

READ THIS FIRST



Model G0449/G0450

*****IMPORTANT UPDATE*****

**For Machines Mfd. Since 05/05
and Owner's Manual Revised 08/21**

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

We recently discovered the following mistake in the owner's manual:

- Incorrect conveyor feed rate shown in Data Sheet, Additional Controls, and Variable Speed.

This document provides the relevant updates to the owner's manual that no longer applies—aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Revised Specifications

Main Specifications:

Operation Information

Conveyor Feed Rate 8 - 20 FPM

Revised Additional Controls

Variable Feed Rate Dial: Adjusts feed rate from 8–20 FPM.

Revised Variable Speed

The variable speed knob allows you to increase the feed rate from 8–20 FPM. The correct speed to use depends on the type of stock you are using (hardwood vs. softwood) and the stage of finish you are at with that workpiece.

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#JP22394 PRINTED IN TAIWAN

Grizzly **Industrial, Inc.**®

MODEL G0449/G0450

37" DRUM SANDER

OWNER'S MANUAL

(FOR MACHINES MANUFACTURED SINCE 8/13)




C US
177335

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V4.08.21

 **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.

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INTRODUCTION

Machine Description

A drum sander is used to remove surface material from stock using a looping abrasive belt, which is required when preparing a workpiece.

After the workpiece is placed on the conveyor, it moves forward and is pressed down slightly by the front pressure roller. Then the front and rear sanding drums remove material from the workpiece surface. Finally, the operator receives the workpiece at the back of the sander.

The table height handwheel is used to control cutting depth. Also, a variable speed knob allows the operator to adjust the conveyor speed for the specific type of workpiece and finish.

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

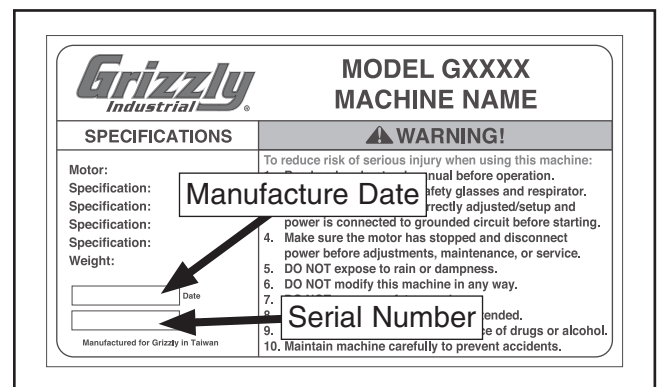
Manual Accuracy

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.





MACHINE DATA SHEET

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

MODEL G0449 37" 10 HP DRUM SANDER

Product Dimensions:

Weight..... 1143 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 68 x 50-1/2 x 49 in.
 Footprint (Length x Width)..... 45-1/2 x 28-1/2 in.

Shipping Dimensions:

Type..... Wood Slat Crate
 Content..... Machine
 Weight..... 1406 lbs.
 Length x Width x Height..... 55 x 60 x 45 in.
 Must Ship Upright..... Yes

Electrical:

Power Requirement..... 240V, Single-Phase, 60 Hz
 Full-Load Current Rating..... 47A
 Minimum Circuit Size..... 60A
 Connection Type..... Permanent Hardwire
 Switch Type..... Control Panel w/Magnetic Switch Protection

Motors:

Main

Horsepower..... 10 HP
 Phase..... Single-Phase
 Amps..... 44.5A
 Speed..... 1725 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer..... Dual Belt Drive
 Bearings..... Sealed & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... External

Feed

Horsepower..... 1/3 HP
 Phase..... Single-Phase
 Amps..... 2.5A
 Speed..... 1175 RPM
 Type..... TEFC Capacitor-Start Induction
 Power Transfer..... Chain Drive
 Bearings..... Sealed & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... External



Main Specifications:

Operation Information

Number of Sanding Heads.....	2
Maximum Board Width.....	36-1/2 in.
Minimum Board Width.....	2 in.
Maximum Board Thickness.....	4 in.
Minimum Board Thickness.....	1/16 in.
Minimum Board Length.....	9 in.
Sandpaper Speed.....	2800 FPM
Conveyor Feed Rate.....	6 – 18 FPM
Sandpaper Length.....	138 in.
Sandpaper Width.....	6 in.

Drum Information

Infeed Sanding Drum Type.....	Steel/Rubber
Infeed Sanding Drum Size.....	6 in.
Outfeed Sanding Drum Type.....	Rubber
Outfeed Sanding Drum Size.....	6 in.

Construction

Conveyor Belt.....	Rubber
Body.....	Steel
Paint Type/Finish.....	Powder Coated

Other Related Information

Floor To Table Height.....	29 - 33 in.
Sanding Belt Tension.....	Spring Loaded
Number of Pressure Rollers.....	5
Pressure Roller Type.....	Rubber
Pressure Roller Size.....	1-17/32 in.
Conveyor Belt Length.....	90-1/2 in.
Conveyor Belt Width.....	36-1/2 in.
Belt Roller Size.....	2.67 in.
Number of Dust Ports.....	4
Dust Port Size.....	4 in.

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	ID Label on Control Box
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

Features:

- Spring-Loaded Sanding Belt Tension/Sandpaper
- Industrial-Duty Rubber Conveyor Belt
- Four 4" Dust Ports
- Variable Speed Conveyor
- Twin V-Belt Main Motor; V-Belt Feed Motor
- 6" Steel/Rubber Sanding Drums
- Green and Putty Powder Coated Paint
- Easy Access Control Panel with Load Meter
- Advanced Dust Collection
- Hinged Hood with Gas Struts for Easy Drum Access
- State of the Art Computer Balanced Drums
- 0.020" Table Lift with 360 degree Handwheel Turn





MACHINE DATA SHEET

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

MODEL G0450 37" 15 HP 3-PHASE DRUM SANDER

Product Dimensions:

Weight..... 1143 lbs.
 Width (side-to-side) x Depth (front-to-back) x Height..... 68 x 50-1/2 x 49 in.
 Footprint (Length x Width)..... 45-1/8 x 28-1/2 in.

Shipping Dimensions:

Type..... Wood Slat Crate
 Content..... Machine
 Weight..... 1382 lbs.
 Length x Width x Height..... 55 x 60 x 45 in.
 Must Ship Upright..... Yes

Electrical:

Power Requirement..... 240V or 480V, 3-Phase, 60 Hz
 Prewired Voltage..... 240V
 Full-Load Current Rating..... 43A at 240V, 21.5A at 480V
 Minimum Circuit Size..... 60A at 240V, 30A at 480V
 Connection Type..... Permanent (Hardwire to Shutoff Switch)
 Switch Type..... On/Off Emergency Stop
 Voltage Conversion Kit..... P0450753 for 440V
 Recommended Phase Converter..... H3741

Motors:

Main

Horsepower..... 15 HP
 Phase..... 3-Phase
 Amps..... 41.3A/20.65A
 Speed..... 1725 RPM
 Type..... TEFC Induction
 Power Transfer Twin V-Belt Drive
 Bearings..... Sealed & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... N/A

Feed

Horsepower..... 1/3 HP
 Phase..... 3-Phase
 Amps..... 1.64A/0.82A
 Speed..... 1175 RPM
 Type..... TEFC Induction
 Power Transfer Belt and Chain Drive
 Bearings..... Sealed & Permanently Lubricated
 Centrifugal Switch/Contacts Type..... N/A



Main Specifications:

Operation Information

Number of Sanding Heads.....	2
Maximum Board Width.....	36-1/2 in.
Minimum Board Width.....	2 in.
Maximum Board Thickness.....	4 in.
Minimum Board Thickness.....	1/16 in.
Minimum Board Length.....	9 in.
Sandpaper Speed.....	2800 FPM
Conveyor Feed Rate.....	6 – 18 FPM
Sandpaper Length.....	138 in.
Sandpaper Width.....	6 in.

Drum Information

Infeed Sanding Drum Type.....	Steel/Rubber
Infeed Sanding Drum Size.....	6 in.
Outfeed Sanding Drum Type.....	Rubber
Outfeed Sanding Drum Size.....	6 in.

Construction

Conveyor Belt.....	Rubber
Body.....	Steel
Paint Type/Finish.....	Powder Coated

Other Related Information

Floor To Table Height.....	29 - 33 in.
Sanding Belt Tension.....	Spring Loaded
Number of Pressure Rollers.....	5
Pressure Roller Type.....	Rubber
Pressure Roller Size.....	1-17/32 in.
Conveyor Belt Length.....	90-1/2 in.
Conveyor Belt Width.....	36-1/2 in.
Belt Roller Size.....	2.67 in.
Number of Dust Ports.....	4
Dust Port Size.....	4 in.

