18" Open End Drum Sander

MODEL G0458

INSTRUCTION MANUAL

#TRCREWPCBL7423 PRINTED IN CHINA

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 chemical 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.

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.

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INTRODUCTION

Foreword

We are proud to offer the Model G0458. This machine is part of a growing Grizzly family of fine woodworking 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 G0458. 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 G0458 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 G0458
OPEN-END DRUM SANDER

Design Type	Floor Model
Overall Dimensions:	
Height	50"
Width	35"
Depth	21"
Table Height	35"–40"
Shipping Weight	354 lbs.
Net Weight	298 lbs.
Crate Size	34" L x 24½" W x 34" H
Base Footprint	18" x 37"
Capacities:	
Maximum Board Width	18"
Maximum Board Thickness	4½"
Minimum Board Length	6"
Minimum Board Thickness	⅛"
Surface Speed of Drums	4000 FPM
Conveyor Feed Rate	Variable, 2-12 FPM
Sanding Drum Motor:	
Type	TEFC Capacitor Start Induction
Horsepower	1½ HP
Voltage	110V Only
Amps	15A
Motor Speed	3450 RPM
Phase / Cycle	Single / 60 HZ
Power Transfer	V-Belt Drive
General Construction:	
Frame	Steel
Sanding Drum	4" Diameter Aluminum
Pressure Plates (2)	20" Wide
Conveyor Belt	18" x 44½" Abrasive Belt
	2½" Dust Port
	Variable Speed Conveyor
	Included Dust Collection Bag
	Stand Alone Dust Collection

Specifications, while deemed accurate, are not guaranteed.

Identification

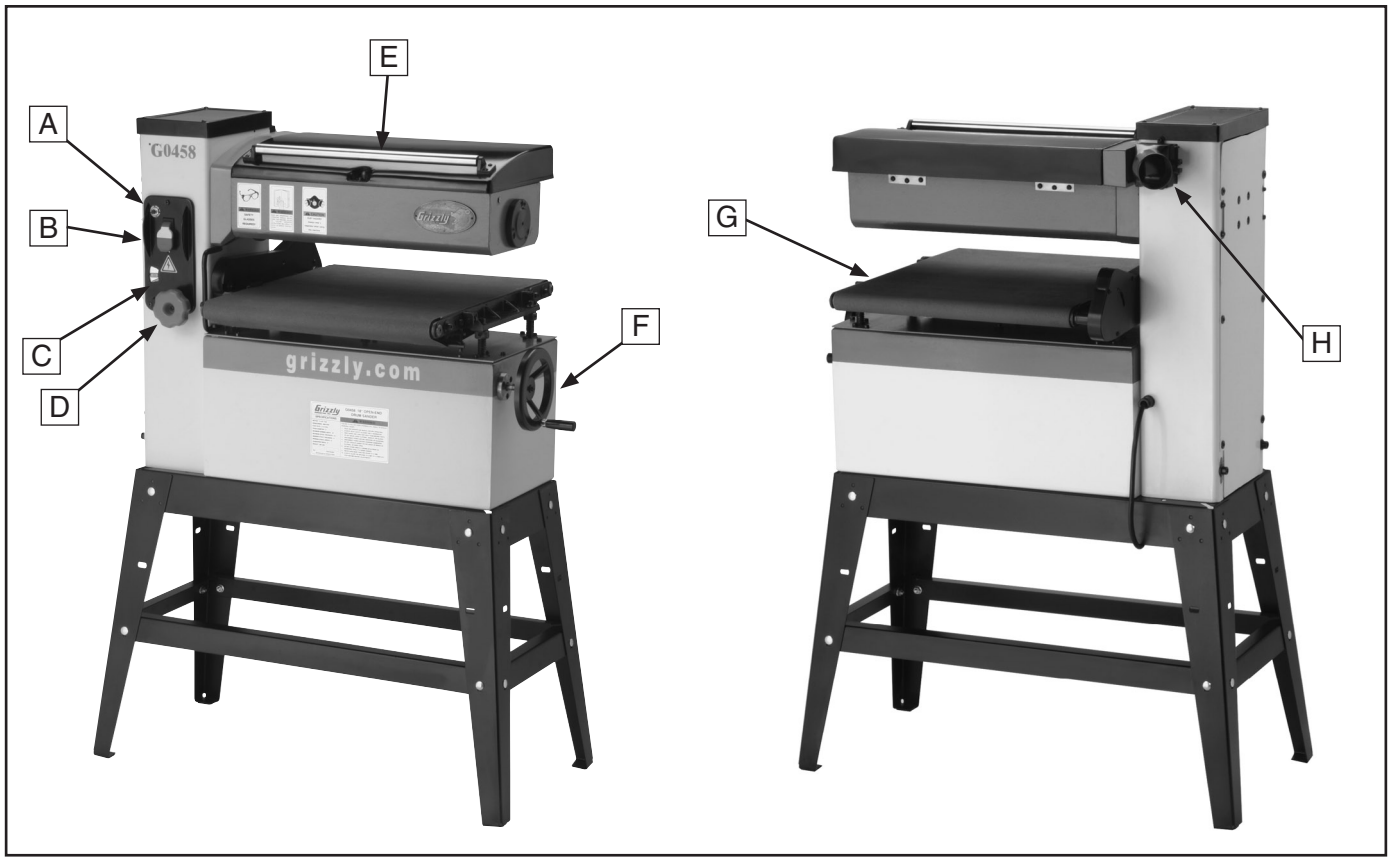


Figure . Main controls/components of the sander.

- **A.** Circuit Breaker
- **B.** ON/OFF Switch w/Lockout Key
- **C.** Feed Speed Scale
- **D.** Variable Speed Feed Rate Knob
- **E.** Return Roller
- **F.** Table Height Adjustment Handwheel
- **G.** Feed Belt
- **H.** Dust Port

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 which are 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 THROUGH 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 AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught 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 CHILD PROOF.** 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 LIT.** Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.

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 and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.

19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause 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.** Keep proper footing and balance at all times.

23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

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

25. **BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION** in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.

⚠WARNING
Additional Safety for Drum Sanders

1. **FEEDING STOCK.** DO NOT allow anyone to stand at the outfeed end when feeding your stock. Never sand more than one piece of stock at a time.

   DO NOT jam the workpiece into the machine during operation. Firmly grasp the workpiece in both hands and ease it into the machine using light pressure.

2. **MINIMUM STOCK DIMENSIONS**. DO NOT sand any stock thinner than ⅛", narrower than ⅛", or shorter than 6". DO NOT sand thin stock by using a "dummy" board under your workpiece.

3. **CLOTHING.** DO NOT wear loose clothing while operating this machine. Roll up or button sleeves at the cuff.

4. **HAND PROTECTION**. DO NOT place hands near, or in contact with, sanding drums during operation. DO NOT allow fingers to get pinched between board and conveyor belt during operation. This may pull the operator's hand into the machine and cause serious injury or death!

5. **INSPECTING WORKPIECES**. Always inspect workpiece for nails, staples, knots, and other imperfections that could be dislodged and thrown from the machine during sanding operations.

6. **DUST COLLECTION SYSTEM**. Never operate the sander without an adequate dust collection system in place and running.

7. **UNATTENDED OPERATION**. Never leave the machine running unattended.

8. **REPLACING SANDING PAPER**. Replace sanding paper when it becomes worn.

9. **EXPERIENCING DIFFICULTIES**. Any problem, with the exception of conveyor belt tracking that is concerned with any moving parts or accessories, must be investigated and corrected with the power disconnected, and after all moving parts have come to a complete stop.

10. **MAINTENANCE AND ADJUSTMENTS**. Never attempt to adjust conveyor belt tracking when the sanding drums are engaged. Perform machine inspections and maintenance service promptly when called for. Disconnect power before performing maintenance or adjustments on the sander.

11. **RESPIRATOR AND SAFETY GLASSES.** Always wear a respirator and safety glasses while operating the machine. Dust and chips are created when sanding. Some debris will be ejected, becoming hazards to the eyes and lungs.

⚠WARNING

Like all machines there is danger associated with this machine. 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.

⚠CAUTION

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

SECTION 2: CIRCUIT REQUIREMENTS

110V Operation

⚠WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. DO NOT connect the machine to the power source until instructed to do so.

Amperage Draw

The 1½ HP motor on the Model G0458 draws the following amps during normal operation:

Motor Draw ..... 15 Amps

Circuit Requirements

Only connect your machine to a circuit that meets the requirements below. Always check to see if the wires and circuit breaker in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician.

Minimum Circuit Requirement .....20 Amp

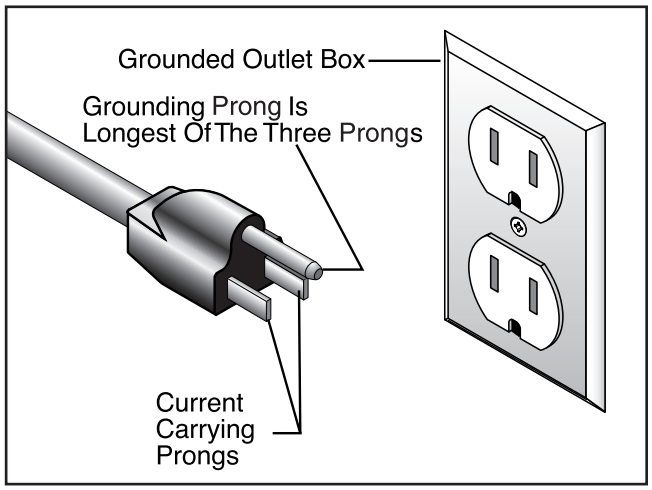
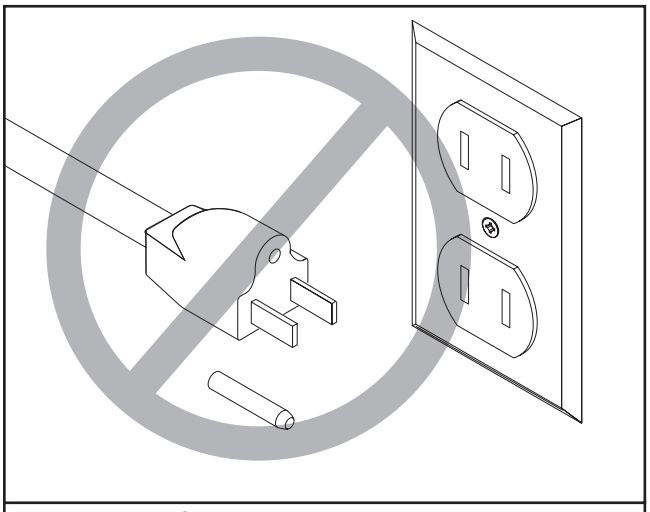


Figure 1. Typical plug and receptacle.

⚠WARNING

Electrocution or fire could result if this machine is not grounded correctly or if your electrical configuration does not comply with local and state codes. Ensure compliance by checking with a qualified electrician!



⚠CAUTION

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

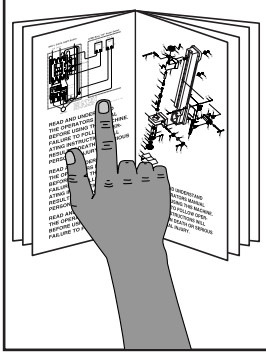
Extension Cords

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

- Use at least a 10 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug prong.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

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 G0458 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
• Assistants	2
• Wrench or Socket 13mm	1
• Wrench or Socket 14mm	2
• Hex Wrench 4mm	2
• Phillips Head Screwdriver	1
• Wood Blocks	(three 2x4s)
• Wood Shims	(as needed)

Unpacking

The Model G0458 was carefully packed when it left our warehouse. 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: (Figures 1 & 2) **Qty**

A. Drum Sander 1

Figure 1. Box Contents.

