MODEL T33256
4" X 36" BELT / 6" DISC COMBO SANDER
OWNER'S MANUAL
(For models manufactured since 04/22)

#CS22256 PRINTED IN CHINA V1.04.22

******Keep for Future Reference******

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

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

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

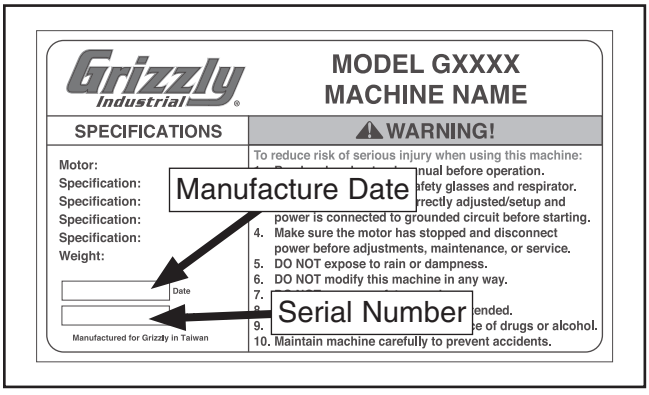
Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual**.

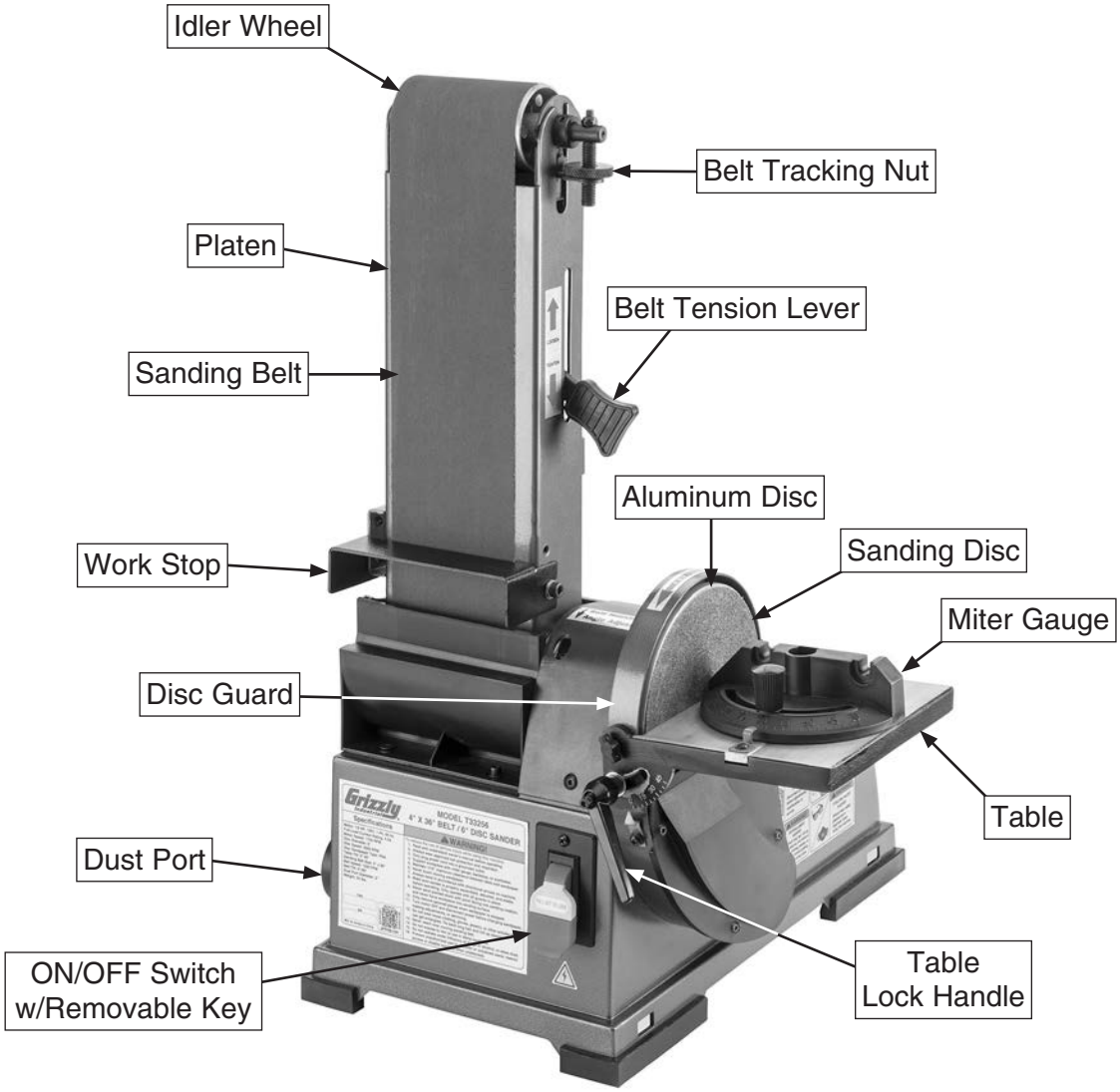
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **manufacture date** and **serial number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.



Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.

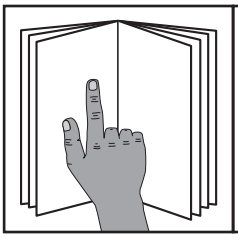


⚠WARNING

For Your Own Safety Read Instruction Manual Before Operating the Sander

a) Wear eye and ear protection.
b) Support workpiece with miter gauge, backstop, or work table.
c) Maintain 1/16 in. maximum clearance between table and sanding belt or disc.
d) Avoid kickback by sanding in accordance with directional arrows.

Controls & Components



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

Refer to the following figures and descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and minimize your risk of injury when operating this machine.

Disc Sanding Components

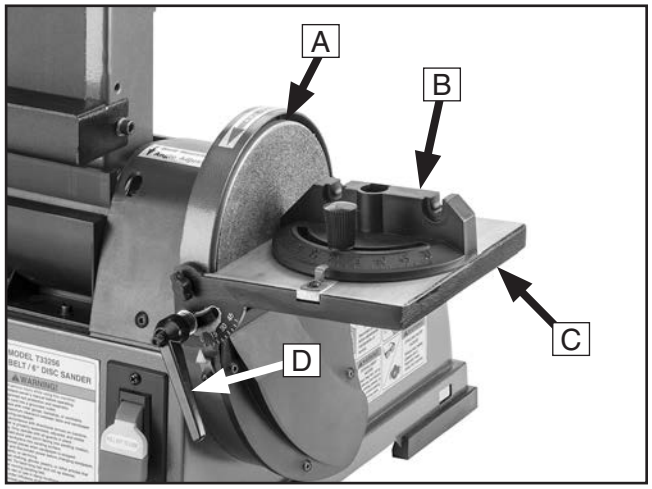


Figure 1. Disc sanding components.

A. Aluminum Disc: Provides disc support for flat sanding surface.

B. Miter Gauge: Braces workpiece on table for miter sanding. Adjusts between 60° left and 60° right.

C. Table: Supports workpiece as it is pressed against sanding disc and tilts between 0°–45°.

Note: *Table can also be installed for use with sanding belt when platen is in vertical position.*

D. Table Lock Handle: Loosens to adjust table tilt; tightens to secure.

Belt Sanding Components

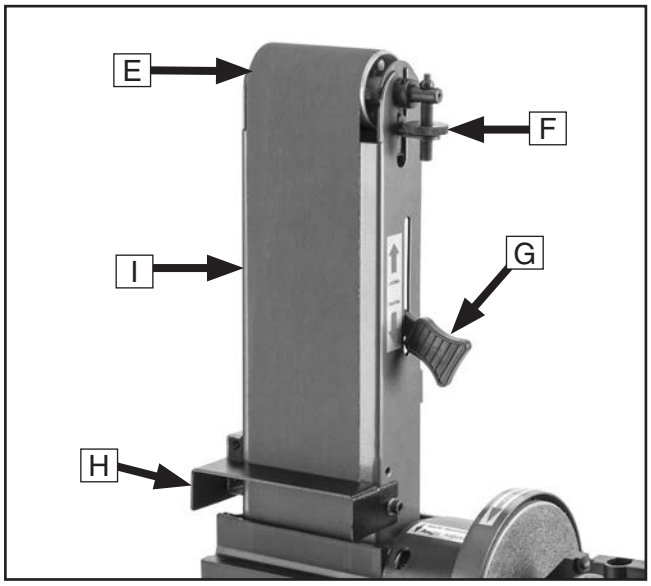


Figure 2. Belt sanding components.

E. Idler Roller: Provides belt support for an additional, curved sanding surface.

F. Belt Tracking Nut: Controls side-to-side tracking of sanding belt.

G. Belt Tension Lever: Moves away from idler roller to tension sanding belt; moves toward idler roller to release sanding belt tension.

H. Work Stop: Prevents workpiece from being ejected from belt.

I. Platen: Provides belt support for flat sanding surface and tilts between 0°–90°.

Power Controls

Figure 3. ON/OFF switch.

J. ON/OFF Switch w/Removable Key: Turns motor ***ON***/***OFF*** and prevents accidental startup.

MACHINE DATA SHEET

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

MODEL T33256 4" X 36" BELT / 6" DISC COMBO SANDER

Product Dimensions:

Weight	33 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	20 x 16-1/2 x 25 in.
Footprint (Length x Width)	16-1/2 x 10 in.

Shipping Dimensions:

Type	Cardboard
Content	Machine
Weight	36 lbs.
Length x Width x Height	22 x 13 x 16 in.
Must Ship Upright	Yes

Electrical:

Power Requirement	120V, Single-Phase, 60Hz
Full-Load Current Rating	4.3A
Minimum Circuit Size	15A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	74 in.
Power Cord Gauge	18 AWG
Plug Included	Yes
Included Plug Type	5-15
Switch Type	Paddle Safety Switch w/ Removable Key

Motors:

Main

Horsepower	1/2 HP
Phase	Single-Phase
Amps	4.3A
Speed	1700 RPM
Type	Induction
Power Transfer	Belt
Bearings	Sealed & Permanently Lubricated

Main Specifications:

Belt Sander Info

Sanding Belt Width	4 in.
Sanding Belt Length	36 in.
Sanding Belt Speed	1320 FPM
Sanding Belt Tilt	0-90 deg.
Table-to-Floor Height	12-5/8 in.
Max Height of Belt in Vertical Position	24-5/8 in.
Contact Wheel Diameter	2-1/4 in.
Contact Wheel Width	4 in.
Drive Wheel Diameter	2-1/4 in.
Drive Wheel Width	4 in.
Belt Tension Release Type	Quick-Release Lever
Platen Type	Steel
Platen Length	11-1/2 in.
Platen Width	4-3/4 in.

Disc Sander Info

Disc Diameter	6 in.
Disc Speed	2200 RPM
Disc Sandpaper Backing Type	PSA
Table Length	7 in.
Table Width	5-3/8 in.
Table Thickness	5/8 in.
Table Tilt	0-45 deg.
Table-to-Floor Height	9-1/8 in.

Construction Materials

Base	Cast Aluminum
Table	Cast Aluminum
Frame	Steel
Disc	Aluminum
Miter Gauge	Plastic
Paint Type/Finish	Urethane

Other Related Info

Miter Gauge Slot Width	5/8 in.
Miter Gauge Slot Height	1/4 in.
Number of Dust Ports	1
Dust Port Size	2 in.

Other Specifications:

Country of Origin	China
Warranty	1 Year
Approximate Assembly & Setup Time	15 Minutes
ISO 9001 Factory	Yes

Features:

0-90 Degree Belt Tilt
0-45 Degree Table Tilt for Use with Disc or Platen
Work Stop
Adjustable Miter Gauge
6" 80-Grit Abrasive Disc Included
4" x 36" 80-Grit Sanding Belt Included
Cord Storage Brackets
Quick-Release Belt Tension Lever
Single-Nut Tracking Adjustment

SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

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

⚠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 **Alerts the user to useful information about proper operation of the machine to avoid machine damage.**

Safety Instructions for Machinery

⚠WARNING

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are NOT approved safety glasses.

⚠WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

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

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

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

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

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

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

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine ***OFF*** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

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

Additional Safety for Combo Sanders

⚠WARNING

Serious injury or death can occur from fingers, clothing, jewelry, or hair getting pinched/entangled in rotating disc, belt, spindle or other moving components. Abrasion injuries can occur from touching moving sandpaper with bare skin. Workpieces thrown by sanding surface can strike operator or bystanders with moderate force, causing impact injuries. Long-term respiratory damage can occur from using sander without proper use of a respirator. To reduce the risk of these hazards, operator or bystanders MUST completely heed the hazards and warnings below.

SANDPAPER DIRECTION. Feeding workpiece incorrectly can cause it to be thrown from machine, striking operator or bystanders, or causing your hands to slip into the moving sandpaper. To reduce these risks, only sand against direction of sandpaper travel, ensure workpiece is properly supported, and avoid introducing sharp edges into moving sandpaper on the leading side of the workpiece.

IN-RUNNING NIP POINTS. The gap between moving sandpaper and fixed table/support creates a pinch point for fingers or workpieces; the larger this gap is, the greater the risk of fingers or workpieces getting caught in it. Minimize this risk by adjusting table/support to no more than 1/16" away from sandpaper.

HAND PLACEMENT. Rotating sandpaper can remove skin quickly. Always keep hands away from moving sandpaper during operation. Stop machine to clean table of sawdust and chips.

MINIMUM STOCK DIMENSION. Small workpieces can be aggressively pulled from your hands, causing contact with sanding surface. Always use a jig or other holding device when sanding small workpieces, and keep hands and fingers at least 2" away from sanding surface.

FEEDING WORKPIECE. Forcefully jamming workpiece into sanding surface could cause it to be grabbed aggressively, pulling hands into sanding surface. Firmly grasp workpiece in both hands and ease it into sandpaper using light pressure.

AVOIDING ENTANGLEMENT. Becoming entangled in moving parts can cause pinching and crushing injuries. To avoid these hazards, keep all guards in place and closed. DO NOT wear loose clothing, gloves, or jewelry, and tie back long hair.

WORKPIECE SUPPORT. Workpiece kickback can occur with violent force if workpiece is not properly supported during operation. Always sand with workpiece firmly against table or another support device.

SANDING DUST. Sanding creates large amounts of dust that can lead to eye injury or respiratory illness. Reduce your risk by always wearing approved eye and respiratory protection when using sander. Never operate without adequate dust collection system in place and running. However, dust collection is not a substitute for using a respirator.

WORKPIECE INSPECTION. Nails, staples, knots, or other imperfections in workpiece can be dislodged and thrown from sander at a high rate of speed at people, or cause damage to sandpaper or sander. Never sand stock that has embedded foreign objects or questionable imperfections.

SANDPAPER CONDITION. Worn or damaged sandpaper can fly apart and throw debris at operator, or aggressively grab workpiece, resulting in subsequent injuries from operator loss of workpiece control. Always inspect sandpaper before operation and replace if worn or damaged.

WORKPIECE INTEGRITY. Sanding fragile workpieces can result in loss of control, resulting in abrasion injuries, impact injuries, or damage to sandpaper. Only sand solid workpieces that can withstand power sanding forces. Make sure workpiece shape is properly supported; avoid sanding workpieces without flat bottom surfaces unless some type of jig is used to maintain support and control when sanding force is applied.

SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.

⚠WARNING

Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating ..... 4.3 Amps

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

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

⚠WARNING

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

120V Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 110V, 115V, 120V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 15 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

⚠CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Grounding & Plug Requirements

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. DO NOT modify the provided plug!