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	ID Label on Control Box
ISO 9001 Factory	No
Certified by a Nationally Recognized Testing Laboratory (NRTL)	Yes

Features:

- Spring-Loaded Sanding Belt Tension/Sandpaper
- Industrial-Duty Rubber Conveyor Belt
- Four 4" Dust Ports
- Variable Speed Conveyor
- Twin V-Belt Main Motor; V-Belt Feed Motor
- 6" Steel/Rubber Sanding Drums
- Green and Putty Powder Coated Paint
- Easy Access Control Panel with Load Meter
- Advanced Dust Collection
- Hinged Hood with Gas Struts for Easy Drum Access
- State of the Art Computer Balanced Drums
- 0.020" Table Lift with 360 degree Handwheel Turn



Identification

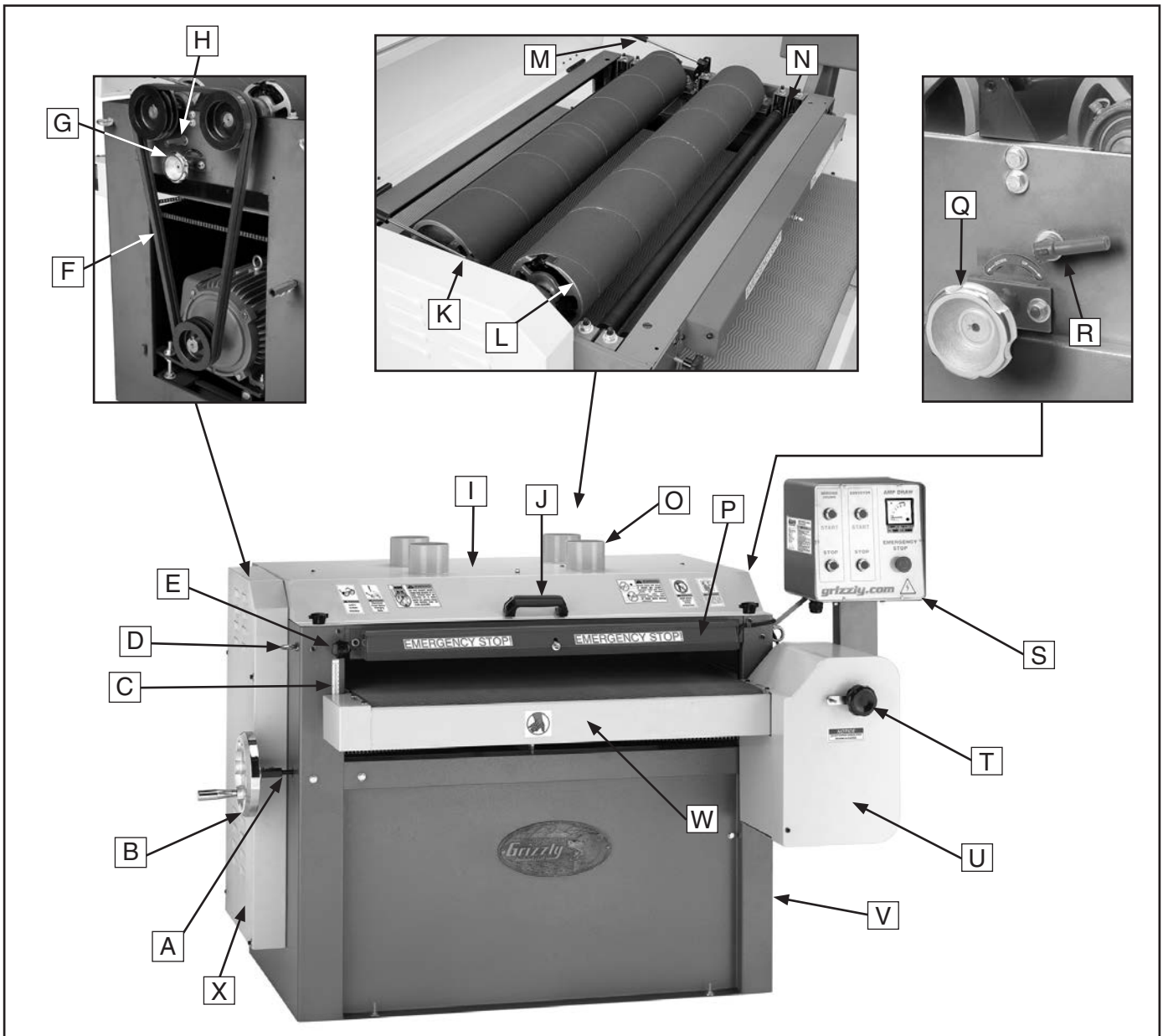


Figure 1. Front view, Model G0449/G0450.

- | | |
|---|--|
| A. Table Height Shaft | M. Gas Strut |
| B. Table Height Handwheel | N. Pressure Roller |
| C. Depth Scale | O. Dust Port |
| D. Lifting Hook | P. Emergency Stop Bar |
| E. Table Height Lock Knob | Q. Micro-Adjust Knob (Right Side) |
| F. V-Belts | R. Micro-Adjust Lock (Right Side) |
| G. Micro-Adjust Knob (Left Side) | S. Control Panel |
| H. Micro-Adjust Lock (Left Side) | T. Variable Speed Control |
| I. Top Cover | U. Pulley Motor Housing |
| J. Top Cover Handle | V. Drum Sander Frame |
| K. Rear Drum | W. Infeed Guard |
| L. Front Drum | X. Pulley Cover |



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.



WARNING

Additional Safety for Drum Sanders

Main injury risks of drum sanders are: crushing or abrasion injuries from getting entangled between conveyor belt and sanding drums; impact injuries from being struck by workpieces that kickback or are thrown from the machine, or broken or dislodged components; respiratory damage or eye injury from sawdust. To minimize your risk of these hazards, always heed the following warning information:

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.

MINIMUM STOCK DIMENSIONS. Do not sand any stock thinner than $\frac{1}{8}$ ", narrower than 2", or shorter than 9". Do not sand thin stock by using a "dummy" board under your workpiece.

CLOTHING. Do not wear loose clothing while operating this machine. Roll up or button sleeves at the cuff.

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.

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

UNATTENDED OPERATION. Never leave the machine running unattended.

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

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

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.

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.

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 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

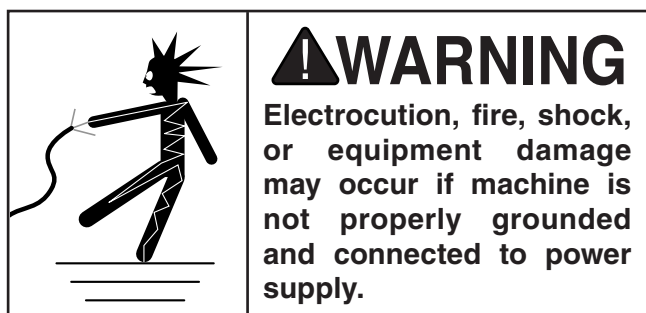
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or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



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.



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.

G0449 Amp Draw at 240V..... 47 Amps
G0450 Amp Draw at 240V..... 43 Amps
G0450 Amp Draw at 480V..... 21.5 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.

Circuit Information

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.*

G0449 240V Circuit Requirements

This machine is prewired to operate on a 240V power supply circuit that has a verified ground and meets the following requirements:

Acceptable Voltage Range216V–264V
Cycle60 Hz
Phase Single-Phase
Power Supply Circuit 60 Amps
Connection TypeHardwired

G0450 240V Circuit Requirements

This machine is prewired to operate on a 240V power supply circuit that has a verified ground and meets the following requirements:

Acceptable Voltage Range216V–264V
Cycle60 Hz
Phase 3-Phase
Power Supply Circuit 60 Amps
Connection TypeHardwired



Circuit Requirements for 480V

This machine can be converted to operate on a 480V power supply (refer to Voltage Conversion instructions) that has a verified ground and meets the following requirements:

Acceptable Voltage Range 432V–528V
Cycle 60 Hz
Phase 3-Phase
Power Supply Circuit 30 Amps
Connection Type Hardwired

Connection Type

A permanently connected (hardwired) power supply is typically installed with wires running through mounted and secured conduit. A disconnecting means, such as a locking switch (see following figure), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by an electrician in accordance with all applicable electrical codes and ordinances.

