# MODEL G9742
# 5" x 6" METAL-CUTTING BANDSAW w/ SWIVEL HEAD
## OWNER'S MANUAL


#PC7670 PRINTED IN CHINA

# ⚠ WARNING!

**This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.**

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

**The owner of this machine/equipment 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, blade/cutter 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.**

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# INTRODUCTION

## Foreword

We are proud to offer the Model G9742 5" x 6" Metal-Cutting Bandsaw with Swivel Head. This machine is part of a growing Grizzly family of fine metalworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are pleased to provide this manual with the Model G9742. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G9742 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

## Contact Info

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

We stand behind our machines. If you have any service questions or parts requests, 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
Web Site: http://www.grizzly.com

# MACHINE DATA SHEET

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

## MODEL G9742 4" X 6" METAL-CUTTING BANDSAW W/ SWIVEL HEAD

**Product Dimensions:**

| | |
|---|---|
| Weight | 150 lbs. |
| Length/Width/Height | 39 x 23-3/8 x 54-3/4 in. |
| Foot Print (Length/Width) | 26-1/2 x 20-1/2 in. |

**Shipping Dimensions:**

| | |
|---|---|
| Type | Wood Slat Crate |
| Content | Machine |
| Weight | 176 lbs. |
| Length/Width/Height | 41 x 19 x 22 in. |

**Electrical:**

| | |
|---|---|
| Switch | Automatic Shut Off |
| Switch Voltage | 110V |
| Cord Length | 4 ft. |
| Cord Gauge | 12 gauge |
| Plug | Yes |

**Motors:**

**Main**

| | |
|---|---|
| Type | TEFC Capacitor Start Induction |
| Horsepower | 1/2 HP |
| Voltage | 110/220V |
| Prewired | 110V |
| Phase | Single |
| Amps | 7/3.5A |
| Speed | 1720 RPM |
| Cycle | 60 Hz |
| Number Of Speeds | 1 |
| Power Transfer | V-Belt Drive |
| Bearings | Shielded and Lubricated |

**Main Specifications:**

**Operation Info**

| | |
|---|---|
| Blade Speeds | 80, 120, 200 FPM |
| Std. Blade Len | 64-1/2 in. |
| Head Swivel | 45 deg. |

**Cutting Capacities**

| | |
|---|---|
| Angle Cuts | Right 45, Left 60 deg. |
| Vise Jaw Depth | 4-3/8 in. |
| Vise Jaw Height | 2-1/2 in. |
| Max. Capacity Rect. Height At 90D | 5 in. |
| Max. Capacity Rect. Width At 90D | 6 in. |
| Max. Capacity Rnd. At 90D | 5 in. |
| Max. Capacity Rect. Height At 45D | 2-15/16 in. |
| Max. Capacity Rect. Height At 30D | 5 in. |
| Max. Capacity Rect. Width At 30D | 5 in. |
| Max. Capacity Rnd. At 30D | 5 in. |
| Max. Capacity Rect. Width At 45D | 3-3/4 in. |
| Max. Capacity Rnd. At 45D | 3-3/4 in. |
| Max. Capacity Rect. Height At 60D | 1-3/4 in. |
| Max. Capacity Rect. Width At 60D | 2-3/16 in. |
| Max. Capacity Rnd. At 60D | 1-3/4 in. |

**Construction**

| | |
|---|---|
| Table Construction | Precision Ground Cast Iron |
| Wheel Construction Upper | Machined Cast Iron |
| Wheel Construction Lower | Machined Cast Iron |
| Body Construction | Cast Iron |
| Base Construction | Formed and Welded Steel with Coolant Sump |
| Wheel Cover Construction | Pre-formed Steel |
| Paint | Epoxy |

**Other**

| | |
|---|---|
| Wheel Size | 13 in. |
| Blade Guides Upper | Adjustable Carbide a |
| Blade Guides Lower | Adjustable Carbide a |

**Table Info**

| | |
|---|---|
| Table Size Length | 12 in. |
| Table Size Width | 4-1/2 in. |
| Floor To Cutting Area Height | 29 in. |

**Other Specifications:**

| | |
|---|---|
| ISO Factory | ISO 9001 |
| Country Of Origin | **China** |
| Warranty | 1 Year |
| Serial Number Location | Machine Label on Body Frame |
| Assembly Time | 30 minutes |

**Features:**

Control Panel Conveniently Located
Adjustable Hydraulic Downfeed
Quick Release Vise for Rapid Change out of Workpiece
Blade Included

# Identification

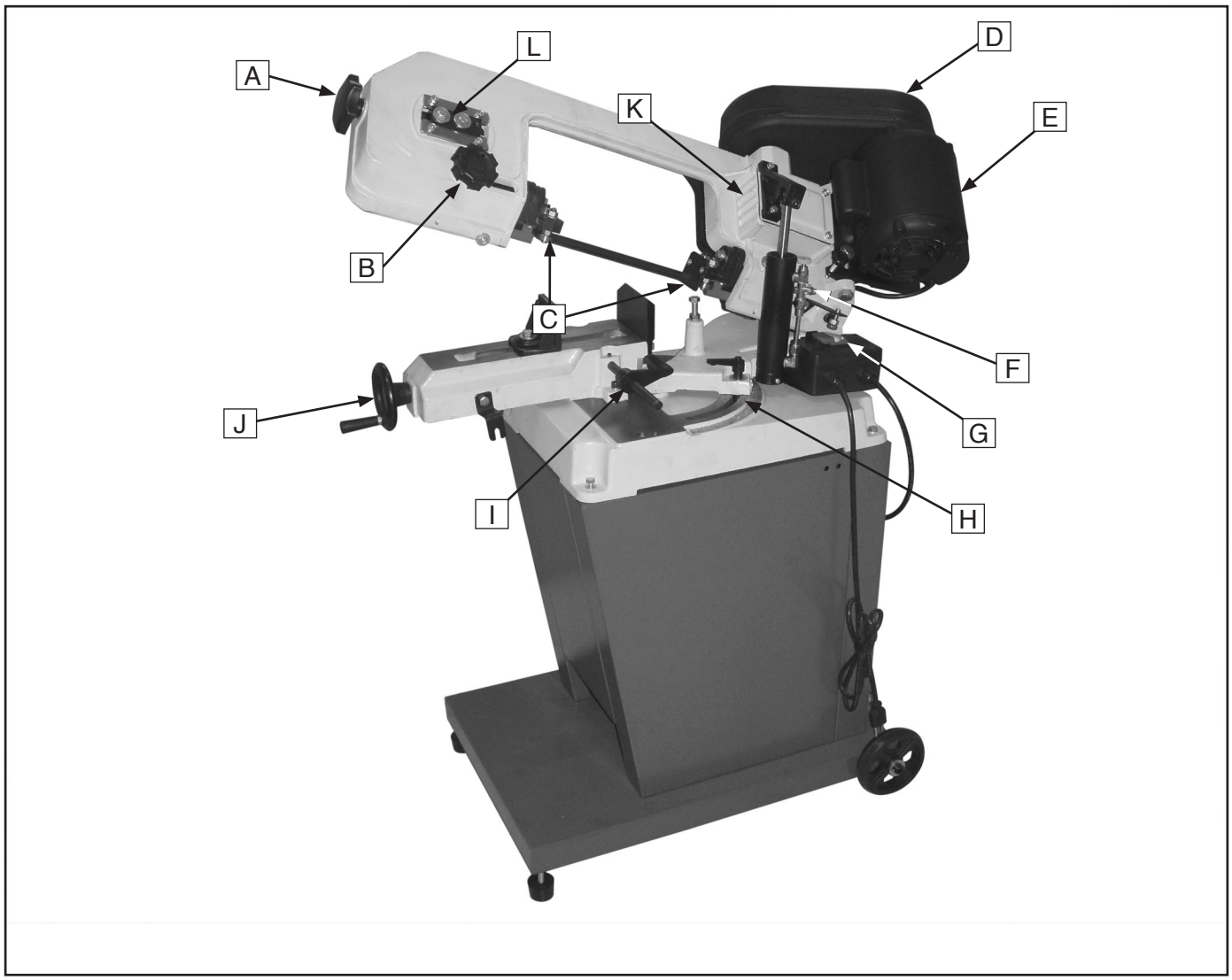



**Figure 1.** The Model G9742.

**A.** Blade Tension Knob
**B.** Blade Guide Knob
**C.** Blade Guides
**D.** Pulley Cover
**E.** Heavy Duty Motor
**F.** Hydraulic Cylinder and Feed Rate Dial
**G.** ON/OFF Push-Button Switch Assembly
**H.** Table Angle Scale
**I.** Cast Iron Stop
**J.** Vise Clamp Handwheel
**K.** Gear Box
**L.** Blade Tension Gauge

# SECTION 1: SAFETY

## ⚠WARNING

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

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

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

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

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

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

## ⚠WARNING

## Safety Instructions for Machinery

1. **READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

# ⚠WARNING
# Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power ***OFF*** and allow all moving parts to come to a complete stop before leaving machine unattended.

11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.

14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ***ON***.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.

19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.

20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.

21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

22. **DO NOT OVERREACH.** Maintain stability and balance at all times.

23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY**.

25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.

# ⚠WARNING

# Additional Safety Instructions for Metal Cutting Bandsaws

1. **BLADE CONDITION.** Do not operate with dull, cracked or badly worn blade. Inspect blades for cracks and missing teeth before each use.

2. **HAND PLACEMENT.** Never position fingers or thumbs in line with the cut. Hands could be crushed in vise or by falling machine components.

3. **ENTANGLEMENT HAZARDS.** Do not operate this bandsaw without blade guard in place. Otherwise, loose clothing, jewelry, long hair and work gloves can be drawn into working parts.

4. **BLADE REPLACEMENT.** When replacing blades, make sure teeth face toward the workpiece. Wear gloves to protect hands and safety glasses to protect eyes.

5. **WORKPIECE HANDLING.** Always support the workpiece with table, vise, or some type of support fixture. Flag long pieces to avoid a tripping hazard. Never hold the workpiece with your hands during a cut.

6. **LOSS OF STABILITY.** Unsupported workpieces may jeopardize machine stability and cause the machine to tip and fall which could cause serious injury.

7. **POWER INTERRUPTION.** Unplug machine after power interruption. Machines without magnetic switches can start up after power is restored.

8. **FIRE HAZARD.** Use EXTREME CAUTION if cutting magnesium. Using the wrong cutting fluid will lead to chip fire and possible explosion.

9. **CUTTING FLUID SAFETY.** Always follow manufacturer's cutting fluid safety instructions. Pay particular attention to contact, contamination, inhalation, storage and disposal warnings. Spilled cutting fluid is a slipping hazard.

10. **ATTENTION TO WORK AREA.** Never leave a machine running and unattended. Pay attention to the actions of others in the area to avoid unintended accidents.

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

12. **HEARING PROTECTION & HAZARDS.** Noise generated by blade and workpiece vibration, material handling, and power transmission can cause permanent hearing loss over time and interfere with communication and audible signals. Always wear hearing protection.

13. **HOT SURFACES.** Due to friction, the workpiece, chips, and some machine components can be hot enough to burn you.

# ⚠WARNING

**No list of safety guidelines can be complete. Every shop environment is different. Like all machines there is danger associated with the Model G9742. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.**

# SECTION 2: CIRCUIT REQUIREMENTS

## 110/220V Operation

**⚠WARNING**

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

**⚠WARNING**

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

***NOTICE***

**The Model G9742 is prewired for 110V operation. If you plan to operate your machine at 220V, the motor must be rewired (see Page 32).**

### Full Load Amperage Draw

Amp Draw at 110V (prewired).....7 Amps
Amp Draw at 220V .....3.5 Amps

### Power Supply Circuit Requirements

You MUST connect your machine to a grounded circuit that is 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 (110V)..... 15 Amps
Minimum Circuit Size (220V) ..... 15 Amps

### Power Connection Device

The Model G9742 comes prewired with a NEMA 5-15 plug for connection to power. If you rewire the motor to 220V, we recommend using the plug and receptacle shown in **Figure 2** for 220V.

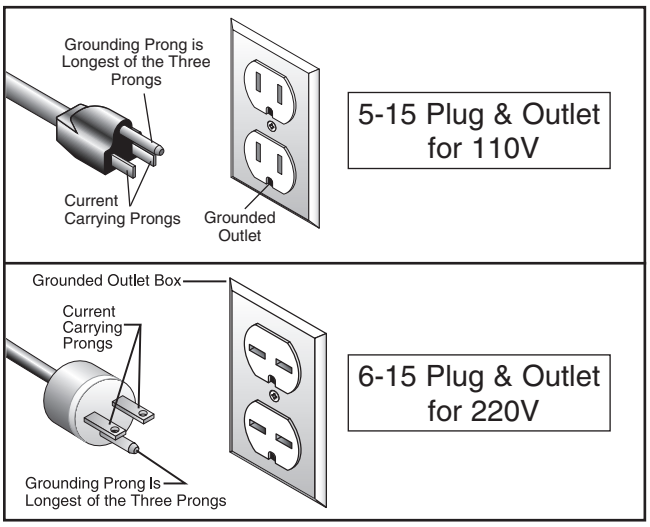



**Figure 2.** Recommended plug types.

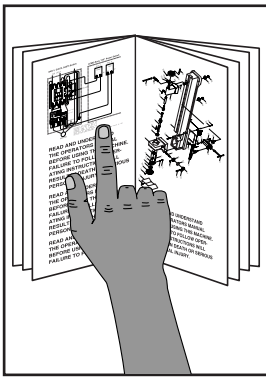
### Extension Cords

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 14 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: SET UP

## Set Up Safety



**⚠WARNING**

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

**⚠WARNING**

**Wear safety glasses during the entire set up process!**

**⚠WARNING**

**The Model G9742 is a heavy machine. DO NOT over-exert yourself while unpacking or moving your machine—get assistance.**

## Items Needed for Set Up

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

| Description | Qty |
|---|---|
| • Safety Glasses (for each person) | 1 |
| • An Assistant | 1 |
| • Phillips Head Screwdriver #2 | 1 |
| • Standard Screwdriver #2 | 1 |
| • Hex Wrench 6mm | 1 |
| • Open-End Wrenches 6, 12, 14, & 19mm | 1 ea. |
| • Open-End Wrenches $\frac{3}{8}$", $\frac{7}{16}$" & $\frac{1}{2}$" | 1 ea. |

## Unpacking

The Model G9742 was carefully packed to ensure that it arrives to you safely. If you discover the machine is damaged after you have signed for delivery, 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, you should inventory the contents.