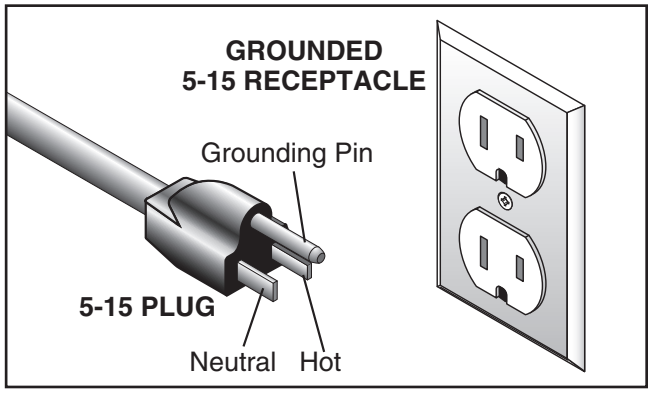
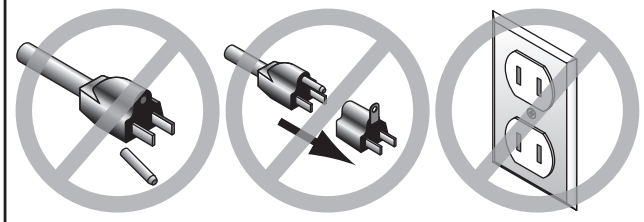


Figure 4. Typical 5-15 plug and receptacle.

⚠CAUTION



SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

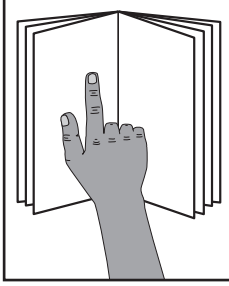
We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

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

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size .....16 AWG
Maximum Length (Shorter is Better).....50 ft.

SECTION 3: SETUP



⚠WARNING

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

⚠WARNING

Wear safety glasses during the entire setup process!

⚠WARNING

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

⚠CAUTION

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

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description	Qty
• Disposable Rags	As Needed
• Cleaner/Degreaser	As Needed
• Safety Glasses	1 Pr.
• Disposable Gloves	As Needed
• Mounting Hardware	As Needed
• Machinist's Square	1
• Phillips Head Screwdriver #2	1
• Dust Collection System	1
• Dust Hose 2"	1
• Hose Clamps 2"	2

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Inventory (Figure 5)	Qty
A. Table	1
B. Miter Gauge	1
C. Sanding Disc 6" 80-Grit	1
D. Work Stop	1
E. Hex Wrenches 3, 5mm	1 Ea.
F. Open-End Wrench 14mm	1
G. Handle M6-1 x 15, 65L	1
H. Table Stud	1
I. Wing Knobs M5-.8 x 14	2
J. Mounting Brackets	4
K. Cap Screws M6-1 x 16	2
L. Flat Washers 6mm	3
M. Lock Washers 6mm	2

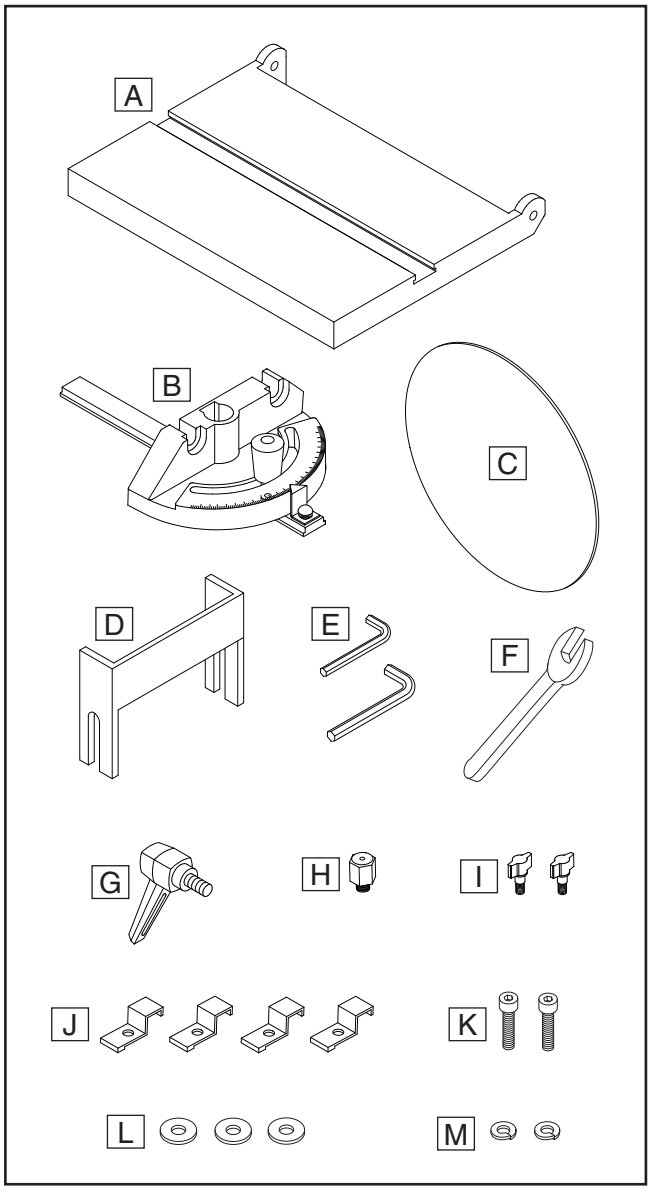


Figure 5. Inventory.

Site Considerations

Workbench Load

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

Placement Location

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.

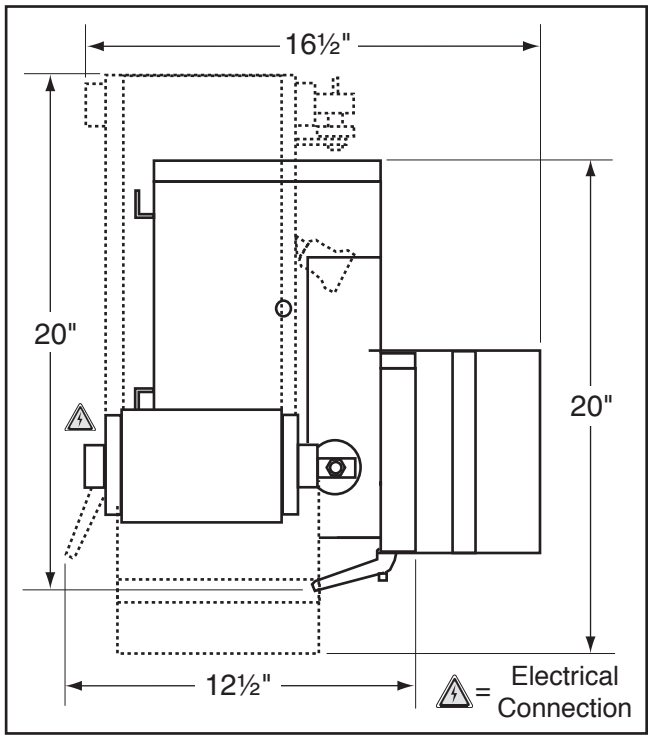
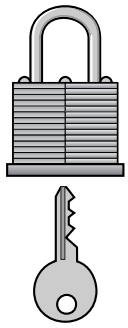


Figure 6. Minimum working clearances.



⚠CAUTION

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

Bench Mounting

Number of Mounting Holes 4
Diameter of Mounting Hardware Needed . 5/16"

This machine comes with four mounting brackets that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage (see **Figure 7**).

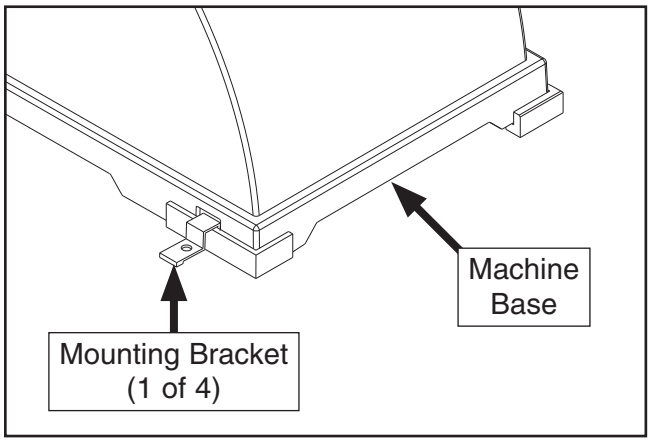


Figure 7. Installing mounting brackets.

We recommend mounting the machine where all four sides of the machine will be accessible so you can use all the features of the machine and track the belt when necessary.

Continued on next page ⟶

The strongest mounting option is a "Through Mount" (see **Figure 8**) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.

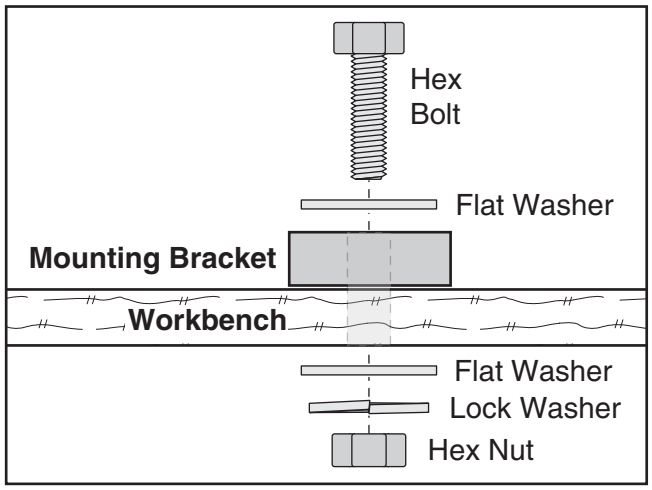


Figure 8. "Through Mount" setup.

Another option is a "direct mount" (see **Figure 9**) where the machine is secured directly to the workbench with lag screws and washers.

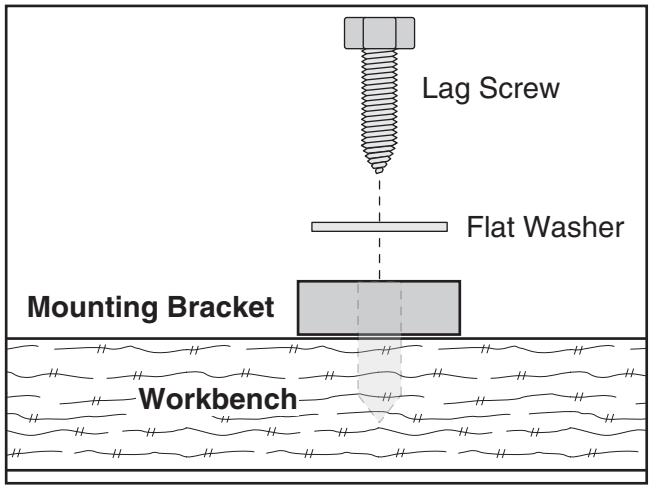


Figure 9. "Direct Mount" setup.

Assembly

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to **Needed for Setup** and gather all listed items. To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

To assemble machine:

1. Remove (4) button head cap screws shown in **Figure 10** to remove disc cover.

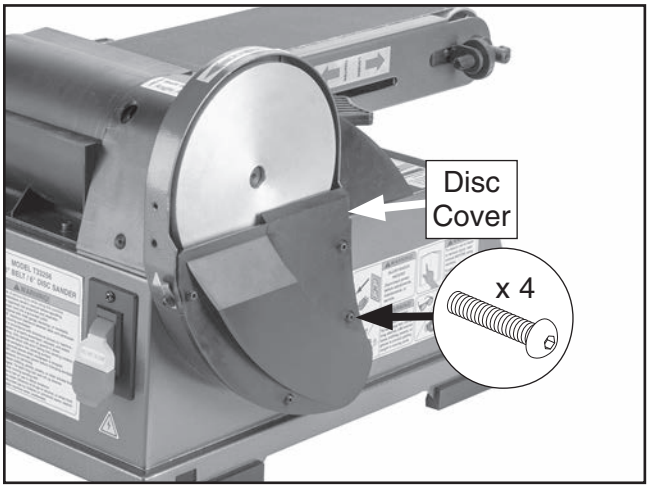


Figure 10. Location of disc cover and cap screws.

2. Peel backing off of sanding disc, then press adhesive side to center of aluminum disc (see **Figure 11**), working from center outward, making sure it contacts surface evenly.

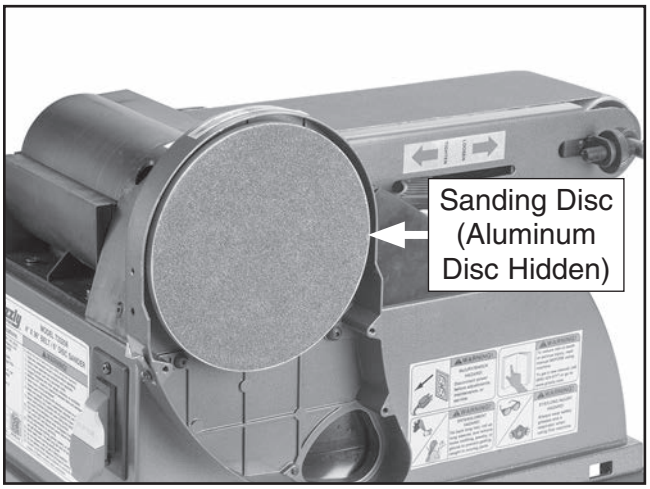


Figure 11. Sanding disc stuck to aluminum disc.

3. Install disc cover with screws removed in **Step 1**.

4. Attach table to disc guard with (2) M5-.8 x 14 wing knobs (see **Figure 12**).

5. Thread M6-1 x 15 handle through 6mm flat washer and into disc guard (see **Figure 12**).

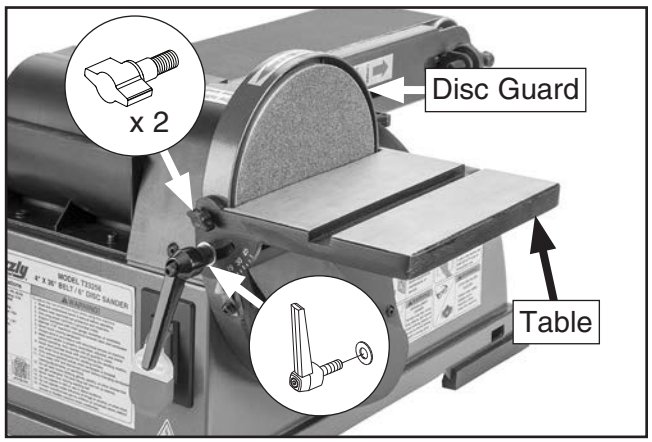


Figure 12. Table attached to disc guard.

6. Refer to **Calibrating Table Tilt** on **Page 38** to square table to sanding disc.

7. Attach work stop to platen with (2) M6-1 x 16 cap screws, 6mm lock washers, and 6mm flat washers (see **Figure 13**).

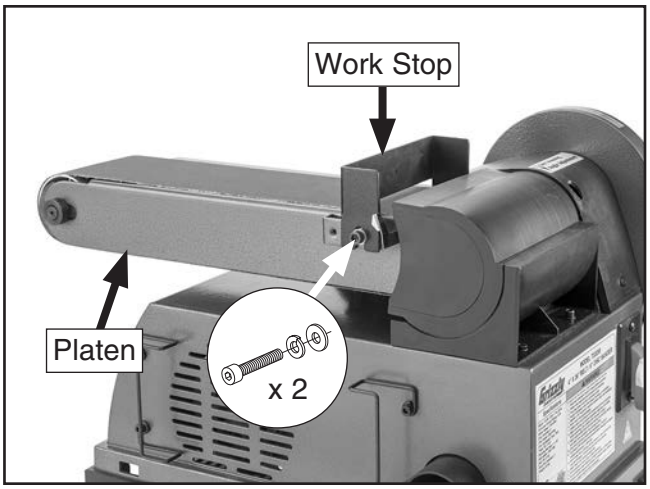


Figure 13. Work stop attached to platen.

⚠CAUTION

To reduce risk of fingers or workpiece getting trapped between work stop and sanding belt, adjust work stop within 1/16" of sanding belt.

Dust Collection

⚠CAUTION

This machine creates a lot of wood chips/dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust-collection system.