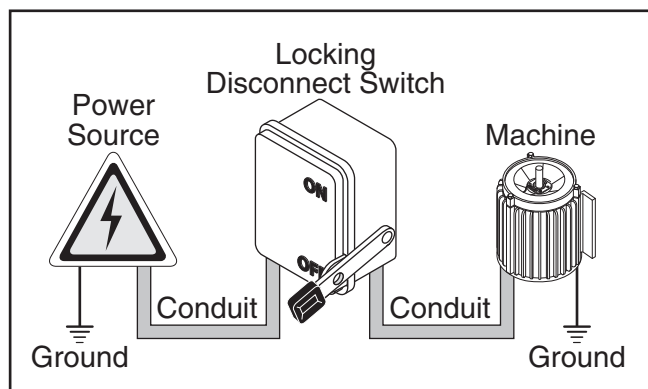


Figure 2. Typical setup of a permanently connected machine.

Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

⚠ 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.

Extension Cords

Since this machine must be permanently connected to the power supply, an extension cord cannot be used.

Phase Converter Precaution

The power from the manufactured leg may damage electrical components if connected to the wrong incoming power terminal on your machine. Only connect the manufactured leg to the L2 terminal on the incoming power terminal block (see **Page 19** for instructions). **DO NOT use a static phase converter, as they notoriously damage electrical components.**



480V Conversion

The Model G0450 can be converted for 480V operation. This conversion job consists of disconnecting the sander from the power source, replacing the existing control box 240V main panel with a 480V main panel and rewiring the sanding motor and feed motor.

The G0450 480V Conversion Kit (Part Number P0450753), which includes the necessary 480V main panel, can be purchased by calling Grizzly Customer Service at (800) 523-4777.

All wiring changes must be performed by an electrician or qualified service personnel. If, at any time during this procedure you need help, call Grizzly Tech Support at (570) 546-9663.

To rewire the Model G0450 for 480V operation:

1. DISCONNECT POWER TO SANDER!
2. Rewire both the sanding drum and feed motors according to the diagrams on the inside of the junction box cover.

Note: *These drawings are also shown on Pages 63–64 for your reference, but always use the drawings in the junction box cover, as they will reflect any changes to the machine since this manual was printed.*

3. Remove the control panel cover and familiarize yourself with **Figure 89** on **Page 59** for component locations.
4. Keeping track of the wire locations, disconnect all power and motor wires, so the main panel can be completely removed (the main panel is the board all electrical components are mounted to).

5. Remove the four cap screws (one in each corner) that secure the 240V main panel, then replace it with the 480V main panel from the 480V conversion kit (see **Figure 3**).

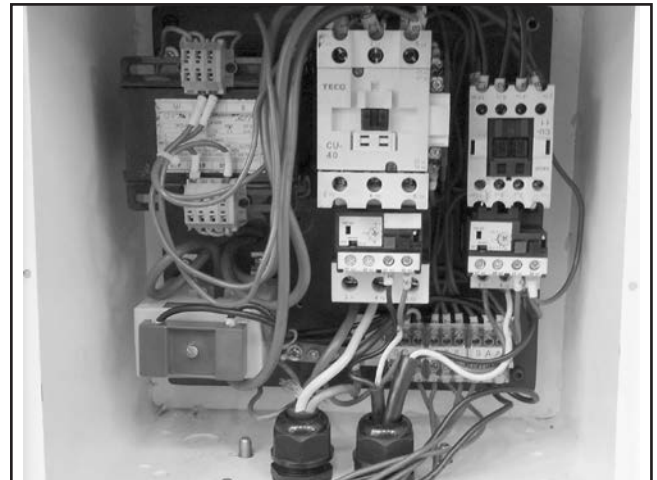


Figure 3. G0450 control box main panel, 3-phase 480V.

6. Connect the power and motor wires to the 480V main panel in the same manner that they were removed from the 240V main panel.
7. Make sure the thermal overload relays are set to the following values for 480V as shown in **Figure 4**:

Feed Motor Relay = 0.8A
Sanding Motor Relay = 20.7A

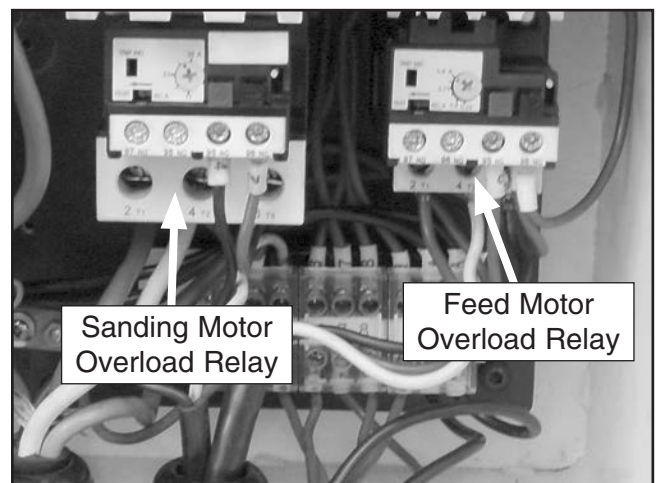
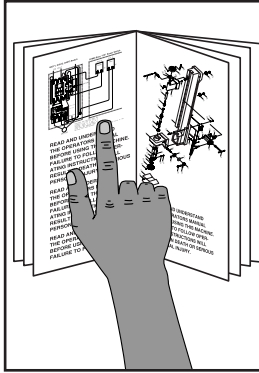


Figure 4. G0450 3-phase 480V thermal overload relay values.

8. Replace the control panel cover.

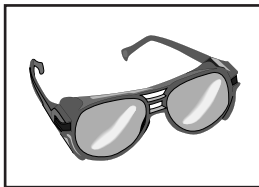


SECTION 3: SETUP



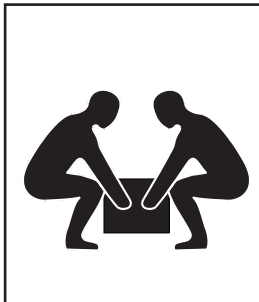
!WARNING

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



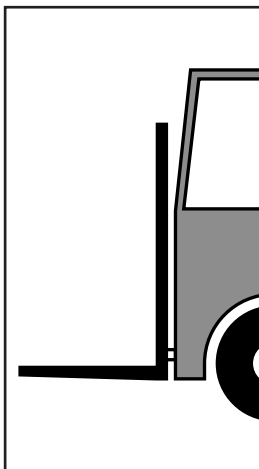
!WARNING

Wear safety glasses during the entire setup process!



!WARNING

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



!WARNING

This machine and its components are very heavy. Serious personal injury may occur if safe moving methods are not followed. To be safe, get assistance and use power equipment when moving the crate and removing the machine from the crate.

Needed for Setup

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

Description	Qty
• Safety Glasses	1
• Forklift.....	1
• Lifting Straps w/ Safety Hooks (min. 2000 lb capacity)	2
• Additional People	1
• Power Cord (length as needed)	1
• Power Disconnect Box	1
• Dust Collection System	1
• Dust Hoses 4"	4
• Hose Clamps 4"	4

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for shipping purposes.*

Box 1: (Figure 5)	Qty
A. Drum Sander.....	1
B. Control Panel.....	1
C. Handwheel	1
D. Top Cover.....	1

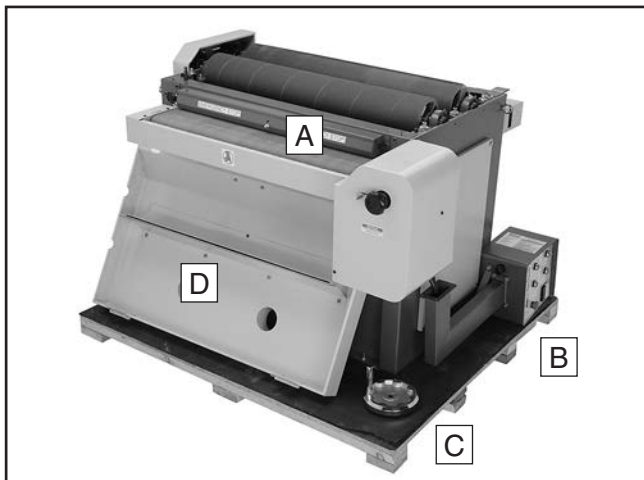


Figure 5. G0449/G0450 inventory.

