	DONT OPEN 2"W X 3 5/16"H	
183	PLARFL-18	LINPLUG BANDSAW LARFI	

REF PART # DESCRIPTION

184	G8588	GRIZZLY NAMEPLATE- SMALL	
185	P0513185	SAW TENSION LABEL	
186	P0513186	G0513 LABEL	
186	P0514186	G0514 LABEL	
187	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT	
188	PPAINT-10	LIGHT GRAY REF PAINT	
189	P0513189	GUIDE POST ADJUST LABEL	
190	P0513190	BS BLADE ENCLOSURE LABEL	

AWARNING

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.

Grizziy WARRANTY CARD

Street		_ State	7in
		Email	
		Order #	
The	following information is given o	n a voluntary basis. It will be used for murse, all information is strictly confid	narketing purposes to help us develo
1.	How did you learn about us' Advertisement Card Deck	? Friend Website	Catalog Other:
2.	Which of the following maga	azines 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 househ \$20,000-\$29,000 \$50,000-\$59,000	old income?\$30,000-\$39,000\$60,000-\$69,000	\$40,000-\$49,000 \$70,000+
4.	What is your age group? 20-29 50-59	30-39 60-69	40-49 70+
5.		woodworker/metalworker? 2-8 Years 8-20 Ye	ars20+ Years
6.	How many of your machines	s or tools are Grizzly? 3-56-9	10+
7.	Do you think your machine r	represents a good value?	No
В.	Would you recommend Griz	zly Industrial to a friend?	No
9.	Would you allow us to use y Note: We never use names	our name as a reference for Grizzly more than 3 times.	•
10.	Comments:		

Place Stamp Here



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

Hdalaladaldhaladdhadladdallad

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.





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









Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com