Minimum CFM at Dust Port: 100 CFM
Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect dust collection system to machine:

1. Fit 2" dust hose over dust port, as shown in **Figure 14**, and secure in place with hose clamp.

Figure 14. Dust hose attached to dust port.

2. Tug hose to make sure it does not come off.

   Note: *A tight fit is necessary for proper performance.*

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following: 1) The belt tracks properly and will not come off the rollers during initial startup, 2) the motor powers up and runs correctly, and 3) the switch disabling key disables the switch properly.

⚠WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

⚠WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools away from machine.

2. Tie back loose clothing and long hair to protect yourself from getting caught in moving belt and disc when you start machine.

3. Connect machine to power and use ON/OFF switch (see **Figure 15**) to start and immediately stop machine, while watching how belt tracks on platen and roller (see **Figure 16**). Belt "tracking" refers to belt positioning on rollers when belt rotates. When tracking properly, belt remains centered on rollers as it rotates.

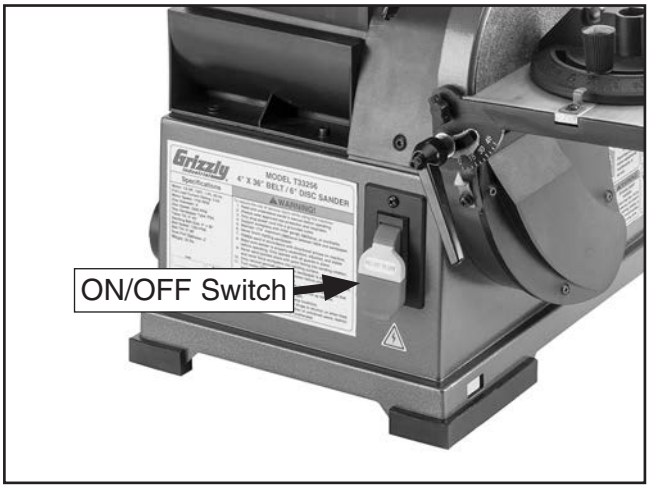


Figure 15. Location of ON/OFF switch.

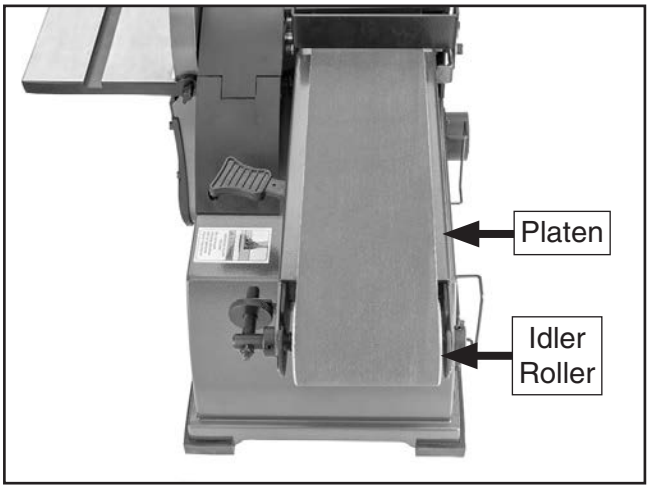


Figure 16. Belt tracking components.

— If belt tracks too far left or right, belt edge will be destroyed. To prevent that from happening, you must adjust belt tracking before proceeding to next step. Refer to **Checking/Adjusting Belt Tracking** on **Page 26**.

4. Start machine and allow it to run while ensuring belt tracks properly. Fine-tune tracking with nut shown in **Figure 17** as necessary before proceeding to next step.

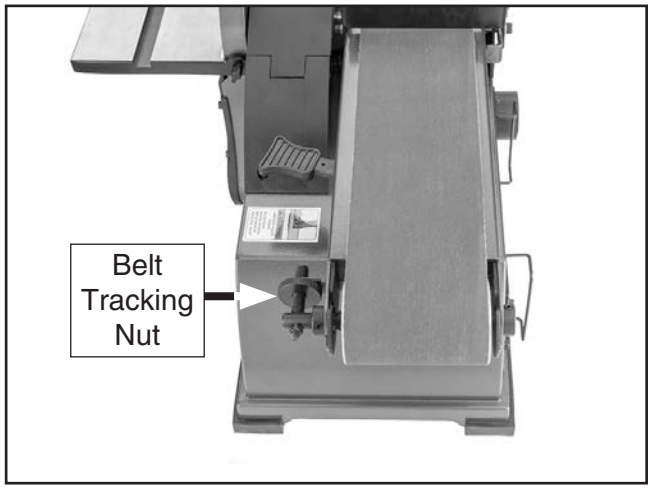


Figure 17. Location of belt tracking nut.

Motor should run smoothly and without unusual problems or noises.

— If motor *does not* run smoothly, turn machine OFF and disconnect power. Contact technical support.

5. Turn machine ***OFF***.

6. Remove switch disabling key from ON/OFF switch, as shown in **Figure 18**.

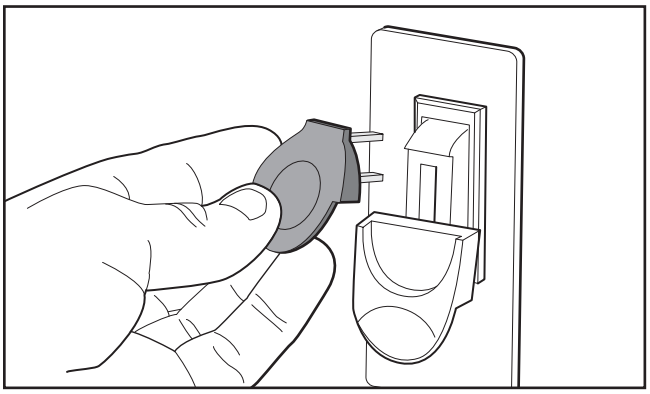


Figure 18. Removing switch key from paddle switch.

7. Try to start machine with paddle switch. Machine should not start.

— If machine *does not* start, switch disabling feature is working correctly.

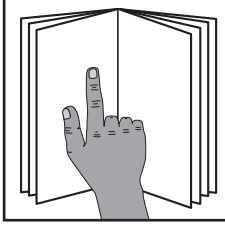
— If machine *does start*, immediately stop machine. Switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

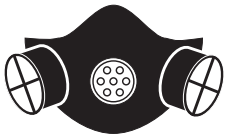


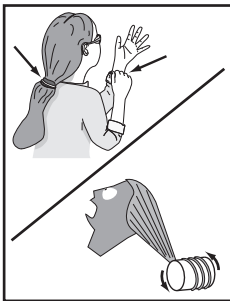
⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

⚠WARNING

To reduce risk of eye injury from flying chips or lung damage from breathing dust, always wear safety glasses and a respirator when operating this machine.





⚠WARNING

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/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.

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

1. Examines workpiece to make sure it is suitable for sanding.
2. Inspects and installs sanding belt/disc with appropriate grit for operation.
3. **For sanding on belt:** Adjusts platen tilt as desired (and table/miter gauge, if used).

   For sanding on disc: Adjusts table tilt and/or miter gauge position to desired location.
4. Secures loose clothing, removes loose jewelry, and ties back long hair.
5. Puts on safety glasses and respirator. Takes all other required safety precautions.
6. Starts dust collector, then turns sander ***ON***.
7. Holds workpiece firmly against work stop or table and miter gauge (if used), pushes workpiece into sanding belt or along downspin of sanding disc, and moves workpiece back and forth to wear sandpaper evenly and prevent overheating.
8. Turns sander ***OFF***, then stops dust collector.

Sanding Tips

- Extend the life of the sandpaper by regularly using PRO-STIK® abrasive belt cleaners (see **Accessories** on **Page 30**).
- When sanding workpieces with a bow or crown, place the high point up on the able to prevent the workpiece from rocking, then take very light passes.
- Hold workpiece securely with both hands and do not wear gloves. Use work table, miter gauge, and work stop whenever possible to support workpiece. Do not force workpiece against belt or disc.
- Sanding discs/belts clog and wear. Change sandpaper whenever you notice a difference in sanding quality/performance.
- To increase the life of the sanding disc/belt and ensure even wear, move the workpiece back and forth across the sanding surface.
- As a rule-of-thumb, sand with progressively higher grit numbers. A higher grit will achieve a finer finish.
- Make sure belt covers are closed and secured during operation.
- Avoid sanding a workpiece more than is necessary, since doing so will unnecessarily decrease belt life and cost you more money over time.

⚠CAUTION

Moving belt or disc can cause serious personal injury if it comes in contact with fingers, hands, or other body parts. Always support workpiece against table, work stop, or miter gauge when sanding. Use extreme care to provide a safe distance between sanding paper and any body part.

Choosing Sandpaper

The Model T33256 uses a 4" x 36" sanding belt and a 6" sanding disc. 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 marks and initial finish sanding.
120–180	Fine	Finish sanding.

We recommend using aluminum-oxide sanding belts and discs for best results. The grit you choose will depend on the condition and species of wood, and the level of finish you wish to achieve.

The general rule of thumb is to sand a workpiece with progressively higher grit numbers. Avoid skipping grits; the larger the grit increase at one time, 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.

Note: *Sandpaper finer than 180-grit will easily load up or burn workpieces.*

Workpiece Inspection

Some workpieces are not safe to sand or may require modification before they are safe to sand.

Before sanding, inspect all workpieces for the following:

- ***Material Type:*** This machine is intended for sanding natural and man-made wood products. This machine is NOT designed to sand metal, glass, stone, tile, plastics, drywall, cement backer board, laminate products, etc. Sanding improper materials increases risk of respiratory harm to operator and bystanders due to especially fine dust inherently created by all types of sanding operations—even if a dust collector is used. Additionally, life of machine and sanding belts/discs will be greatly reduced (or immediately damaged) from sanding improper materials or from exposure to fine dust created when doing so.

- ***Foreign Objects:*** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While sanding, these objects can become dislodged and tear sanding belt or disc. Always visually inspect your workpiece for these items. If they cannot be removed, DO NOT sand the workpiece.

- ***Wet or "Green" Stock:*** Sanding wood with a moisture content over 20% causes unnecessary clogging and wear on the sanding belt or disc, increases the risk of kickback, and yields poor results.

- ***Excessive Glue or Finish:*** Sanding workpieces with excess glue or finish will load up the abrasive, reducing its usefulness and lifespan.

Adjusting Table Tilt

The angle of the table on the Model T33256 can be adjusted between 0°–45° to sand angled workpieces against either the sanding disc or the platen.

To adjust table tilt:

1. DISCONNECT MACHINE FROM POWER!

2. Loosen table lock handle (see **Figure 19**), adjust table tilt, then tighten handle to secure.

Figure 19. Location of table lock handle.

Adjusting Miter Gauge

The miter gauge angle can be adjusted 60° to the right or the left, keeping angled workpieces accurate.

To adjust miter gauge:

1. Loosen miter lock handle (see **Figure 20**), adjust angle, then tighten handle to secure.

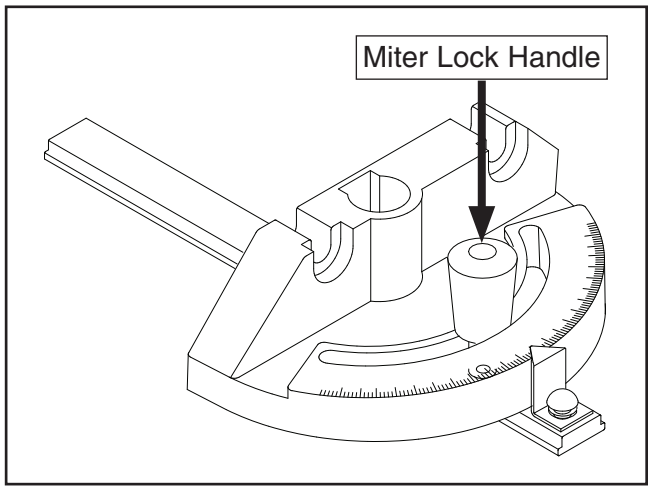


Figure 20. Location of miter lock handle.

Adjusting Platen Tilt

The Model T33256 platen can be positioned from 0°–90°, depending on your operation (see **Figure 21**).

Figure 21. Platen positioned at 45°.

Tool Needed	Qty
Hex Wrench 5mm	1

To adjust platen tilt:

1. DISCONNECT MACHINE FROM POWER!

2. While supporting platen body, loosen cap screw shown in **Figure 22**. If platen is upright, it will fall back to horizontal position. Adjust platen and tighten cap screw when it is at desired angle.

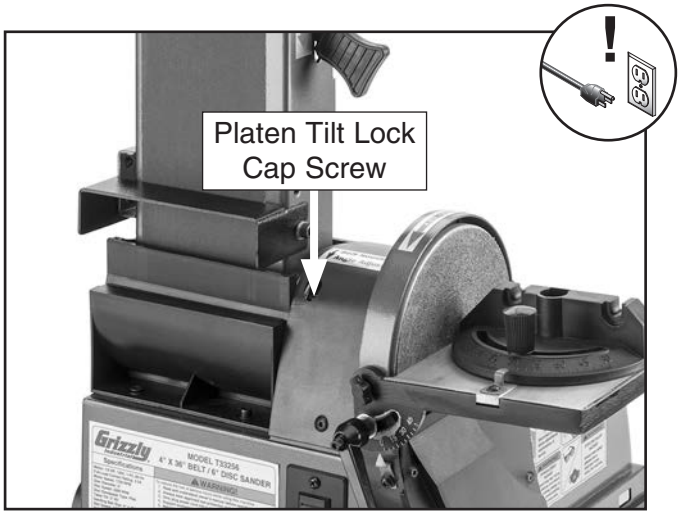


Figure 22. Location of platen tilt lock cap screw.

Changing Sanding Disc

The T33256 accepts 6" diameter PSA (pressure-sensitive adhesive) sanding discs. Use the following steps to change the sanding disc when a sanding disc wears out or your operation requires a different grit size.

Items Needed	Qty
Hex Wrench 3mm	1
Cleaner/Degreaser	As Needed
Disposable Rags	As Needed

To change sanding disc:

1. DISCONNECT MACHINE FROM POWER!

2. If table is installed for disc sanding, remove table lock handle, washer, and (2) wing knobs from disc guard (see **Figure 23**) to remove table from sanding disc position.

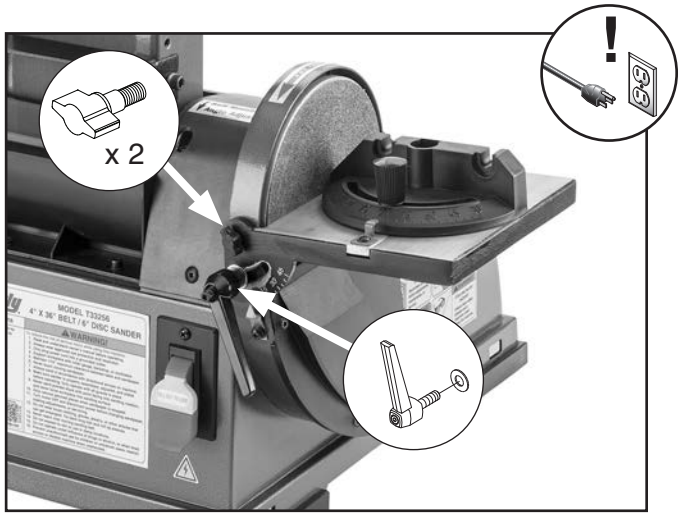


Figure 23. Location of table fasteners.