B. Dust Bag 1
C. Dust Hose Clamp 1
D. Dust Port 1
E. Stand Legs 4
F. Bottom Long Brackets 2
G. Top Long Brackets 2
H. Bottom Short Brackets 2
I. Top Short Brackets 2

J. Hardware and Tools (Not Shown)
— Handwheel 1
— Handwheel Handle M10-1.5 1
— Phillips Head Screw M6-1 x 25 1
— Flat Washer 5mm 1
— Hex Bolt M8-1.25 x 20 4
— Hex Nut M8-1.25 4
— Flat Washer 8mm 8
— Carriage Bolt M8-1.25 x 15 16
— Serrated Flange Nut M8-1.25 16
— Combination Wrench 8/12mm 1
— Hex Wrenches 4, 5, 6mm ..... 1 ea

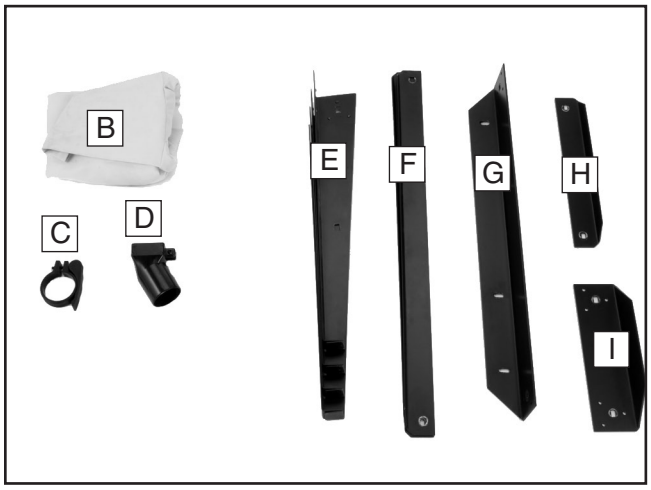
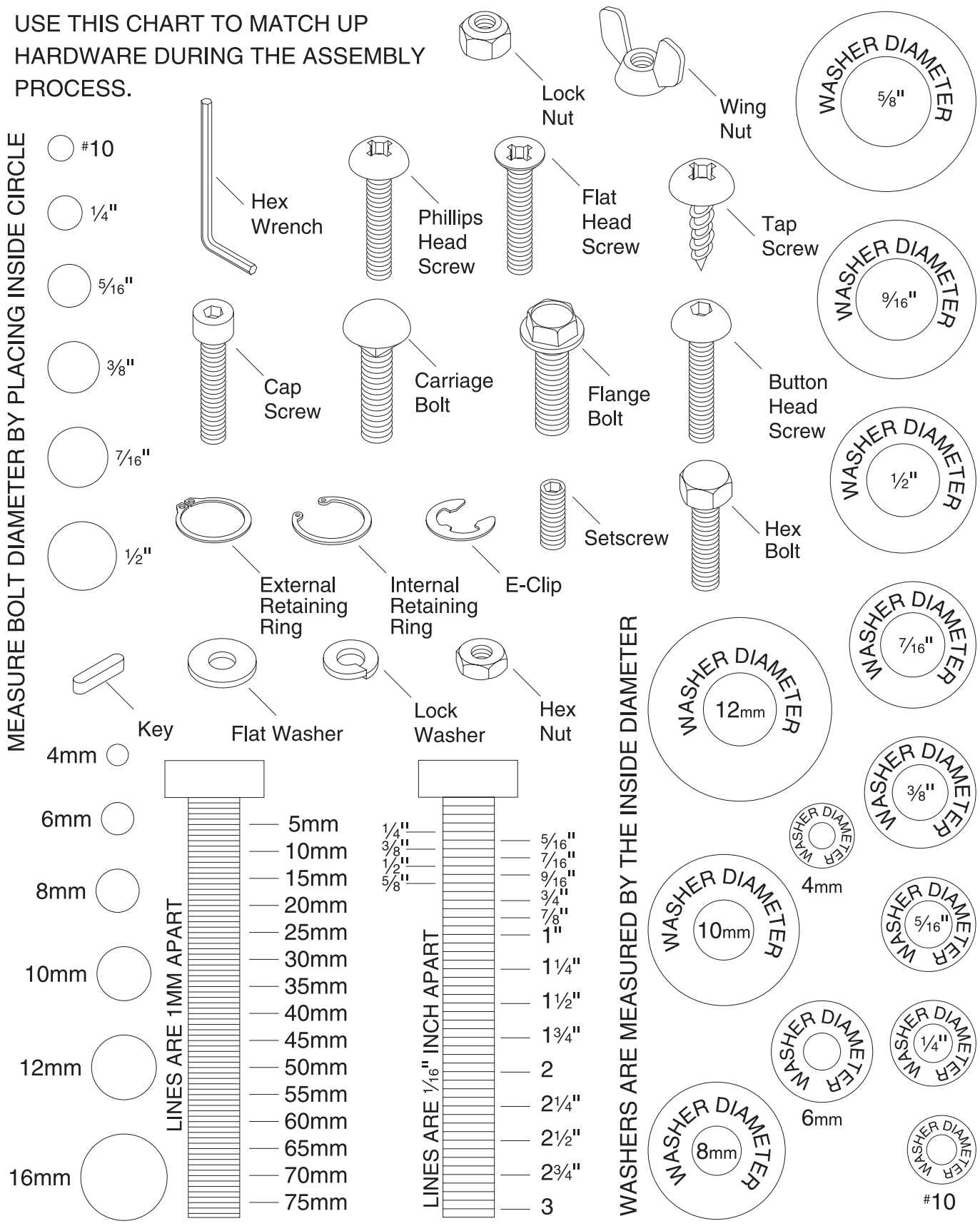


Figure 2. Additional box contents.

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.

Hardware Recognition Chart



Site Considerations

Floor Load

The weight and footprint size for your machine is located in the machine data sheet. Some residential floors may require additional reinforcement to support the machine, workpieces, 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 3** for the minimum working clearances.

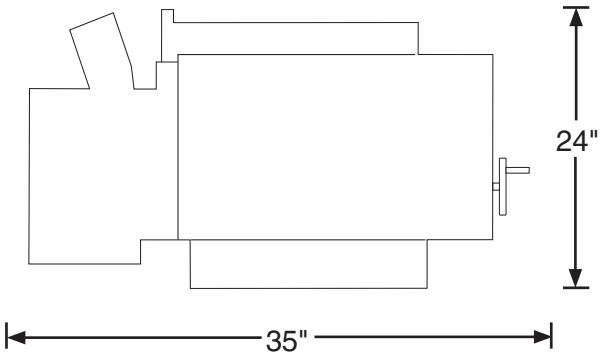
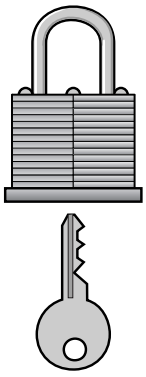


Figure 3. Model G0458 Working clearances.



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!

Stand

Components and Hardware Needed: Qty

Carriage Bolts M8-1.25 x 15 16
Serrated Flange Nuts 12mm 16
Top Short Brackets 2
Bottom Short Brackets 2
Stand Legs 4
Top Long Brackets 2
Bottom Long Brackets 2

We recommend assembling the stand upside down. To make it easier, have an assistant hold the pieces while you assemble the stand.

NOTICE

Do not final tighten stand bolts until the stand components have been assembled.

To assemble the stand:

1. Mount a top and bottom long bracket to a stand leg and loosely secure with two M8-1.25 x 15 carriage bolts and serrated flange nuts as shown in **Figure 4**.

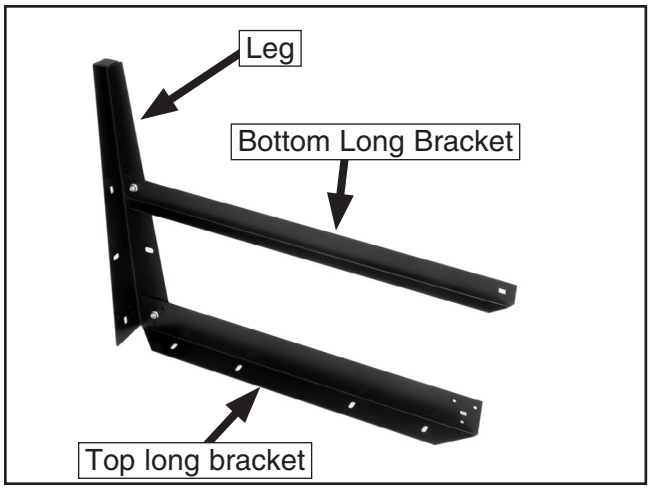


Figure 4. Top and bottom long brackets secured to a stand leg.

2. Secure a second leg to the top and bottom long brackets with two M8-1.25 x 15 carriage bolts and serrated flange nuts as shown in **Figure 5**.

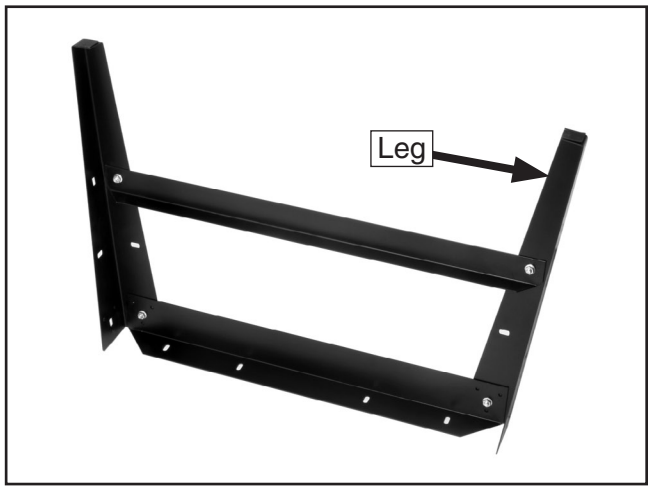


Figure 5. A completed stand leg assembly.

3. Mount a top and bottom short bracket to the left and right sides of the stand leg assembly completed in **Step 2** as shown in **Figure 6**. Secure with two M8-1.25 x 15 carriage bolts and serrated flange nuts.

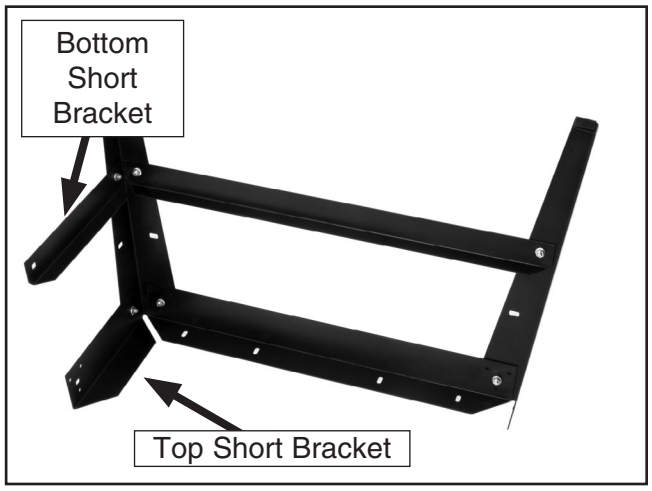


Figure 6. Top and bottom short brackets secured to a stand leg assembly.

4. Build the rest of the stand assembly, as shown in **Figure 7**, with the remaining hardware.

Figure 7. Completed stand assembly.

5. Turn the stand upright and adjust it so the legs are evenly positioned, then tighten all the stand fasteners.

Installing Sander on Stand

⚠WARNING

The sander is very heavy. DO NOT over-exert yourself while unpacking or moving your machine—get assistance.

Components and Hardware Needed:	Qty
Sander	1
Stand Assembly	1
Hex Bolts M8-1.25 x 20	4
Flat Washers 8mm	8

To install the sander on the stand:

1. Make sure the sander is still resting on the shipping pallet.

2. Place the pallet and stand near the permanent mounting location (once the sander is mounted to the stand it will be difficult to move).

3. With help of an assistant, tilt the sander back so the side with pulley cover faces the pallet, move the left bottom edge of the sander forward, and rest the left side of the sander on the pallet as shown in **Figure 8.**

   Note: *The base should stick out a few inches beyond the edge of the pallet.*

Figure 8. Sander tipped back on pallet against pulley cover.

4. Place two stacks of blocks the same height as the pallet and about 15 inches apart on the floor near the sander base as shown in **Figure 9**.

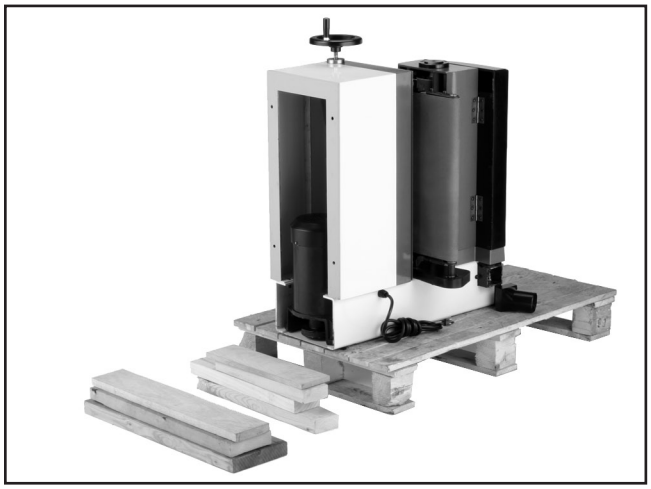


Figure 9. Blocks set near sander base.

5. Lay the stand on the blocks as shown in **Figure 10**.

Figure 10. Stand resting on blocks.

6. Align the holes, and secure the stand to the sander with the remaining hex bolts, washers, and hex nuts (**Figure 11**).

Note: *If the holes do not align, add wood shims to adjust the block heights.*

Figure 11. Mounting sander to stand.

7. Lift up on the stand and remove the blocks.

8. Tighten the mounting bolts.

9. Tilt the sander upright, as shown in **Figure 12,** so the rear legs touch the floor.

⚠CAUTION

If the legs start to slide when tilting, you MUST have a third person hold the stand from sliding to avoid personal injury or machine damage!

Figure 12. Tilting sander upright.

Handwheel

Components and Hardware Needed: **Qty**
Handwheel Handle 1
Handwheel 1
Cap Screw M5-.8 x 10 1
Flat Washer 5mm 1

To install the handwheel:

1. Thread the handwheel handle into the handwheel and tighten it.

2. Slide the handwheel over the shaft, making sure the shaft pin (**Figure 13**) inserts into the slots in the handwheel.

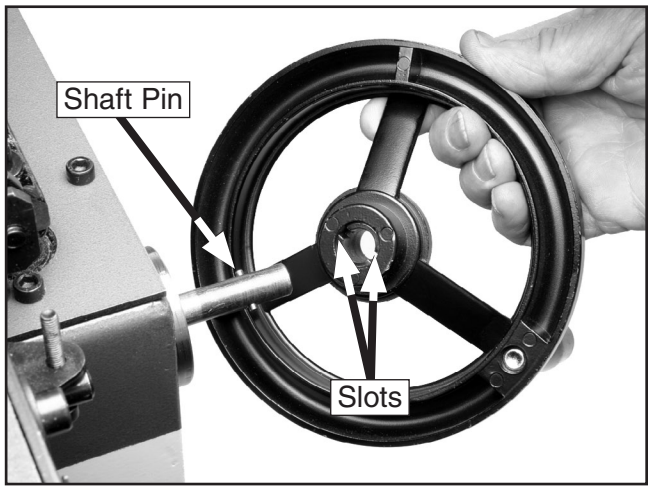


Figure 13. Installing handwheel.