Tools (Not Shown)

—Hex Wrenches 4, 5mm	1 Ea
—Wrench 12/14.....	1
—Phillips Head Screwdriver.....	1
—Tension Tools	2
—Rubber Plates (Dust Scoop)	2

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

Site Considerations

Floor Load

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

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 6** for the minimum working clearances.

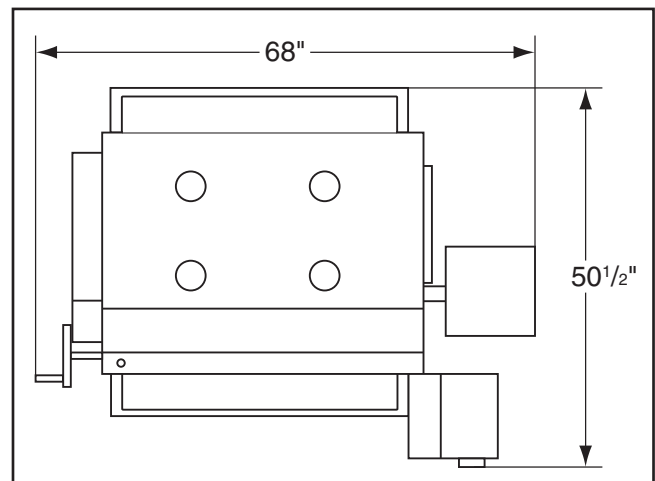
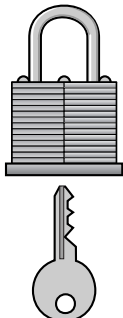


Figure 6. Minimum working clearances.

	<p>⚠ CAUTION</p> <p>Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.</p>
--	---



Assembly

To attach the top cover, control panel, and handwheel to the drum sander:

1. Remove the six button head cap screws from the top cover shown in **Figure 7**, and remove the two lock knobs shown in **Figure 8**.

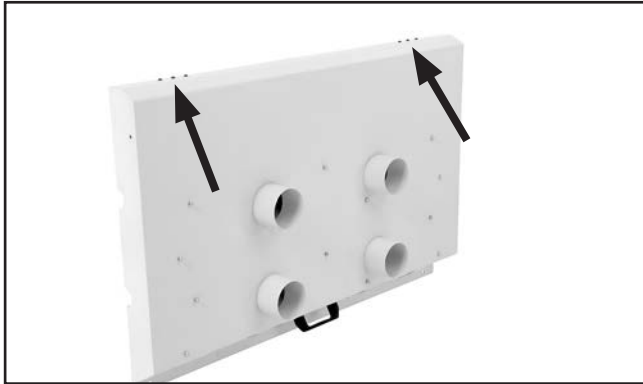


Figure 7. Removing cap screws on top cover.

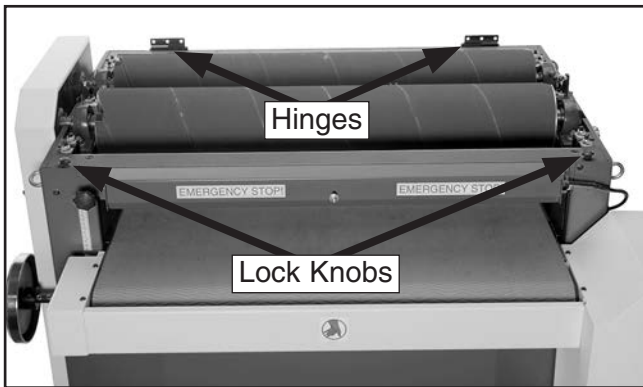


Figure 8. Lock knobs and hinges.

2. Place the top cover on the sander and attach the hinges with the screws removed in **Step 1**.

Note: To close the top cover fully, tuck the gas struts under the cover.

3. While an assistant holds the top cover up, install each gas strut on a bracket with a jam nut, as shown in **Figure 9**. The threaded end of each strut should be flush with the outside of the bracket.

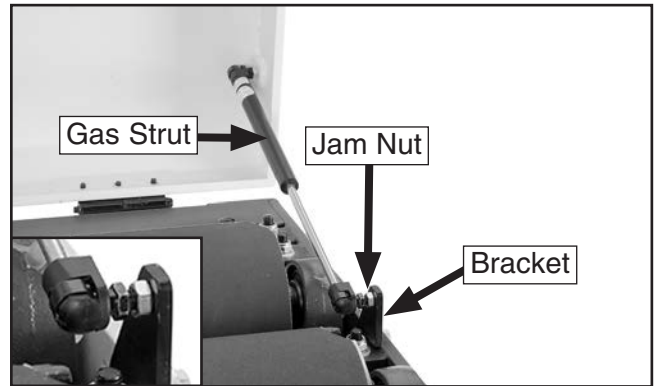


Figure 9. Gas strut installed (right side shown).

4. Close the top cover, remove the knobs securing the pulley cover, and open the cover.
5. Pull the V-belt down to rotate the sanding drums, and listen for any scraping sounds.

—If the sanding drums scrape the plastic dust scoop or metal dust scoop plates on the top cover, refer to instructions on **Page 47** for adjusting the dust scoops.

—If you do not hear any scraping sounds go to **Step 6**.

6. Reinstall the pulley cover with the knobs removed in **Step 4**, and reinstall the lock knobs removed in **Step 1**, to secure the top cover.
7. Remove the bolts, flat washers, and hex nuts from the control panel support arm, as shown in **Figure 10**.

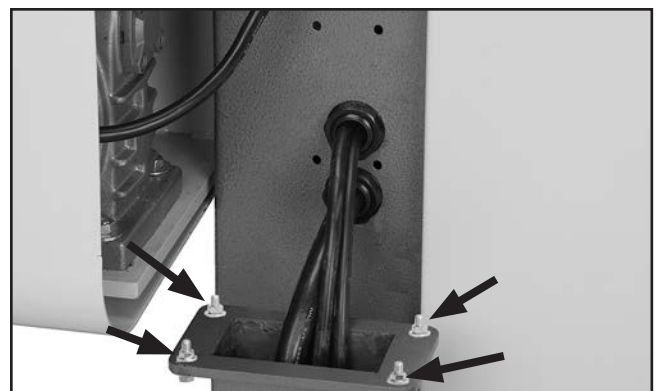


Figure 10. Control panel mounting bolts.

8. Remove the right access panel to gain access for attaching the control panel support arm.



9. With assistance, lift the control panel into place and secure it with the bolts, flat washers, and hex nuts removed in **Step 7**.
10. Reinstall the right access panel.
11. Attach the brace from the control panel to the sander as shown in **Figure 11**.

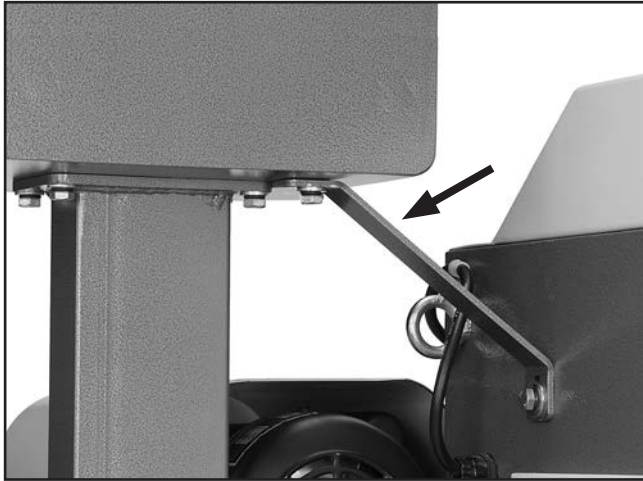


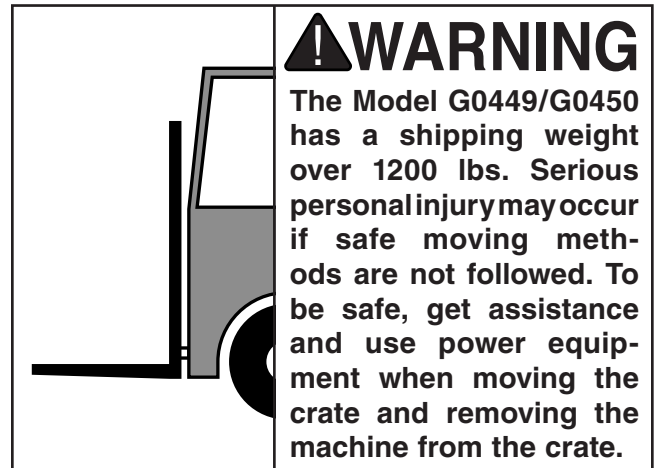
Figure 11. Control panel brace.