3. Remove (4) button head cap screws shown in **Figure 24** to remove disc cover.

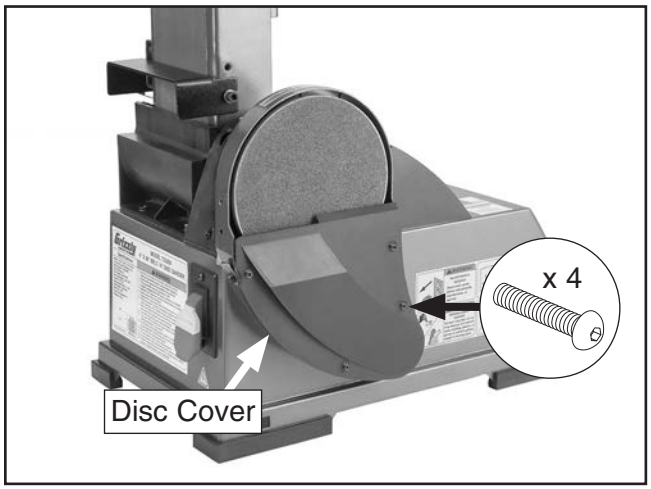


Figure 24. Location of disc cover and cap screws.

4. Peel old sanding disc off of aluminum disc.

5. Clean aluminum disc to remove any leftover adhesive.

6. Peel backing off of new sanding disc, then press adhesive side to center of aluminum disc (see **Figure 25**), working from center outward, making sure it contacts surface evenly.

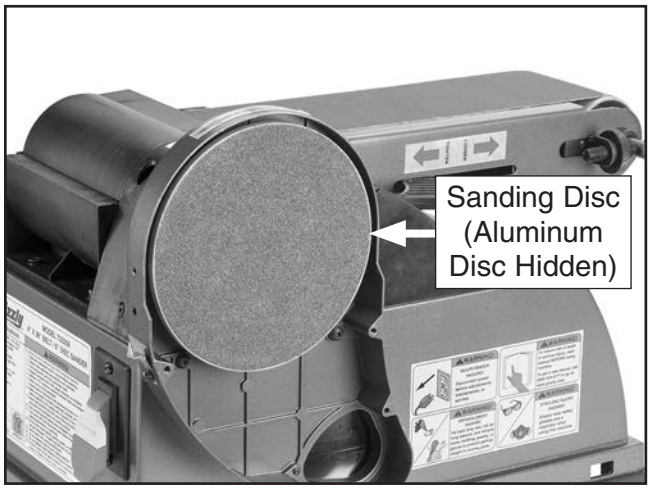


Figure 25. Sanding disc stuck to aluminum disc.

7. Install disc cover with screws removed in **Step 3**.

8. Install table.

Disc Sanding

The sanding disc can be used to create flat, smooth ends and edges of workpieces.

⚠CAUTION

Always keep workpiece on left side of wheel that rotates down toward table. This will keep workpiece from flying out of hands due to kickback.

⚠CAUTION

To reduce risk of fingers or workpiece getting trapped between table and sanding disc, adjust table within 1/16" of sanding disc.

To sand on disc:

1. Adjust table and miter gauge (if using) to desired angles for operation.

2. Connect machine to power, turn it ***ON***, and allow motor to reach full speed.

3. Place workpiece on table and firmly against miter gauge (if using).

4. With light pressure, slowly move workpiece into left side of sanding disc. See **Figures 26–29** for examples of disc sanding.

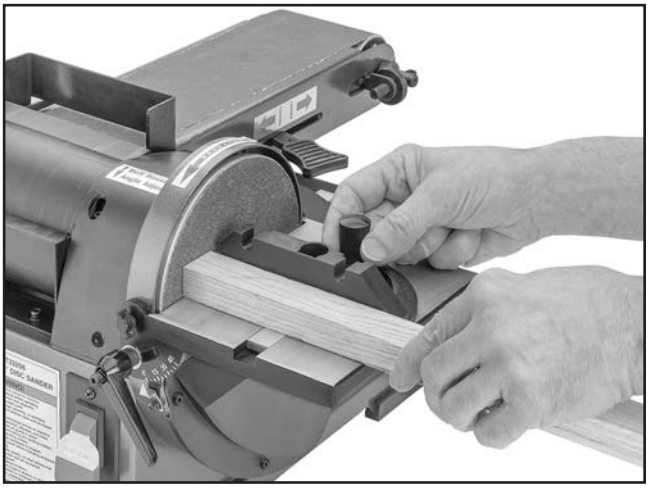


Figure 26. 90° disc sanding.

Figure 27. Miter sanding.

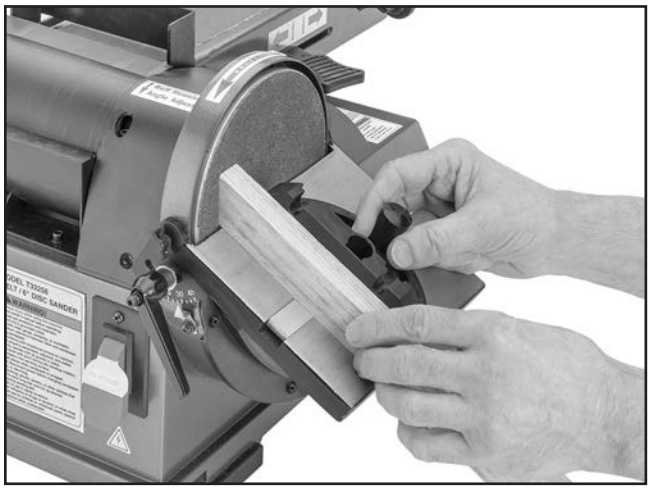


Figure 28. Bevel sanding.

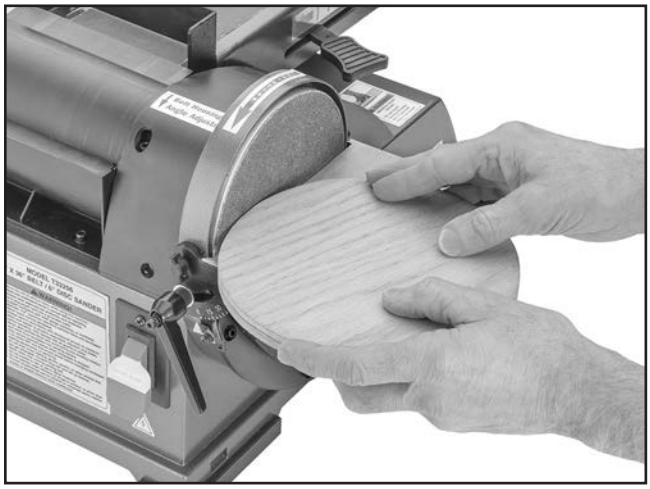


Figure 29. Sanding round workpiece.

Changing Sanding Belt

Some sanding belts are designed to sand in only one direction and will have a direction indicated on the back of the belt. The Model T33256 is designed so that the sanding belt travels clockwise when viewed from the left side.

To change sanding belt:

1. DISCONNECT MACHINE FROM POWER!

2. Remove work stop or table from platen, if installed.

3. Move belt tension lever toward idler roller to release sanding belt tension (see **Figure 30**).

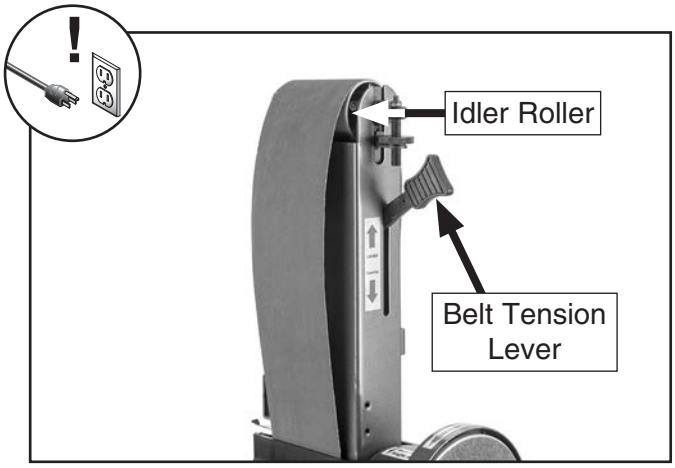


Figure 30. Belt tension lever moved toward idler roller.

4. Slide side cover up and out to remove (see **Figure 31**).

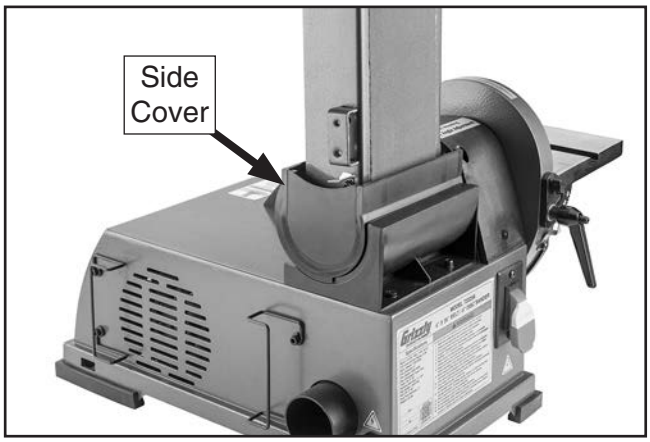


Figure 31. Location of side cover.

5. Remove belt from rollers (see **Figure 32**).

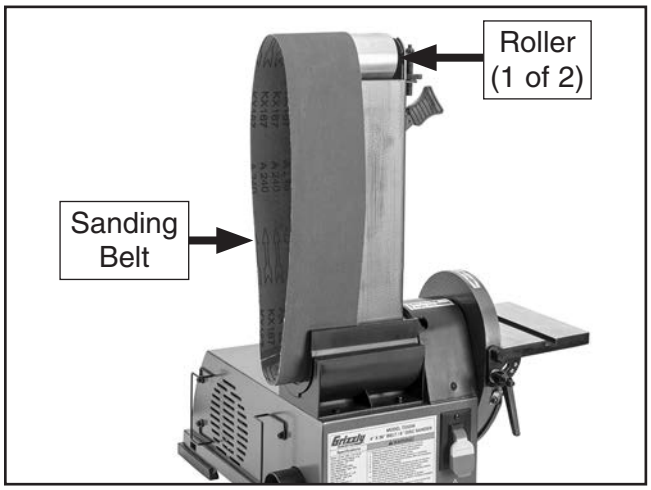


Figure 32. Example of removing sanding belt.

6. Slide new sanding belt over rollers and position at center.

7. Move belt tension lever away from idler roller to tension belt (see **Figure 33**).

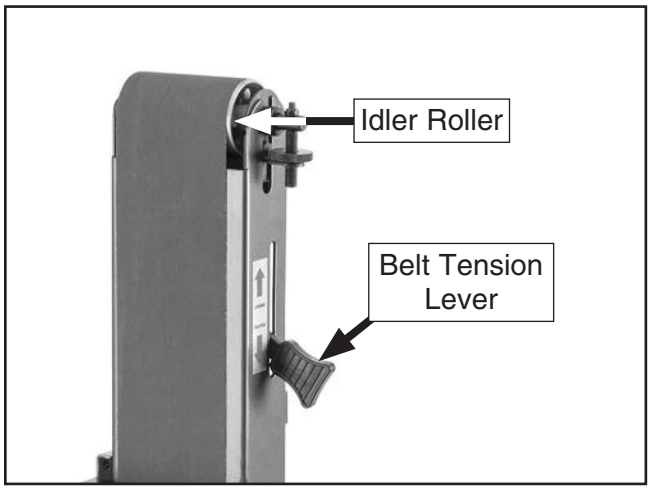


Figure 33. Belt tension lever in tensioned position.

8. Install side panel.

9. Adjust belt tracking (see **Checking/Adjusting Belt Tracking** on **Page 26**).

Checking/Adjusting Belt Tracking

The purpose of belt tracking is to make sure the belt stays centered on the rollers during sanding operations. Although belt tracking is set at the factory, it needs to be checked any time you change or replace the belt.

You must perform the following procedure after installing a sanding belt to ensure the belt does not come off the rollers or get jammed against the machine frame.

To check/adjust belt tracking:

1. DISCONNECT MACHINE FROM POWER!

2. Refer to **Adjusting Platen Tilt** on **Page 22** to adjust platen to horizontal position.

3. Standing at rear of machine, push sanding belt multiple times along platen (see **Figure 34**), so that it moves in direction of operation (toward front of machine on platen), then watch how belt tracks on rollers.

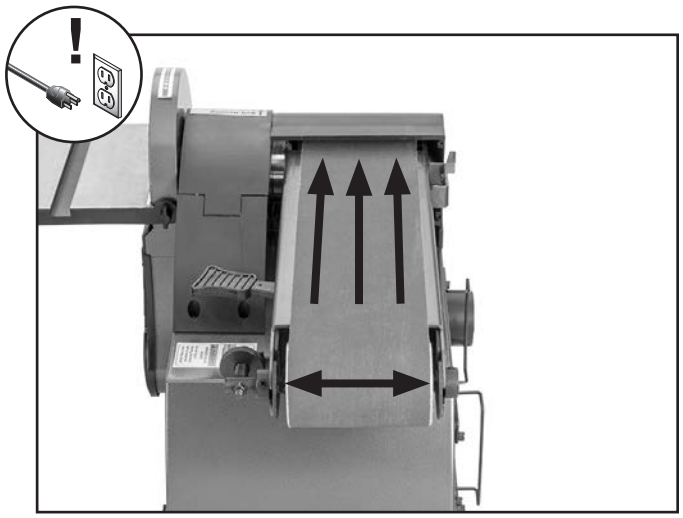


Figure 34. Belt tracking.

— If sanding belt *stays* in center of rollers as you rotate belt by hand, proceed to **Step 5**.

— If sanding belt *does not stay* in center of rollers as you rotate belt by hand, proceed to **Step 4**.

4. Adjust belt tracking nut until belt tracks at center of rollers when pushed by hand (see **Figure 35**).

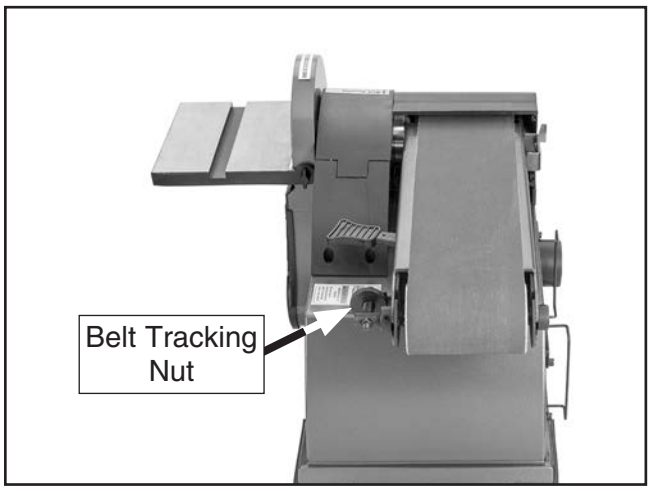


Figure 35. Location of belt tracking nut.

— If belt moves *away* from sanding disc, rotate belt tracking nut counterclockwise.

— If belt moves *toward* sanding disc, rotate belt tracking nut clockwise.

5. Connect machine to power and turn it ***ON***. Verify belt is tracking correctly in center of rollers, and fine-tune tracking with belt tracking nut (see **Figure 35**) as necessary while machine is running.

6. When belt tracking is correct, turn machine ***OFF***.

Platen Sanding

Flat sanding operations can be performed directly on the belt against the platen. Always use two hands to control the workpiece and use either the work stop or the table to support it.

Horizontal Sanding

When the platen is horizontal, install the work stop. Supporting your workpiece against it will prevent the workpiece from being thrown from the belt.

To sand horizontally on platen:

1. Refer to **Adjusting Platen Tilt** on **Page 22** to adjust platen to desired horizontal position.

2. Install and adjust work stop so there is no more than 1/16" between work stop and belt (see **Figure 36**).

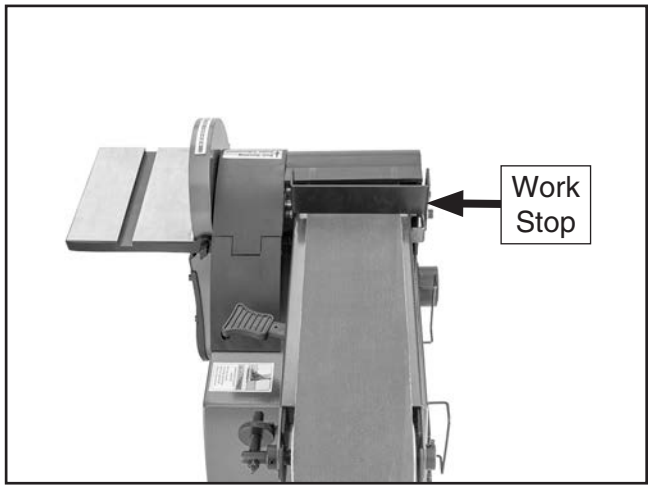


Figure 36. Work stop installed on platen.