# Inventory

After all the parts have been removed from the box, you should have the following items:

| Box 1: (Figure 3) | | Qty |
|---|---|---|
| **A.** | Base | 1 |
| **B.** | Front Panel | 1 |
| **C.** | Rear Panel | 1 |
| **D.** | Right Panel | 1 |
| **E.** | Left Panel | 1 |
| **F.** | Chip Tray | 1 |
| **G.** | Feet | 4 |
| **H.** | Wheels | 2 |
| **I.** | Axle | 1 |
| **J.** | Work Stop Shaft | 1 |
| **K.** | Work Stop | 1 |
| **L.** | Belt Cover | 1 |
| **M.** | V-Belt | 1 |

**Assembly Hardware:**

| | |
|---|---|
| —Hex Wrench 4mm | 1 |
| —Hex Bolt 3/8-16 x 1" | 2 |
| —Hex Bolt M8-1.25 x 30 | 4 |
| —Flat Washer 17mm (Wheels) | 4 |
| —Flat Washer 8mm | 4 |
| —Cotter Pin 1/8 x 1 (Wheels) | 2 |
| —Hex Nut 3/8-16 (Feet) | 4 |
| —Flat Washer 3/8 | 1 |
| —Phillips Head Screw M6-1 x 12 | 16 |
| —Flat Washer 1/4 | 18 |
| —Hex Bolt 1/4 x 20 x 1/2" | 2 |
| —Sheet Metal Screw 1/4-10 x 5/16" | 1 |

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

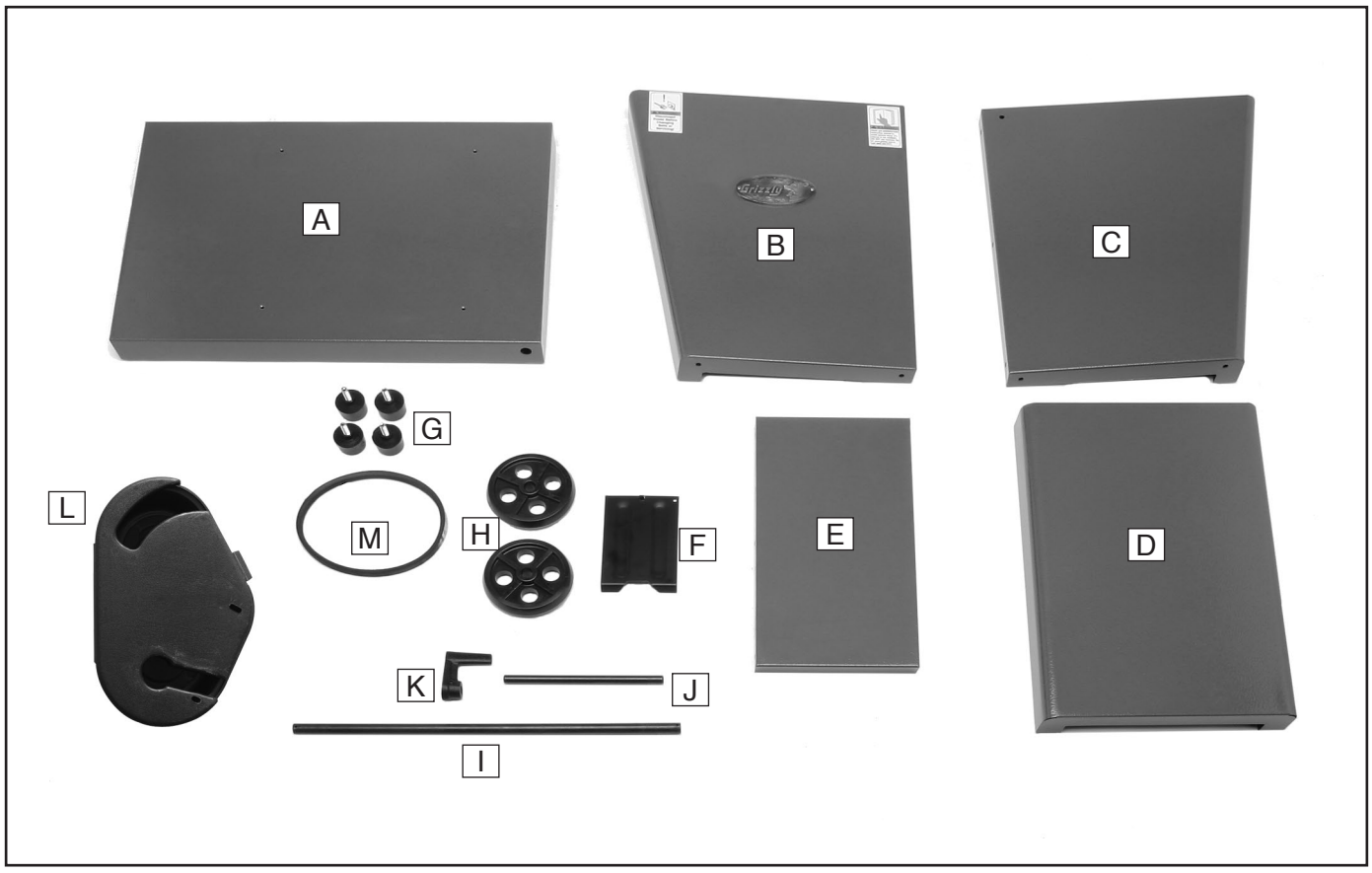


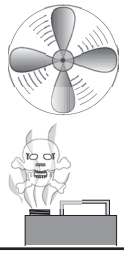

**Figure 3.** G9742 Loose parts inventory.

# 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 4**. 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.**



**⚠CAUTION**

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

**G2544—Solvent Cleaner & Degreaser**
A great product for removing the waxy shipping grease from your machine during clean up.


**Figure 4.** Cleaner/degreaser available from Grizzly.

# Site Considerations

## Floor Load

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

## Working Clearances

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 5** for the minimum working clearances.

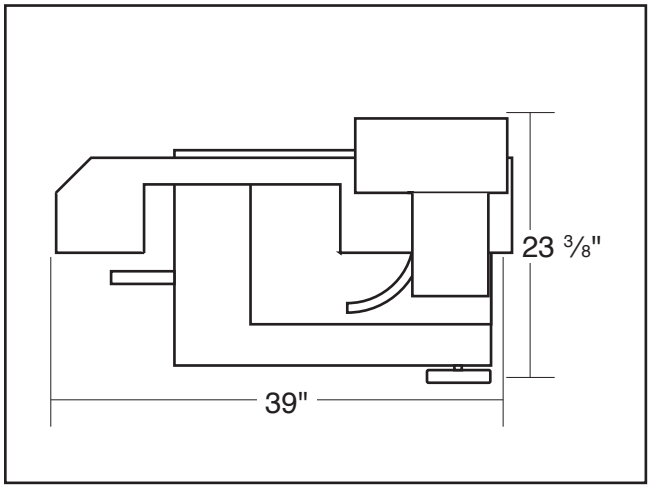
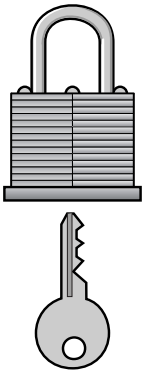



**Figure 5.** Minimum working clearances.



**⚠CAUTION**

**Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and DO NOT allow unsupervised children or visitors in your shop at any time!**

# Cabinet, Wheels & Feet

This bandsaw is shipped with four rubber feet with posts and two wheels with an axle. It is your option to install four rubber feet if you do not need to move the bandsaw, or install the axle and wheels if you need to move the bandsaw regularly.

| **Components and Hardware Needed:** | **Qty** |
|---|---|
| Base | 1 |
| Front Panel | 1 |
| Rear Panel | 1 |
| Right Panel | 1 |
| Left Panel | 1 |
| Ramp | 1 |
| Feet | 4 |
| Wheels | 2 |
| Axle | 1 |
| —Flat Washers 17mm | 4 |
| —Cotter Pins | 2 |
| —Hex Nuts ⅜-16 | 4 |
| —Phillips Head Screw M6-1 x 12 | 16 |
| —Flat Washer ¼ | 16 |
| —Hex Bolt M8-1.25 x 30 | 4 |
| —Flat Washer 8mm | 4 |

**To install the wheels, feet, and the cabinet:**

**1.** At the end of the base with the axle holes, insert the axle into the base (see **Figure 6**).

**2.** Slide a 17mm flat washer and wheel onto each end of the axle, followed by another washer and cotter pin.

**3.** Thread a ⅜-16 hex nut on both feet.

**4.** Thread the two rubber feet into the base (see **Figure 6**).

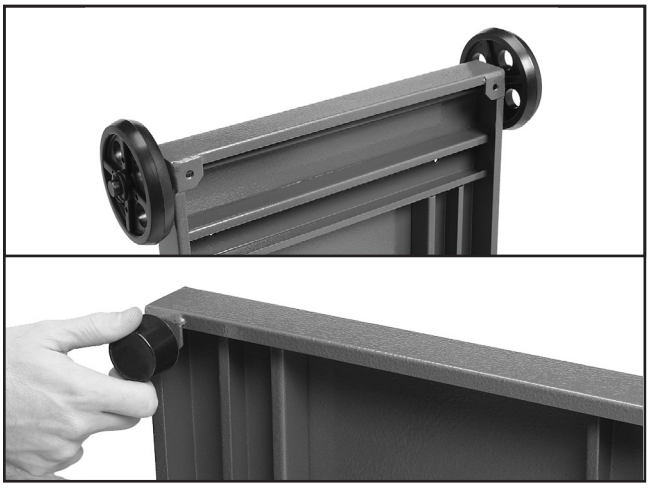


**Figure 6**. Installing wheels and feet.

**5.** Position the base on the floor, and adjust the feet until the base is level and is stable.

**6.** Tighten the hex nuts against the base to lock the feet in position.

**7.** Position the front and rear panels on the base and install the panels to the base with four M6-1 x 12 Phillips head screws and flat washers (see **Figure 7**).

**Figure 7**. Front and rear panels installed.

**8.** Position the left panel between the front and rear panels, and secure it in place with six M6-1 x 12 Phillips head screws and flat washers (see **Figure 8**).

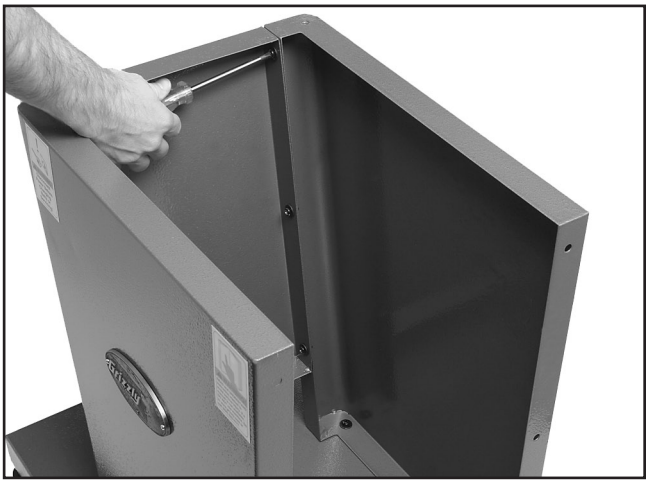


**Figure 8**. Left Panel installed.

**9.** Position the right panel between the front and rear panel, and secure it in place with six M6-1 x 12 Phillips head screws and flat washers (see **Figure 9**).

**Figure 9.** Installing right panel.

**⚠WARNING**

**Get assistance when lifting this machine. Otherwise, you can severely injure yourself!**

**10.** With the help of an assistant or a hoisting device, place the bandsaw onto the cabinet.

**11.** Secure the bandsaw to the cabinet with four M8-1.25 x 30 hex bolts and 8mm flat washers (see **Figure 10**).

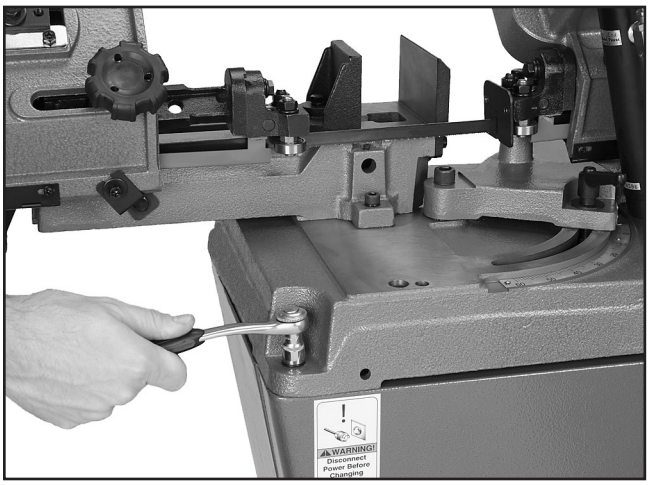



**Figure 10.** Attaching bandsaw to cabinet.

# Shipping Strap & Stop Adjustment

To ensure that your bandsaw arrives without damage to the hinge system, a shipping strap was installed. After removing the shipping strap, you will have to make a series of adjustments, beginning with the feed stop bolt.

**To remove the shipping strap and adjust the feed stop bolt:**

1. Remove the shipping strap hex bolt and strap with a 12mm wrench (see **Figure 11**).

   **Note:** *Keep this shipping strap in the event that you must transport or ship the bandsaw.*

2. Adjust the feed stop bolt and jam nut with a 14mm wrench (**Figure 12**), so the bandsaw blade teeth are just below the table surface when the cut is complete.