3. Secure the handwheel with an M5-.8 x 10 cap screw and 5mm flat washer.

Dust Port and Bag

Components and Hardware Needed: **Qty**
Dust Port 1
Dust Bag 1
Dust Hose Clamp 1
Phillips Head Screw M6-1 x 25 1

To install the dust port:

1. Slide the dust port over the fan housing and tighten the included Phillips head screw (**Figure 14**).

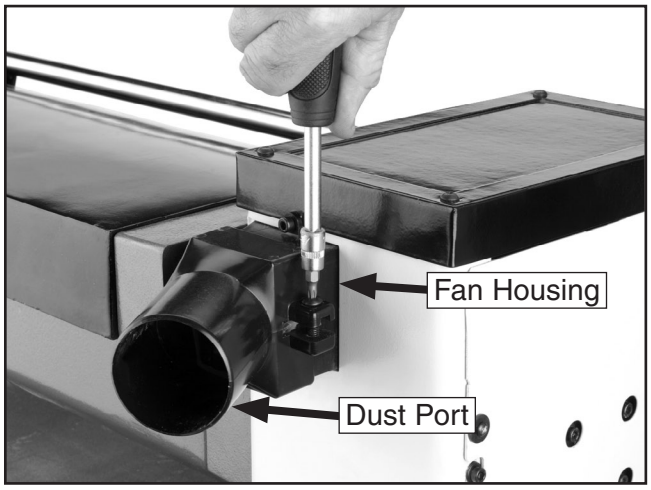


Figure 14. Installing dust port.

2. Slide the dust hose clamp over the dust bag, insert the bag and clamp over the dust port (**Figure 15**), and secure with the clamp handle. **DO NOT overtighten the clamping adjustment or it may break!**

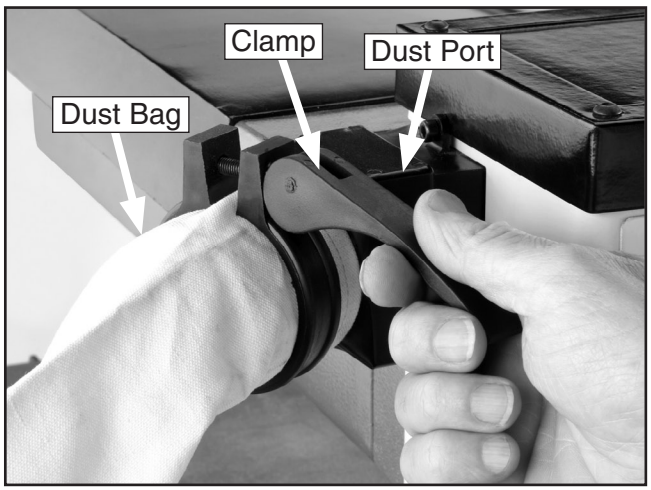


Figure 15. Installing dust bag and clamp.

Dust Collection

⚠CAUTION

DO NOT operate the Model G0458 without adequate dust collection. This sander creates substantial amounts of wood dust while operating. Failure to use dust collection can result in short and long-term respiratory illness.

You may attach the Model G0458 drum sander to a dust collection system if you do not use the included dust bag. If you are using your own dust collection system, we recommend using a system that can collect a minimum of 400 CFM **AT THE DUST PORT**.

Note: *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 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.*

When the dust collection is working properly, a fine layer of dust may be present on your stock as it comes out of the sander. This is a normal characteristic of all drum sanders.

To connect the dust ports to a dust collector:

1. Attach a 2½" dust collection hose to the dust port and secure with a hose clamp.

Test Run

Now that the machine is assembled, perform a test run to make sure all the controls are working properly.

⚠WARNING

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

To test run the sander:

1. Put on safety glasses and make sure any bystanders are out of the way and also wearing safety glasses.

2. Connect the sander to power.

3. Flip the ON/OFF switch ***ON***. Make sure that your finger is poised over the ON/OFF switch, just in case there is a problem.

   The drum sander should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises MUST be investigated and corrected before operating the machine further. To avoid injury or damage to the machine, **DO NOT** attempt to make adjustments to the machine without turning it ***OFF*** and unplugging it from its power source.

Investigate and correct any problems before operating the machine further. If you need help, refer to the **Troubleshooting** section in the back of this manual or contact Tech Support at (570) 546-9663.

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

However, because of the many variables involved with shipping, some of these adjustments may need to be repeated to ensure optimum results. Keep this in mind as you start to use your new drum sander.

Step-by-step instructions for these adjustments can be found in SECTION 7: SERVICE ADJUSTMENTS.

1. V-Belt Tensioning (**Page 27**). Perform after the first 16 hours.

2. Feed Belt Tensioning & Tracking (**Pages 31 & 32**).

3. Table Adjustments (**Page 34**).

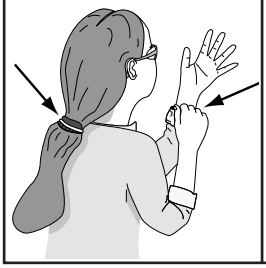
SECTION 4: OPERATIONS

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.

Depth of Cut

The optimum depth of cut will vary based on the type of wood, feed rate, and sandpaper grit. Attempts to remove too much material can cause jamming, wood burning, rapid paper wear or tearing, poor finish, and belt slippage.

To set the depth of cut:

1. Rotate the table height handwheel (**Figure 16**) until the table is too low, then raise the table, allowing a gap between the workpiece and the sanding drum.

   Note: *When adjusting the table to sand a thicker workpiece, lower and then raise the table to remove backlash from the adjustment mechanism.*

Figure 16. Table height handwheel.

2. Turn ***ON*** the feed belt and sanding drum and feed the workpiece into the sander. SLOWLY raise the feed belt until the workpiece makes light contact with the sanding drum. This is the correct height to begin sanding the workpiece.

3. After the initial pass, turn the handwheel up to ¼ turn (1/64" or 0.4mm)—the maximum depth for most sanding conditions. **Note:** *Each full turn of the table height handwheel raises the feed table approximately 0.060" (1/16") or 1.5mm.*

Variable Speed

The variable speed knob allows you to increase the feed rate from 2–12 FPM. The correct speed to use depends on the type of stock you are using (hardwood vs. softwood) and the stage of finish with that workpiece.

As a general rule, a slower feed rate will sand the surface smoother, but runs the risk of burning the wood; a faster feed rate will remove material faster, but runs the risk of overloading the motor or damaging the sandpaper.

Use trial-and-error to determine the best settings for your specific applications.

To adjust the feed belt speed:

1. Turn ***ON*** the feed belt (DO NOT adjust conveyor speed when the conveyor motor is ***OFF***).

NOTICE

Adjusting the variable speed when the conveyor motor is *OFF* can damage the V-belt and the adjusting mechanism.

2. Rotate the variable speed knob (**Figure 17**) counterclockwise to increase the feed speed, or clockwise to decrease the feed speed.

Figure 17. Variable speed knob.

Sanding

⚠WARNING

DO NOT sand more than one board at a time. Minor variations in thickness can cause one board to be propelled by the rapidly spinning sanding drum and ejected from the machine. NEVER stand directly in front of the outfeed area of the machine. Failure to do so could result in severe personal injury.

To sand a workpiece:

1. Adjust the table height according to the instructions in **Depth of Cut** on **Page 19.**

2. Make sure the filter bag is secure (or start the dust collector, if connected) and turn the sander ***ON***.

3. Feed the workpiece through the sander. Retrieve the workpiece by standing at the side—not at the outfeed end.

4. Run wide stock through two or three times without adjusting the table height. Turn the stock 180° between passes to ensure an evenly sanded surface.

NOTICE

Over-bogging the motor or pushing the sander to failure weakens the electrical system. Repeatedly doing so is abuse to the machine that will cause motor, capacitor, or thermal breaker damage, which is not covered by the warranty.

Sanding Tips

- Replace the sandpaper with a higher grit to achieve a finer finish.
- Raise the table a maximum of ¼ turn of the handwheel until the workpiece is the desired thickness.
- Reduce snipe when sanding more than one board of the same thickness by feeding them into the sander with the front end of the second board touching the back end of the first board.
- Feed boards into the sander at different points on the conveyor to maximize sandpaper life and prevent uneven conveyor belt wear.
- DO NOT sand boards less than 6" long or less than ⅛" thick to prevent damage to the workpiece and the drum sander.
- Extend the life of the sandpaper by regularly using a PRO-STICK® sanding pad (**Page 24**).
- When sanding workpieces with irregular surfaces, such as cabinet doors, take very light sanding passes to prevent gouges. When the drum moves from sanding a wide surface to sanding a narrow surface, the load on the motor will be reduced, and the drum will speed up, causing a gouge.
- DO NOT edge sand boards. This can cause boards to kickback, causing serious personal injury. Edge sanding boards also can cause damage to the conveyor belt and sandpaper.
- When sanding workpieces with a bow or crown, place the high point up (prevents the workpiece from rocking) and take very light passes.
- Feed the workpiece at an angle to maximize stock removal and sandpaper effectiveness, but feed the workpiece straight to reduce sandpaper grit scratches for the finish passes.

Choosing Sandpaper

There are many types of sanding belts to choose from. We recommend Aluminum Oxide for general workshop environments. Below is a chart that groups abrasives into different classes, and shows which grits fall into each class.

Grit	Class	Usage
36	Extra Coarse	Rough sawn boards, thickness sanding, and glue removal.
60	Coarse	Thickness sanding and glue removal.
80–100	Medium	Removing planer marks and initial finish sanding.
120–180	Fine	Finish sanding.

The general rule of thumb is to sand a workpiece with progressively higher grit numbers, with no one grit increase of more than 50. Avoid skipping grits; the larger the grit increase, the harder it will be to remove the scratches from the previous grit.

Ultimately, the type of wood you use and your stage of finish will determine the best grit types to install on your sander.

Paper Replacement

Tools Needed:	Qty
Flat Head Screwdriver	1
Hex Wrench 4mm	1
Hex Wrench 5mm	1
Carton Cutter or Utility Knife	1

The Model G0458 is designed for 3" wide sandpaper rolls. Turn to **SECTION 5: ACCESSORIES** on **Page 24** for grit selection and model numbers.

To change the paper:

1. **Disconnect power to the sander!**

2. Open the top cover, remove the three cap screws that secure the chip deflector to the sander frame, and set the deflector aside.

3. Loosen the cap screw on the right spring-loaded clamp as shown in **Figure 18**.

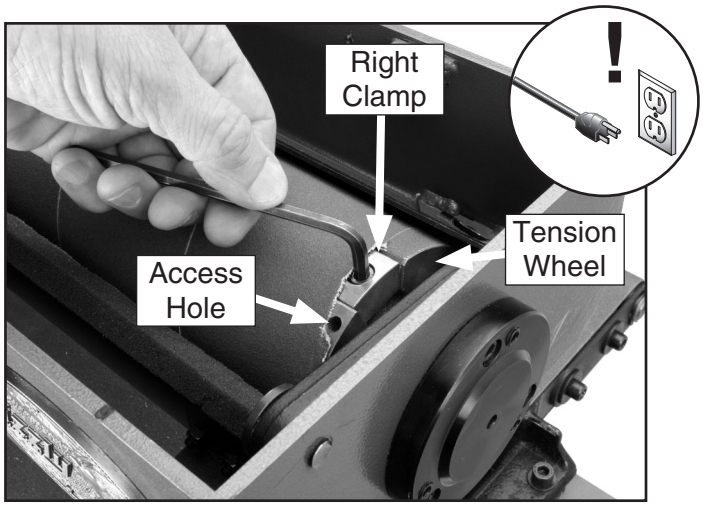


Figure 18. Loosening cap screw on right spring-loaded clamp.

4. Remove the sandpaper from the clamp.

   Note: *You can use a flat head screwdriver to loosen the clamp to free the sandpaper.*

5. Rotate the drum to remove the sandpaper belt.

6. Loosen the cap screw on the left clamp and remove the sandpaper.

7. Use the old sandpaper as a pattern, or use the pattern in **Figure 19**, to cut a new piece of sandpaper to the necessary shape. After cutting the 12½" angled sides, measure 1" along the same sides and cut off the ends with a knife.

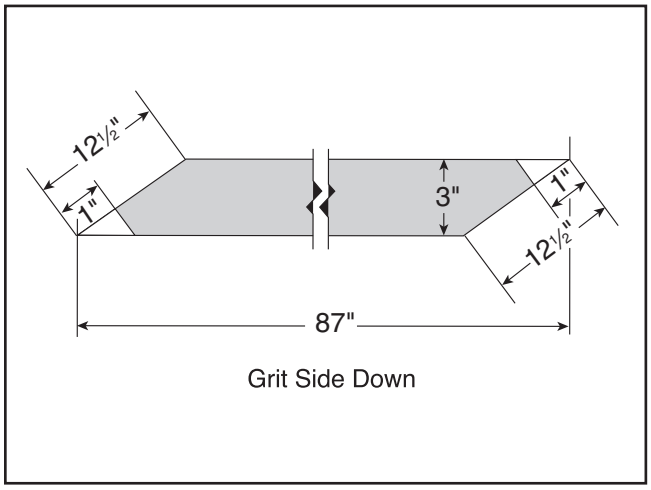


Figure 19. Sandpaper pattern.

8. Insert the left corner of the new sandpaper into the left clamp and tighten the cap screw as shown in **Figure 20**. The angled side of the sandpaper must be flush with the left drum edge. If the sandpaper overlaps the edge, you may have difficulty closing the cover.