3. Connect machine to power, turn it ***ON***, and allow motor to reach full speed.

4. While supporting workpiece against work stop, slowly feed it into moving belt with light, even pressure. Maintain control of workpiece, as shown in **Figures 37–38**. DO NOT force workpiece against belt.

Figure 37. Properly sanding workpiece face.

Figure 38. Properly sanding workpiece edge.

Vertical Sanding

When the platen is vertical, install the table to provide a flat surface to support the workpiece. The table also provides support for miter and bevel sanding.

Items Needed	Qty
Hex Wrench 5mm	1
Table Stud	1
Open-End Wrench 14mm	1

To sand vertically on platen:

1. Refer to **Adjusting Platen Tilt** on **Page 22** to adjust platen to desired vertical position.

2. Remove table lock handle, washer, and (2) wing knobs from disc guard (see **Figure 39**) to remove table from sanding disc position.

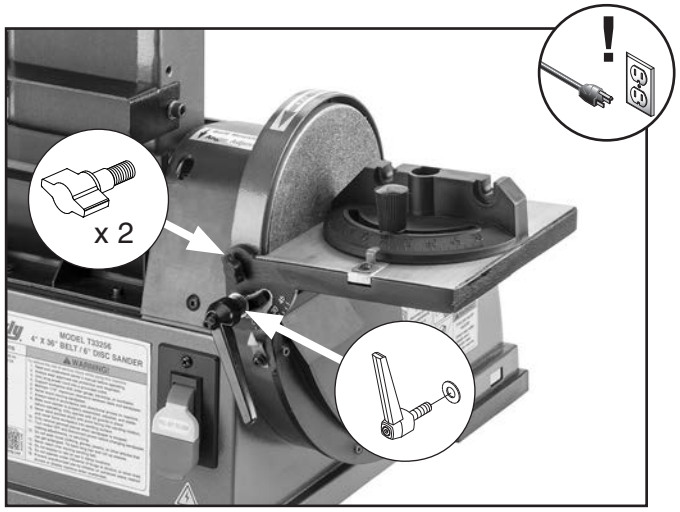


Figure 39. Location of table fasteners.

3. Remove cap screws and washers shown in **Figure 40** to remove work stop from platen.

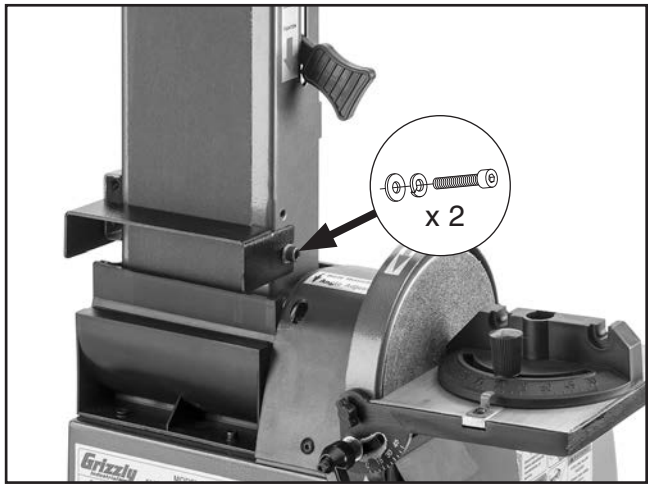


Figure 40. Location of work stop cap screws and washers.

4. Thread table stud into platen, as shown in **Figure 41**.

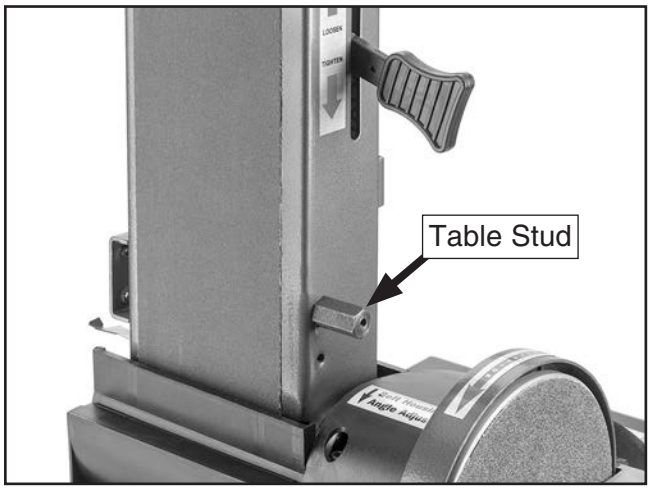


Figure 41. Table stud installed in platen.

5. Attach table to platen and table stud with (2) wing knobs, then thread table lock handle through flat washer and into platen (see **Figure 42**).

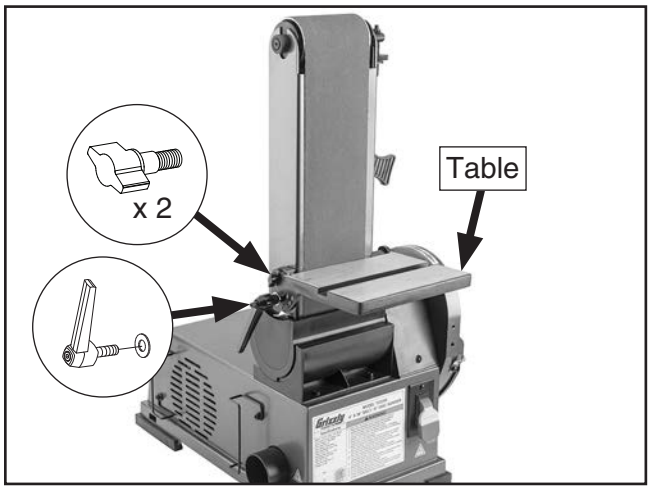


Figure 42. Table attached to platen and table stud.

6. Refer to **Calibrating Table Tilt** on **Page 38** to square table to sanding belt.

7. Adjust angle of table (and miter gauge, if desired) for operation.

8. Connect machine to power, turn it ***ON***, and allow it to reach full speed.

9. Place workpiece on table (and against miter gauge, if used).

10. Slowly feed workpiece into moving belt with light, even pressure. Maintain control of workpiece, as shown in **Figures 43–45**. DO NOT force workpiece against belt.

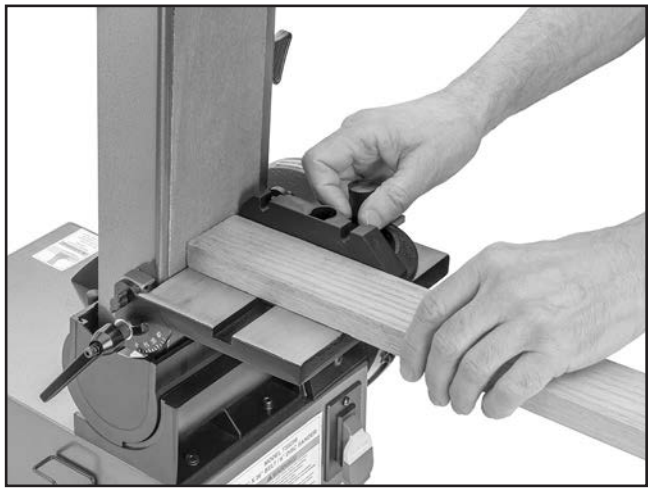


Figure 43. End grain sanding.

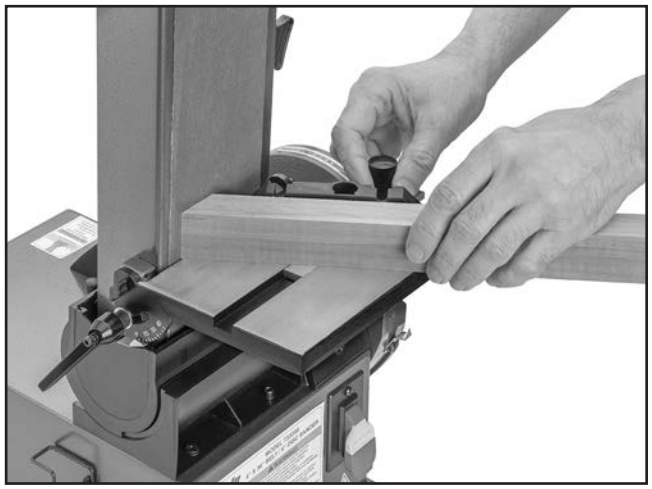


Figure 44. Miter sanding.

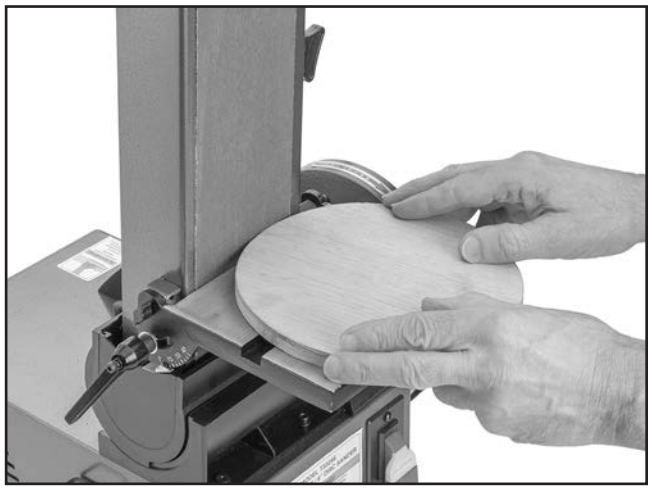


Figure 45. Sanding round workpiece.

Contour Sanding

Contour sanding operations can be performed directly on the idler wheel. Since the work stop cannot be used for these operations, support the workpiece against your workbench, if the workpiece is large enough. Always use two hands to control the workpiece.

To contour sand:

1. Refer to **Adjusting Platen Tilt** on **Page 22** to adjust platen to horizontal position.

2. Connect machine to power, turn it ***ON***, and allow it to reach full speed.

3. Slowly feed workpiece into curved end of belt and continue moving workpiece profile along contour until you achieve desired shape, as shown in **Figure 46**.

Figure 46. Example of contour sanding.

SECTION 5: ACCESSORIES

⚠WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

Grizzly 6" Sanding Discs

These tough, aluminum oxide sanding discs come in a variety of grits to fit the Model T33256. These sanding discs are pre-applied with top-quality pressure-sensitive adhesive.

D1307—60-Grit, 3-Pk.
D1308—80-Grit, 3-Pk.
D1309—100-Grit, 3-Pk.
D1310—120-Grit, 3-Pk.
D1311—150-Grit, 3-Pk.
D1312—180-Grit, 3-Pk.
D1313—220-Grit, 3-Pk.

Figure 47. Replacement sanding discs.

PRO-STIK® Abrasive Surface Cleaners

Extend the life of your abrasive belts! Choose the Pro-Stik® with a handle for greater control or without a handle for more usable area.

Model	Size
W1306	1½" x 1½" x 8½"
W1307	2" x 2" x 12"
W1308	1½" x 1½" x 9" with Handle
W1309	2" x 2" x 11" with Handle

Figure 48. PRO-STIK® abrasive cleaners.

Grizzly 4" x 36" Sanding Belts

These tough, aluminum oxide sanding belts come in a variety of grits to fit the Model T33256.

D1249—60-Grit, 2-Pk.
D1250—80-Grit, 2-Pk.
D1251—100-Grit, 2-Pk.
D1252—120-Grit, 2-Pk.
D1253—150-Grit, 2-Pk.
D1254—180-Grit, 2-Pk.
D1255—220-Grit, 2-Pk.
T21479—60-Grit, 10-Pk.
T21480—80-Grit, 10-Pk.
T21481—100-Grit, 10-Pk.
T21482—120-Grit, 10-Pk.
T21483—150-Grit, 10-Pk.
T21484—180-Grit, 10-Pk.
T21485—220-Grit, 10-Pk.

W1315—Wire Hose Clamp 2"
D4202—2' x 10' Clear Hose"
W1053—Anti-Static Grounding Kit
We've hand picked a selection of dust collection components commonly needed to connect your new machine to basic dust collection.

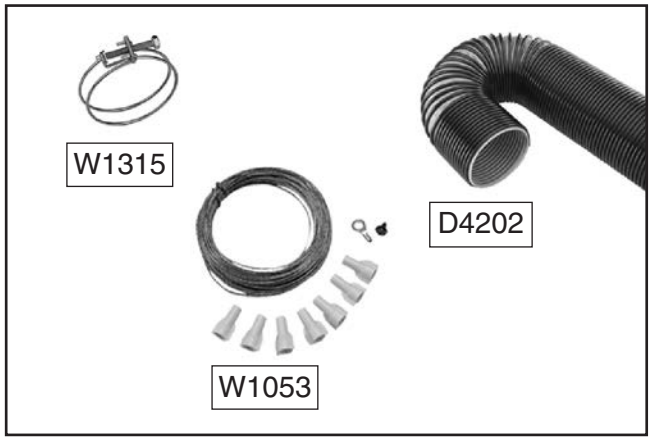


Figure 49. Dust collection accessories.

G0862—3 HP Portable Cyclone Dust Collector
The G0862 features a 3 HP motor, a whopping 1941 CFM of airflow capacity, and a 45-gallon collection capacity. It's packed with features like a quick-release collection drum, latching system, high-efficiency, two-stage separation driven by a 16" aluminum impeller, durable powder coated finish, and a heavy-duty steel frame and housing.

Figure 50. G0862 3 HP Portable Cyclone Dust Collector.

D2056—Tool Table
Get that bench-top tool off your bench and put it on this sturdy stand instead! Flared legs and adjustable rubber feet ensure stability and reduce machine vibration. Butcher block finish table top measures 1" x 13" x 23" and is 30-1/2" from the floor. Bottom measures 21" x 32". 700 lb. Capacity!

Figure 51. D2056 Tool Table.

T10456—Heavy-Duty Anti-Fatigue Mat 3' x 5'
This Heavy-Duty Anti-Fatigue Mat features beveled edges and no-slip tread for safety and comfort. Open-hole design allows liquid to drain through, so it's perfect for wet or oily conditions. Measures 3' wide x 5' long x ⅜" thick.

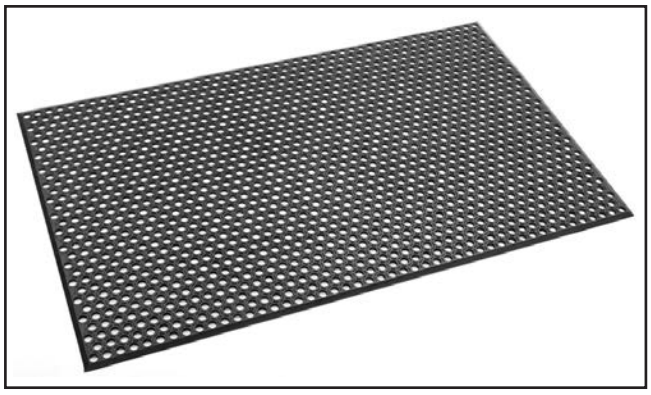


Figure 52. T10456 Anti-Fatigue Mat 3' x 5'.

H2993—4-Pc. Machinist's Square Set
This is a handy set to have around. Each square is finely ground stainless steel. All have common beam and blade widths and thicknesses which will allow them to be used in combination. 2", 3", 4" & 6" squares.