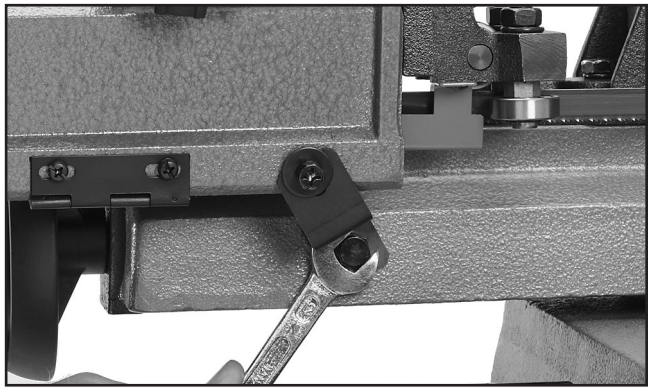


**Figure 11.** Removing shipping strap.

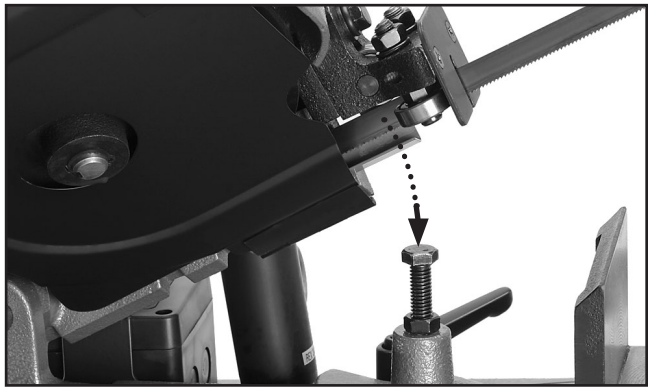


**Figure 12.** Feed stop bolt.

# Squaring Vise to Blade

To ensure that your bandsaw will make cuts that match the degree scale, you must make sure to square the vise to the blade.

**To square the vise to the blade:**

1. Rotate the headstock until the pointer reads "0" on the tabletop scale, and tighten the headstock lock lever so the headstock stays indexed at zero.

2. Using a 6mm wrench, loosen the two cap screws that hold the vise to the table (see **Figure 13**).

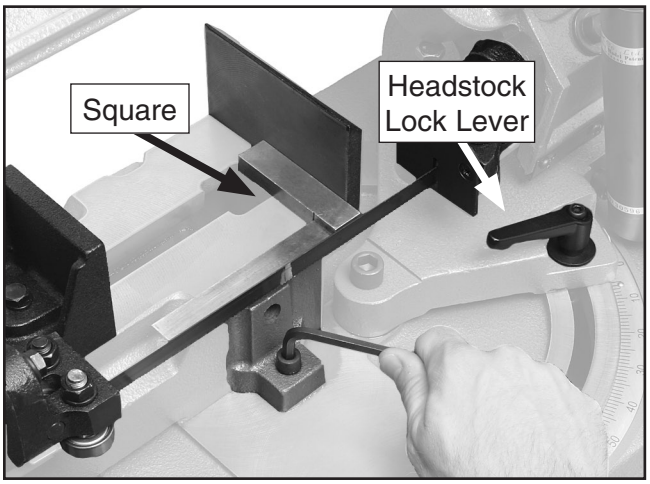



**Figure 13.** Squaring vise to blade, headstock, and table scale.

3. Using a small machinists square, adjust the vise so it is square to the blade.

4. Tighten the two cap screws, so the vise and blade are square with one another.

# Chip Tray & Cast Iron Stop

The chip tray directs small workpieces into a bucket when the cut is complete. The cast iron stop allows you to repeat cuts at the same length.

**To install the chip tray and cast iron stop:**

1. Position the chip tray as shown in **Figure 14** if you choose to use this accessory.

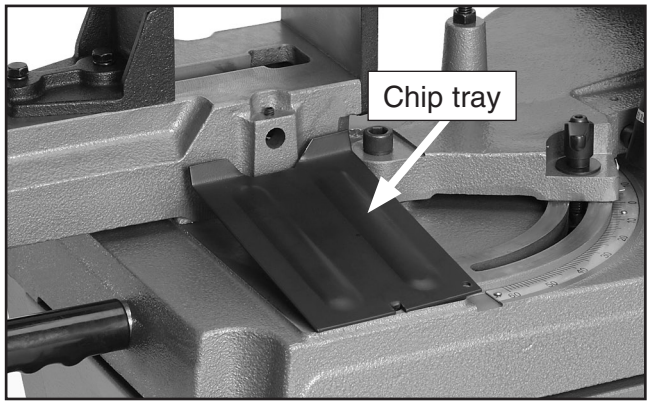



**Figure 14.** Chip tray installed.

2. Insert the stop rod approximately ¾" into the saw until the end of the rod is just flush with the inside casting surface.

3. Using the 4mm hex wrench, tighten the set screw shown in **Figure 15**.

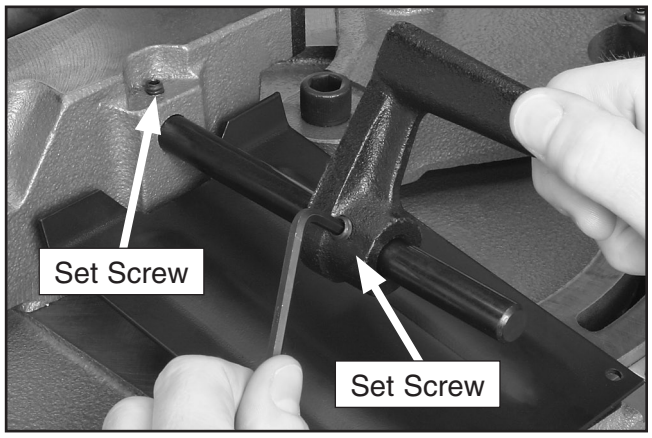



**Figure 15.** Installing stop rod.

4. Slide the cast iron stop onto the stop rod and tighten the set screw.

# OFF Button Lever

After you have removed the shipping strap and have adjusted the headstock stop bolt, you must adjust the OFF button lever stop bolt, so the bandsaw shuts OFF automatically when a cut is complete.

**To set the OFF button lever stop bolt:**

1. With the headstock in the complete down position, loosen the 12mm stop bolt and jam nut (see **Figure 16**).

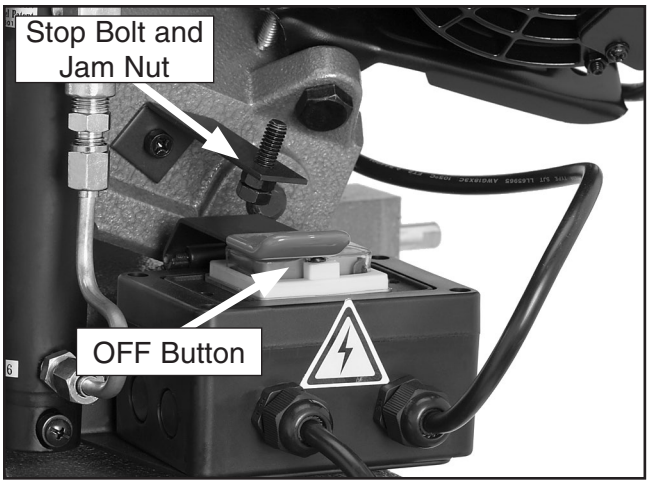



**Figure 16.** OFF button lever and stop bolt.

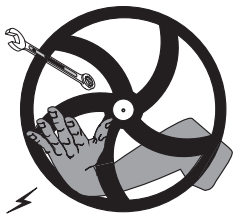
2. Push down on the OFF button lever so the button is completely depressed.

3. While keeping the lever depressed, use your fingertips to turn the stop bolt until the head touches the lever.

4. Back off the stop bolt ⅓ turn and tighten the jam nut.

# Pulley Cover

When opened, the pulley cover gives you access to change the pulley ratio so the bandsaw can cut at one of three speeds.



**⚠WARNING**

**ENTANGLEMENT HAZARD! You MUST install the pulley cover before operating! Otherwise, severe injury may occur.**

**To install the pulley cover:**

1. UNPLUG THE BANDSAW!

2. Position and rotate the pulley cover into place as shown in **Figure 17**.

3. Install the two ¼-20 x ½" hex bolts and washers that secure the pulley cover.

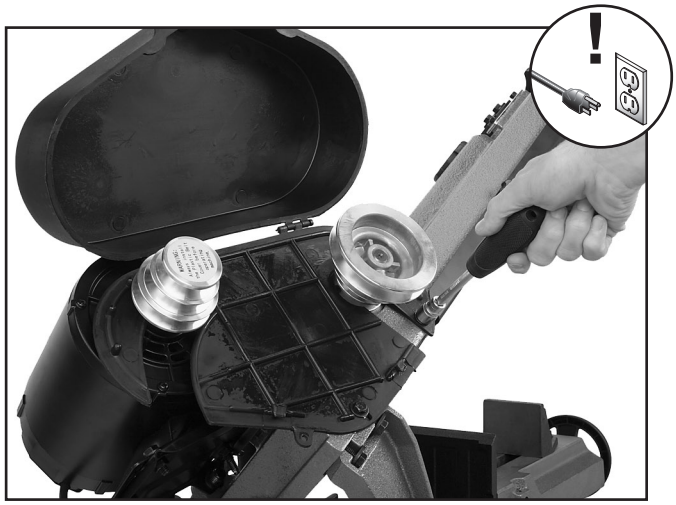


**Figure 17.** Positioning the pulley cover.

4. Loosen the belt tension knob enough to install the belt on the appropriate pulley that will give the required blade speed. Refer to **Blade Speed** on **Page 19** for blade speed selections.

5. Adjust the belt tension knob (**Figure 18**), so the belt has ¼" deflection when pressed in the center, and close the cover.

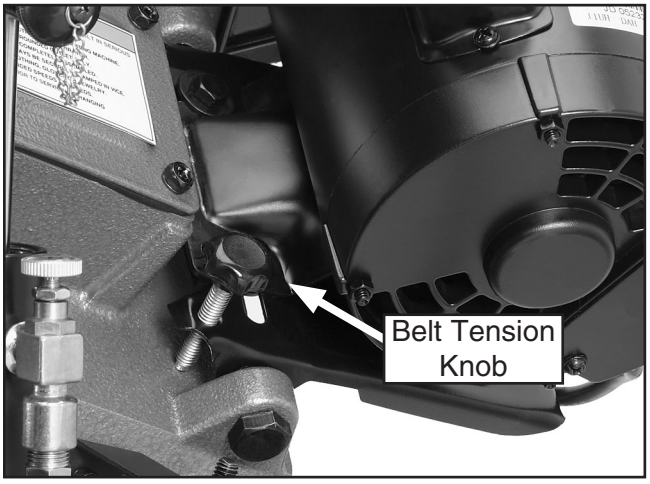



**Figure 18.** Belt tension knob.

# Test Run

**⚠WARNING**

**Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during assembly and operation.**

**Starting the machine:**

**1.** Read the entire instruction manual.

**2.** Make sure all tools and foreign objects have been removed from the machine.

**3.** Put on safety glasses and secure loose clothing or long hair.

**4.** Raise the bandsaw by the handle.

**5.** Start the bandsaw while keeping your finger near the ON/OFF switch at all times during the test run. The bandsaw should run smoothly with little or no vibration.

— If you suspect any problems, immediately stop the bandsaw and correct before continuing.

—If you need any help with your bandsaw call our Tech Support at (570) 546-9663.

# Recommended Adjustments

The adjustments listed below have been performed at the factory. However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the adjustments remain unchanged.

Step-by-step instructions on verifying these adjustments can be found in **SECTION 6: MAINTENANCE** on **Page 26** and **SECTION 7: SERVICE** on **Page 27.**

**Factory adjustments that should be verified:**

**1.** Blade Tracking (**Page 30**).

**2.** Squaring Vise to Blade (**Page 15**).

**3.** Blade Guides (**Page 22**).

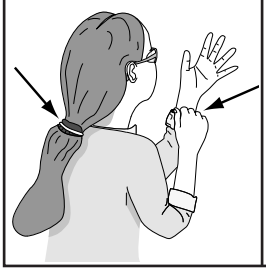
# SECTION 4: OPERATIONS

## Operation Safety

**⚠WARNING**

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





**⚠WARNING**

**Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.**

***NOTICE***

**If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.**

## Blade Speed

The Model G9742 has these three blade speeds: 80, 120, and 200 FPM.

**To change blade speeds:**

1. UNPLUG THE BANDSAW!

2. Determine the best speed for your cut. The table in **Figure 19** is provided as a basic guideline. Material thickness and the type of blade used will factor into FPM selection.

| Material | Feet Per Minute (FPM) |
|---|---|
| Aluminum | 250 |
| Plastics | 800 |
| Brass (soft) | 500 |
| Carbon Tool Steel | 100-150 |
| Cast Iron | 100-150 |
| Cold Rolled Steel | 150-200 |
| High Speed Steel | 90-125 |
| Malleable Iron | 150-200 |
| Hard Rubber | 150-200 |

**Figure 19.** Blade speed table.

3. Slacken the V-belt and position it for the desired FPM (see **Figure 20**).

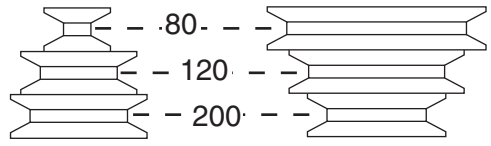



**Figure 20.** V-belt positions in FPM.

4. Tension the V-belt as described in the **Pulley Cover** section on **Page 17**.

# Blade Selection

The chart below is a basic starting point for choosing blade type based on teeth per inch (TPI) for variable tooth pitch blades and for standard raker type bimetal blades/HSS blades. However, for exact specifications of bandsaw blades, contact the blade manufacturer.

Here are some general rules of thumb with respect to bandsaw blade use.

- At least three teeth must contact the metal at any phase of the cut. Otherwise, the teeth can load up with metal, fracture, and break off. If the TPI is too high, the teeth can load up with material and overheat, damaging the blade.
- For a faster but rougher cut, use a blade with a lower TPI and a higher feed rate.
- For a slower but smoother cut, use a blade with more TPI and a lower feed rate.