12. Place the handwheel over the shaft shown in **Figure 12** and tighten the set screw in the handwheel hub.



Figure 12. Handwheel installed.

Placing Sander



To place the sander in a permanent location:

1. Unbolt the sander from the pallet.
2. Position the forklift forks directly above the sander. Place two lifting straps with hooks on the ends over the forklift forks and slide the hooks into the points shown in **Figure 13**.



Figure 13. Lifting the sander.

3. Lift the sander and move it to your predetermined location. **DO NOT** lift it any higher than is necessary to clear the floor.



Mounting to Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included.

Bolting to Concrete Floors

Lag shield anchors with $\frac{3}{8}$ " lag bolts or anchor studs (Figure 14) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

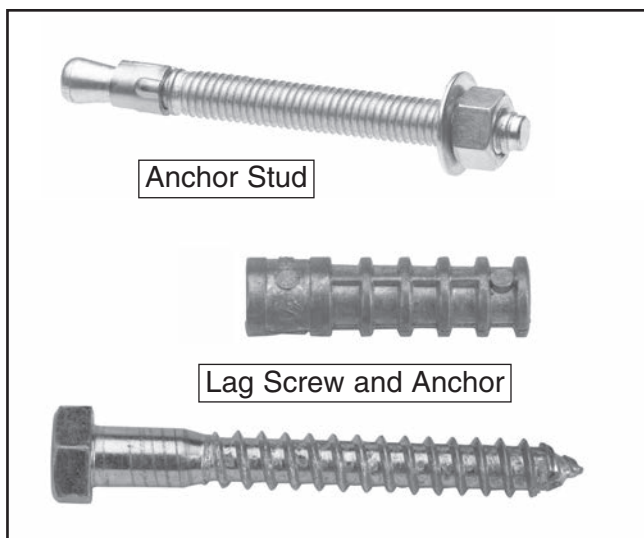


Figure 14. Typical fasteners for mounting to concrete floors.

NOTICE

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

Bolting to Wood Floors

The most secure method of mounting this drum sander to a wood floor is using $\frac{3}{8}$ " hex bolts with flat washers, and securing the bolts from under the floor with flat washers, lock washers and hex nuts, as shown in Figure 15. Use lag bolts with washers only if you do not have access to the underside of the floor.

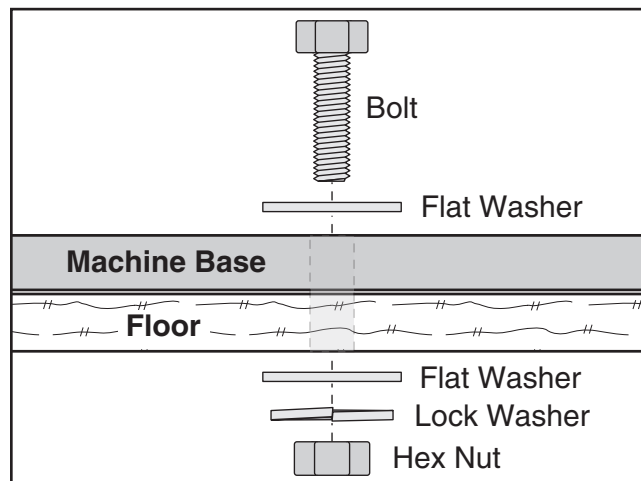


Figure 15. Bolting to a wood floor.

Dust Collection

CAUTION

DO NOT operate the Model G0449/G0450 without an adequate dust collection system. This sander creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Sander: 1600 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.

We recommend using a dust collection system that produces a minimum of 1600 CFM. A fine layer of dust will be present on your stock as it comes out of the sander. This is normal.



To connect a dust collection hose:

1. Attach 4" dust collection hoses to the dust ports shown in **Figure 16**, and secure them with hose clamps.

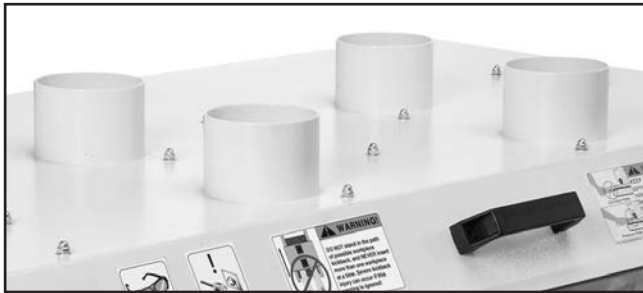
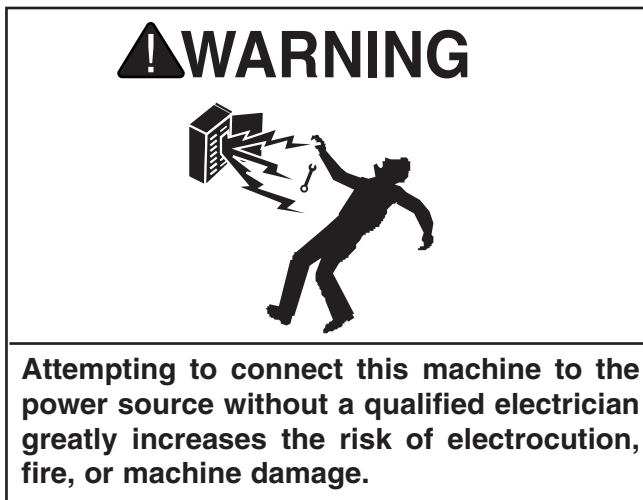


Figure 16. Dust port locations.

Power Connection

Before connecting to power, read through the **SECTION 2: CIRCUIT REQUIREMENTS** section on **Page 11** to check that your setup follows the safety and circuit requirements for this machine. Be sure to also have your electrician on hand for the "Test Run" in case the power is connected out of phase (Model G0450 only).



To connect the sander to the power source:

1. Remove cover from the power connection junction box on the rear of the frame.

2. Feed the power wires through a strain relief on the bottom of the junction box, tighten the strain relief, connect the cord to the terminals shown in **Figure 17** or **18**, and reinstall the junction box cover.

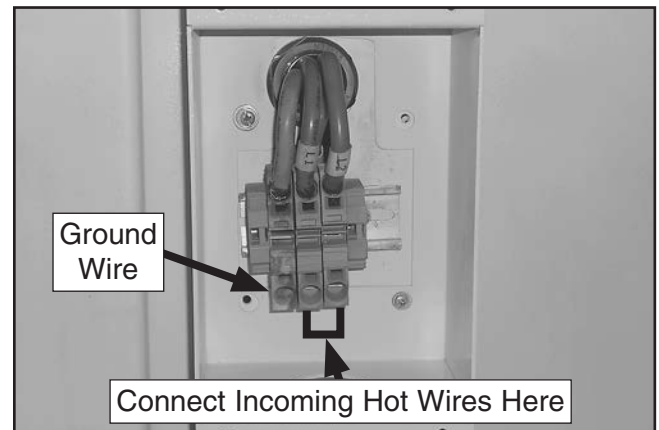


Figure 17. G0449 junction box wiring.

Note (Model G0450 Only): When using a phase converter, connect the manufactured power leg or "wild wire" to the L2 terminal (**Figure 18**). The L2 terminal can handle power fluctuation because it is wired directly to the motor. The other wires connect to the controls and must have consistent power to prevent damage.

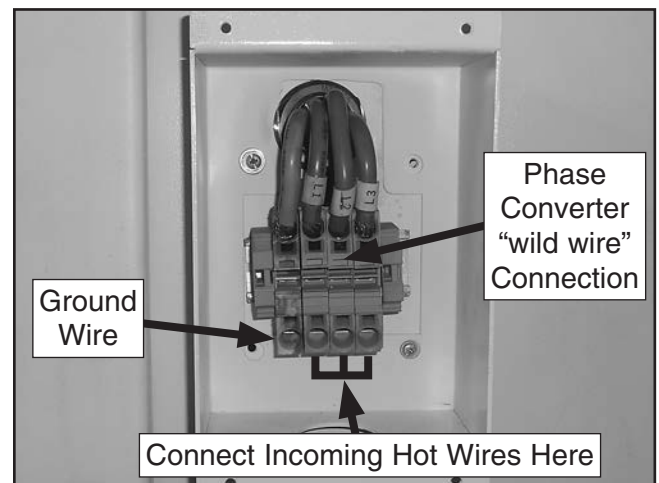


Figure 18. G0450 junction box wiring.