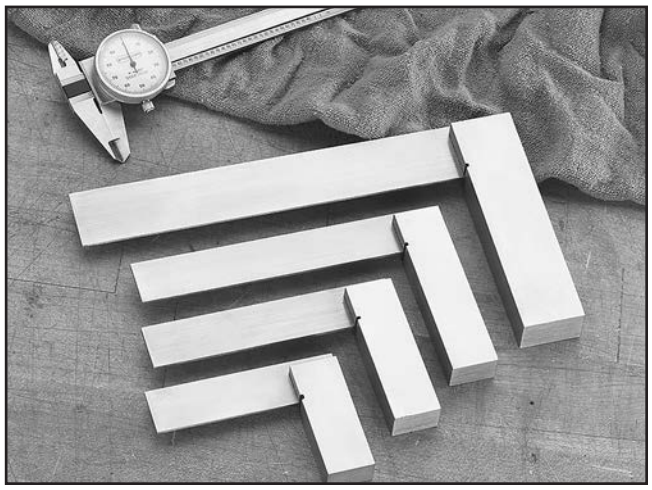


Figure 53. H2993 4-Pc. Square Set.

T32736—Understanding Wood Finishing Book
For more than 18 years, Bob Flexner has been inspiring woodworkers with his writings and teachings on wood finishing. Nicknamed the "Bible" of wood finishing, this book in a best-selling, easy-to-understand resource that teaches readers everything they need to know, from preparing and staining wood, to different types of wood finishes, coloring techniques, filling pores, removing finishes, and more.

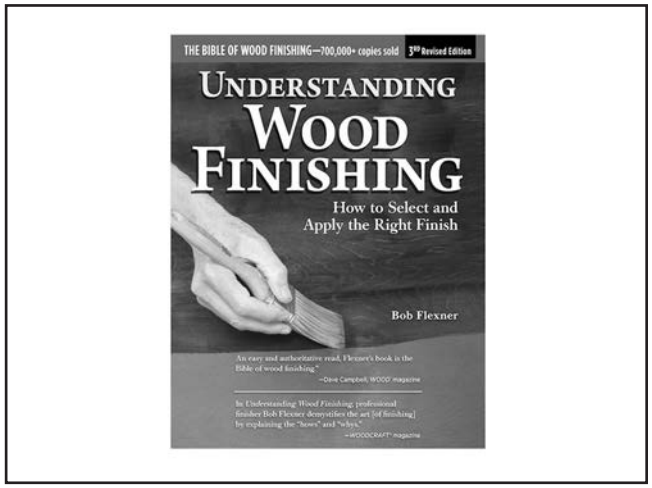


Figure 54. T32736 Understanding Wood Finishing Book.

Basic Respiratory Protection

H2499—Small Half-Mask Respirator
H3631—Medium Half-Mask Respirator
H3632—Large Half-Mask Respirator
H3635—Cartridge Filter Pair P100
Breathing metal dust could cause severe respiratory illnesses. If you work around dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!

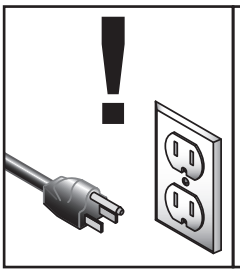
Figure 55. Half-mask respirator with disposable cartridge filters.

Basic Eye Protection

T20501—Face Shield Crown Protector 4"
T20502—Face Shield Crown Protector 7"
T20503—Face Shield Window
T20451—"Kirova" Clear Safety Glasses
T20456—DAKURA Safety Glasses, Black/Clear
T28175—R3 SAFETY Stealth Safety Glasses

Figure 56. Assortment of basic eye protection.

SECTION 6: MAINTENANCE



⚠WARNING
To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

Ongoing
To minimize your risk of injury and maintain proper machine operation, shut down the machine immediately if you ever observe any of the items below, and fix the problem before continuing operations:

- Loose mounting bolts.
- Damaged sanding belt or disc.
- Worn or damaged wires.
- Any other unsafe condition.

After Each Use
- Clean any shavings and dust from between platen and belt.
- Sweep surrounding dust and shavings.
- Clean/protect table.

Weekly Maintenance
- Sweep or vacuum dust and shavings from inside belt compartment and inside machine base.

Monthly Check
- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside belt compartment and inside machine base.

Cleaning & Protecting

Cleaning the Model T33256 is relatively easy. Vacuum excess sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Cleaning Sanding Belt/Disc

Using an abrasive belt/disc cleaner can prolong the life of a clogged sanding belt/disc, provided it is in otherwise good condition. See **Accessories** on **Page 30** for more details.

To clean sanding belt/disc:

1. Turn machine ***ON***.

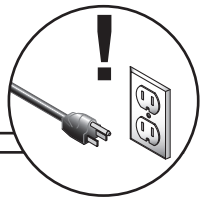
2. Using work stop or table as support, rub abrasive cleaner on sanding belt/disc in continuous motion, covering entire surface of belt/disc until belt/disc is no longer clogged.

3. Turn machine ***OFF***.

SECTION 7: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start, or power supply breaker immediately trips after startup.	1. Switch disabling key removed. 2. Incorrect power supply voltage or circuit size. 3. Power supply circuit breaker tripped or fuse blown. 4. Wiring broken, disconnected, or corroded. 5. ON/OFF switch at fault. 6. Motor or motor bearings at fault.	1. Install switch disabling key. 2. Ensure correct power supply voltage and circuit size. 3. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 4. Fix broken wires or disconnected/corroded connections. 5. Replace switch. 6. Replace motor.
Machine stalls or is underpowered.	1. Workpiece material unsuitable for machine. 2. V-belt slipping/pulleys misaligned. 3. Pulley slipping on shaft. 4. Machine undersized for task. 5. Motor overheated. 6. Run capacitor at fault. 7. Extension cord too long. 8. Motor or motor bearings at fault.	1. Only sand wood/ensure moisture is below 20%. 2. Clean/replace V-belt (**Page 36**); ensure pulleys are aligned. 3. Tighten/replace loose pulley/shaft. 4. Clean (**Page 30**)/replace sanding belt (**Page 25**)/disc (**Page 23**); reduce pressure when feeding workpiece. 5. Clean motor, let cool, and reduce workload. 6. Test/repair/replace. 7. Move machine closer to power supply; use shorter extension cord. 8. Replace motor.
Machine has vibration or noisy operation.	1. Motor or component loose. 2. V-belt worn, loose, pulleys misaligned, or belt slapping cover. 3. Pulley loose. 4. Incorrectly mounted to workbench. 5. Motor mount loose/broken. 6. Aluminum disc out of balance or loose. 7. Motor bearings at fault.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Inspect/replace V-belt (**Page 36**). Realign pulleys if necessary. 3. Secure pulley on shaft. 4. Adjust feet, shim, or tighten mounting hardware. 5. Tighten/replace. 6. Tighten disc hub or replace disc. 7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.

Operation

Symptom	Possible Cause	Possible Solution
Sanding belt slaps or vibrates excessively.	1. Belt not tensioned properly. 2. Belt tracking needs adjustment. 3. Belt is stretched unevenly, worn, or damaged. 4. Idler/drive roller is loose. 5. Weak or broken tension spring.	1. Tension belt (**Page 25**). 2. Adjust belt tracking (**Page 26**). 3. Replace belt (**Page 25**). 4. Tighten idler/drive roller. 5. Replace spring.

Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Sanding belt will not track properly.	1. Belt is not tensioned properly. 2. Belt is stretched unevenly, worn, or damaged. 3. Belt roller is worn.	1. Tension belt (**Page 25**). 2. Replace belt (**Page 25**). 3. Replace belt roller.
Sanding belt slips during use.	1. Belt is not tensioned properly. 2. Excessive workpiece pressure. 3. V-belt is worn or not tensioned properly.	1. Tension belt (**Page 25**). 2. Reduce workpiece pressure. 3. Inspect/tension V-belt (**Page 36**).
Belts/discs clog quickly or excessive sanding belt/disc replacement.	1. Sanding wet stock. 2. Not using full width of sanding surface. 3. Excessive workpiece pressure. 4. Using too fine of sanding grit. 5. Sanding softwood.	1. Only sand wood/ensure moisture is below 20%. 2. Move workpiece back and forth across sanding surface. 3. Reduce workpiece pressure. 4. Use coarser grit sandpaper (**Page 20**). 5. Use different stock or accept characteristics and plan on frequently cleaning (**Page 30**)/replacing sanding belt (**Page 25**)/disc (**Page 23**).
Deep sanding grooves or scars in workpiece.	1. Not using full width of sanding surface. 2. Workpiece sanded across grain. 3. Excessive workpiece pressure. 4. Sandpaper too coarse for desired finish.	1. Move workpiece back and forth across sanding surface. 2. Sand workpiece with grain. 3. Reduce workpiece pressure. 4. Use finer grit sandpaper (**Page 20**).
Burn marks on workpiece.	1. Not using full width of sanding surface. 2. Excessive workpiece pressure. 3. Using too fine of sanding grit. 4. Sanding belt/disc clogged/worn.	1. Move workpiece back and forth across sanding surface. 2. Reduce workpiece pressure. 3. Use coarser grit sandpaper (**Page 20**). 4. Clean (**Page 30**)/replace sanding belt (**Page 25**)/disc (**Page 23**).
Snake-shaped marks on workpiece.	1. Sanding belt/disc dirty/damaged.	1. Clean (**Page 30**)/replace sanding belt (**Page 25**)/disc (**Page 23**).
Glazed sanding surfaces.	1. Sanding wet stock. 2. Sanding stock with high pitch/residue. 3. Sanding belt/disc worn or filled with pitch/residue.	1. Only sand wood/ensure moisture is below 20%. 2. Use different stock or accept characteristics and plan on frequently cleaning (**Page 30**)/replacing sanding belt (**Page 25**)/disc (**Page 23**). 3. Replace sanding belt (**Page 25**)/disc (**Page 23**).
Poor, non-aggressive sanding results.	1. Using too fine of sanding grit. 2. Sanding belt/disc clogged/worn.	1. Use coarser grit sandpaper (**Page 20**). 2. Clean (**Page 30**)/replace sanding belt (**Page 25**)/disc (**Page 23**).
Abrasive grit rubs off easily.	1. Sanding belt/disc has been stored in an incorrect environment. 2. Sanding belt/disc has been folded or crushed.	1. Replace sanding belt (**Page 25**)/disc (**Page 23**). Store belt/disc in a cool, dry area. 2. Replace belt (**Page 25**)/disc (**Page 23**). Do not bend or fold belt/disc.
Workpiece not sanded square when table is set to 90°.	1. Table is not square to sanding belt/disc.	1. Calibrate table tilt (**Page 38**).
Workpiece not sanded square when miter gauge is set to 90°.	1. Miter gauge body is not square to miter bar.	1. Calibrate miter gauge scale (**Page 38**).

Checking/Replacing V-Belt

The V-belt transfers power from the motor to the sanding belt and disc. If the V-belt does not have the proper tension or is damaged in any way, the sander will not operate optimally, and unnecessary wear on the moving parts will occur. Regularly check V-belt tension and replace it when necessary.

Items Needed	Qty
Hex Wrenches 3, 4, 5mm	1 Ea.
Phillips Head Screwdriver #2	1
Replacement V-Belt (#PT33256103)	1

To check and replace V-belt:

1. DISCONNECT MACHINE FROM POWER!

2. Remove flat head cap screw shown in **Figure 57** so belt cover can be opened.

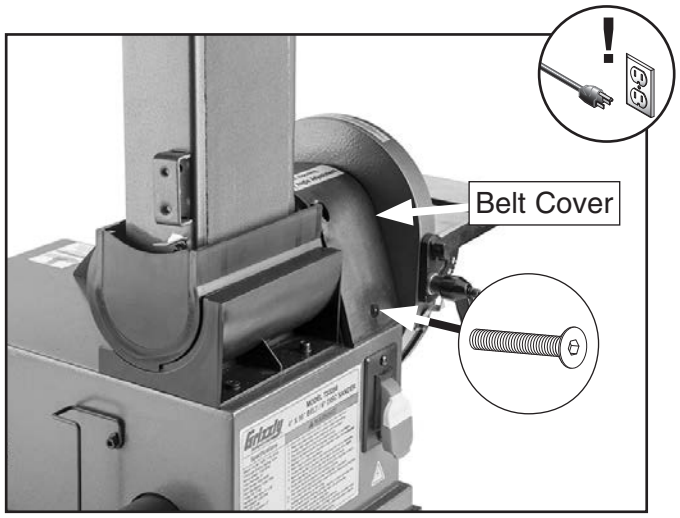


Figure 57. Location of belt cover and button head cap screw.

3. Pivot belt cover up, then press belt in center to check belt tension. Belt is correctly tensioned when there is approximately ¼" deflection when it is pushed with moderate pressure, as shown in **Figure 58**.

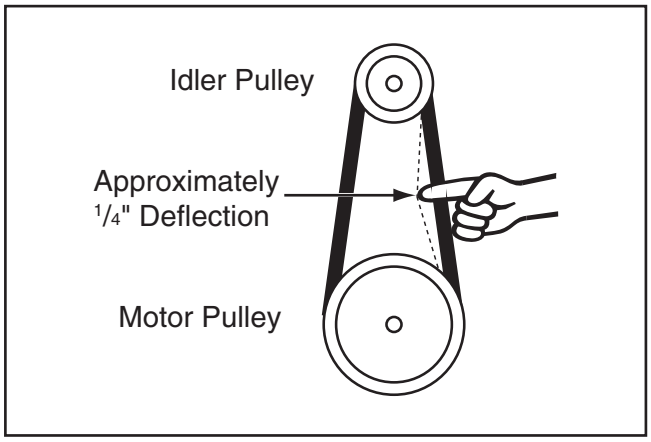


Figure 58. Checking V-belt tension.

— If V-belt is in good condition and there *is* ¼" of deflection, belt does not need to be replaced and tension does not need to be adjusted. Proceed to **Step 16**.

— If V-belt is cracked, torn, excessively worn, damaged, or if there *is not* ¼" of deflection, proceed to **Step 4**.

4. Carefully turn machine on its side to access under base.

5. Remove (6) Phillips head screws and washers to remove machine base cover (see **Figure 59**).

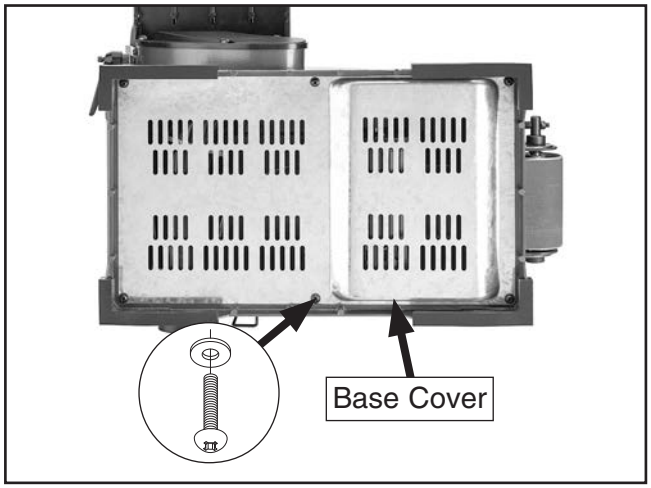


Figure 59. Location of machine base cover and Phillips head screws.

6. Loosen (4) motor cap screws to release V-belt tension (see **Figure 60**).

   — If V-belt is in good condition but there is not ¼" of deflection, proceed to **Step 14**.

   — If V-belt is cracked, torn, excessively worn, damaged, proceed to **Step 7**.