**To select the correct blade TPI:**

1. Measure the material thickness. This measurement is the length of cut taken from where the tooth enters the workpiece, sweeps through, and exits the workpiece.
2. Refer to the "Material Thickness" row of the blade selection chart in **Figure 21**, and read across to find the workpiece thickness you need to cut.
3. Refer to the "Shape" of metal and "Material Type" columns, and find the shape and material to be cut.
4. In the applicable row, read across to the right and find the box where the row and column intersect. Listed in the box is the minimum TPI recommended for the variable tooth pitch blades, and the TPI for bimetal raker blades in parentheses.

| SHAPE | MATERIAL THICKNESS / MATERIAL TYPE | 5 | 10 | 15 | 20 | 25 | 50 | 75 | 100 | 150 | 200 | 250(mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1/8 | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 7/8 | 1 | 1.5 | 2 | 2.5 | 3 | 4 | 6 | 8 | 10(in) |
|  | FERROUS/ NON-FERROUS | 14/18 (24) | 10/14 (12) | 8/14 (12) | 6/10 (10) | 5/8 (10) | 4/6 (10) | 3/4 (10) | 2/3 (10) | 1.4/2.5 (10) | | | | | | | |
|  | COPPER/ALUMINUM ALLOY | 14/18 (24) | 10/14 (12) | 8/14 (12) | 6/10 (10) | 5/8 (10) | 4/6 (10) | 3/4 (10) | 2/3 (10) | 1.4/2.5 (10) | | | | | | | |
|  | CAST IRON CARBON STEEL | 14/18 (24) | 10/14 (12) | 8/14 (12) | 6/10 (10) | 5/8 (10) | 4/6 (10) | 3/4 (10) | 2/3 (10) | 1.4/2.5 (10) | | | | | | | |
|  | STAINLESS STEEL TOOL STEEL | 14/18 (24) | 10/14 (12) | 8/14 (12) | 6/10 (10) | 5/8 (10) | 4/6 (10) | 3/4 (10) | 2/3 (10) | | | | | | | | |

**Figure 21.** Blade selection chart. **Note:** *The TPI numbers in parentheses apply to bimetal/HSS blades only.*

# Feed Rate

The speed at which the saw blade will cut through a workpiece is controlled by blade type and feed rate.

The feed rate is controlled by the valve lever and feed rate dial on the hydraulic cylinder shown in **Figure 22**.

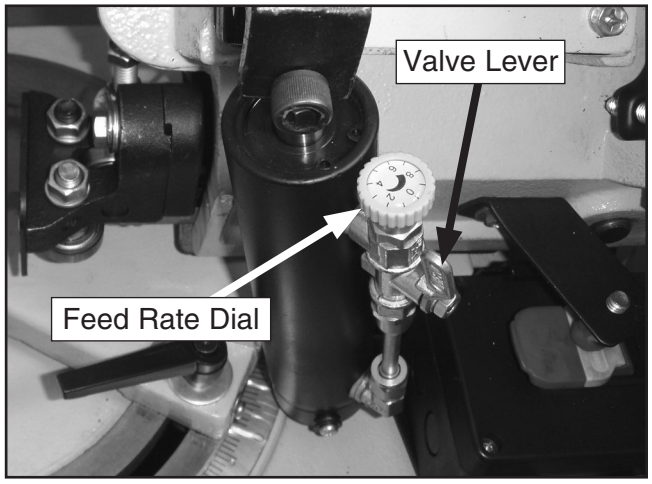



**Figure 22.** Bandsaw feed rate control.

Turning the valve lever in-line with the piping (as shown in the **Figure 22**) opens it up, which allows the fluid to circulate and allows the head to move. Turning the valve lever sideways or perpendicular to the pipiing closes it, which locks the headstock in place.

The feed rate dial controls the amount of fluid that circulates around the hydraulic cylinder, which in turn, controls the speed that it moves.

**To set the feed rate:**

1. Raise the headstock and turn the valve lever sideways (horizontally).
2. Clamp the workpiece in the table vise.
3. Move the headstock and blade a few inches above the workpiece.
4. With the correct saw blade installed and blade speed selected, turn the saw ***ON***.
5. Slowly rotate the feed rate dial to a conservative feed rate until the saw begins to cut the workpiece.
6. Observe the chips that exit the cut, and increase or decrease the feed rate according to the chip characteristics (see **Figure 23**).

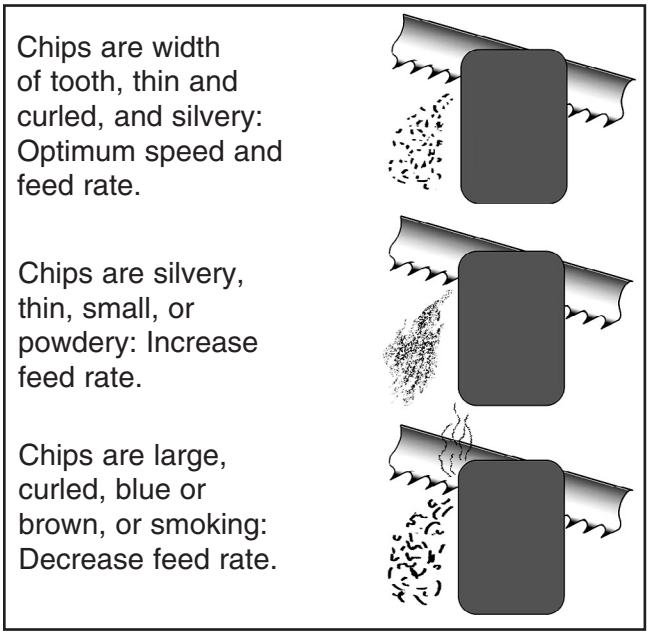



**Figure 23.** Reading chips.

# Blade Guides

**⚠WARNING**

**UNPLUG the bandsaw power cord, and NEVER adjust the blade guides while the saw blade is moving!**

The blade guide side bearings support and twist the blade straight so the blade will enter the workpiece perpendicular to the table surface. The blade guide support bearings prevent blade twist by stopping the blade from being pushed back during a cut. Both adjustments are critical for correct saw operation (see **Figure 24**).

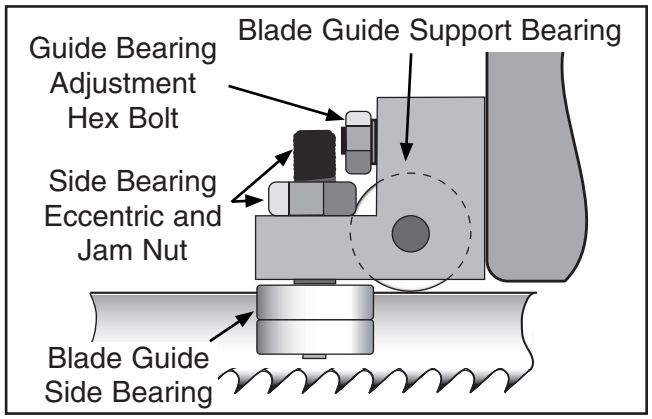



**Figure 24.** Blade guide adjustment locations.

**To adjust the guide bearings:**

**Note:** *Make sure the blade is tensioned and tracks correctly before you adjust the blade guide bearings. Refer to* ***Blade Tension*** *and* ***Blade Tracking*** *on* ***Pages 23*** *and* ***30*** *for further instructions.*

**1.** UNPLUG THE BANDSAW!

**2.** Let the bandsaw headstock park in the full down position.

**3.** Using a 12mm wrench, loosen the guide bearing adjustment hex bolt (see **Figure 25**).

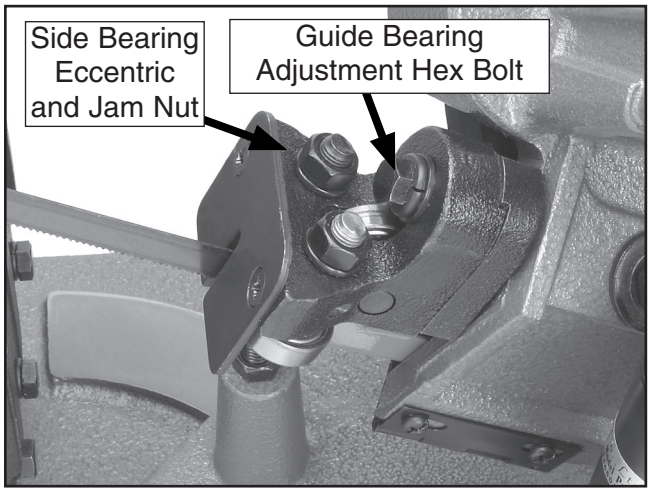



**Figure 25.** Blade guide adjustments.

**4.** Adjust the blade guide housing so the support bearing rests against the rear of the blade (**see Figure 24**).

**5.** Using a 14mm wrench, loosen the outer side bearing eccentric jam nuts.

**6.** Using a 12mm wrench, rotate the side bearing eccentrics until the bearings have a bearing-to-blade clearance of 0.000" to 0.001". The bearings must not pinch the blade and the blade needs to be perpendicular to the table.

**7.** Tighten the jam nuts, loosen the lock knob, and slide the blade guide close to the workpiece so the blade is supported and will not twist during the cut (see **Figure 26**).

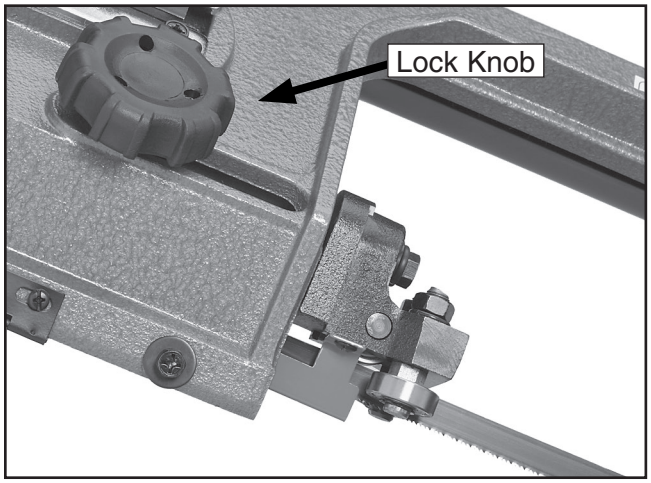



**Figure 26.** Blade guide position lock knob.

# Blade Tension

Proper blade tension is essential to long blade life, straight cuts, and efficient cutting. The Model G9742 features a blade tension indicator to assist you with blade tensioning.

Two major signs that you do not have proper blade tension are: 1) the blade stalls in the cut and slips on the wheels, and 2) the blade frequently breaks from being too tight.

**To tension the blade on the bandsaw:**

1. Make sure the blade is tracking properly.
2. UNPLUG THE BANDSAW!
3. Slide the blade guides as far apart as they will go, then tighten them down again.
4. Turn the tension knob clockwise to tighten the blade.
5. Tighten the blade until the tension indicator moves into the green or center section of the indicator.
6. To fine tune blade tension, use a blade tensioning gauge, like the one found in **SECTION 5: ACCESSORIES** on **Page 24**. Please follow the instructions included with your gauge and the blade manufacturer's recommendations on blade tension.

# Operation Tips

The following tips will help you safely and effectively operate your bandsaw, and help you get the maximum life out of your saw blades.

**Tips for horizontal cutting:**

- Use the work stop to quickly and accurately cut multiple pieces of stock to the same length.
- Clamp the material firmly in the vise jaws to ensure a straight cut through the material, and use the positive lock to speed production.
- Let the blade reach full speed before engaging the workpiece. Never start a cut with the blade in contact with the workpiece (see **Figure 27**).
- Chips should be curled and silvery. If the chips are thin and powder like, increase your feed rate.
- Burned chips indicate a need to reduce your blade speed.
- Wait until the blade has completely stopped before removing the workpiece from the vise, and avoid touching the cut end—it could be very hot!
- Support long pieces so they won't fall when cut, and flag the end to alert passers-by of potential danger.
- Adjust the blade guides as close as possible to the workpiece to minimize side-to-side blade movement.
- Use coolant when possible to increase blade life.

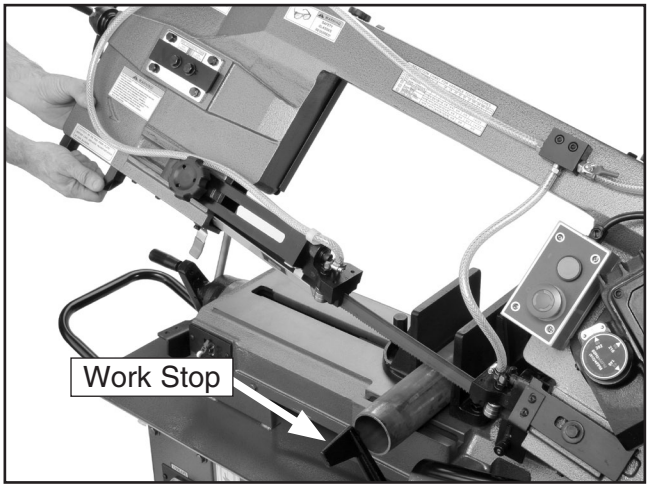



**Figure 27**. Typical proper starting position.

# SECTION 5: ACCESSORIES

**G5107—64-1/2 x 1/2 x .025 10 TPI Raker**
**G5108—64-1/2 x 1/2 x .025 14 TPI Raker**
**G5109—64-1/2 x 1/2 x .025 18 TPI Raker**
**G5110—64-1/2 x 1/2 x .025 24 TPI Raker**
**G5111—64-1/2 x 1/2 x .025 6-10 Variable Pitch**
**G5112—64-1/2 x 1/2 x .025 8-12 Variable Pitch**
**G5113—64-1/2x1/2 x .025 10-14 Variable Pitch**
**G5114—64-1/2x1/2 x .025 14-18 Variable Pitch**
**G5115—64-1/2x1/2 x .025 20-24 Variable Pitch**

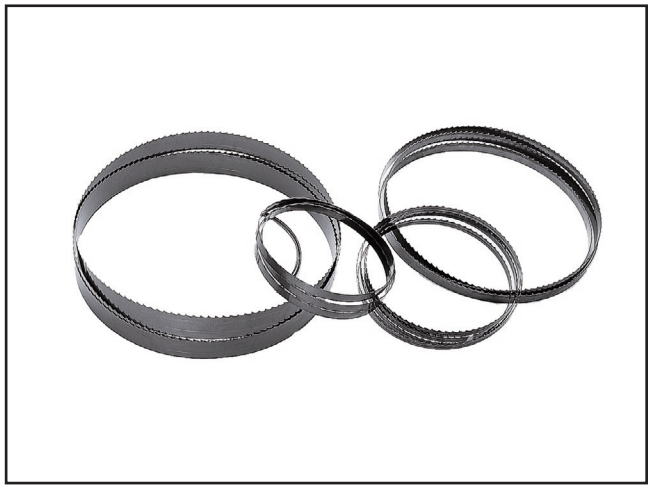


**Figure 28.** Blades.

**H5408—Blade Tensioning Gauge**
The Blade Tensioning Gauge ensures long blade life, reduced blade breakage, and straight cutting by indicating correct tension. A precision dial indicator provides you with a direct readout in PSI.


**Figure 29.** H5408 blade tensioning gauge.

**Power Twist® V-Belts**
**H9815—A ½" x 4'**
A smart upgrade for any machine that uses V-belts. These link belts provide smooth running with less vibration, heat, and noise than solid belts. Power Twist® V-Belts can be customized in minutes to any size—just add or remove sections to fit your needs. Once you use a link belt, you'll like it so much you'll want to convert all your machines!