3. Shut off the main power at the power source circuit breaker, and attach the wires to the locking shutoff switch to complete the power connection.
4. Replace the junction box cover and turn on the the locking shutoff switch to enable power.



Gear Oil Check

To check the gear oil:

1. Check the sight glass shown on the back of the gear box to make sure gear oil is present, as shown in **Figure 19**.

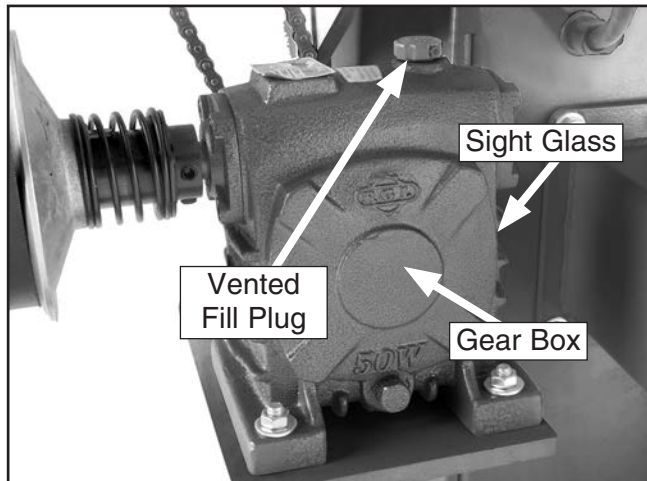


Figure 19. Typical vented fill plug (sight glass not shown).

2. If the gearbox oil level is low, follow the steps on **Page 31** to refill the oil.

Test Run

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

The test run consists of verifying the following: 1) The motors power up and run correctly, 2) the motors turn the correct direction (machine is not wired out of phase, G0450 only), and 3) the EMERGENCY STOP button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 33**.

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

!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 features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.
2. Make sure the feed motor gearbox is full of oil and the shipping seal is removed from the vented fill plug.
3. Ensure all tools and objects used during setup are cleared away from the machine, and all covers and panels are closed.



4. Push the EMERGENCY STOP button in, then twist it clockwise so it pops out. When the EMERGENCY STOP button pops out, the switch is reset and ready for operation (see Figure 20).

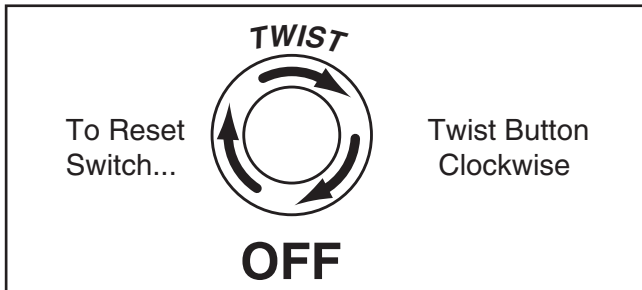


Figure 20. Resetting the switch.

5. **Model G0449:** Press the CONVEYOR START button.

—If any problems occur, press the EMERGENCY STOP BUTTON.

Model G0450: Verify that the power is not connected out of phase by pressing the CONVEYOR START button, using the criteria below:

—If the top of the conveyor belt moves toward the back of the machine, it is moving in the correct direction.

—If the top of the conveyor belt rotates toward the front of the machine, it is moving in the wrong direction. Stop the machine, DISCONNECT THE POWER, then swap any two wires L1, L2, or L3 at the incoming power terminal block. If using a phase converter for 240V 3-phase operation, ONLY swap the L1 and L3 wires (see Figure 21) to correct the conveyor belt rotation. (The "wild wire" is connected to the L2 terminal.)

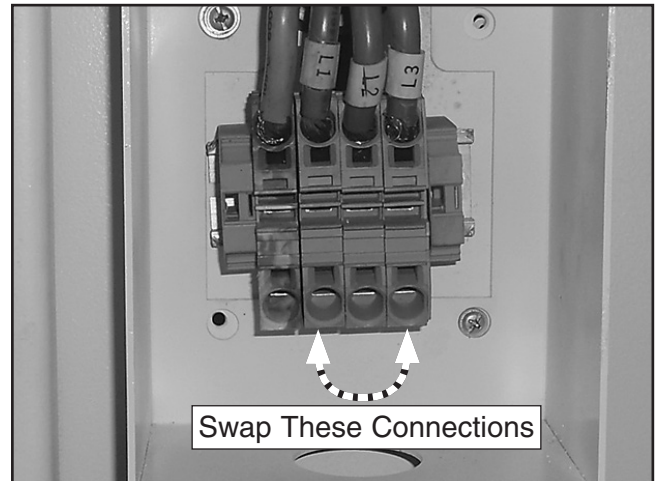


Figure 21. Swapping L1 and L3 wires at incoming power junction box.

6. Press the CONVEYOR STOP button to stop the machine.
7. Press the SANDING DRUMS START and SANDING DRUMS STOP buttons. The sanding drums should start, run, and stop smoothly.
8. Press the EMERGENCY STOP button to stop the machine.
9. WITHOUT resetting the switch, press the CONVEYOR START button. The machine should not start.

—If the machine DOES NOT start, the EMERGENCY STOP button safety feature is working correctly.

—If the machine DOES start (with the EMERGENCY STOP button pushed in), immediately disconnect power to the machine.

The EMERGENCY STOP button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

10. Reset the EMERGENCY STOP button.



11. Press the CONVEYOR START button, then press the emergency stop bar. The sander will come to a complete stop. The stop bar should only be used during emergencies. The emergency stop bar switch will wear quicker if this feature is used for regular shut down.

—If the conveyor belt does not come to a complete stop, the emergency stop bar is not working correctly. This safety feature must work properly before proceeding with regular operations. Immediately disconnect power to the machine and call Tech Support for help.

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.

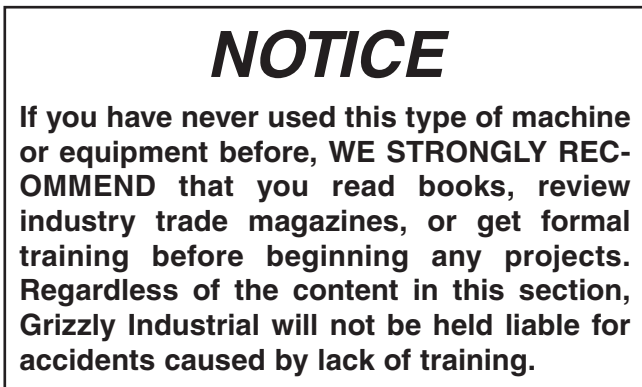
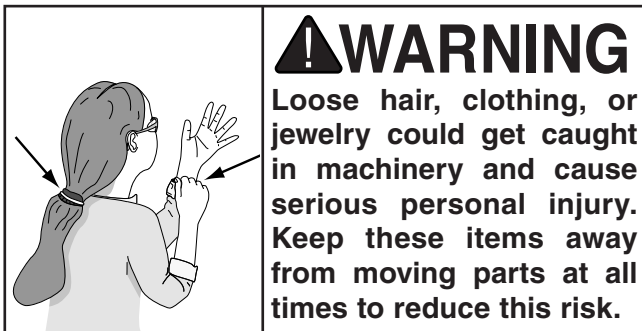
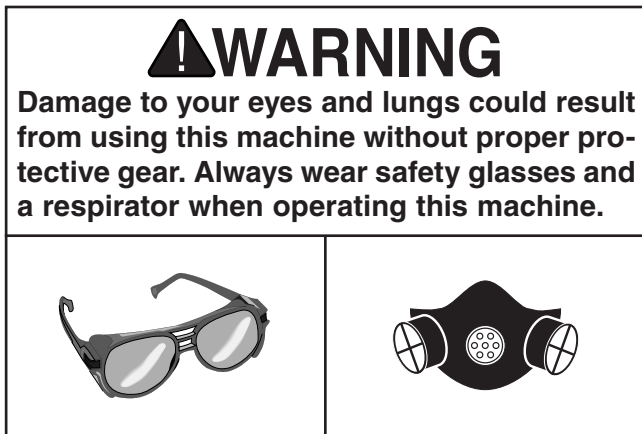
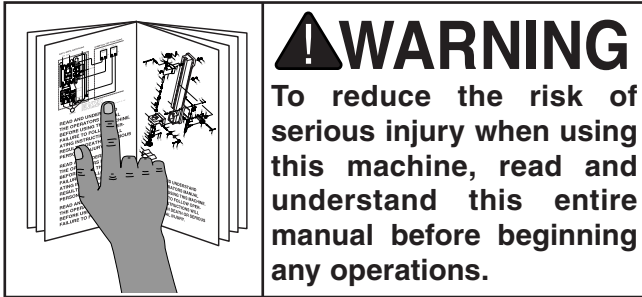
However, because of the many variables involved with shipping, some of these adjustments may need to be repeated to ensure optimum results. Keep this in mind as you start to use your new drum sander.