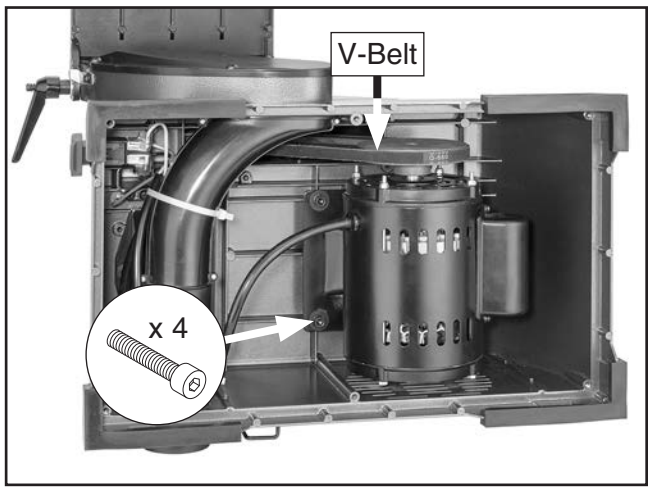


Figure 60. Location of motor cap screws and V-belt.

7. Remove V-belt from motor pulley, then turn machine upright.

   Note: *Do not install machine base, it will be installed in later step.*

8. If table is installed for disc sanding, remove table lock handle, washer, and (2) wing knobs from disc guard (see **Figure 61**) to remove table from sanding disc position.

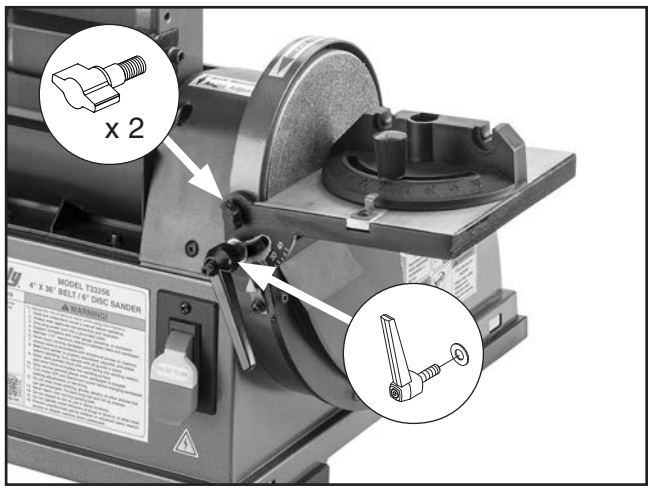


Figure 61. Location of table fasteners.

9. Remove (4) button head cap screws shown in **Figure 62** to remove disc cover.

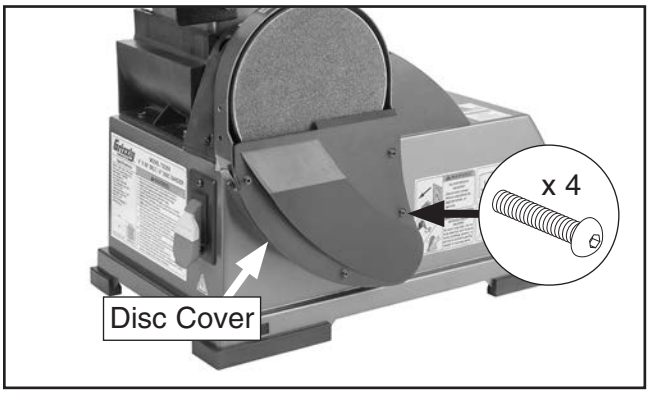


Figure 62. Location of disc cover and cap screws.

10. Pivot belt cover up, then loosen (2) set screws shown in **Figure 63** to remove aluminum disc from drive shaft.

11. Remove V-belt from idler pulley (see **Figure 63**), then seat new V-belt in pulley.

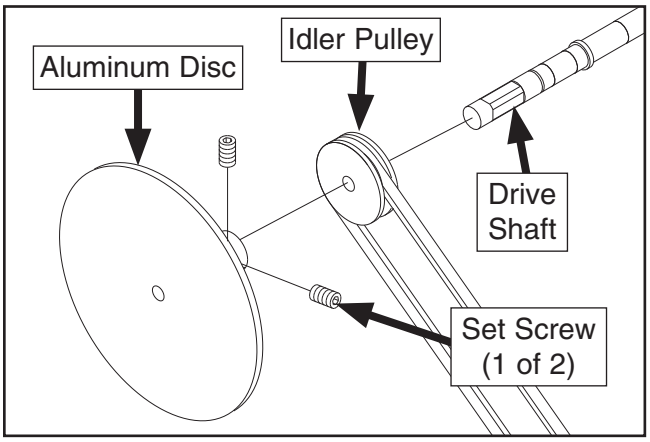


Figure 63. Sanding disc drive components (other parts removed for clarity).

12. Install aluminum disc and disc cover.

13. Turn machine on its side and place new belt around motor pulley.

14. Move motor to tension belt with ¼" deflection, then tighten cap screws from **Step 6**.

15. Install machine base cover, then turn machine upright.

16. Secure belt cover with screw removed in **Step 2**.

Calibrating Miter Gauge Scale

Calibrate the miter gauge scale if workpieces are not square when being sanded at 90° while using the miter gauge.

Tools Needed	Qty
Machinist's Square	1
Phillips Head Screwdriver #2	1

To calibrate miter gauge scale:

1. Adjust miter gauge until scale reads 90° (see **Figure 64**).

2. Use machinist's square to check if miter bar is square to miter gauge body (see **Figure 64**).

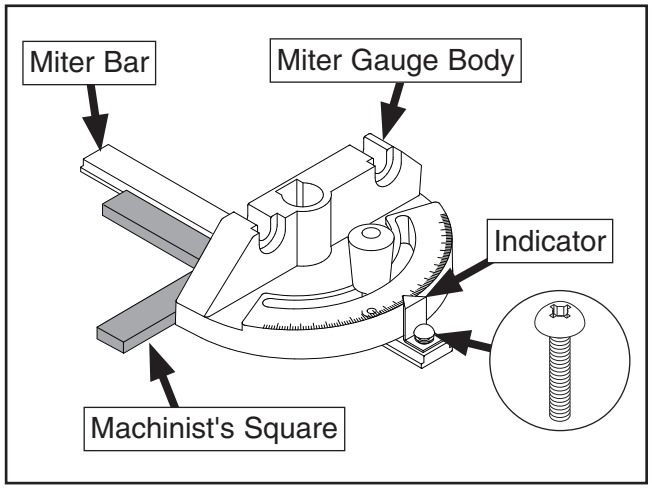


Figure 64. Example of miter gauge angle adjusted to 90° on scale.

— If bar *is* square to miter gauge body when angle indicator points to 90°, no adjustment is required.

— If bar *is not* square to miter gauge body when angle indicator points to 90°, proceed to **Step 3**.

3. Loosen Phillips head screw shown in **Figure 64**, adjust indicator to point to 90°, then tighten screw.

Calibrating Table Tilt

Calibrate the table tilt if workpieces are not square when being sanded at 90°. These steps can be performed if table is installed for disc sanding or belt sanding.

Tools Needed	Qty
Machinist's Square	1
Phillips Head Screwdriver #2	1

To calibrate table tilt:

1. DISCONNECT MACHINE FROM POWER!

2. Place machinist's square on table, loosen table lock handle, and adjust table until it is square to sanding disc or belt (see **Figures 65**–**66**).

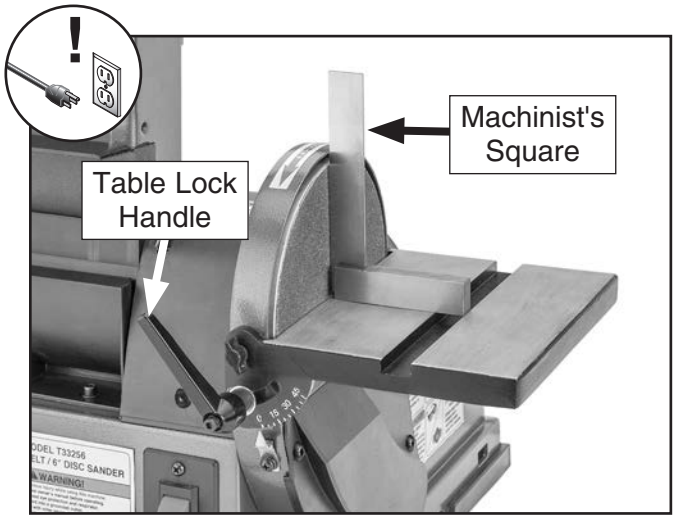


Figure 65. Squaring table to sanding disc.

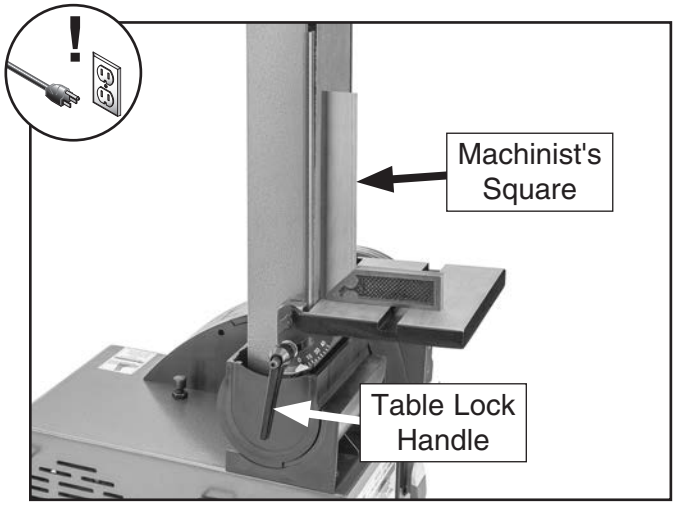


Figure 66. Squaring table to sanding belt.

3. Check to see if angle indicator points to zero (see **Figure 67**).

   — If angle indicator *does not* point to zero, proceed to **Step 4**.

   — If angle indicator *does* point to zero, table tilt is calibrated correctly and no adjustment is necessary.

4. Loosen angle indicator Phillips head screw (see **Figure 67**), adjust indicator to zero, then tighten screw.

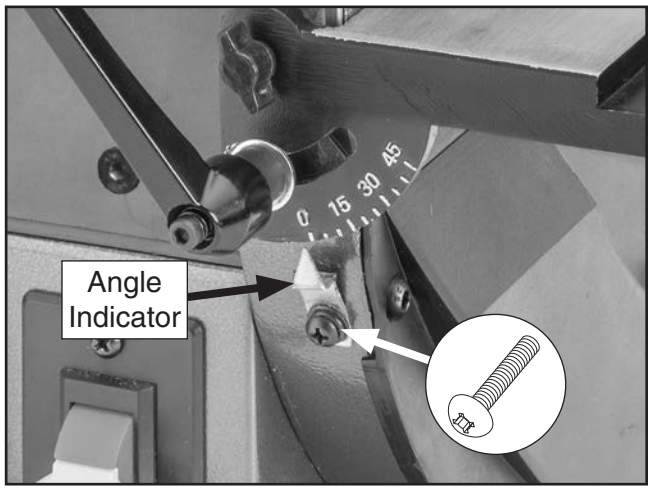


Figure 67. Location of angle indicator and Phillips head screw (disc table indicator shown).

Note: *You may need to remove side cover to access screw on platen table tilt indicator (see **Figure 68**).*

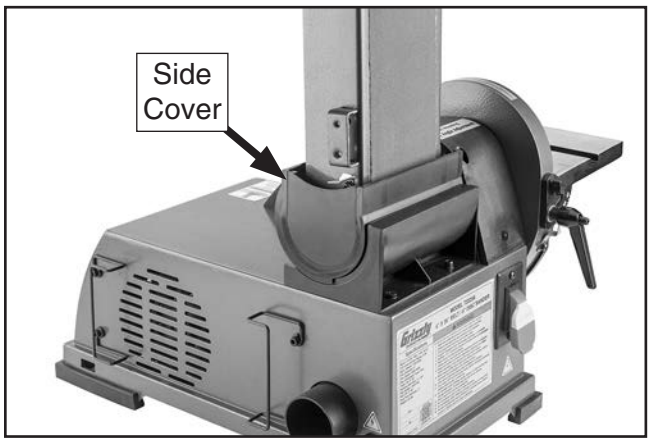


Figure 68. Location of side cover.

SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

⚠WARNING
Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

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

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

NOTICE

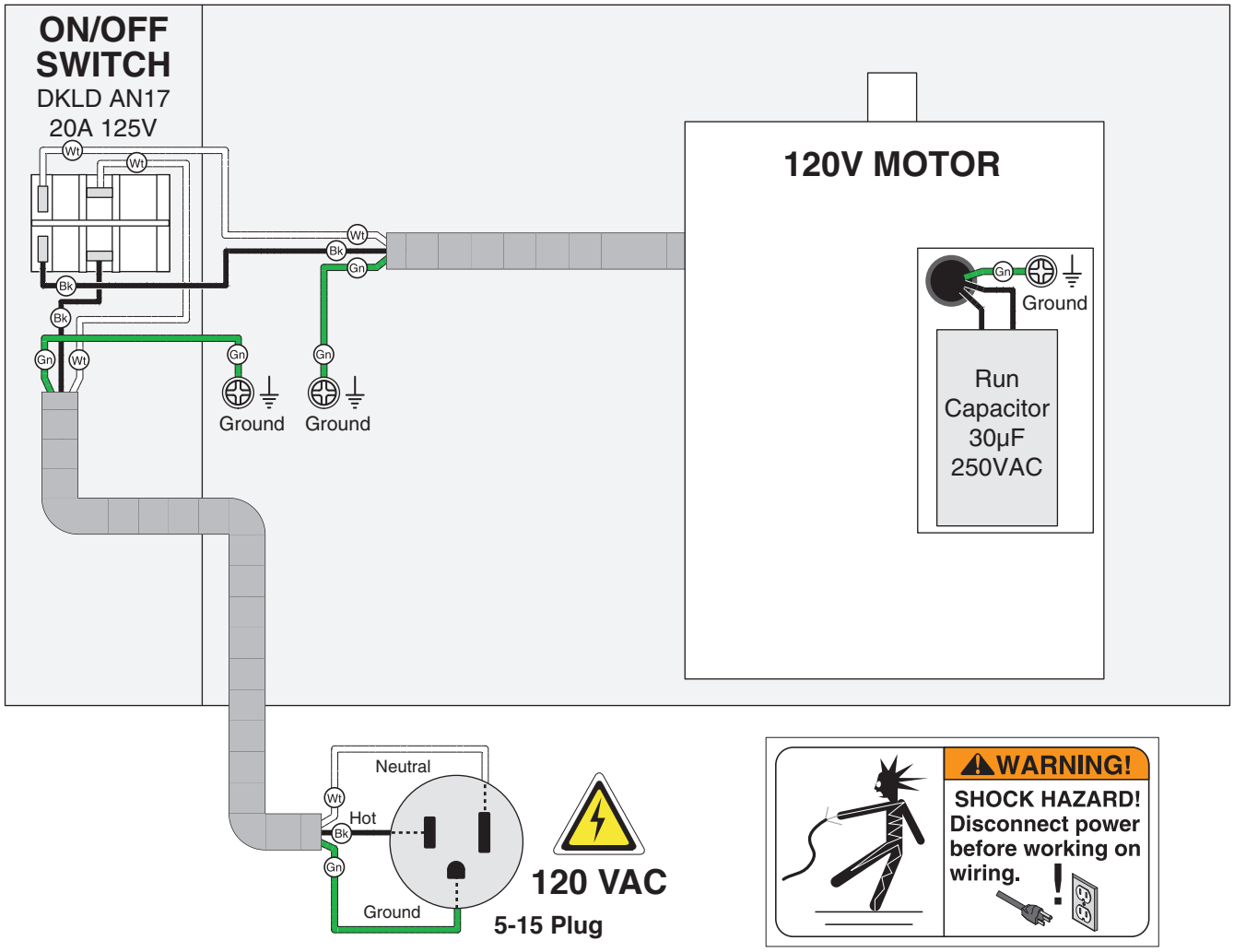
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