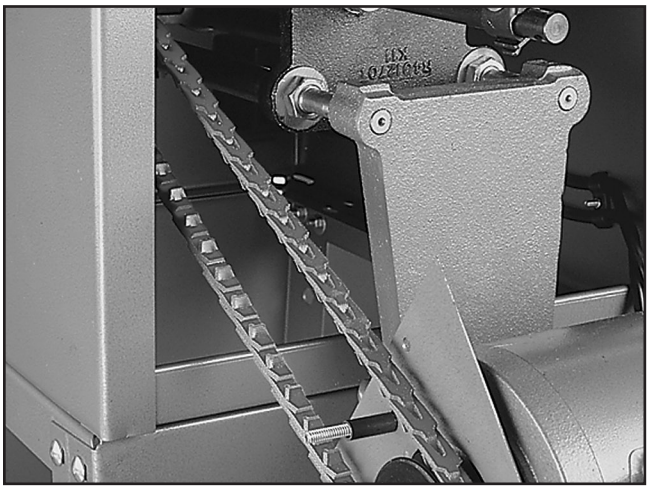


**Figure 30.** Power Twist® V-Belt.

**T20640—Machinery's Handbook**
For more than 90 years, this handbook has been the benchmark by which machinists' and engineering texts have been judged. Includes a wealth of information on mathematics, mechanics, measurements, and materials. A must have for the amateur or professional.

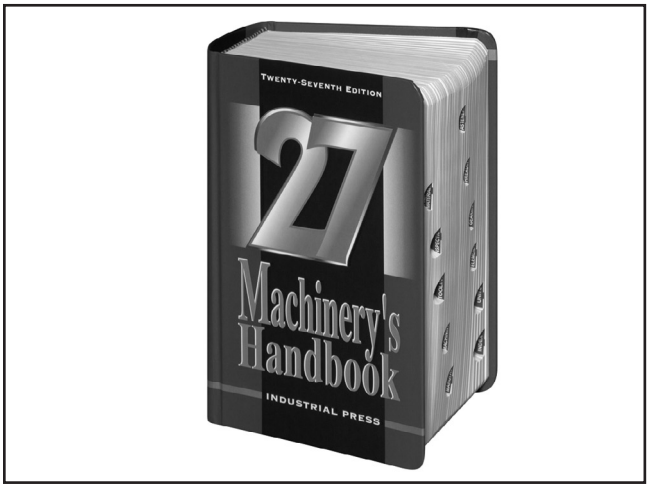



**Figure 31.** Machinery's Handbook.

**G5618—Deburring Tool w/ 2 Blades**
**G5619—Extra Aluminum Blades**
**G5620—Extra Brass and Cast Iron Blade**
The quickest tool for smoothing freshly machined metal edges. Comes with two blades—one for steel/aluminum and one for brass/cast iron.

**Figure 32.** G5618 deburring tool.

**T20501—Face Shield, 4" Crown, Clear**
**T20502—Face Shield, 7" Crown, Clear**
**T20448—Economy Clear Safety Glasses**
**T20452—"Kirova" Anti-Reflective Glasses**
**T20456—"Dakura" Clear Safety Glasses**
**H0736—Shop Fox® Safety Glasses**
These glasses meet ANSI Z87.1-2003 specifications. Buy extras for visitors or employees. You can't be too careful with shop safety!

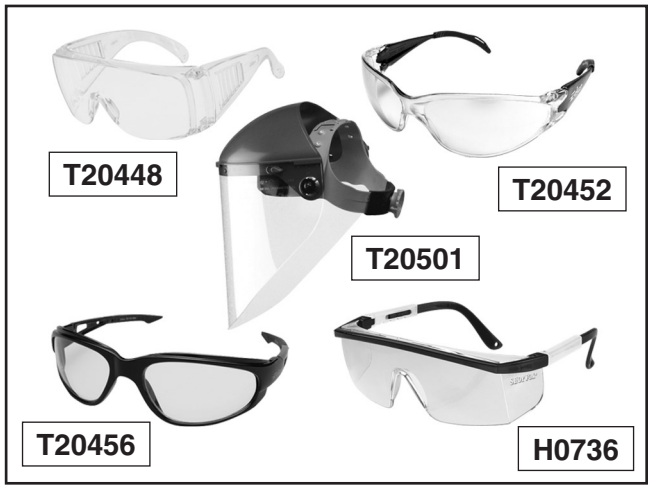



**Figure 33.** Our most popular eye protection.

**G7615—Oil Can w/Steel Nozzle**
**G7616—Oil Can w/Plastic Nozzle**
**G7617—Oil Can w/Flexible Plastic Nozzle**
Whether you're lubricating cutting tools or maintaining machinery in top operating condition, you'll appreciate these High Pressure Oil Cans. Each can holds 5 ounces of oil and has a trigger activated, high pressure pump.

**Figure 34.** High pressure oil cans.

**G9256—6" Dial Caliper**
**G9257—8" Dial Caliper**
**G9258—12" Dial Caliper**
These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock resistant construction and a dust proof display.

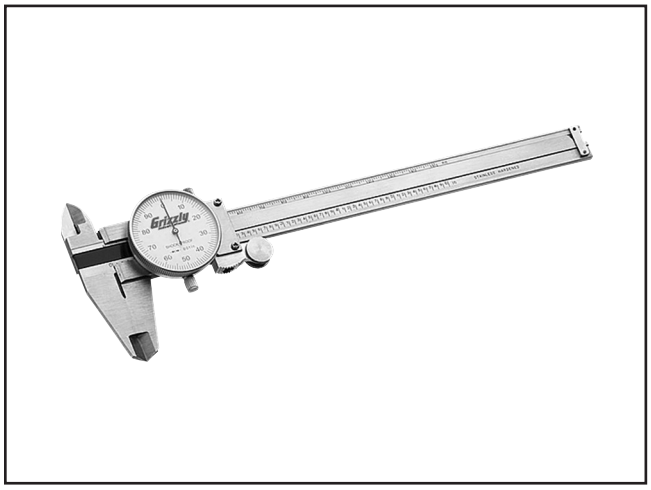
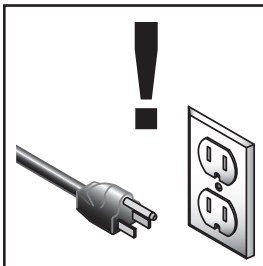



**Figure 35.** Grizzly® dial calipers.

# SECTION 6: MAINTENANCE



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

## Schedule

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

**Daily Check**
- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.
- Clean after each use.
- Proper blade tension.

**Monthly Check**
- Lubricate vise screw.
- Check V-Belt for wear.

**Annual Check**
- Inspect gear lubrication.

## Cleaning

Cleaning the Model G9742 is relatively easy. Keeping metal chips away from bandsaw mechanisms is important to making sure that your bandsaw lasts a long time. Use a shop vacuum or brush off metal chips frequently.

## Lubrication

The gearbox and all bearings are sealed and permanently lubricated so no scheduled lubrication is needed. However, you must periodically lubricate adjustment locations and bare metal surfaces. Refer to **Figure 36** for lubrication points.

**Lubricate the following areas listed below:**

**A. Blade Tension Mechanism:** Open the main blade guard, and drop a few drops of oil on the tension knob lead screw.

**B. Blade and Guides:** Drop a few drops of light machine oil on the blade and the blade guides daily.

**C. Gear Box:** Is packed with grease and should only be changed if you suspect contamination has entered.

**D. Table and Machined Surfaces:** Keep bare metal surfaces rust-free with regular applications of products like SLIPIT®. For long term storage you may want to consider products like Boeshield T-9™.

**E. Vise Lead Screw:** Drop a few drops of light machine oil on the vise lead screw weekly.

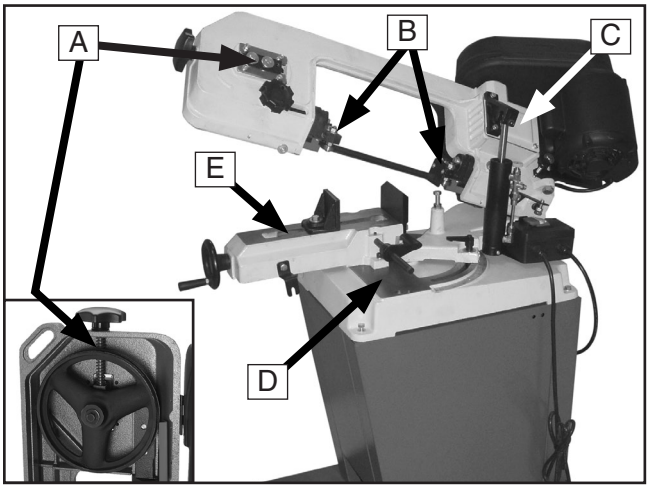
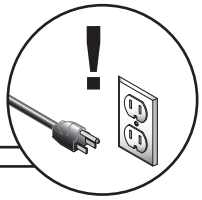



**Figure 36.** Lubrication points.

# SECTION 7: SERVICE

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

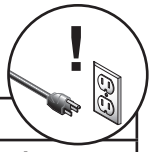
## Troubleshooting



### Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|---|---|---|
| Machine does not start or a breaker trips. | 1. Plug/receptacle is at fault or wired incorrectly.<br>2. Start capacitor is at fault.<br>3. Wall fuse/circuit breaker is blown/tripped.<br>4. Motor connection wired incorrectly.<br>5. Power supply is at fault/switched OFF.<br>6. Motor ON/OFF switch is at fault.<br>7. Wiring is open/has high resistance.<br>8. Motor is at fault. | 1. Test for good contacts; correct the wiring.<br>2. Test/replace if faulty.<br>3. Ensure correct size for machine load; replace weak breaker.<br>4. Correct motor wiring connections.<br>5. Ensure hot lines have correct voltage on all legs and main power supply is switched ON.<br>6. Replace faulty ON/OFF switch.<br>7. Check for broken wires or disconnected/ corroded connections, and repair/replace as necessary.<br>8. Test/repair/replace. |
| Machine stalls or is underpowered. | 1. Wrong blade for the workpiece material.<br>2. Wrong workpiece material.<br>3. Feed rate/cutting speed too fast for task.<br>4. Blade is slipping on wheels.<br>5. Low power supply voltage.<br>6. Motor bearings are at fault.<br>7. Plug/receptacle is at fault.<br>8. Motor connection is wired incorrectly.<br>9. Motor has overheated.<br>10. Motor is at fault. | 1. Use blade with correct properties for your type of cutting.<br>2. Use metal with correct properties for your type of cutting.<br>3. Decrease feed rate/cutting speed.<br>4. Adjust blade tracking and tension.<br>5. Ensure hot lines have correct voltage on all legs.<br>6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.<br>7. Test for good contacts; correct the wiring.<br>8. Correct motor wiring connections.<br>9. Clean off motor, let cool, and reduce workload.<br>10. Test/repair/replace. |
| Machine has vibration or noisy operation. | 1. Motor fan is rubbing on fan cover.<br>2. Blade is at fault.<br>3. Gearbox is at fault.<br>4. Wrong blade & too slow of speed. | 1. Replace dented fan cover; replace loose/ damaged fan.<br>2. Replace/resharpen blade.<br>3. Rebuild gearbox for bad gear(s)/bearing(s).<br>4. Change blade and or speed. |

## Bandsaw Operations



| SYMPTOM | POSSIBLE CAUSE | CORRECTIVE ACTION |
|---|---|---|
| Machine is loud when cutting or bogs down in the cut. | 1. Excessive feed rate.<br>2. The blade TPI is too great, or the material is too coarse. | 1. Refer to **Feed Rate** on **Page 21**, or **Changing Blade Speed** on **Page 19**, and adjust as required.<br>2. Refer to **Blade Selection** on **Page 20** and adjust as required. |
| Blades break often. | 1. Blade is not tensioned correctly.<br>2. The workpiece is loose in the vise.<br>3. The feed or cut speed is wrong.<br>4. The blade TPI is too great, or the material is too coarse.<br>5. The blade is rubbing on the wheel flange.<br>6. The bandsaw is being started with the blade resting on the workpiece.<br>7. The guide bearings are misaligned, or the blade is rubbing on the wheel flange.<br>8. The blade is too thick, or the blades are of low quality. | 1. Check to see that blade is not excessively tight or too loose.<br>2. Clamp the workpiece tighter, or use a jig to hold the workpiece.<br>3. Refer to **Feed Rate** on **Page 21**, or **Changing Blade Speed** on **Page 19**, and adjust as required.<br>4. Refer to **Blade Selection** on **Page 20** and adjust as required.<br>5. Refer to **Blade Tracking** on **Page 30**, and adjust as required.<br>6. Start bandsaw and then slowly lower the headstock by setting the feed rate.<br>7. Refer to **Blade Tracking** on **Page 30**, or **Blade Guides** on **Page 22** and adjust as required.<br>8. Use a higher quality blade. |
| Blade dulls prematurely. | 1. The cutting speed is too fast.<br>2. The blade TPI is too coarse.<br>3. The blade feed pressure is too light.<br>4. The workpiece has hard spots, welds, or scale is on the material.<br>5. The blade is twisted.<br>6. The blade is slipping on the wheels. | 1. Refer to **Changing Blade Speed** on **Page 19**, and adjust as required.<br>2. Refer to **Blade Selection** on **Page 20** and adjust as required.<br>3. Refer to **Feed Rate** on **Page 21**, and adjust as required.<br>4. Increase the feed pressure, and reduce the cutting speed.<br>5. Replace the blade.<br>6. Refer to **Blade Tension** on **Page 23**, and adjust as required. |
| Blade wears on one side. | 1. The blade guides are worn or mis-adjusted.<br>2. The blade guide slide bracket is loose.<br>3. The wheels are out of alignment. | 1. Refer to **Blade Guides** on **Page 22** and replace or adjust.<br>2. Tighten the blade guide bracket.<br>3. Refer to **Blade Tracking** on **Page 30**, and adjust as required. |
| Teeth are ripping from the blade. | 1. The feed pressure is too heavy and the blade speed is too slow; or the blade TPI is too coarse for the workpiece.<br>2. The workpiece is vibrating in the vise.<br>3. The blade gullets are loading up with chips. | 1. Refer to **Blade Selection** on **Page 20** and decrease the feed pressure. Refer to **Feed Rate** on **Page 21**, and adjust as required.<br>2. Re-clamp the workpiece in the vise, and use a jig if required.<br>3. Use a coarser-tooth blade. |
| The cuts are crooked. | 1. The feed pressure is too high.<br>2. The guide bearings are out of adjustment, or too far away from the workpiece.<br>3. The blade tension is low.<br>4. The blade is dull.<br>5. The blade speed is wrong. | 1. Refer to **Feed Rate** on **Page 21**, and adjust as required.<br>2. Refer to **Blade Guides** on **Page 22** and replace or adjust.<br>3. Refer to **Blade Tension** on **Page 23**, and adjust as required.<br>4. Refer to **Changing the Blade** on **Page 29** and replace the blade.<br>5. Refer to **Changing Blade Speed** on **Page 19**, and adjust as required. |

# Blade Change

Blades should be changed when they become dull, damaged, or when you are using materials that require a blade of a certain type or tooth count.