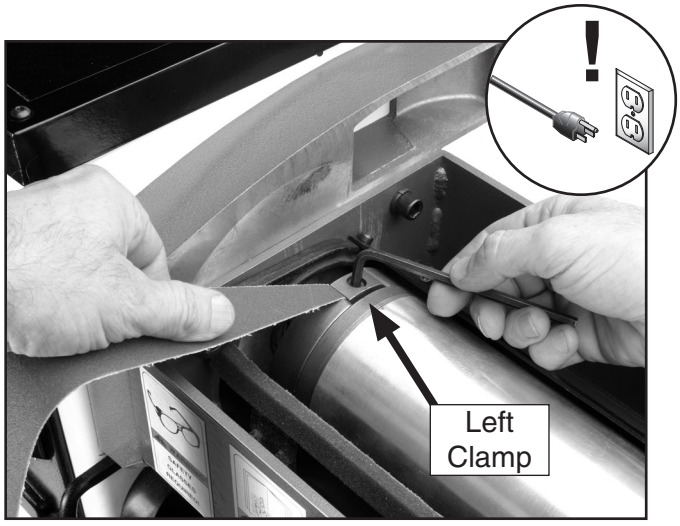


Figure 20. Securing sandpaper in left clamp.

9. Wrap the sandpaper around the drum (**Figure 21**), ensuring there are no bubbles or overlapping edges.

Figure 21. Wrapping sandpaper around drum.

10. When the sandpaper reaches the right side of the drum, move the sandpaper out of the way with a 4mm wrench and place it into the access hole.

11. Rotate the drum toward you so the wrench rests against the frame as shown in **Figure 22**.

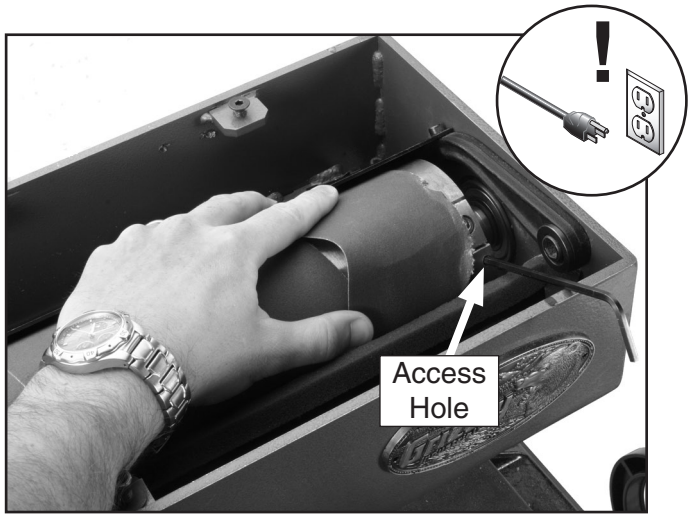


Figure 22. Hex wrench inserted into access hole on right tension wheel.

12. Firmly hold down the sandpaper with both hands, rotate the drum toward you, then wrap the end of the sandpaper over the top of the drum (**Figure 23**).

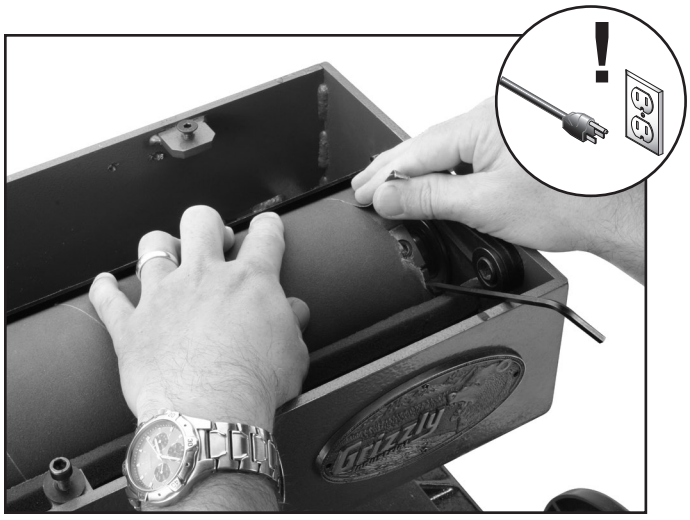


Figure 23. Wrapping sandpaper over tension wheel.

13. Place the end of the sandpaper into the clamp, secure it, and remove the hex wrench from the access hole.

14. If the sandpaper does not fit into the right clamp, you may have inserted the sandpaper too deeply into the left clamp. Also, check to make sure the length, width, and angled cuts match the pattern in **Figure 19**. Make adjustments to the sandpaper if necessary.

If sandpaper completely covers the access hole, you may have placed too little sandpaper into the left clamp. Unwrap the sandpaper and redo **Steps 8–13**.

15. In either case, reinstall the sandpaper, repeat **Steps 9–13**, and continue adjusting the paper until it fits into the clamp.

16. When finished, reinstall the chip deflector, secure it with the three cap screws, and close the cover.

SECTION 5: ACCESSORIES

Aluminum Oxide Sanding Rolls 3" x 10'
G3071—60 Grit: Use for thickness sanding and glue removal.
G3072—80 Grit: Use for removing planer marks and initial finish sanding.
G3073—100 Grit: Use for removing planer marks and initial finish sanding.
G3074—120 Grit: Use for finish sanding.
G4400—150 Grit: Use for finish sanding.
G4401—180 Grit: Use for finish sanding.
G4402—220 Grit: Use for finish sanding.

H2499—Small Half-Mask Respirator
H3631—Medium Half-Mask Respirator
H3632—Large Half-Mask Respirator
H3635—Disposable Cartridge Filter Pair P100
Wood dust is now considered a known carcinogen and 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 24. Half-mask respirator and disposable cartridge filters.

PRO-STICK® Sanding Pad
Extend the life of your sandpaper! Just feed this crepe-rubber cleaning pad through your drum sander to remove dust build-up from the sandpaper without damage.

Size	Model
15" X 20" X 1⅛"	H2845

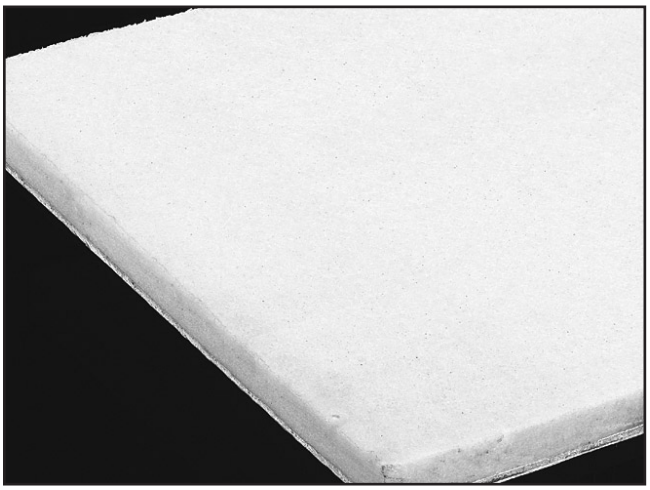


Figure 25. PRO-STICK® sanding pad.

G3640—Power Twist® V-Belt ½" x 4'
Smooth running with less vibration and noise than solid belts. The Power Twist® V-belts can be customized in minutes to any size—just add or remove sections to fit your needs. Size: ½" x 4'; replaces all "A" sized V-belts. Requires one Power Twist® V-belt to replace the stock V-belt on your Model G0458.

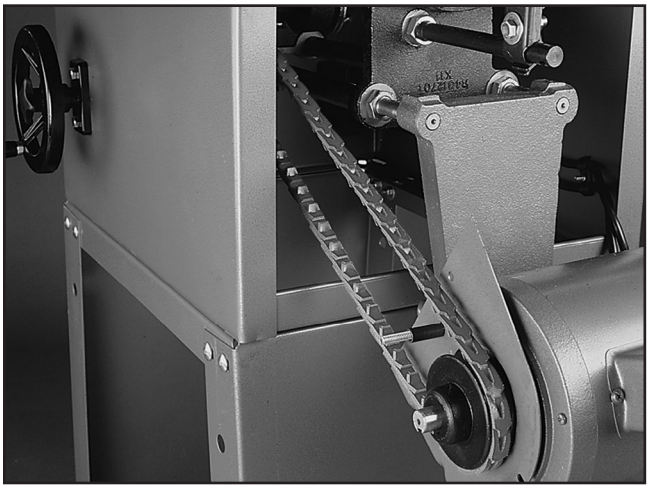
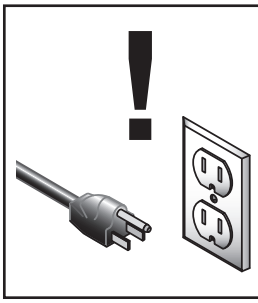


Figure 26. Power twist V-belt.

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 safe and optimum performance from a machine that is used on a daily basis, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Checks and Maintenance:

- Loose mounting bolts.
- Damaged sanding belt.
- Worn switch.
- Worn or damaged cords or plugs.
- Damaged V-belts.
- Any other unsafe condition.
- Oil the feed belt roller and drive bushings.
- Clean/vacuum dust buildup from inside cabinet and off of the motor.

⚠WARNING

DO NOT attempt to investigate or adjust the machine while it is running. Wait until the machine is turned *OFF*, unplugged, and all working parts have stopped moving before you do anything!

Cleaning

Cleaning the Model G0458 is relatively easy. Vacuum excess sawdust, and wipe off the remaining dust with a dry cloth.

Lubrication

The feed belt bushings should be lubricated daily with a light machine oil. Lubricate the chains and gears with a high-quality, lithium-based grease. The bearings do not need lubrication.

Avoid using excess lubrication. Too much lubricant attracts sawdust and will clog the chain.

Bushings: Must be oiled daily or each time the sander is used. Oil the bushings on each end of the feed belt rollers and remove the pulley cover and oil the drive bushings (see **Figure 27**).

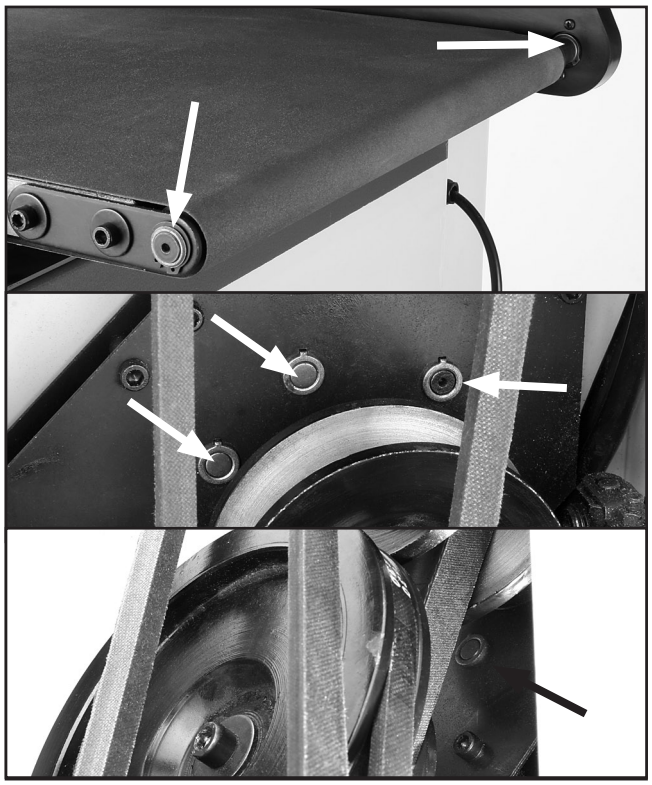


Figure 27. Bushing locations.

Feed Belt Drive: Lubricate with lithium grease monthly. Wipe sawdust and dirt impregnated grease off of the chain and gears shown in **Figures 28 & 29**. Apply fresh lithium grease to the gears and chain.

Figure 28. Feed belt drive chain.

Figure 29. Feed belt gears.

Table Lift Mechanism: Lubricate the table lift screws, chain, and helical gear with lithium grease every six months. Clean the chain and table lift screws (**Figure 30**), then rub lithium grease onto the chain links and screw threads. Clean the helical gear (**Figure 31**) and place a dab of grease on the teeth. Move the table up or down to spread the grease thoroughly throughout the mechanism.

Figure 30. Table lift screws (only two shown).

Figure 31. Helical gear.

Sanding Belts

You can greatly increase the lifespan of your sanding belts if you clean them often. Cleaning pads (**Accessories** on **Page 24**) are the fastest way to remove sawdust build-up.

V-Belt Tensioning

Tools Needed: **Qty**
Hex Wrenches 4 & 8mm .....1 Ea
Phillips Head Screwdriver 1
Pry Bar 1

Proper tension is important for optimum power transmission. However, too much tension may cause premature bearing failure.

Correct V-belt tension is achieved when the V-belts can be deflected ½"–¾" when pushed in the middle with moderate pressure. See **Figure 32** for an example of how to perform a V-belt deflection test with a straightedge and ruler.

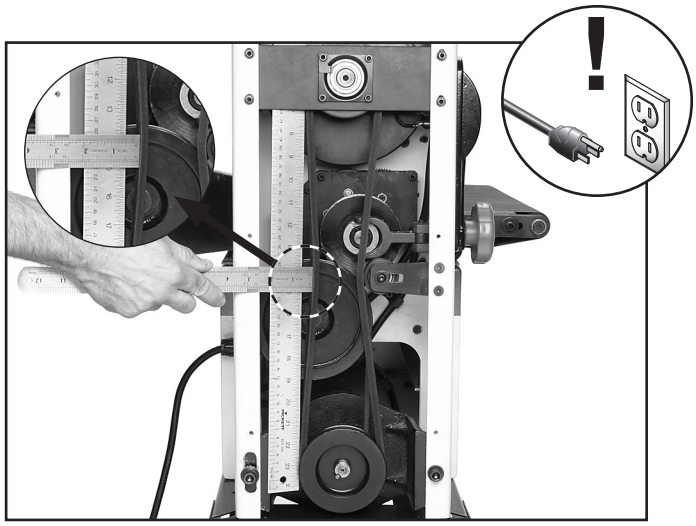


Figure 32. Checking V-belt tension with a straightedge and a ruler.