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

Wiring Diagram

MACHINE BASE



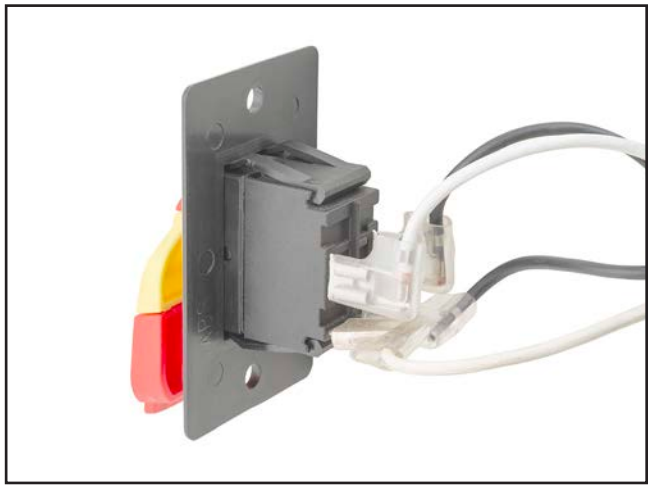


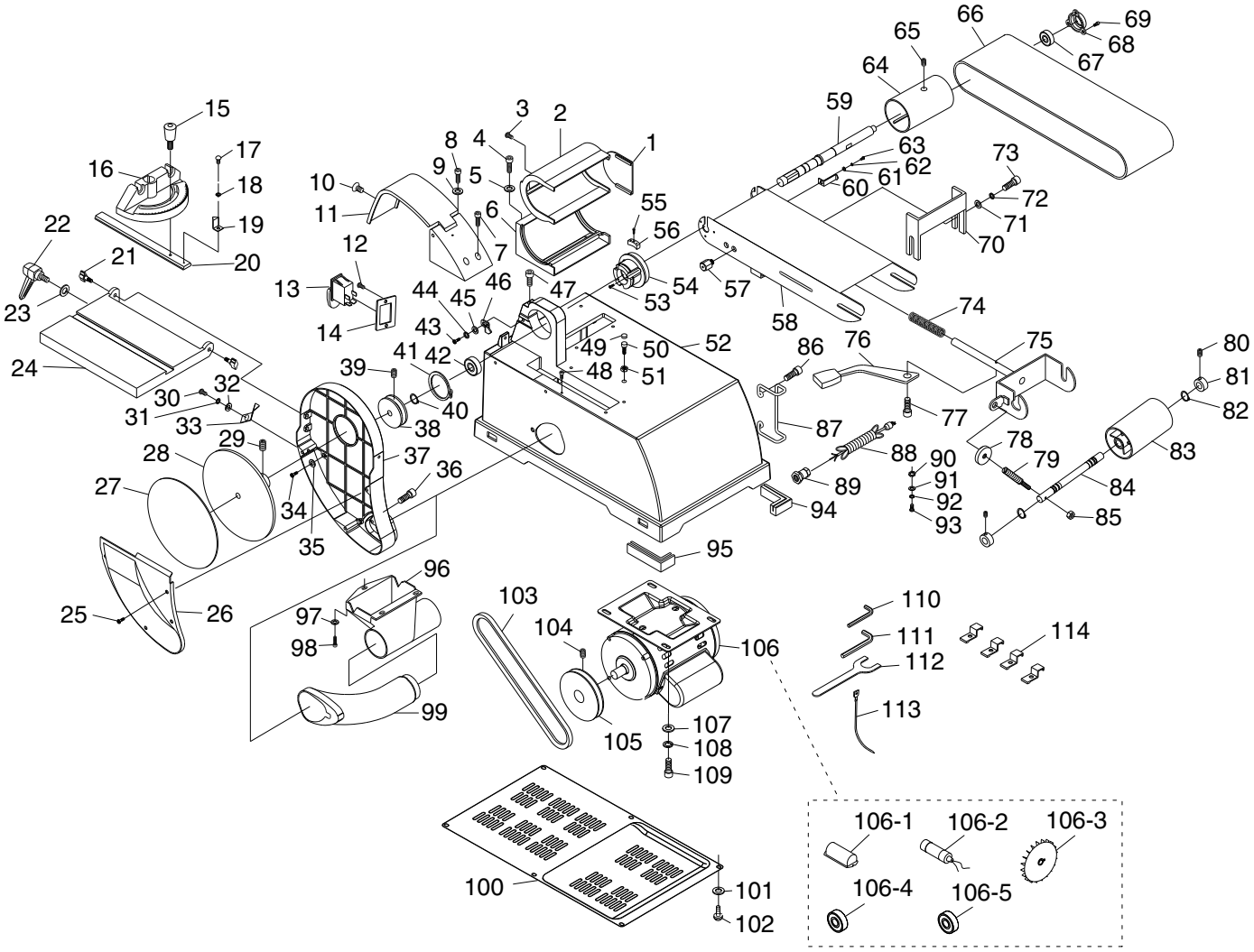
Figure 69. ON/OFF switch wiring.

Figure 70. Run capacitor wiring.

SECTION 9: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

Main



REF	PART #	DESCRIPTION
1	PT33256001	SIDE COVER
2	PT33256002	DUST DEFLECTOR
3	PT33256003	PHLP HD SCR M4-.7 X 16
4	PT33256004	CAP SCREW M5-.8 X 10
5	PT33256005	FLAT WASHER 5MM
6	PT33256006	DUST COVER
7	PT33256007	CAP SCREW M5-.8 X 10
8	PT33256008	CAP SCREW M5-.8 X 10
9	PT33256009	FLAT WASHER 5MM
10	PT33256010	FLAT HD CAP SCR M5-.8 X 8

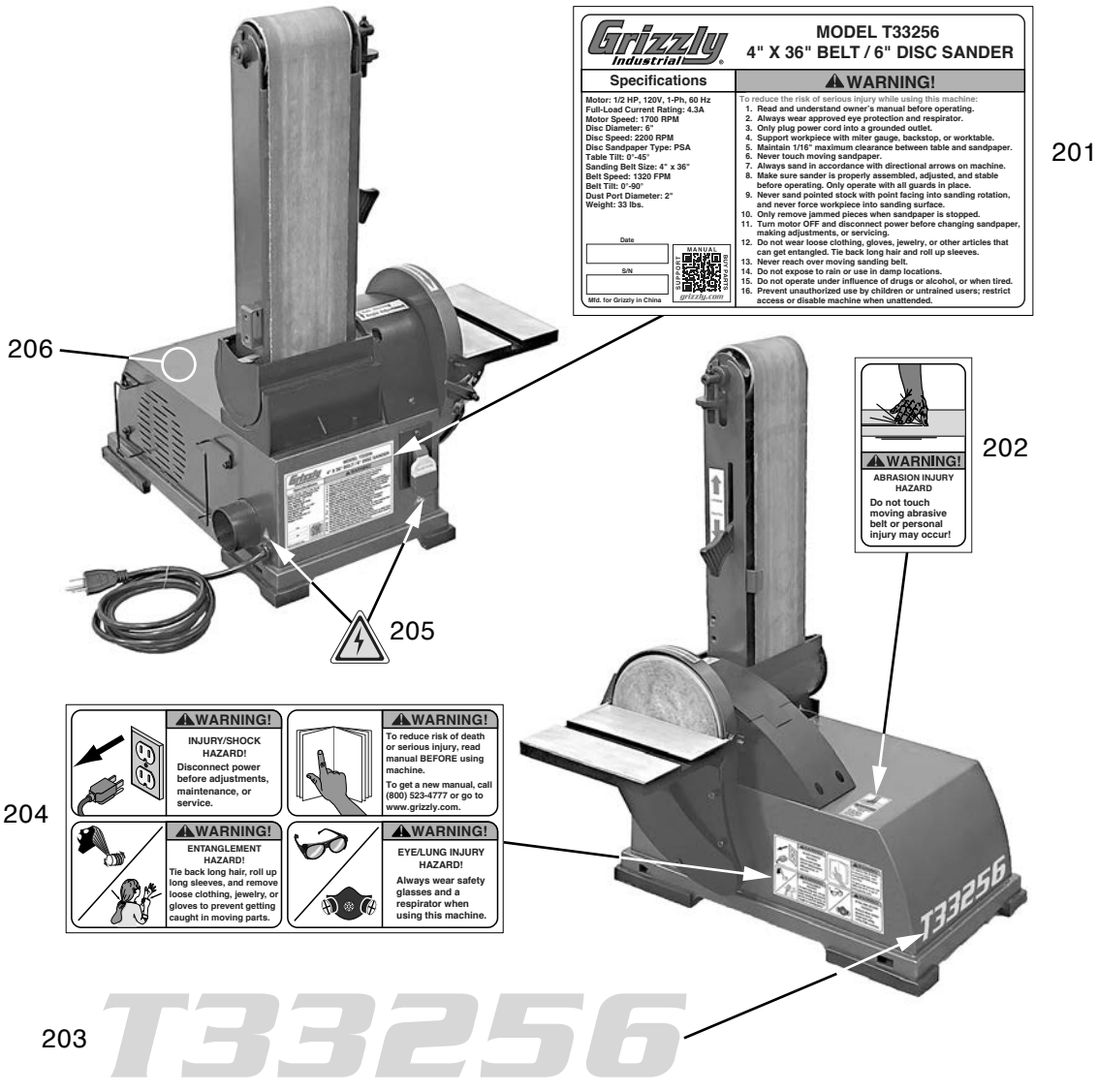
REF	PART #	DESCRIPTION
11	PT33256011	BELT COVER
12	PT33256012	PHLP HD SCR M5-.8 X 10
13	PT33256013	PADDLE SWITCH DKLD 125V 20A AN17
14	PT33256014	SWITCH PLATE
15	PT33256015	KNOB BOLT M6-1 X 20, D20, TAPERED KD
16	PT33256016	MITER GAUGE BODY
17	PT33256017	PHLP HD SCR M4-.7 X 6
18	PT33256018	FLAT WASHER 4MM
19	PT33256019	MITER GAUGE POINTER
20	PT33256020	MITER GAUGE SLIDE BAR

Main Parts List

REF	PART #	DESCRIPTION
21	PT33256021	KNOB BOLT M5-.8 X 14, D18, WING
22	PT33256022	ADJUSTABLE HANDLE M6-1 X 15, 65L
23	PT33256023	FLAT WASHER 6MM
24	PT33256024	TABLE
25	PT33256025	CAP SCREW M5-.8 X 10
26	PT33256026	DISC COVER
27	PT33256027	ABRASIVE DISC 6" 80-GRIT
28	PT33256028	ALUMINUM DISC 6"
29	PT33256029	SET SCREW M8-1.25 X 10
30	PT33256030	PHLP HD SCR M5-.8 X 10
31	PT33256031	LOCK WASHER 5MM
32	PT33256032	FLAT WASHER 5MM
33	PT33256033	DISC TABLE TILT POINTER
34	PT33256034	CAP SCREW M5-.8 X 10
35	PT33256035	FLAT WASHER 5MM
36	PT33256036	CAP SCREW M5-.8 X 10
37	PT33256037	DISC GUARD
38	PT33256038	DRIVE PULLEY
39	PT33256039	SET SCREW M8-1.25 X 10
40	PT33256040	EXT RETAINING RING 14MM
41	PT33256041	EXT RETAINING RING 50MM
42	PT33256042	BALL BEARING 6002ZZ
43	PT33256043	CAP SCREW M5-.8 X 10
44	PT33256044	LOCK WASHER 5MM
45	PT33256045	FLAT WASHER 5MM
46	PT33256046	VERTICAL STOP PLATE
47	PT33256047	CAP SCREW M6-1 X 30
48	PT33256048	CAP SCREW M5-.8 X 10
49	PT33256049	RUBBER COVER
50	PT33256050	PLATEN STOP SCREW M8-1.25 X 22
51	PT33256051	HEX NUT M8-1.25
52	PT33256052	BODY
53	PT33256053	CAP SCREW M5-.8 X 10
54	PT33256054	DRIVE SHAFT HOUSING
55	PT33256055	CAP SCREW M5-.8 X 8
56	PT33256056	LIMIT BLOCK
57	PT33256057	STANDOFF-HEX MF M6-1 X 9, M5-.8
58	PT33256058	SANDING BELT PLATEN
59	PT33256059	DRIVE SHAFT
60	PT33256060	PLATEN TABLE TILT POINTER
61	PT33256061	FLAT WASHER 5MM
62	PT33256062	LOCK WASHER 5MM
63	PT33256063	PHLP HD SCR M5-.8 X 10
64	PT33256064	DRIVE ROLLER
65	PT33256065	SET SCREW M6-1 X 8
66	PT33256066	SANDING BELT 4" X 36" 80-GRIT
67	PT33256067	BALL BEARING 6000ZZ
68	PT33256068	BEARING COVER
69	PT33256069	CAP SCREW M5-.8 X 10
70	PT33256070	WORK STOP

REF	PART #	DESCRIPTION
71	PT33256071	FLAT WASHER 6MM
72	PT33256072	LOCK WASHER 6MM
73	PT33256073	CAP SCREW M6-1 X 16
74	PT33256074	COMPRESSION SPRING 2.5 X 22 X 82
75	PT33256075	IDLER ROLLER SUPPORT
76	PT33256076	TENSION LEVER
77	PT33256077	SHOULDER BOLT M6-1 X 12
78	PT33256078	TRACKING NUT M10-1.5
79	PT33256079	SHOULDER STUD-FT M10-1.5 X 40, M6-1 X 12
80	PT33256080	SET SCREW M5-.8 X 6
81	PT33256081	LOCK COLLAR 12MM, M5-.8
82	PT33256082	EXT RETAINING RING 12MM
83	PT33256083	IDLER ROLLER
84	PT33256084	IDLER SHAFT
85	PT33256085	LOCK NUT M6-1
86	PT33256086	CAP SCREW M5-.8 X 10
87	PT33256087	POWER CORD HOOK
88	PT33256088	POWER CORD 18G 3W 74" 5-15P
89	PT33256089	STRAIN RELIEF TYPE-1 5/16
90	PT33256090	EXT TOOTH WASHER 5MM
91	PT33256091	FLAT WASHER 5MM
92	PT33256092	LOCK WASHER 5MM
93	PT33256093	PHLP HD SCR M5-.8 X 10
94	PT33256094	FOOT (RIGHT)
95	PT33256095	FOOT (LEFT)
96	PT33256096	DUST CHUTE
97	PT33256097	FLAT WASHER 5MM
98	PT33256098	CAP SCREW M5-.8 X 8
99	PT33256099	CONNECTION CHANNEL
100	PT33256100	BOTTOM COVER
101	PT33256101	FLAT WASHER 5MM
102	PT33256102	PHLP HD SCR M5-.8 X 10
103	PT33256103	V-BELT O-680
104	PT33256104	SET SCREW M8-1.25 X 10
105	PT33256105	MOTOR PULLEY
106	PT33256106	MOTOR 1/2HP 120V 1-PH
106-1	PT33256106-1	CAPACITOR COVER
106-2	PT33256106-2	R CAPACITOR 30M 250V 1-5/16 X 2-9/16
106-3	PT33256106-3	MOTOR FAN
106-4	PT33256106-4	BALL BEARING 6202ZZ (FRONT)
106-5	PT33256106-5	BALL BEARING 6201ZZ (REAR)
107	PT33256107	FLAT WASHER 6MM
108	PT33256108	LOCK WASHER 6MM
109	PT33256109	CAP SCREW M6-1 X 20
110	PT33256110	HEX WRENCH 3MM
111	PT33256111	HEX WRENCH 5MM
112	PT33256112	WRENCH 14MM OPEN-END
113	PT33256113	CABLE TIE
114	PT33256114	MOUNTING BRACKET

Labels & Cosmetics



REF	PART #	DESCRIPTION
201	PT33256201	MACHINE ID LABEL
202	PT33256202	ABRASION INJURY LABEL
203	PT33256203	MODEL NUMBER LABEL

REF	PART #	DESCRIPTION
204	PT33256204	COMBO WARNING LABEL
205	PT33256205	ELECTRICITY LABEL
206	PT33256206	TOUCH-UP PAINT, GRIZZLY GREEN

⚠WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

WARRANTY & 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.

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.

In the event you need to use 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.

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.

To take advantage of this warranty, you must register it at **https://www.grizzly.com/forms/warranty**, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.