**To change the bandsaw blade:**

1. UNPLUG THE BANDSAW!

2. Hold the headstock, unattach the feed cylinder by removing the cap screw, then raise the headstock to the full vertical position (see **Figure 37**).

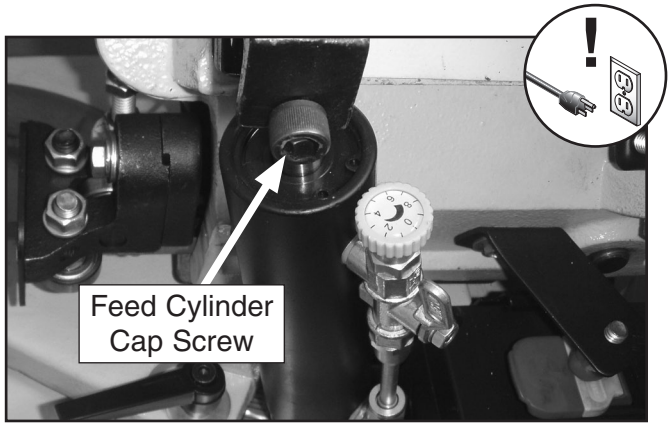



**Figure 37**. Disengaging the feed cylinder.

3. Push the safety stop in, use a screwdriver to remove the upper and lower blade guide guards, and loosen the blade guides (see **Figure 38**).

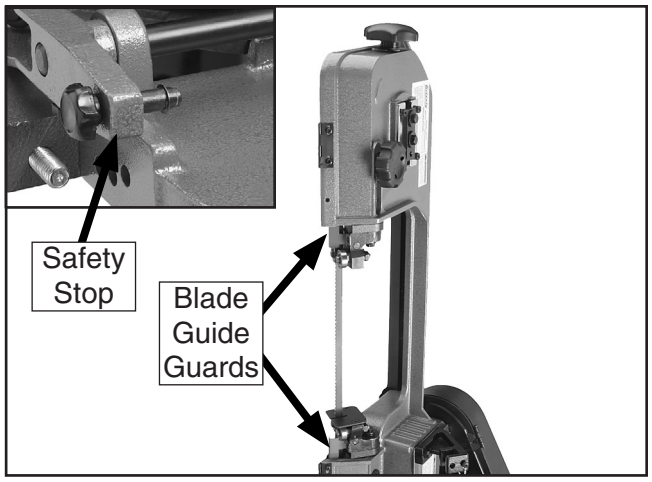



**Figure 38.** Blade guide guards and fasteners.

4. Loosen the tension knob and slip the blade off of the wheels.

5. Install the new blade through both blade guide bearings, as shown in **Figure 39**, and around the bottom wheel.

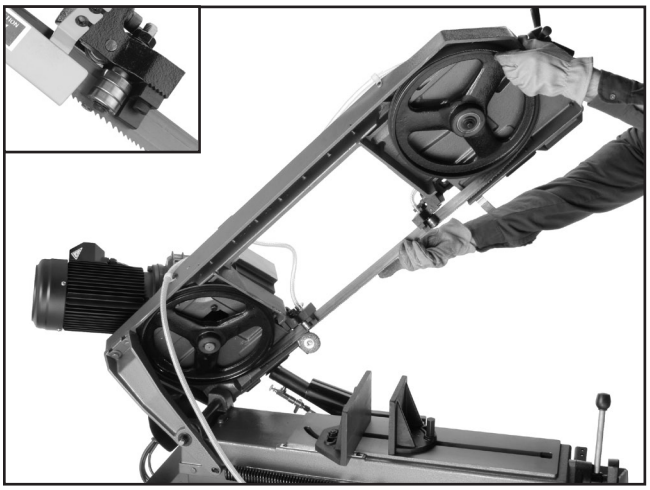


**Figure 39.** Typical blade installation.

6. Hold the blade around the bottom wheel with one hand and slip it around the top wheel with the other hand, keeping the blade between the blade guide bearings.

   **Note:** *It is sometimes possible to flip the blade inside out, in which case the blade will be installed in the wrong direction. Check to make sure the blade teeth are facing toward the workpiece, as shown in* ***Figure 39****, after mounting on the bandsaw. Some blades will have a directional arrow as a guide.*

7. When the blade is around both wheels, adjust the position so the back of the blade is against the shoulder of the wheels.

8. Tighten the tension knob as tight as necessary so the blade will not slip on the wheels during start up.

9. Spin the wheel by hand until the blade resumes the previous tracking.

   —If the tracking needs to be adjusted, refer to the **Tracking** procedure in the next section.

   —If the tracking is fine, proceed to **Blade Tension** on **Page 23**.

**10.** Reinstall the blade guards, and adjust the blade guides as described in **Blade Guides** on **Page 22**

**11.** Re-attach the feed cylinder.

# Blade Tracking

The blade tracking has been properly set at the factory. The tracking will rarely need to be adjusted if the bandsaw is used properly.

**To adjust the blade tracking on the bandsaw:**

**1.** UNPLUG THE BANDSAW!

**2.** Raise the headstock and lock it in place by pushing in the safety stop knob.

**3.** Remove both blade guide assemblies.

**4.** Open the wheel access cover.

**5.** Loosen, but do not remove the lower cap screw in the blade wheel tilting mechanism (**Figure 40**).

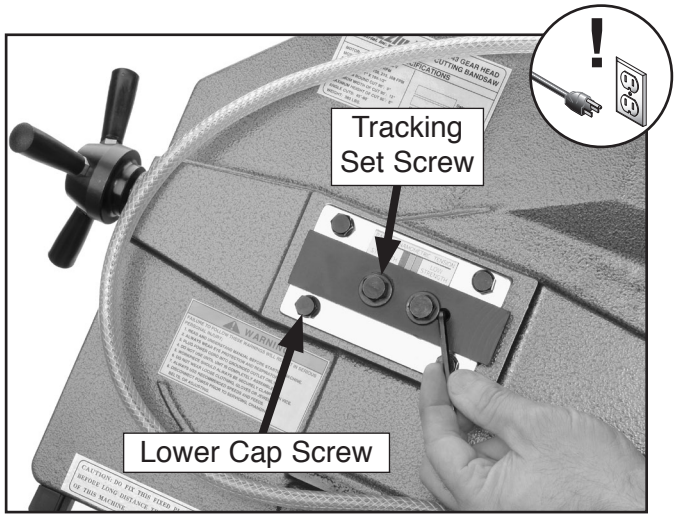



**Figure 40.** Adjusting tracking set screw.

**6.** Relax the blade tension.

**7.** Adjust the tracking set screw with a 4mm hex wrench as shown in **Figure 40**, then tighten the cap screw loosened in **Step 5**.

—Tightening the set screw will move the blade closer to the shoulder of the wheel.

—Loosening the set screw will move the blade away from the shoulder.

**8.** Tension the blade.

**9.** Spin the wheel by hand and observe how the blade tracks on the wheel.

—If the blade tracks along the shoulder of the wheel (without rubbing), the blade is tracking properly and this adjustment is completed.

—If the blade drifts away from the shoulder of the wheel or hits the shoulder, repeat **Steps 5-8**.

**10.** Replace the blade guard and blade guide assemblies.

**11.** Adjust the blade guides as needed. Refer to **Blade Guides** on **Page 22**

# Electrical Components


**Figure 41.** Capacitor.


**Figure 43.** Switch wiring rear view.

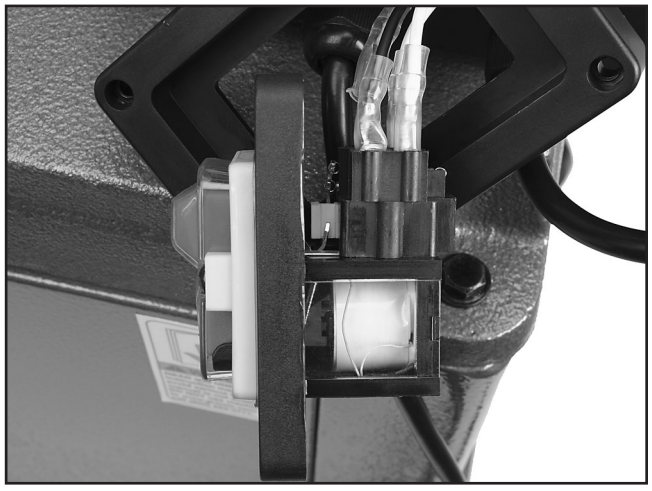


**Figure 42.** Switch wiring right-hand view.

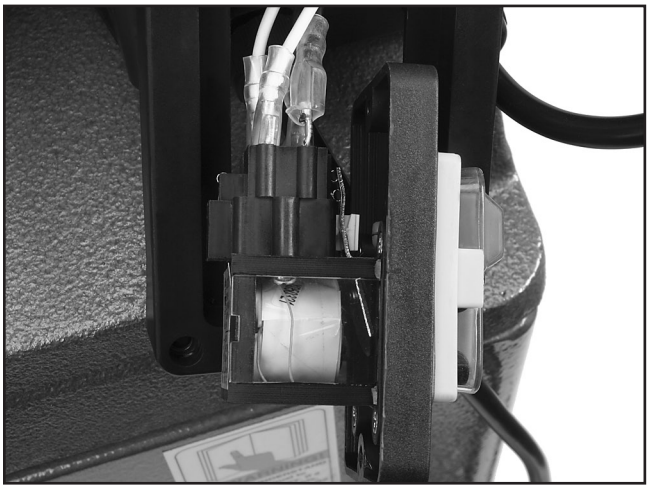
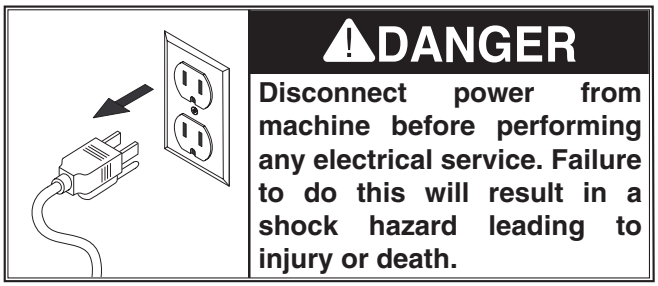


**Figure 44.** Switch wiring left hand view.

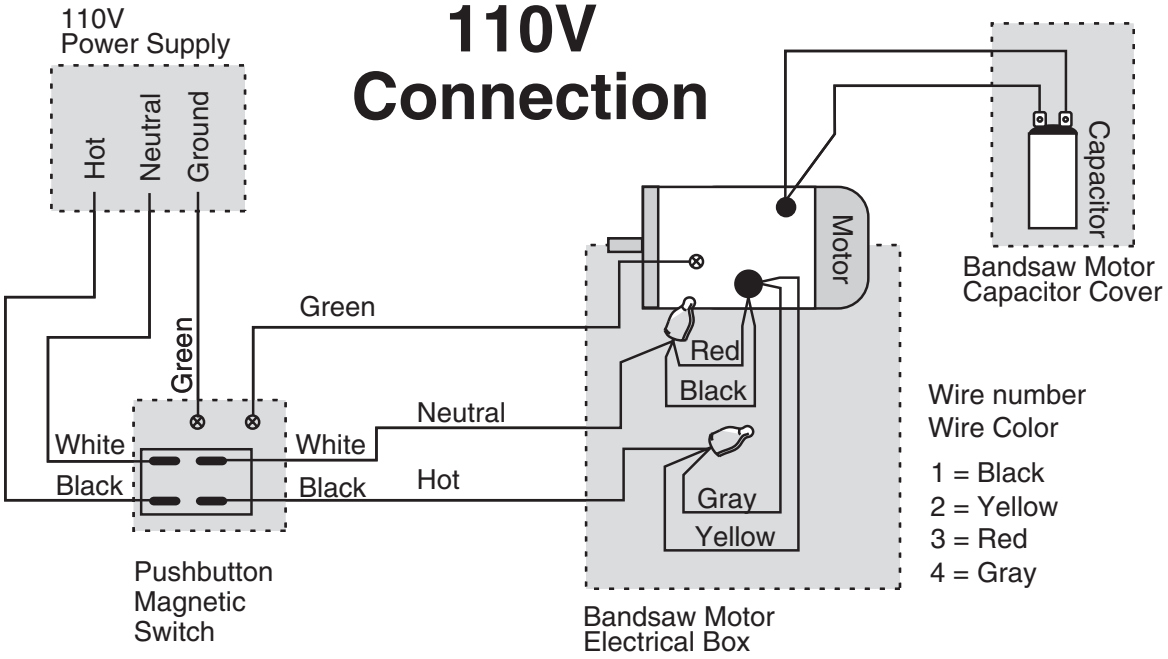
# G9742 Wiring Diagram



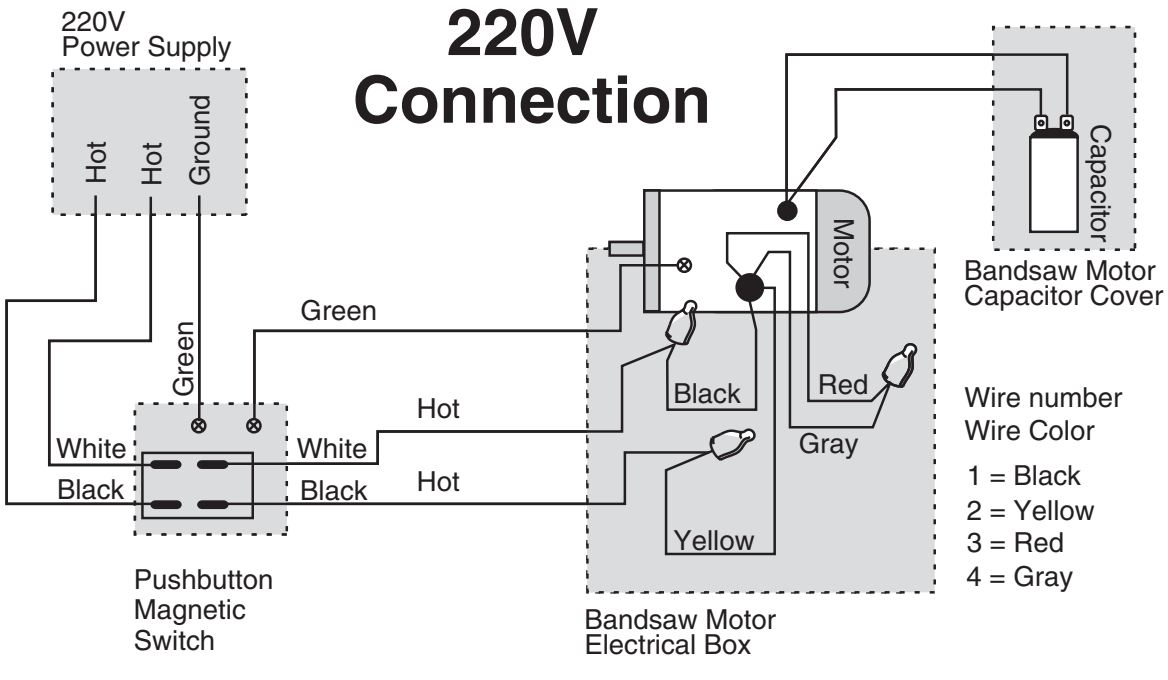
**⚠DANGER**

**Disconnect power from machine before performing any electrical service. Failure to do this will result in a shock hazard leading to injury or death.**