⚠CAUTION

Always inspect V-belts for damage or deterioration when adjusting for tension. Should you find evidence of cracking, abrasion or damage from wood chips or other foreign materials, replace the belt immediately. Belt breakage may lead to mechanical damage or operator injury.

To adjust V-belt tension:

1. **Disconnect power to the sander!**

2. Open the pulley cover.

3. Check the tension of the feed belt V-belt, then adjust the tension by loosening the motor mount cap screws shown in **Figure 33** and pushing down on the motor mount to tighten the V-belts.

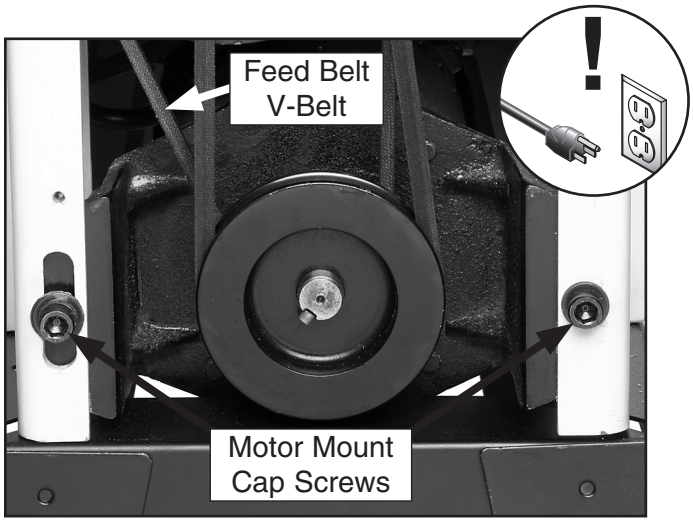


Figure 33. Feed belt V-belt tension.

4. Tension the sanding drum V-belt by sliding the idler roller (**Figure 34**) into the V-belt until the belt is correctly tensioned, then replace the pulley cover.

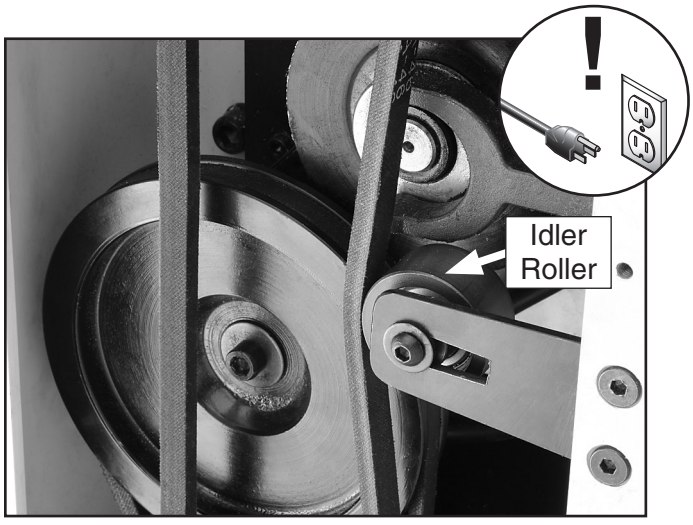


Figure 34. Sanding drum V-belt tension.

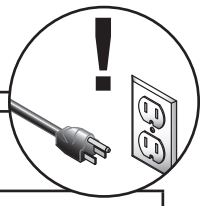
NOTICE

New V-belts will often stretch and loosen after moderate use. Check frequently after installation and re-tension if necessary.

SECTION 7: SERVICE

This section is provided for your convenience—it is not a substitute for the Grizzly Service Department. If you need help troubleshooting, you need replacement parts, or you are unsure of how to perform the procedures in this section, then feel free to call our Technical Support at (570) 546-9663.

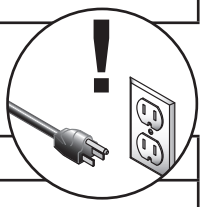
Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Plug/receptacle is faulty or wired incorrectly.	1. Test power plug and receptacle for good contact and correct wiring.
	2. Start capacitor is faulty.	2. Test capacitor and replace if necessary.
	3. Motor connection is wired incorrectly.	3. Correct motor wiring (see **Page 37**).
	4. Power supply is faulty, or is switched OFF.	4. Make sure hot lines and grounds are operational and have correct voltage on all legs.
	5. Safety switch key is at fault.	5. Install or replace safety key, or replace switch assembly.
	6. Motor ON/OFF switch is faulty.	6. Replace faulty ON/OFF switch.
	7. Centrifugal switch is at fault.	7. Adjust or replace the centrifugal switch.
	8. Cable or wiring is open or has high resistance.	8. Check for disconnected or corroded connections, troubleshoot wires for internal or external breaks, then repair or replace wiring.
	9. Motor is at fault.	9. Test, then repair or replace motor.
Machine stalls or is underpowered.	1. Wrong workpiece material.	1. Only process wood with correct moisture content, and no glues, or resins.
	2. Low power supply voltage.	2. Make sure hot lines and grounds are operational and have correct voltage on all legs.
	3. Run capacitor is faulty.	3. Test capacitor and replace if necessary.
	4. Filter bags are at fault.	4. Empty and clean filter bag.
	5. V-belts are slipping.	5. Replace bad belts, align pulleys, and re-tension the V-belts (see **Pages 27 & 30**).
	6. Plug or receptacle is at fault.	6. Test power plug and receptacle for good contact and correct wiring.
	7. Motor connection is wired incorrectly.	7. Correct motor wiring (see **Page 37**).
	8. Motor bearings are at fault.	8. Rotate motor shaft for noisy or burnt bearings, repair/replace as required.
	9. Machine is overloaded.	9. Use new sandpaper with appropriate grit, and reduce the feed rate/depth of sanding.
	10. Motor has overheated.	10. Check motor cooling air flow, let motor cool, and reduce workload on machine.
	11. Centrifugal switch is at fault.	11. Adjust/replace the centrifugal switch.
	12. Motor is at fault.	12. Test motor, and repair/replace if necessary.

Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	1. Motor or component is loose.	1. Inspect for stripped/damaged bolts/nuts, replace/re-tighten with thread locking fluid.
	2. V-belts are worn or loose.	2. Inspect belts, replace and re-tension (see **Pages 27 & 30**).
	3. Motor fan is rubbing on fan cover.	3. Replace dented fan cover/damaged fan.
	4. Pulley is loose.	4. Remove pulley, replace shaft, pulley, set-screw, and key as required, and realign.
	5. Machine is incorrectly mounted to the floor.	5. Machine has loose anchor studs in floor, or is sitting on uneven floor. Replace/tighten relocate as required.
	6. Cast iron motor mount is at fault.	6. Using leverage and a small pry bar to inspect, carefully replace loose/broken mounts.
	7. Motor bearings are at fault.	7. Check bearings, replace motor or bearings as required.



Sanding Operations

Symptom	Possible Cause	Possible Solution
Vibration when sanding.	1. Loose drum bearings. 2. Worn drum bearings.	1. Tighten drum bearings. 2. Replace drum bearings.
Grinding, screeching, or rubbing noise when sanding drums are powered up.	1. Drum bushings lack sufficient oil. 2. Drum bushings are worn and need replacement.	1. Oil the drum bushings (see **Page 25**). 2. Replace the drum bushings.
Short V-belt lifespan.	1. Pulleys not aligned correctly. 2. Improperly tensioned.	1. Align pulleys (see **Page 31**). 2. Properly tension V-belts (see **Page 27**).
Machine lacks power; drums stop turning under load.	1. V-belts loose. 2. Too much pressure on pressure plates.	1. Tighten V-belts (see **Page 27**). 2. Raise the pressure plates (**Page 35**).
Feed belt slips under load.	1. Feed belt is too loose. 2. Too much load.	1. Tension feed belt (see **Page 32**). 2. Decrease load.
Feed belt tracks to one side or hits the feed table mounts.	1. Feed belt tracking is incorrect.	1. Track the feed belt so it runs straight (see **Page 31**).
Excessive snipe.	1. Lack of outfeed support. 2. Too much pressure from pressure plates. 3. Too much pressure from the rear pressure plate.	1. Set up an outfeed table or have someone catch the workpiece as it comes out. 2. Raise the pressure plates (**Page 35**). 3. Raise the rear pressure plate (**Page 35**).
Workpiece kicks out of sander.	1. Not enough pressure from the pressure plates.	1. Lower the pressure plates (**Page 35**).
Sandpaper tears off drums during operation.	1. Nail/staple in workpiece. 2. Sandpaper not tightened or fastened correctly.	1. Sand only clean workpieces. 2. Install the sandpaper correctly (see **Page 22**).
Table elevation controls are stiff and hard to adjust.	1. Table lift screws are dirty or loaded with sawdust. 2. Chain idler sprocket cap screws have been over tightened. 3. Elevation handle helical gear is dirty or loaded with sawdust.	1. Clean and re-grease table lift screws (see **Page 26**). 2. Adjust the cap screws on the idler sprocket so it can spin freely. 3. Clean and re-grease the helical gear (see **Page 26**).

Replacing V-Belts

Tools Needed:	Qty
Hex Wrenches 4, 6 & 8mm	1 Ea
Phillips Head Screwdriver	1
Pry Bar	1

Inspect the V-belts closely; if you notice fraying, cracking, glazing, or any other damage, replace the belts. A worn/damaged V-belt will not provide optimum power transmission from the motor to the drum and feed belt.

V-belt removal and replacement is simply a matter of loosening the V-belts, rolling them off of the pulleys, replacing them with new belts, then retensioning them.

To replace the V-belts:

1. **Disconnect power to the sander!**

2. Open the pulley cover.

   Note: *If you plan on replacing the variable speed belt, loosen the cap screw securing the variable speed pulley (**Figure 36**) before loosening the motor mount cap screws.*

3. Loosen the motor mount cap screws shown in **Figure 35** and loosen the cap screw securing the idler roller.

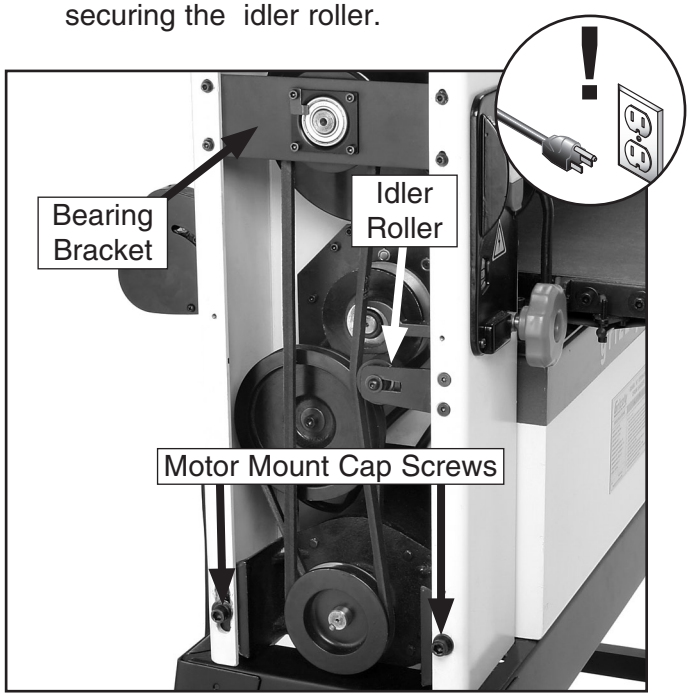


Figure 35. Belt drive system.

4. Remove the cap screws securing the bearing bracket and rotate the bearing bracket 90˚.

5. Slide the sanding drum V-belt off of the motor pulley, then lift the motor mount to remove the feed V-belt.

   Note: *You may need to use a pry bar to lift the motor mount.*

6. To replace the variable speed belt, remove the cap screw securing the pulley shown in **Figure 36**, then remove the outer half of the pulley.

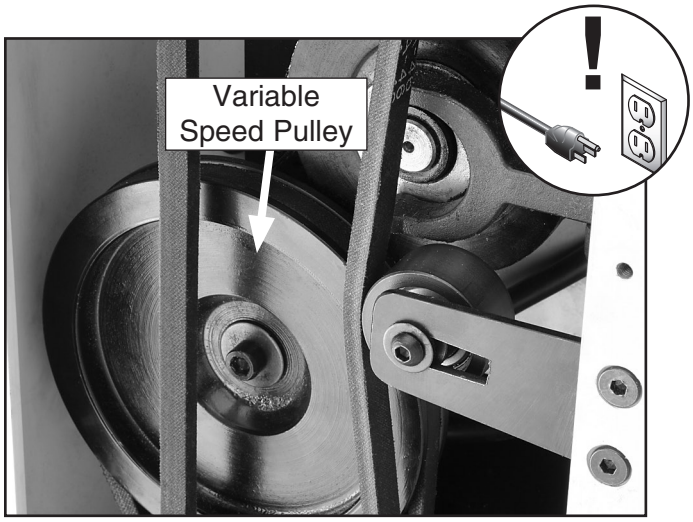


Figure 36. Variable speed pulley.

7. Compress the spring behind the inner half of the variable speed pulley, slide the outer half of the pulley over the shaft and key, then thread in the cap screw.

8. Install the new feed and drum V-belts, re-attach the bearing bracket, and tension according to the instructions on **Page 27**.

9. Tighten the variable speed pulley cap screw and replace the pulley cover.

Pulley Alignment

Tools Needed: **Qty**
Hex Wrenches 4 & 8mm .....1 Ea
Phillips Head Screwdriver 1
Pry Bar 1

Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplaner) for optimum performance.

Each pulley can be adjusted by loosening the set screw that secures the pulley to the shaft, sliding the pulley in/out, and retightening the set screw to lock the pulley in place.