Step-by-step instructions for these adjustments can be found in the SERVICE section.

1. V-Belt Tension (**Page 36**). Perform after the first 16 hours.
2. Conveyor Tensioning & Tracking (**Page 40**).
3. Drum Adjustments (**Page 41**).
4. Pressure Roller Height (**Page 46**).



SECTION 4: OPERATIONS



Basic Controls

Refer to **Figures 22–23** and the following descriptions to become familiar with the basic controls of this machine.

Control Panel

Sanding Drums Start Button: Starts the sanding drums.

Conveyor Start Button: Starts the conveyor belt.

AMP Draw Meter: Indicates the combined amperage draw of both motors, to help control the load so as not to damage the motors.

Emergency Stop Button: Stops all electrical power to motors in event of emergency.

Conveyor Stop Button: Stops the conveyor belt.

Sanding Drums Stop Button: Stops the sanding drums.

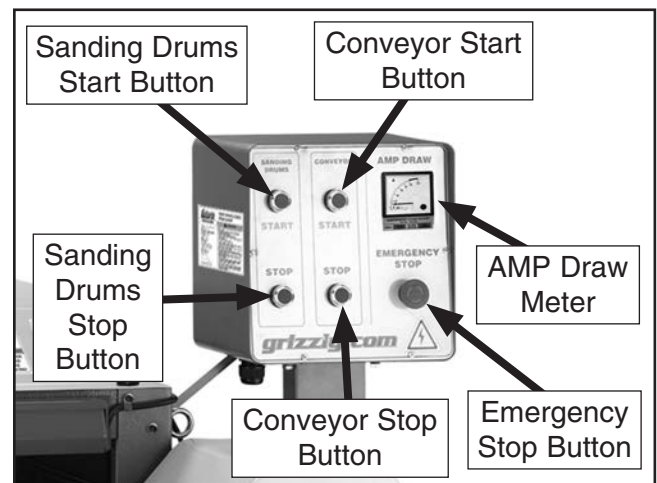


Figure 22. Control panel.



Additional Controls

Table Height Handwheel: Manually raises or lowers the conveyor table. One full turn of the handwheel changes the height of the table 0.020."

Depth Scale: Indicates the thickness the workpiece will be after it has been sanded.

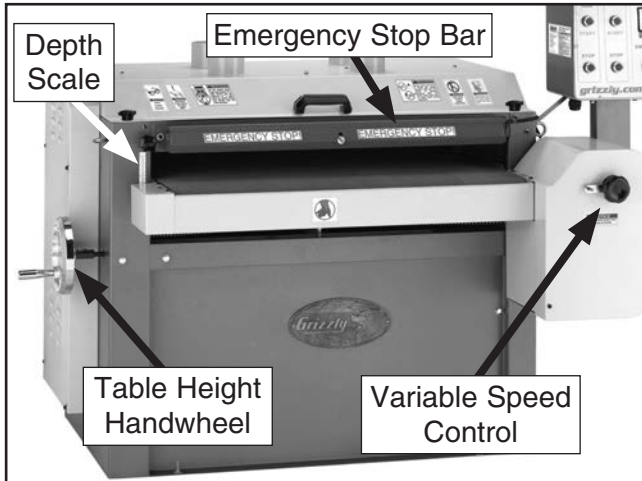


Figure 23. Additional front controls.

Emergency Stop Bar: Stops electricity to the motors to stop the sander immediately.

Variable Feed Rate Dial: Adjusts the feed rate between 6 and 18 FPM.

Operation Overview

A typical workpiece is sanded by turning the sanding drum and conveyor motors **ON**.

While standing to the side of the sander, the operator places the workpiece on the conveyor belt. As the workpiece moves forward on the conveyor, the front pressure rollers press down on the top surface of the workpiece. The workpiece moves forward, passing under the front and rear sanding drums, which remove material from the workpiece surface. A pressure roller behind each sanding drum exerts downward pressure on the workpiece, thereby minimizing the possibility of the workpiece slipping and kicking back at the operator. The operator receives the workpiece at the rear of the sander.

Since the sanding drums only remove a small amount of material, the workpiece is usually passed through the sander, then turned 180° to ensure an even cut. This is repeated to yield the desired result.

The operator rotates the table height handwheel to control the cutting depth. If the handwheel is rotated $\frac{3}{4}$ turn, approximately $\frac{1}{64}$ " of the workpiece will be removed by the sanding drums.

Typically the operator installs a coarser grit sandpaper on the front drum and a finer grit sandpaper on the rear drum, then uses combinations of progressively higher grit numbers.

A variable speed knob allows the operator to adjust the conveyor speed for the specific type of workpiece and finish stage.



Stock Inspection and Requirements

Some workpieces are not safe 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 ONLY sanding natural and man-made wood products. This machine is NOT designed to sand metal, glass, stone, tile, drywall or cementitious backerboard.
- **Foreign Objects:** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While sanding, these objects can become dislodged and tear the sanding belts. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT sand the workpiece.

- **Excessive glue or finish:** Sanding workpieces with excess glue or finish will load up the abrasive, reducing its usefulness and lifespan.
- DO NOT sand boards less than 9" long, 2" wide and $\frac{1}{16}$ " thick to prevent damage to the workpiece and to reduce the risk of your hands contacting the abrasive belt (see **Figure 24**).

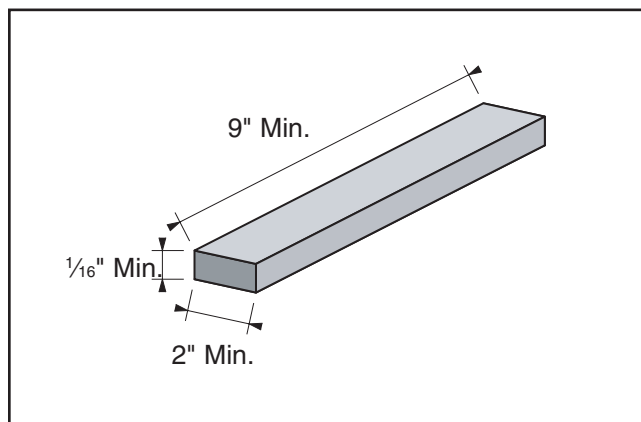


Figure 24. Minimum dimensions for sanding.



Depth of Cut

The optimum depth of cut will vary based on the type of wood, feed rate, and sandpaper grit. Under most sanding conditions, the depth should not exceed $\frac{1}{64}$ " (approx. $\frac{3}{4}$ turn of the handwheel). Each full turn of the table height handwheel raises the conveyor table approximately 0.020". 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 handle (**Figure 25**) 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.

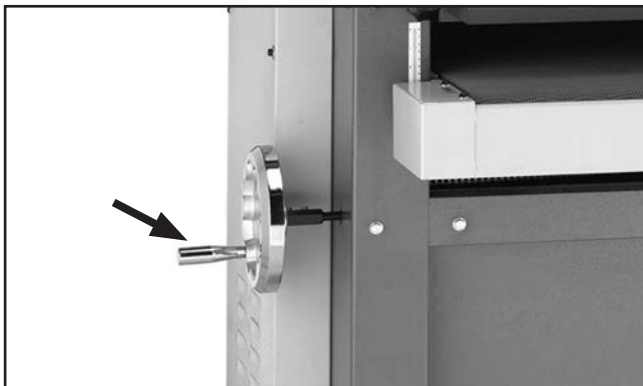


Figure 25. Table height handwheel.

2. Start the conveyor and sanding drums and feed the workpiece into the sander. SLOWLY raise the conveyor table until the workpiece makes light contact with the sanding drums. This is the correct height to begin sanding the workpiece.