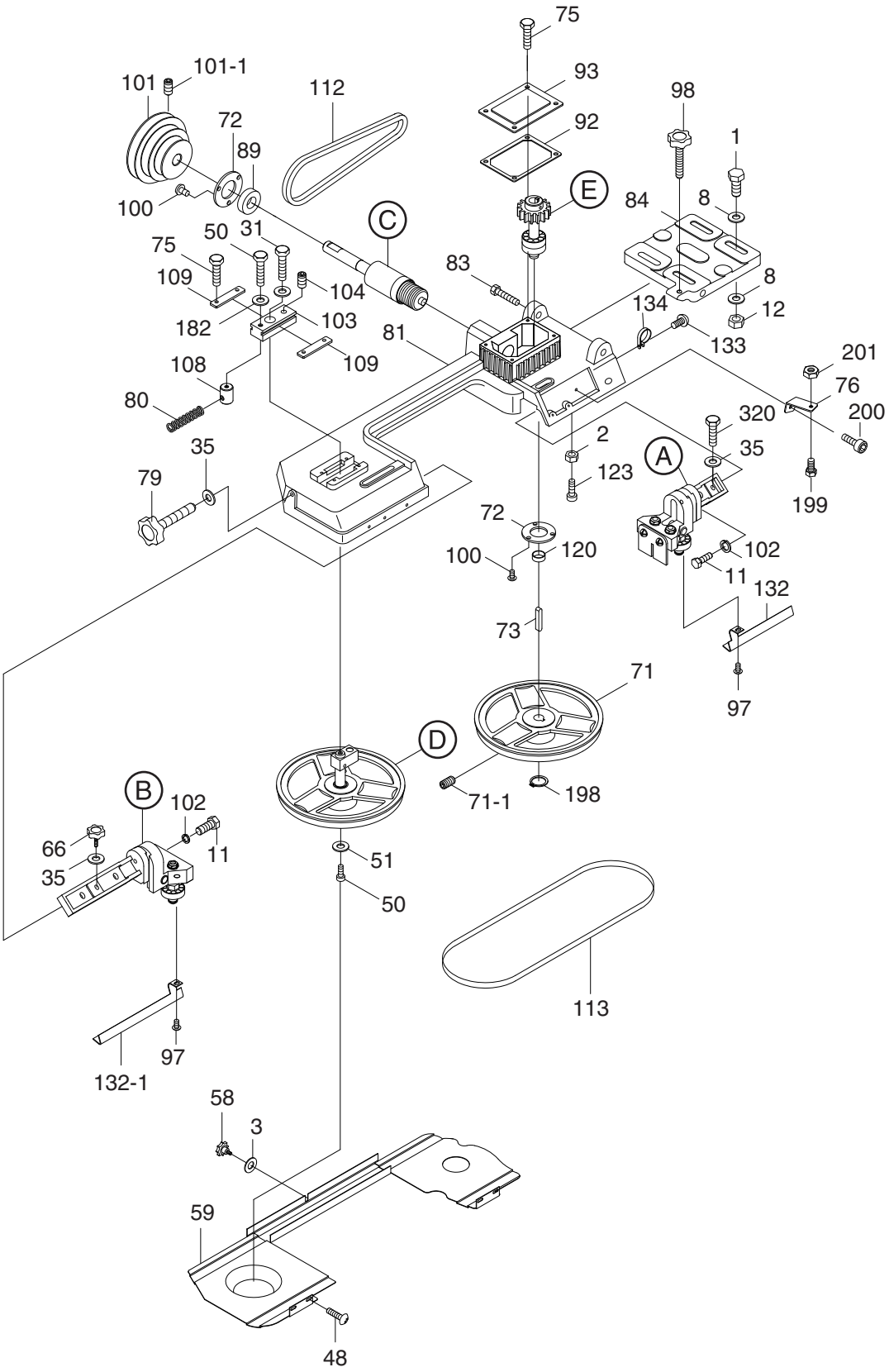
## 110V Connection




## 220V Connection



# Saw Parts Breakdown

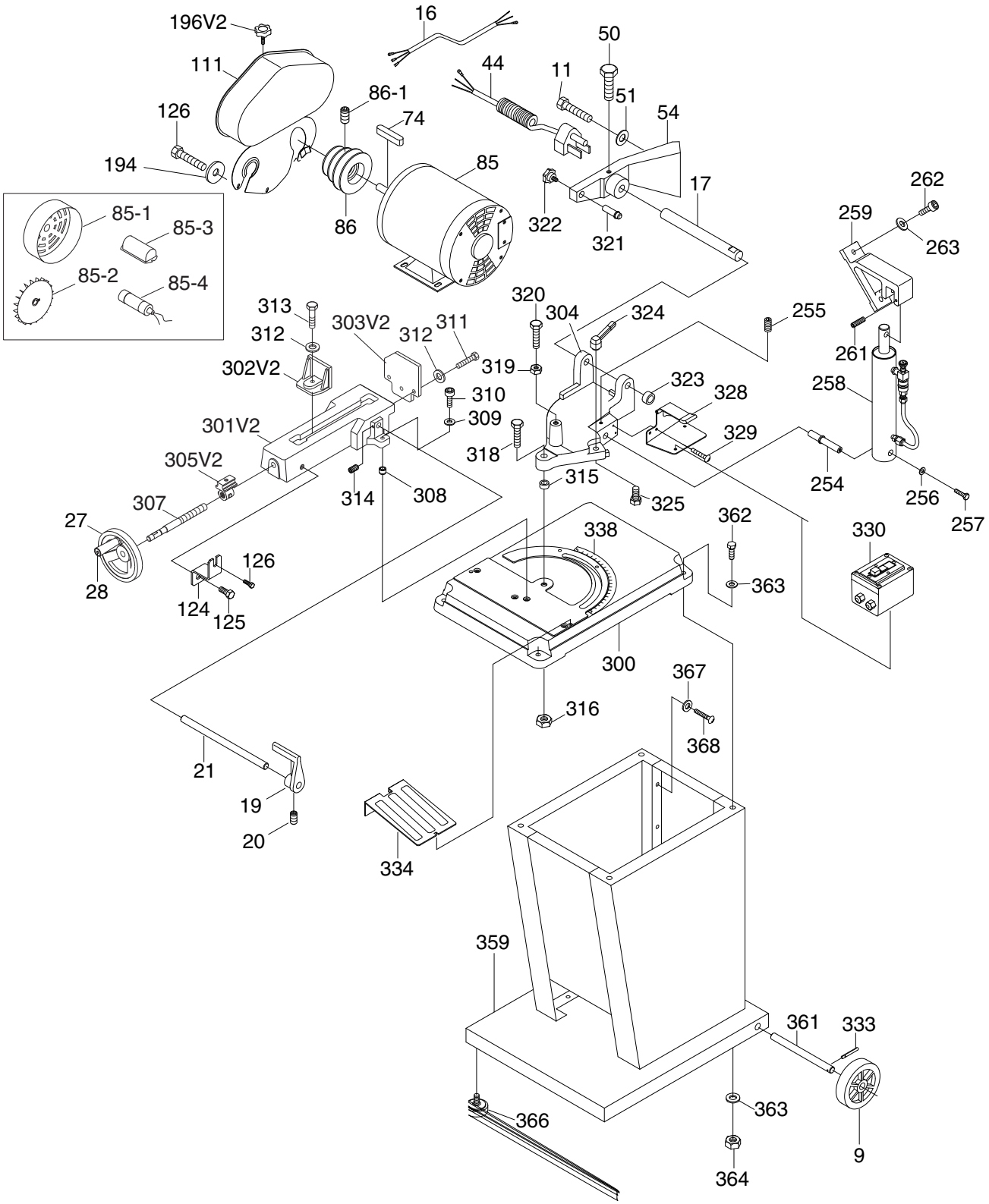


# Saw Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 1 | PB07 | HEX BOLT 5/16-18 X 3/4 |
| 2 | PN05 | HEX NUT 1/4-20 |
| 3 | PW06 | FLAT WASHER 1/4 |
| 8 | PW07 | FLAT WASHER 5/16 |
| 11 | PB03 | HEX BOLT 5/16-18 X 1 |
| 12 | PN02 | HEX NUT 5/16-18 |
| 31 | PB03 | HEX BOLT 5/16-18 X 1 |
| 35 | PLW04 | LOCK WASHER 3/8 |
| 48 | PS06 | PHLP HD SCR 10-24 X 3/8 |
| 50 | PB07 | HEX BOLT 5/16-18 X 3/4 |
| 51 | PW07 | FLAT WASHER 5/16 |
| 58 | P9742058 | KNOB 1/4-20 X 5/8 |
| 59A | P9742059A | BLADE BACK SAFETY COVER V2.11.06 |
| 66 | P9742066 | KNOB 3/8-16 X 1-1/4 |
| 71 | P9742071 | BLADE WHEEL FRONT |
| 71-1 | PSS17 | SET SCREW 5/16-18 X 5/16 |
| 72 | P9742072 | BEARING COVER |
| 73 | PK23M | KEY 5 X 5 X 25 |
| 75 | PB02 | HEX BOLT 1/4-20 X 5/8 |
| 76 | P9742076 | SWITCH CUT OFF TIP |
| 79 | P9742079 | BLADE TENSION ADJ KNOB |
| 80 | P9742080 | COMPRESSION SPRING |
| 81 | P9742081 | BODY FRAME |
| 83 | PB41 | HEX BOLT 1/2-12 X 1-1/2 |
| 84 | P9742084 | MOTOR MOUNT PLATE |
| 89 | P9742089 | OIL SEAL |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 92 | P9742092 | GEAR BOX GASKET |
| 93 | P9742093 | COVER |
| 97 | PS08M | PHLP HD SCR M5-.8 X 12 |
| 98 | P9742098 | KNOB 5/16-18 X 45 |
| 100 | PS23 | PHLP HD SCR 8-32 x 1/4 |
| 101 | P9742101 | WORM GEAR PULLEY |
| 101-1 | PSS38 | SET SCREW 5/16-18 X 5/8 |
| 102 | PLW01 | LOCK WASHER 5/16 |
| 103 | P9742103 | BLADE TENSION SLIDING PLATE |
| 104 | PSS38 | SET SCREW 5/16-18 X 5/8 |
| 108 | P9742108 | SHAFT BLOCK |
| 109 | P9742109 | BLADE TENSION SLIDING GUIDE |
| 112 | PVA22 | V-BELT A-22 4L220 |
| 113 | G5109 | BLADE 64-1/2 X 1/2 X.025 |
| 120 | P9742120 | BUSHING 19 X 17 X 7 |
| 123 | PB05 | HEX BOLT 1/4-20 X 3/4 |
| 132 | P9742132 | SAFETY GUARD RIGHT |
| 133 | PS06 | PHLP HD SCR 10-24 X 3/8 |
| 134 | P9742134 | WIRE CLAMP |
| 182 | PW07 | FLAT WASHER 5/16 |
| 198 | PR05M | EXT RETAINING RING 15MM |
| 199 | PB03 | HEX BOLT 5/16-18 X 1 |
| 200 | PSB04 | CAP SCREW 1/4-20 X 1/2 |
| 201 | PN02 | HEX NUT 5/16-18 |
| 320 | PB58 | HEX BOLT 3/8-16 X 2 |