To align the pulleys:

1. **Disconnect power to the sander!**

2. Open the pulley cover.

3. Looking from the top, sight down the V-belts and pulleys and check to see that the pulleys are parallel and aligned with each other (see **Figure 37**).

   —If the pulleys are aligned, go to **Step 9**.

   —If the pulleys are NOT aligned, perform **Steps 4–8**.

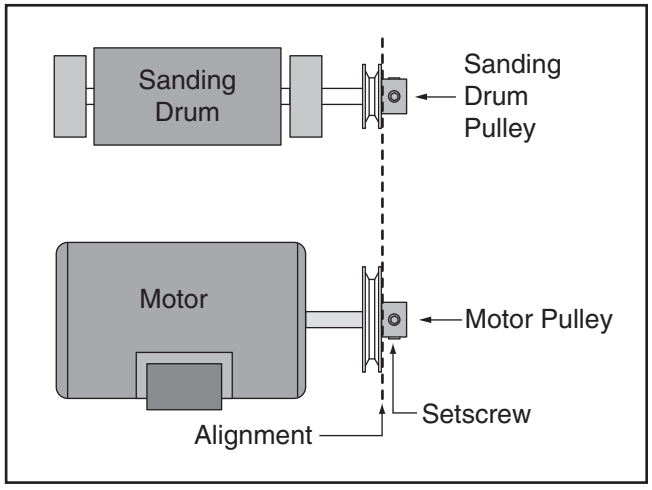


Figure 37. The pulleys should be parallel and aligned.

4. Remove the V-belts.

5. Loosen the set screws on the motor pulley and align the motor pulley with the feed belt pulley.

6. Loosen the set screws on the sanding belt pulley and align the sanding belt pulley with the motor pulley.

7. Tighten the set screws, replace the V-belts, and repeat **Step 3**. Belts should be parallel and aligned as shown in **Figure 37.**

8. Adjust the pulleys again, if necessary, until they are all coplanar with each other.

9. Replace the pulley cover.

Feed Belt Tracking

Tools Needed: **Qty**
Wrench 8mm 1
Hex Wrench 4mm..... 1

The feed belt must track straight. If the feed belt tracks to either side, then the tracking must be corrected or the feed belt will become damaged and have to be replaced.

Tracking the feed belt is a balancing process that takes patience and a small degree of trial-and-error. Usually you must over-tighten the loose side (the side the belt is tracking towards) to make the feed belt move to the middle of the rollers, then loosen that same side to make the feed belt stay in position. If you adjust the bolt too much either way, then you have to repeat the process until the feed belt rides in the middle and stays there during continuous operation.

Note: *Tracking affects tension, so tension must always be adjusted after tracking.*

To track the feed belt:

1. Turn the feed belt ***ON*** and watch it track. If the belt moves to one side, immediately stop the machine and adjust the belt tracking. If the belt tracks evenly, leave it alone.

2. Loosen the lock nut (**Figure 38**) on the side that the feed belt tracks towards and tension the tracking adjustment screw until the feed belt tracks in the opposite direction.

   Note: *Small tracking changes may take up to three minutes before they are noticeable.*

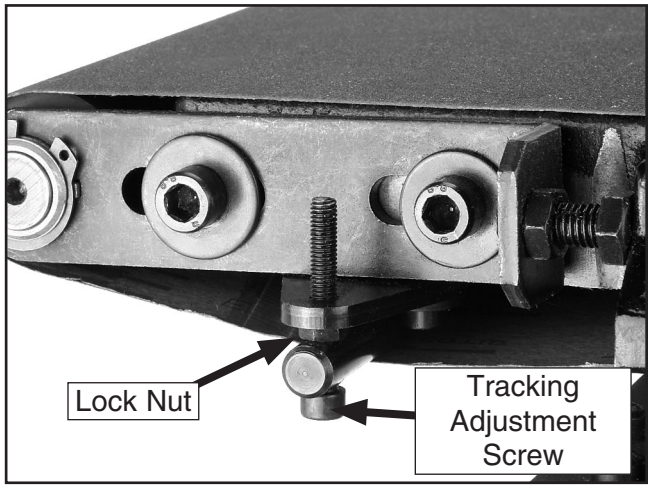


Figure 38. Feed belt tracking adjustment bolt.

3. When the feed belt is near the middle of the rollers or table, loosen the tracking adjustment screw until the feed belt stops moving and tracks straight.

   —If the feed belt tracks too far to the other side, loosen the tracking adjustment screw as necessary to bring it back. Repeat **Steps 2 & 3** until the tracking is correct.

Feed Belt Tension

Tools Needed:	**Qty**
Wrench 12mm	2
Hex Wrench 6mm	1

The feed belt will stretch when new and will eventually need to be tensioned. This is most obvious if the feed belt starts slipping on the rollers.

When you tension the feed belt, focus on adjusting the tensioning bolts in even increments. Adjusting one side more than the other will cause tracking problems, which will require you to take additional steps to get the sander operating correctly.

To tension the feed belt:

1. Loosen the feed roller lock screws, shown in **Figure 39**, on both sides of the feed belt.

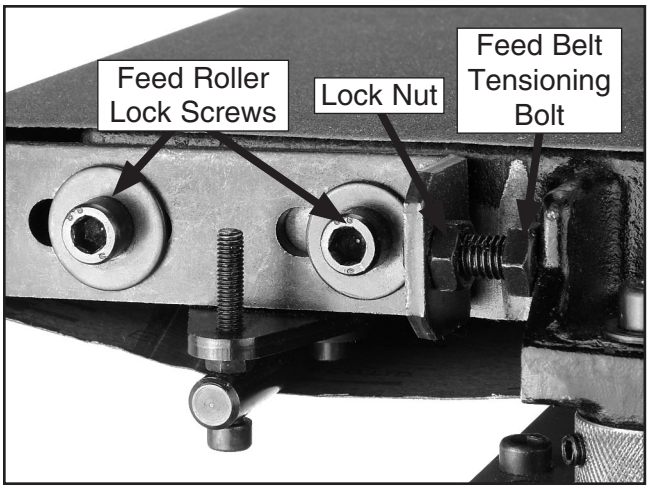


Figure 39. Feed belt tensioning controls.

2. Use a permanent marker, paper correction fluid, or fingernail polish to mark the feed belt tensioning bolt on both sides. This step will aid you in keeping track of the rotations as you turn the bolts, so they remain as even as possible.

3. Loosen the lock nuts and turn both of the feed belt tensioning bolts clockwise one full turn at a time until the feed belt no longer slips during operation.

   —If the feed belt starts tracking to one side, back off the feed belt tensioning bolt that is being adjusted.

   —If the feed belt continues tracking to one side, immediately turn the drum sander ***OFF*** and perform the tracking instructions.

4. Tighten the lock nuts to lock the feed belt tensioning bolts in place.

   Note: *When tensioned properly the belt should not lift off the table, slide back and forth, or slip.*

NOTICE

DO NOT over-tension the feed belt, this may cause premature wearing of the belt, bushings, and cause strain on the motor.

Feed Belt Replacement

Tools Needed:	Qty
Wrench 12mm	2
Hex Wrench 6mm	1
An Assistant	1

Replacing the feed belt is a simple process, but will require tensioning and tracking when completed.

To replace the feed belt:

1. **Disconnect power to the sander!**

2. Use a permanent marker, paper correction fluid, or fingernail polish to mark the front of the feed belt tensioning bolt (**Figure 39**) on both sides. This step will aid you in returning the bolts to their original position, reducing the amount of tracking necessary.

3. Loosen the lock nuts shown in **Figure 39** and turn both of the feed belt adjustment bolts counterclockwise one full turn at a time to release the tension from the feed belt.

4. Remove the outside table cap screws shown in **Figure 40** and loosen the corresponding cap screws on the inside edge.

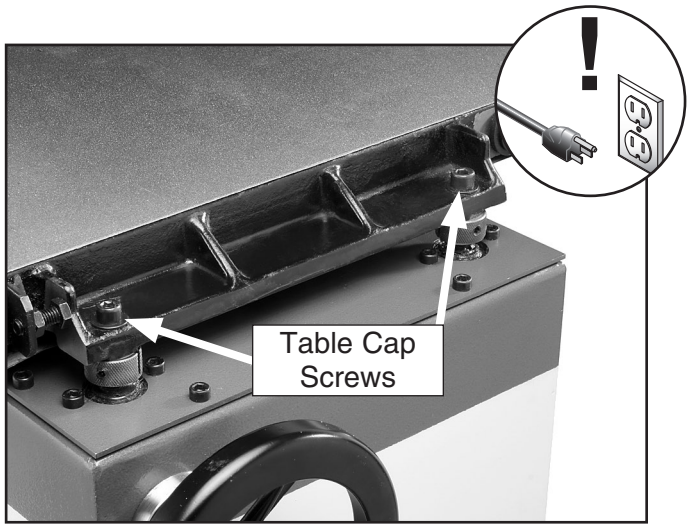


Figure 40. Feed belt table outside cap screws.

5. Have an assistant lift the outside edge of the table, then slide the feed belt off.

6. Clean any dirt or dust off of the table and rollers, have an assistant lift the table, then slide the new feed belt on.

7. Re-install and tighten all of the table cap screws.

8. Tighten the feed belt adjustment bolts equally, then follow the tensioning instructions on **Page 32**.

   Note: *The feed belt will stretch slightly when new and will need to be re-tensioned after a short amount of use.*

9. Track the new feed belt according to the instructions on **Page 31**.

   Note: *One side of the belt may need to be tighter than the other for the belt to track straight.*

Gauge Blocks

Tools Needed:	Qty
6' Long 2x4	1
Miter Saw (or Circular Saw)	1
Jointer	1
Table Saw	1

The gauge blocks described here will be required to complete the remaining service procedures in this section.

To make the gauge blocks:

1. Edge joint the concave edge of the 2x4 flat on a jointer, as shown in **Figure 41**.

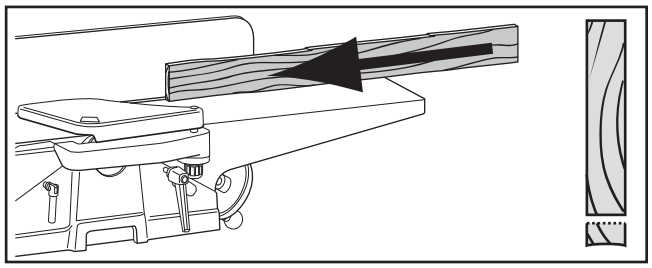


Figure 41. Edge jointing on a jointer.

2. Place the jointed edge of the 2x4 against the table saw fence and rip cut just enough off the opposite side to square up the two edges of the 2x4, as shown in **Figure 42**.

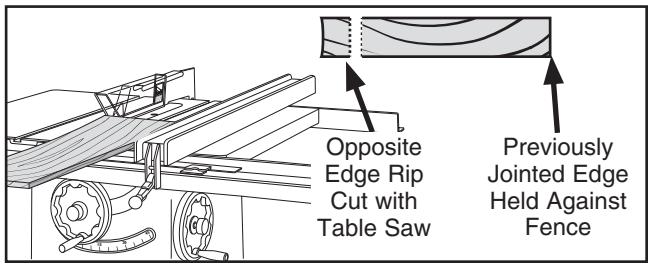


Figure 42. Rip cutting on a table saw.

3. Cut the 2x4 into two even pieces to make two 36" long wood gauge blocks.

   Note: ***Steps 1 & 2*** *can be skipped, but having the gauge blocks at an equal height is critical to the accuracy of your adjustments.*

Table Adjustments

Aligning the drums parallel to the conveyor belt (**Figure 43**) is critical for sanding accuracy. Care should be taken to make the tolerances as close as possible (within 0.002" from one side to the other) when adjusting the drum height.

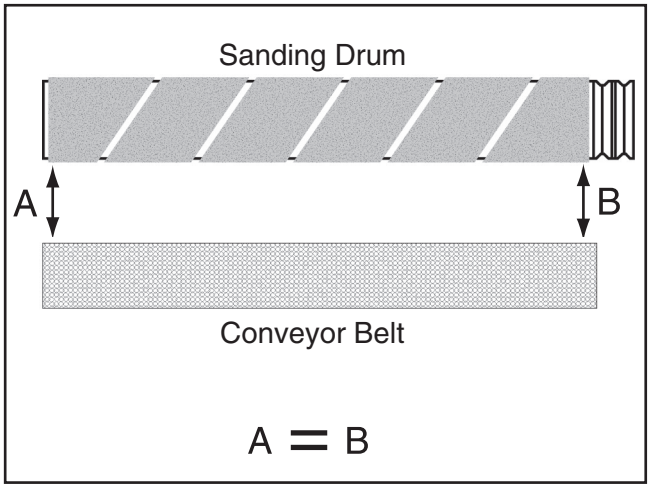


Figure 43. Drum parallel to conveyor belt.

Tools Needed:	Qty
Hex Wrenches 3 & 6mm	1 Ea
Gauge Blocks	2
Feeler Gauge Set	1

To align the drums:

1. **Disconnect power to the sander!**

2. Remove the sandpaper from the drum and place the gauge blocks as shown in **Figure 44**.

Figure 44. Gauge blocks placed under drums.

3. Raise the table until the gauge blocks just touch the drum.

   N**ote:** *A good way to know when they are touching is to rock the drum back and forth while raising the table until you hear or feel contact with the gauge blocks.*

4. Lower the table one full crank of the handwheel (taking handwheel free-play into consideration; or in other words, wait until the chain starts moving before starting to count the handwheel rotation).

5. Starting at one end, find the largest size feeler gauge that can pass between the drum and your gauge block. (The feeler gauge should slide with moderate resistance, without forcing the drum to roll.)

6. Repeat **Step 5** at the other end of the drum.

   —If the difference between the two sizes is 0.002" or less, then no adjustment is necessary.