# Stand Parts Breakdown

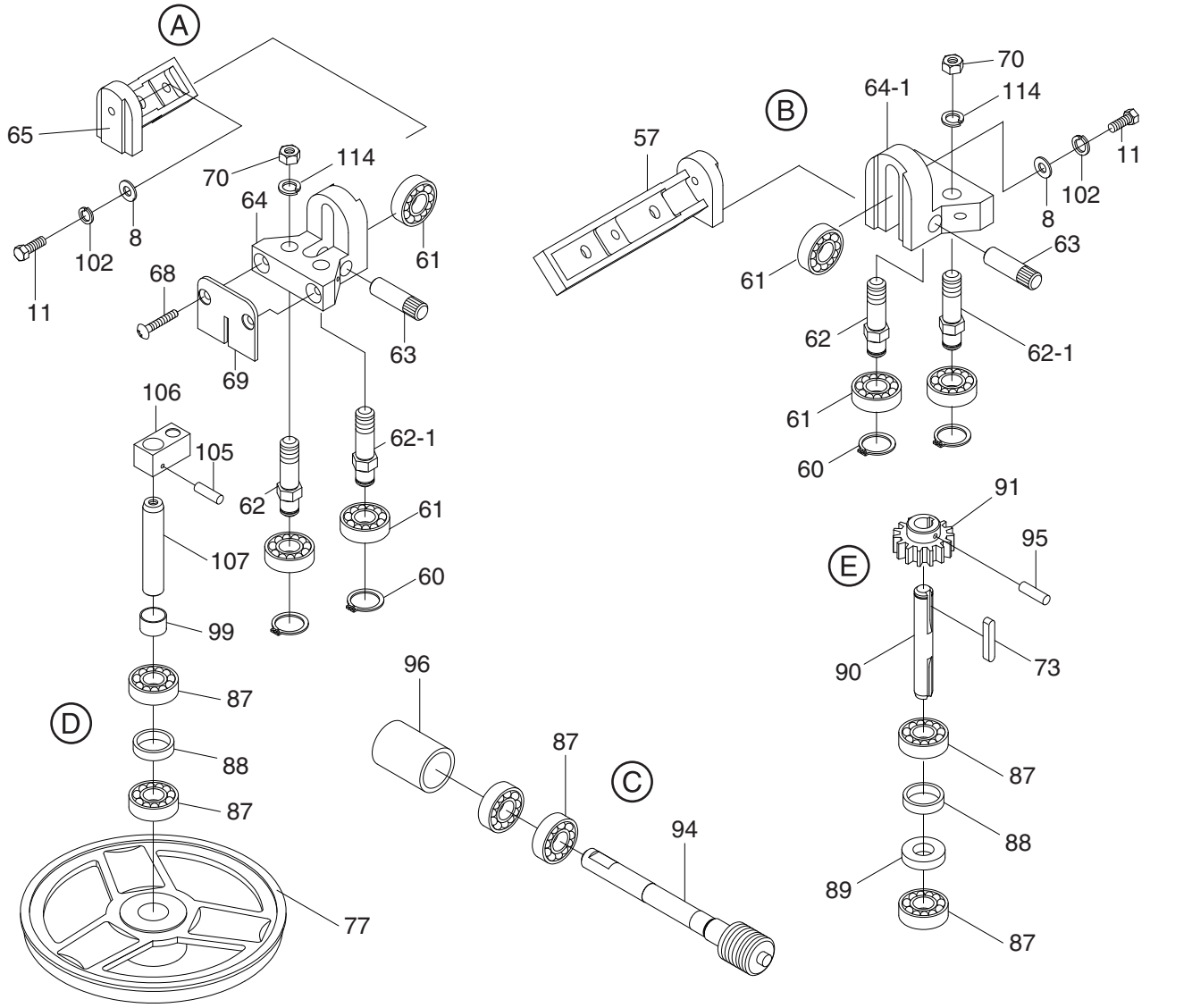


# Stand Parts List

| REF | PART # | DESCRIPTION |
|---|---|---|
| 9 | P9742009 | WHEEL |
| 11 | PB03 | HEX BOLT 5/16-18 X 1 |
| 16 | P9742016 | MOTOR CABLE |
| 17 | P9742017 | PIVOTING ROD |
| 19 | P9742019 | WORK STOP |
| 20 | PSS17 | SET SCREW 5/16-18 X 5/16 |
| 21 | P9742021 | STOCK STOP ROD 1/2 X 216 |
| 27 | P9742027 | HANDWHEEL HANDLE |
| 28 | P9742028 | HANDWHEEL |
| 44 | P9742044 | POWER CABLE |
| 50 | PB07 | HEX BOLT 5/16-18 X 3/4 |
| 51 | PW07 | FLAT WASHER 5/16 |
| 54 | P9742054 | PIVOT |
| 74 | PK12M | KEY 5 X 5 X 30 |
| 85 | P9742085 | MOTOR 1/2 HP |
| 85-1 | P9742085-1 | MOTOR FAN COVER |
| 85-2 | P9742085-2 | MOTOR FAN |
| 85-3 | P9742085-3 | CAPACITOR COVER |
| 85-4 | P9742085-4 | S. CAPACITOR 200MFD 125VAC |
| 86 | P9742086 | MOTOR PULLEY |
| 86-1 | PSS17 | SET SCREW 5/16-18 X 5/16 |
| 111 | P9742110A | PULLEY COVER ASSEMBLY |
| 124 | P9742124 | SHIPPING BRACKET |
| 125 | PB09 | HEX BOLT 5/16-18 X 1/2 |
| 126 | PS04 | PHLP HD SCR 1/4-20 X 1/2 |
| 194 | P9742194 | FENDER WASHER 1/4 |
| 196V2 | P9742196V2 | KNOB #8 X 3/4 V2.06.08 |
| 254 | P9742254 | SUPPORT ROD |
| 255 | PSS04 | SET SCREW 1/4-20 X 5/16 |
| 256 | PW08 | FLAT WASHER #8 |
| 257 | P9742257 | HEX BOLT #8-32 X 1/2 |
| 258A | P9742258A | CYLINDER ASSEMBLY V2.06.06 |
| 259 | P9742259 | CYLINDER UPPER SUPPORT |
| 261 | PSS47 | SET SCREW #8-32 X 5/16 |
| 262 | PSB05 | CAP SCREW 1/4-20 X 3/4 |
| 263 | PLW02 | LOCK WASHER 1/4 |
| 300 | P9742300 | BASE |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 301A | P9742301A | VISE BASE V2.01.08 |
| 302A | P9742302A | VISE JAW BRACKET-FRONT V2.01.08 |
| 303A | P9742303A | VICE JAW BRACKET-REAR V2.01.08 |
| 304 | P9742304 | SWIVEL BASE UPPER |
| 305A | P9742305A | BRACKET W/NUT V2.01.08 |
| 306 | P9742306 | ACME NUT |
| 307A | P9742307A | ACME SCREW V2.01.08 |
| 308 | P9742308 | BUSHING |
| 309 | PLW01 | LOCK WASHER 5/16 |
| 310 | PSB30 | CAP SCREW 5/16-18 X 1/2 |
| 311 | PB07 | HEX BOLT 5/16-18 X 3/4 |
| 312 | PW07 | FLAT WASHER 5/16 |
| 313 | PB12 | HEX BOLT 5/16-18 X 1-1/4 |
| 314 | PSS03 | SET SCREW 1/4-20 X 3/8 |
| 315 | P9742315 | POSITIONING RING |
| 316 | PN06 | HEX NUT 1/2-12 |
| 318 | PB27 | HEX BOLT 1/2-13 X 2-1/2 |
| 319 | PN08 | HEX NUT 3/8-16 |
| 321 | P9742321 | POSITION PIN |
| 322 | P9742322 | POSITION KNOB |
| 323 | P9742323 | BUSHING |
| 324 | P9742324 | HANDLE |
| 325 | PCB19 | CARRIAGE BOLT 3/8-16 X 1 3/4 |
| 328 | P9742328 | SWITCH BASE |
| 329 | PS06 | PHLP HD SCR #10-24 X 3/8 |
| 330A | P9742330A | MAIN SWITCH W/ SWITCH BOX V2.11.06 |
| 333 | P0561096 | COTTER PIN 3 X 25 |
| 334 | P9742334 | CHIP TRAY |
| 338 | P9742338 | SCALE |
| 359 | P9742359 | DELUXE STAND ASSEMBLY |
| 361A | P9742361A | WHEEL ROD 21" TO 22" V2.04.04 |
| 362 | PB26M | HEX BOLT M8-1.25 X 30 |
| 363 | PLW04 | LOCK WASHER 3/8 |
| 364 | PN03M | HEX NUT M8-1.25 |
| 366 | P9742366 | RUBBER FOOT 3/8-16 X 1" |
| 367 | PW03M | FLAT WASHER 6MM |
| 368 | PS14M | PHLP HD SCR M6-1 X 12 |

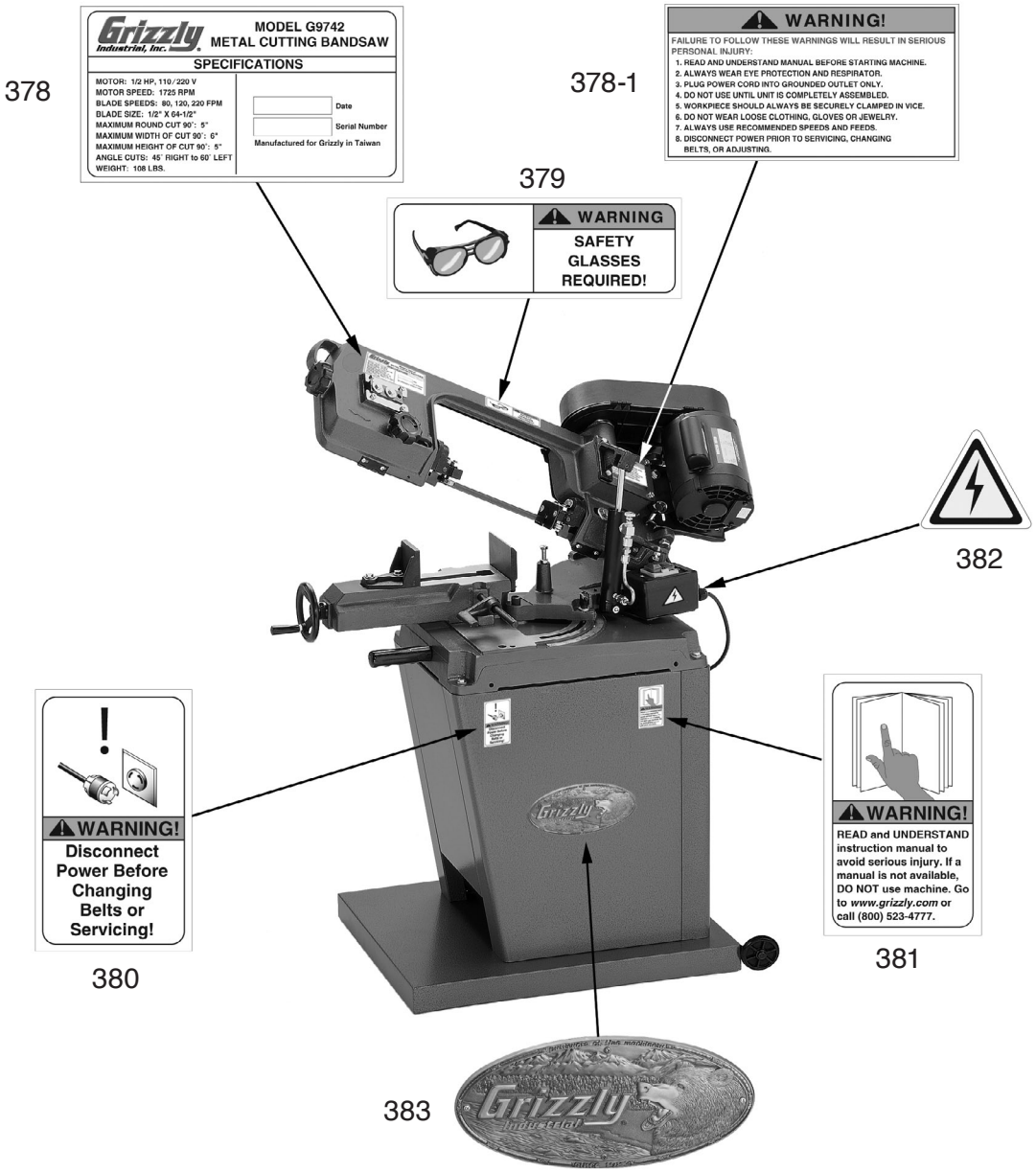
# Guides & Shafts Parts Breakdown




| REF | PART # | DESCRIPTION |
|---|---|---|
| 8 | PW07 | FLAT WASHER 5/16 |
| 11 | PB03 | HEX BOLT 5/16-18 X 1 |
| 57 | P9742057 | ADJUSTABLE BRACKET- LEFT |
| 60 | PR01M | EXT RETAINING RING 10MM |
| 61 | P6000 | BEARING 6000ZZ |
| 62 | P9742062 | GUIDE PIVOT LEFT |
| 62-1 | P9742062-1 | GUIDE PIVOT RIGHT |
| 63 | P9742063 | BEARING PIN |
| 64 | P9742064 | BLADE GUIDE REAR |
| 64-1 | P9742064-1 | BLADE GUIDE FRONT |
| 65 | P9742065 | ADJUSTABLE BRACKET RIGHT |
| 68 | PFH03 | FLAT HD SCR 1/4-20 X 1/2 |
| 69 | P9742069 | DEFLECTOR PLATE |
| 70 | PN08 | HEX NUT 3/8-16 |
| 73 | PK23M | KEY 5 X 5 X 25 |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 77 | P9742077 | BLADE WHEEL REAR |
| 87 | P6202 | BALL BEARING 6202ZZ |
| 88 | P9742088 | BUSHING |
| 89 | P9742089 | OIL SEAL |
| 90 | P9742090 | TRANSMISSION WHEEL SHAFT |
| 91 | P9742091 | WORM GEAR |
| 94 | P9742094 | WORM GEAR SHAFT |
| 95 | PRP20M | ROLL PIN 4 X 22 |
| 96 | P9742096 | BEARING BUSHING |
| 99 | P9742099 | BUSHING |
| 102 | PLW01 | LOCK WASHER 5/16 |
| 105 | PRP39M | ROLL PIN 4 X 20 |
| 106 | P9742106 | SHAFT BLOCK |
| 107 | P9742107 | BLADE WHEEL SHAFT |
| 114 | PLW04 | LOCK WASHER 3/8 |

# Labels Parts Breakdown




| REF | PART # | DESCRIPTION |
|---|---|---|
| 378 | P9742378 | MACHINE ID LABEL |
| 378-1 | P9742378-1 | MACHINE WARNINGS LABEL |
| 379 | P9742379 | SAFETY GLASSES LABEL |
| 380 | PLABEL-26 | UNPLUG LABEL |

| REF | PART # | DESCRIPTION |
|---|---|---|
| 381 | PLABEL-12 | READ MANUAL LABEL |
| 382 | PLABEL-14 | ELECTRICITY LABEL |
| 383 | G9987 | GRIZZLY LOGO PLATE |

## ⚠WARNING

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

# Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

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

**1.** How did you learn about us?

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

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

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

**3.** What is your annual household income?

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

**4.** What is your age group?

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

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

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

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

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

**7.** Do you think your machine represents a good value? _____ Yes _____ No

**8.** Would you recommend Grizzly Industrial to a friend? _____ Yes _____ No

**9.** Would you allow us to use your name as a reference for Grizzly customers in your area?
**Note:** *We never use names more than 3 times.* _____ Yes _____ No

**10.** Comments: _____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

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

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

# WARRANTY AND RETURNS

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

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

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

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

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

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