   —If the difference between the two sizes is more than 0.002", then one end must be adjusted to within 0.002" from the other. Continue to the next step.

7. Loosen the table cap screws and adjust the height of the table by rotating the adjustment knob shown in **Figure 45**.

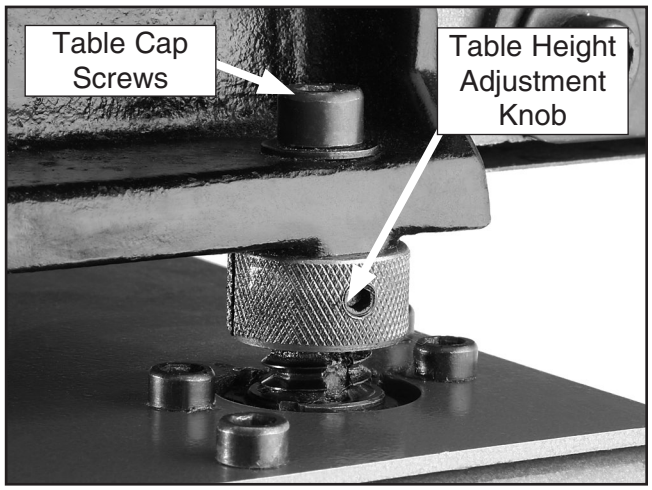


Figure 45. Table height adjustment knob.

8. Tighten the table cap screws and repeat **Steps 5 & 6**.

Pressure Plate Adjustments

Tools Needed:	**Qty**
Wrench 8mm	1
Hex Wrench 4mm	1
Gauge Blocks (see **Page 34**)	2
Feeler Gauge Set	1

When properly positioned, the pressure plates should be approximately 0.004" lower than the drum.

Adjusting the pressure plates is a fine balance between too much pressure and not enough. Too much pressure can cause problems like snipe or overloading the motor, not enough pressure may allow the workpiece to kick out of the sander towards the operator.

The pressure plates have been set correctly at the factory. Do not adjust the pressure plates unless absolutely necessary.

To check pressure plate adjustment:

1. **Disconnect power to the sander!**

2. Place the gauge blocks on the feed belt as shown in **Figure 44**.

3. Raise the table until the gauge blocks just touch the rear pressure plate.

4. Find the largest size feeler gauge that can pass between the drum and your gauge block. (The feeler gauge should slide with moderate resistance, without forcing the drum to roll.)

   —If the gap is 0.004" (0.1mm) or less, then no adjustment of the rear pressure plate is necessary.

   —If the gap is more than 0.004" (0.1mm), then the rear pressure plate must be adjusted.

5. Raise the table until the gauge blocks just touch the drum.

6. Find the largest size feeler gauge that can pass between the front pressure plate and your gauge block. (The feeler gauge should slide with moderate resistance, without forcing the drum to roll.)

   —If the gap is 0.004" (0.1mm) or less, then no adjustment of the front pressure plate is necessary.

   —If the gap is more than 0.004" (0.1mm), then the front pressure plate must be adjusted.

To adjust the rear pressure plate:

1. **Disconnect power to the sander!**

2. Loosen the lock nuts and tighten the cap screws on both ends of the rear pressure plate shown in **Figure 46** to raise the pressure plate, or loosen the cap screw to lower the pressure plate.

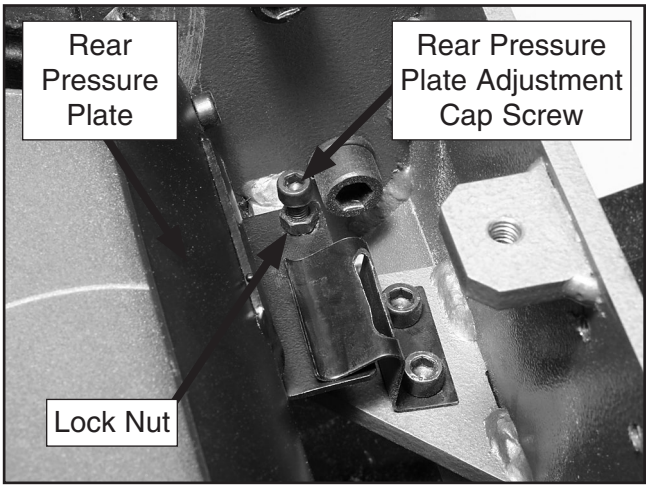


Figure 46. Rear pressure plate adjustments.

3. Adjust the rear pressure plate until it is equal to, or up to 0.004" (0.1mm) lower than the height of the drum.

To adjust the front pressure plate:

1. **Disconnect power to the sander!**

2. Loosen the lock nuts and tighten the cap screws on both ends of the front pressure plate shown in **Figure 47** to raise the pressure plate, or loosen the cap screw to lower the pressure plate.

3. Adjust the front pressure plate until it is equal to, or up to 0.004" (0.1mm) lower than the height of the drum.

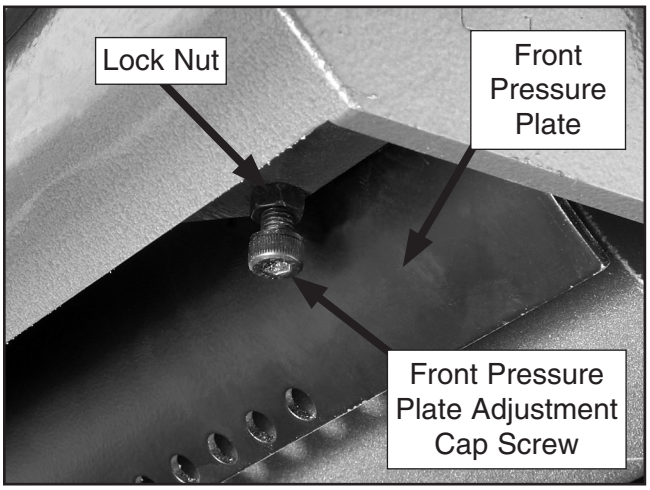
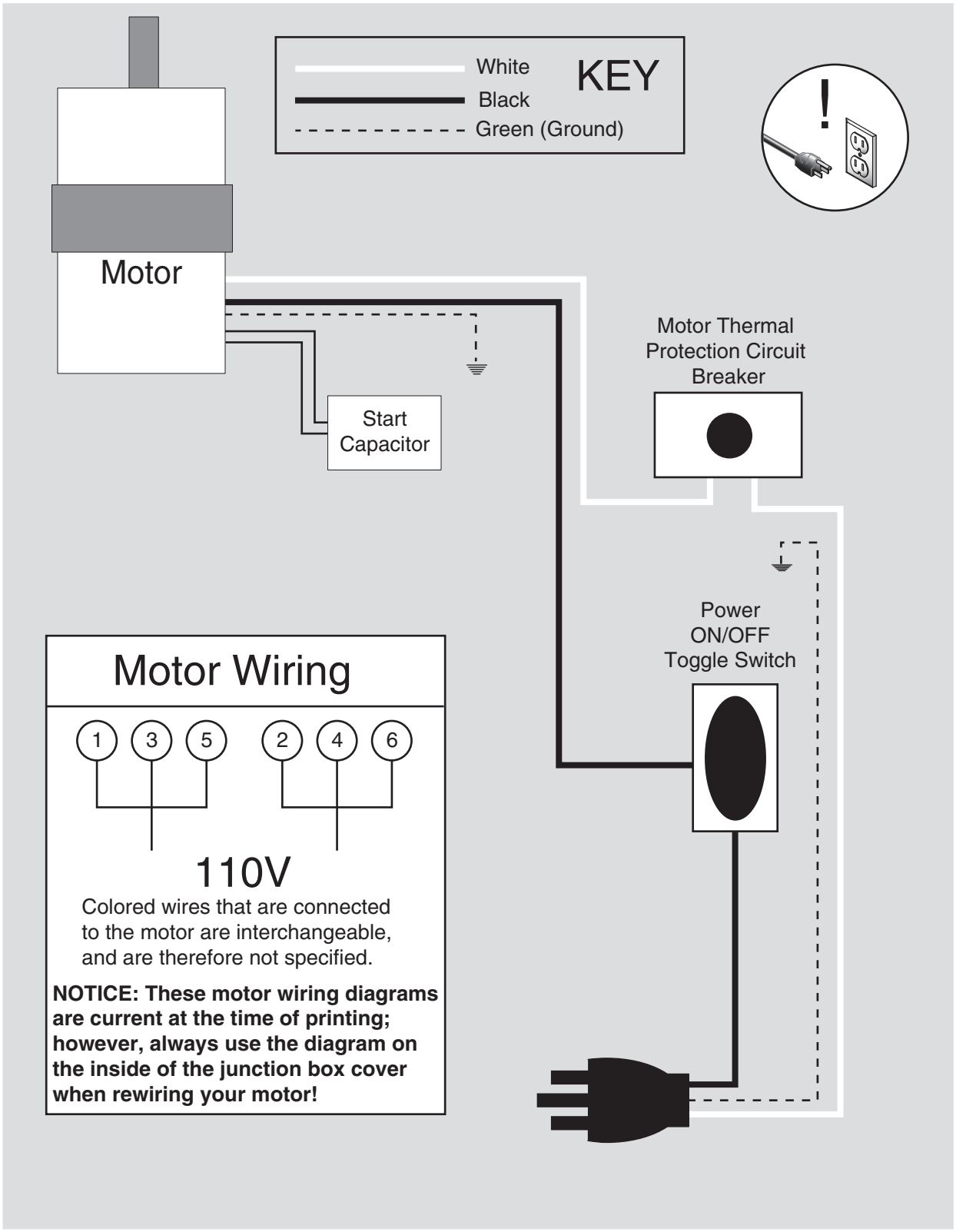
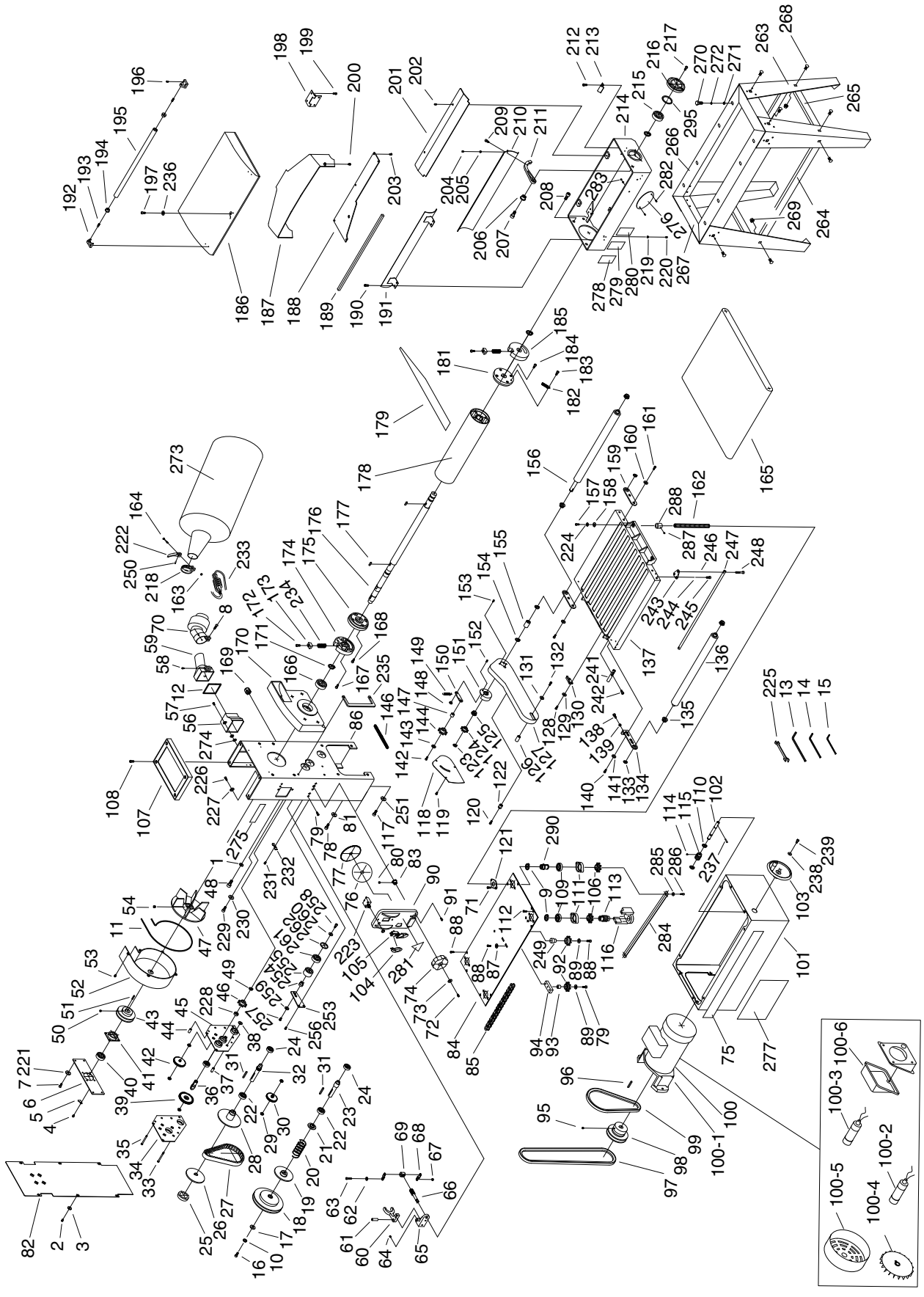


Figure 47. Front pressure plate adjustments.

Wiring Diagram



G0458 Parts Breakdown



G0458 Parts List

REF	PART #	DESCRIPTION
1	P0458001	LOCK WASHER 10MM
2	PS05M	PHLP HD SCR M5-.8 X 8
3	PW02M	FLAT WASHER 5MM
4	PSB03M	CAP SCREW M5-.8 X 8
5	P0458005	BEARING RETAINER
6	P0458006	BEARING CAP
7	PSB33M	CAP SCREW M5-.8 X 12
8	PS47M	PHLP HD SCR M6-1 X 25
9	PEC06M	E-CLIP 20MM
10	PLW04M	LOCK WASHER 8MM
11	P0458011	SPONGE STRIP
12	P0458012	SPONGE STRIP
13	PAW06M	HEX WRENCH 6MM
14	PAW05M	HEX WRENCH 5MM
15	PAW04M	HEX WRENCH 4MM
16	PSB100M	CAP SCREW M8-1.25 X 15
17	PW01M	FLAT WASHER 8MM
18	P0458018	PULLEY
19	P0458019	PULLEY
20	P0458020	COMPRESSION SPRING
21	P0458021	SPACER
22	P6003	BEARING 6003ZZ
23	P0458023	SHAFT
24	P6003	BEARING 6003ZZ
25	P0458025	THRUST BALL BEARING
26	P0458026	PULLEY
27	P0458027	COGGED V-BELT 400VK15-22
28	P0458028	PULLEY
29	P0458029	BUSHING
30	P0458030	GEAR 52/12T
31	PK02M	KEY 5 X 5 X 40
32	P0458032	SHAFT
33	PSB95M	CAP SCREW M5-.8 X 30
34	P0458034	INSIDE COVER
35	PSB38M	CAP SCREW M5-.8 X 25
36	P0458036	SHAFT
37	P0458037	SPACER
38	PW02M	FLAT WASHER 5MM
39	P0458039	GEAR 70T
40	P6004	BEARING 6004ZZ
41	P0458041	BEARING COVER
42	P0458042	GEAR 58/12T
43	P0458043	PULLEY
44	P0458044	SPACER
45	P0458045	INSIDE COVER
46	P0458046	SPROCKET
47	P0458047	FAN
48	PSB64M	CAP SCREW M10-1.5 X 25
49	PR05M	EXT RETAINING RING 15MM
50	PSS01M	SET SCREW M6-1 X 10

REF	PART #	DESCRIPTION
51	PK07M	KEY 6 X 6 X 20
52	P0458052	FAN COVER
53	PSB18M	CAP SCREW M4-.7 X 8
54	PSS20M	SET SCREW M8-1.25 X 8
56	P0458056	COLLECTOR TUBE
57	PS05M	PHLP HD SCR M5-.8 X 8
58	PS47M	PHLP HD SCR M6-1 X 25
59	P0458059	COLLECTOR TUBE
60	P0458060	LINK
61	P0458061	PIN
62	PLW01M	LOCK WASHER 5MM
63	PSB38M	CAP SCREW M5-.8 X 25
64	PSS02M	SET SCREW M6-1 X 6
65	P0458065	BRACKET
66	P0458066	ADJUSTING ROD
67	PN06M	HEX NUT M5-.8
68	P0458068	RETAINER
69	P0458069	SPECIAL NUT
70	P0458070	DUST PORT
71	PSB01M	CAP SCREW M6-1 X 16
72	PS09M	PHLP HD SCR M5-.8 X 10
73	PW02M	FLAT WASHER 5MM
74	P0458074	KNOB 8MM
75	P0458075	GRIZZLY.COM LABEL
76	P0458076	SPEED SCALE
77	P0458077	GEAR
78	PSB64M	CAP SCREW M10-1.5 X 25
79	PSB02M	CAP SCREW M6-1 X 20
80	PSS07M	SET SCREW M5-.8 X 5
81	PW04M	FLAT WASHER 10MM
82	P0458082	SIDE COVER
83	P0458083	GEAR
84	P0458084	SIDE COVER
85	P0458085	CHAIN 132-410
86	P0458086	SIDE CASTING
87	PW03M	FLAT WASHER 6MM
88	PSB04M	CAP SCREW M6-1 X 10
89	PW03M	FLAT WASHER 6MM
90	P0458090	TURNMETER COVER
91	PS08M	PHLP HD SCR M5-.8 X 12
92	P0458092	SPROCKET
93	P0458093	SPACER
94	P0458094	IDLER BRACKET
95	PSS14M	SET SCREW M8-1.25 X 12
96	PK11M	KEY 6 X 6 X 40
97	PVA46	V-BELT A-46 4L460
98	P0458098	PULLEY
99	PVM26	V-BELT M-26 3L260
100	P0458100	MOTOR

G0458 Parts List

REF	PART #	DESCRIPTION
100-1	P0458100-1	MOTOR BRACKET
100-2	P0458100-2	CAPACITOR 25MFD 250VAC
100-3	PC300S	CAPACITOR 300MFD 125VAC
100-4	P0458100-4	MOTOR FAN
100-5	P0458100-5	FAN COVER
100-6	P0458100-6	CAP COVER /JUNCTION BOX
101	P0458101	LOWER CASTING
102	P0458102	SHAFT
103	P0458103	HANDWHEEL
104	P0458104	SWITCH KEY
105	P0458105	SWITCH
106	P0458106	SPROCKET
107	P0458107	COVER
108	PB95M	HEX BOLT M5-.8 X 16
109	P6103043	BEARING 6904ZZ
110	PR03M	EXT RETAINING RING 12MM
111	P0458111	BEARING COVER
112	PS68M	PHLP HD SCR M6-1 X 10
113	P0458113	GEAR
114	PSS07M	SET SCREW M5-.8 X 5
115	P0458115	WORM
116	P0458116	BRACKET
117	PSB130M	CAP SCREW M10-1.5 X 16
118	P0458118	SIDE COVER
119	PHTEK26M	TAP SCREW M5- X 10
120	PS38M	PHLP HD SCR M4-.7 X 10
121	P0458121	DUST COVER
122	P0458122	FIXED COLLAR
123	PR05M	EXT RETAINING RING 15MM
124	P0458124	SPROCKET
125	P0458125	BUSHING
126	P0458126	SPACER
127	P0458127	CHAIN COVER
128	PSB03M	CAP SCREW M5-.8 X 8
129	PW02M	FLAT WASHER 5MM
130	P0458130	GUIDE PLATE
131	PW02M	FLAT WASHER 5MM
132	PSB79M	CAP SCREW M5-.8 X 35
133	PR09M	EXT RETAINING RING 20MM
134	P0458134	EXTENSION BRACKET
135	P0458135	BUSHING
136	P0458136	ROLLER
137	P0458137	TABLE
138	PB09M	HEX BOLT M8-1.25 X 20
139	PN03M	HEX NUT M8-1.25
140	PSB11M	CAP SCREW M8-1.25 X 16
141	PW01M	FLAT WASHER 8MM
142	PSB02M	CAP SCREW M6-1 X 20
143	PW03M	FLAT WASHER 6MM
144	P0458144	SPROCKET
146	P0458146	CHAIN
147	P0458147	SPACER

REF	PART #	DESCRIPTION
148	P0458148	SPECIAL NUT
149	P0458149	EXTENSION SPRING
150	P0458150	TENSION WHEEL ASSY
151	P0458151	CHAIN PROTECTOR
152	PS05M	PHLP HD SCR M5-.8 x 8
153	PS19M	PHLP HD SCR M5-.8 x 6
154	PR09M	EXT RETAINING RING 20MM
155	P0458155	SPACER
156	P0458156	ROLLER
157	PSB31M	CAP SCREW M8-1.25 X 25
158	PW01M	FLAT WASHER 8MM
159	P0458159	EXTENSION BRACKET
160	PW01M	FLAT WASHER 8MM
161	PSB11M	CAP SCREW M8-1.25 X 16
162	P0458162	ELEVATING SCREW
163	PN01M	HEX NUT M6-1
164	P0458164	EYE BOLT M6-1 X 50
165	P0458165	CONVEYOR BELT
166	P0502058	BEARING 6205ZZ
167	PSB06M	CAP SCREW M6-1 X 25
168	PSB06M	CAP SCREW M6-1 X 25
169	P0458169	STRAIN RELIEF
170	P0458170	BEARING SEAT
171	PR11M	EXT RETAINING RING 25MM
172	PSB06M	CAP SCREW M6-1 X 25
173	P0458173	LOCKING BLOCK
174	P0458174	FIXED PAN
175	P0458175	FIXED PAN
176	P0458176	HEAD SHAFT
177	PK99M	KEY 6 X 6 X 15
178	P0458178	DRUM
179	P0458179	SANDPAPER
181	P0458181	FIXED PAN
182	P0458182	EXTENSION SPRING
183	PSB33M	CAP SCREW M5-.8 X 12
184	PSB06M	CAP SCREW M6-1 X 25
185	P0458185	FIXED PAN
186	P0458186	HEAD COVER
187	P0458187	CHIP GUIDE BRACKET
188	P0458188	SIDE COVER
189	P0458189	SPONGE STRIP
190	PSB04M	CAP SCREW M6-1 X 10
191	P0458191	PRESSURE PLATE
192	P0458192	BRACKET
193	P0458193	ROLLER PIN
194	P0458194	BUSHING
195	P0458195	ROLLER
196	PS40M	PHLP HD SCR M5-.8 X 16
197	PSB01M	CAP SCREW M6-1 X 16
198	P0458198	HINGE
199	PS05M	PHLP HD SCR M5-.8 X 8

G0458 Parts List

REF	PART #	DESCRIPTION
200	PSB33M	CAP SCREW M5-.8 X 12
201	P0458201	CHIP DEFLECTOR PLATE
202	PFH43M	FLAT HD SCR M6-1 X 10
203	PFH07M	FLAT HD SCR M5-.8 X 10
204	PSS24M	SET SCREW M5-.8 X 25
205	PN06M	HEX NUT M5-.8
206	P0458206	BUSHING
207	PSB142M	CAP SCREW M10-1.5 X 10
208	PSB64M	CAP SCREW M10-1.5 X 25
209	PSB33M	CAP SCREW M5-.8 X 12
210	P0458210	PRESSURE PLATE
211	P0458211	LINK
212	PSB04M	CAP SCREW M6-1 X 10
213	P0458213	SPRING SHEET
214	P0458214	HEADCASTING
215	P0502058	BEARING 6205ZZ
216	P0458216	BEARING COVER
217	PSB26M	CAP SCREW M6-1 X 12
218	P0458218	COLLAR
219	PN06M	HEX NUT M5-.8
220	PSS34M	SET SCREW M5-.8 X 16
221	PW02M	FLAT WASHER 5MM
222	P0458222	DUST HOSE CLAMP
223	P0458223	SWITCH RESET
224	PLW04M	LOCK WASHER 8MM
225	P0458225	OPEN END WRENCH 8/12MM
226	PS19M	PHLP HD SCR M5-.8 X 6
227	PTLW02M	EXT TOOTH WASHER 5MM
228	P0458228	SPACER
229	PSB33M	CAP SCREW M5-.8 X 12
230	PW02M	FLAT WASHER 5MM
231	PS05M	PHLP HD SCR M5-.8 X 8
232	P0458232	STRAIN RELIEF
233	P0458233	POWER CORD
234	P0458234	COMPRESSION SPRING
235	P0458235	PLATE
236	PW03M	FLAT WASHER 6MM
237	PRP02M	ROLL PIN 3 X 16
238	PW02M	FLAT WASHER 5MM
239	PSB33M	CAP SCREW M5-.8 X 12
241	P0458241	ROD
242	PSB33M	CAP SCREW M5-.8 X 12
243	P0458243	PLATE
244	PW02M	FLAT WASHER 5MM

REF	PART #	DESCRIPTION
246	PN06M	HEX NUT M5-.8
247	P0458247	ROD
248	PSB79M	CAP SCREW M5-.8 X 35
249	P0458249	SPACER
250	P0458250	PIN
251	PLW06M	LOCK WASHER 10MM
253	P0458253	PULLEY COVER
254	P0458254	PULLEY SHAFT
255	P0458255	PULLEY
256	PB04M	HEX BOLT M6-1 X 10
257	PB04M	HEX BOLT M6-1 X 10
258	PB04M	HEX BOLT M6-1 X 10
259	PW03M	FLAT WASHER 6MM
260	PW03M	FLAT WASHER 6MM
261	P0458261	BEARING 6002ZZ
262	PW21M	FLAT WASHER 32MM
263	P0458263	STAND
264	P0458264	FRONT SUPPORTING PLATE
265	P0458265	SIDE SUPPORTING PLATE
266	P0458266	FRONT PLATE
267	P0458267	SIDE PLATE
268	PCB06M	CARRIAGE BOLT M8-1.25 X 16
269	PFN01M	FLANGE NUT M8-1.25
270	PB09M	HEX BOLT M8-1.25 X 20
271	PN03M	HEX NUT M8-1.25
272	PW01M	FLAT WASHER 8MM
273	P0458273	DUST BAG
274	PW02M	FLAT WASHER 5MM
275	P0458275	G0458 LABEL
276	P0458276	GRIZZLY LOGO
277	P0458277	MACHINE ID LABEL
278	PLABEL-11	SAFETY GLASSES LABEL
279	PLABEL-12	READ MANUAL LABEL
280	PLABEL-32	DUST MASK LABEL
281	PLABEL-14	ELECTRICITY LABEL
282	PS98M	PHLP HD SCR M3-.5 X 16
283	PN07M	HEX NUT M3-.5
284	P0458284	CONNECTING CORD
285	PW02M	FLAT WASHER 5MM
286	PB112M	HEX BOLT M5-.8 X 12
287	PSS02M	SET SCREW M6-1 X 6
288	P0458288	LOCK NUT 5/8-8
290	P0458290	BUSHING
295	P0458295	WAVE WASHER 40MM

⚠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.

WARRANTY AND RETURNS

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

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

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

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

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

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

Grizzly 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