Variable Speed

The variable speed knob allows you to increase the feed rate from 6–18 FPM. The correct speed to use depends on the type of stock you are using (hardwood vs. softwood) and the stage of finish you are at 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. Use trial-and-error to determine the best settings for your specific applications.

To adjust the conveyor speed:

1. Start the conveyor (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. Turn the knurled collar clockwise to release the variable speed knob (**Figure 26**), then rotate the knob counterclockwise to increase the feed speed or clockwise to decrease the feed speed.

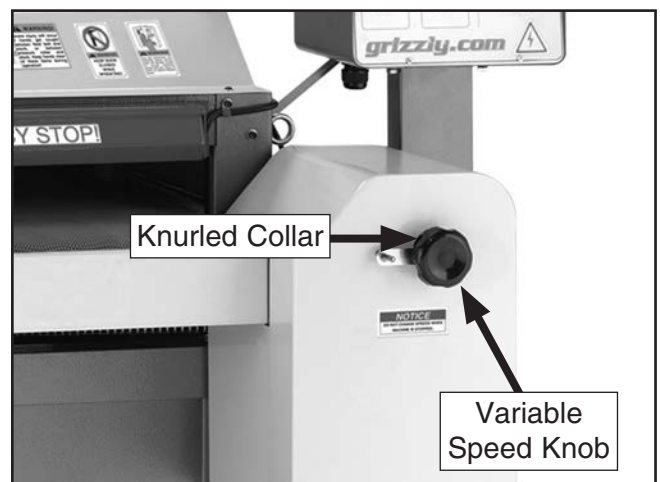


Figure 26. Variable speed knob.



Using the Amp Draw Meter

The amp draw meter (Figure 27) keeps the machine from being overloaded during sanding operations.

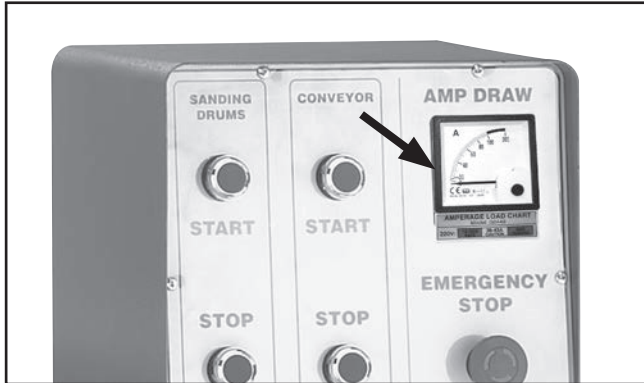


Figure 27. Amp draw meter.

As a general rule, always start with a shallow sanding depth and carefully increase the sanding depth. Keep the amp load in the green range during operation. Generally, the normal depth of cut is no more than 1/64" or 0.016" for a 36 1/2" wide board using coarse sandpaper. DO NOT work your machine in the red zone as shown on the Amperage Load Chart. If operated in the red zone, the motor will lose RPM, the start capacitor will energize, and capacitor or motor damage will occur.

Amp load is directly affected by many factors such as feed rate, depth of cut, wood type, sandpaper grit, and workpiece width.

G0449 Maximum Amp Load 47A
G0450 Maximum Amp Load at 240V 43A
G0450 Maximum Amp Load at 480V 21.5A

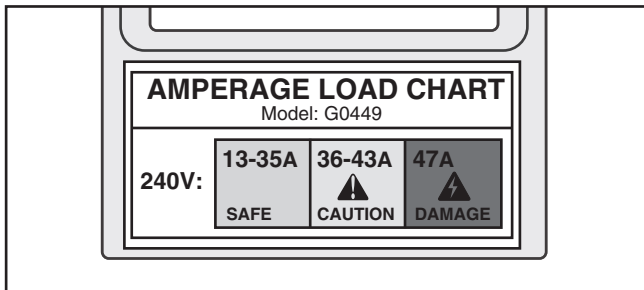


Figure 28. G0449 amp load chart.

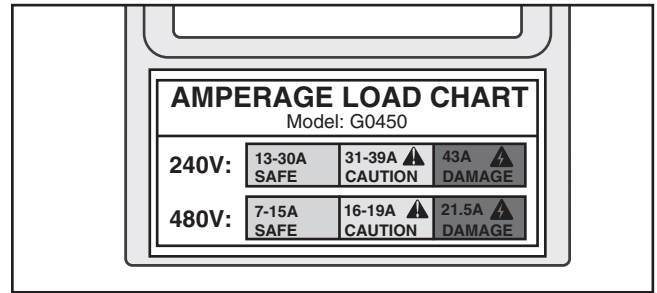


Figure 29. G0450 amp load chart.

Sanding

! WARNING

Close all covers and panels before starting the drum sander. Failure to do so could result in severe personal injury.

! WARNING

DO NOT sand more than one board at a time side-by-side. 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 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 26**.
2. Start the dust collector, the drum motor, and the feed motor.
3. Feed the workpiece through the sander while standing to the side and monitor the amp meter; if it approaches the maximum amp load, lower the conveyor table.
4. Run wide stock through two or three times without adjusting the table height. Turn the stock 180° between passes to ensure an even cut. Do not sand more than one workpiece at a time side-by-side.



Sanding Tips

- Replace the sandpaper with a higher grit to achieve a finer finish.
- Raise the table with a maximum of $\frac{3}{4}$ turn of the height handle 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 9" long or less than $\frac{1}{16}$ " 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 30**).
- 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.

The Model G0449/G0450 allows you to place a different grit sandpaper on each drum. The front drum should have a coarser grit than the rear. Usually this translates into combinations of successive group types. A common selection for stock that is planed before being sanded is a 100/150 grit combination.

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

The Model G0449/G0450 is designed for 6" wide sandpaper rolls.

To change the paper:

1. DISCONNECT POWER TO SANDER!
2. Lift the top cover and place a screwdriver through the right side of the frame and into the side of the drum, as shown in **Figure 30**.

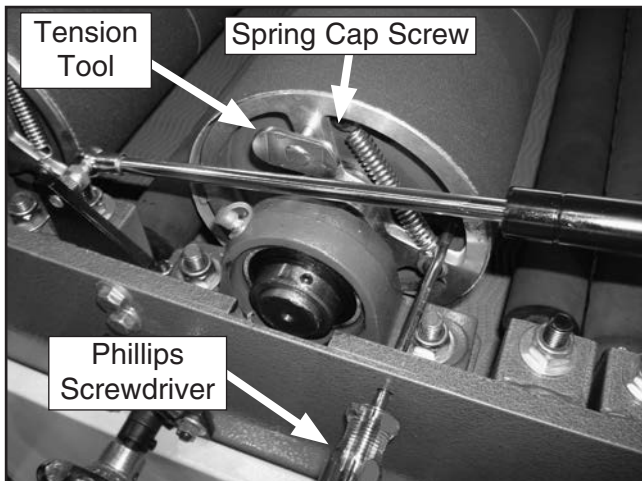


Figure 30. Locking the tension wheel.

3. Rotate the sanding drum to stretch the tension spring. Fit the end of the spring tension tool shaft through the hole in the tension wheel arm (see **Figure 30**) and into the head of the cap screw securing the spring.
4. Remove the screwdriver.
5. Repeat **Steps 2–4** on the opposite end of the sanding drum, then remove the spring clips. **Note:** *Replace the paper on each drum individually. Once the paper is removed the drums can be slippery and hard to rotate.*
6. Unwind the old sandpaper and use it as a pattern, or use the pattern in **Figure 31** to cut the sandpaper to the necessary shape, or see **Figure 32** if using a different width of sandpaper.

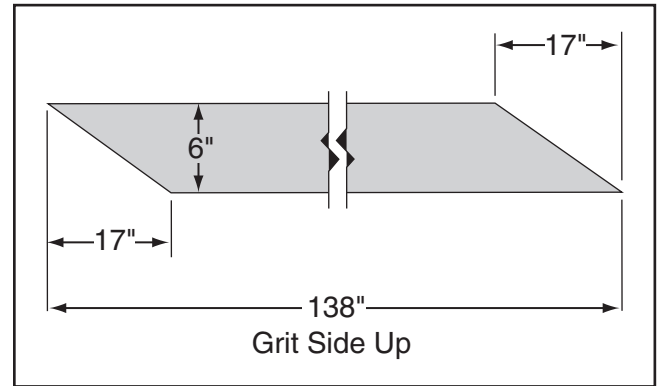


Figure 31. Sandpaper pattern.

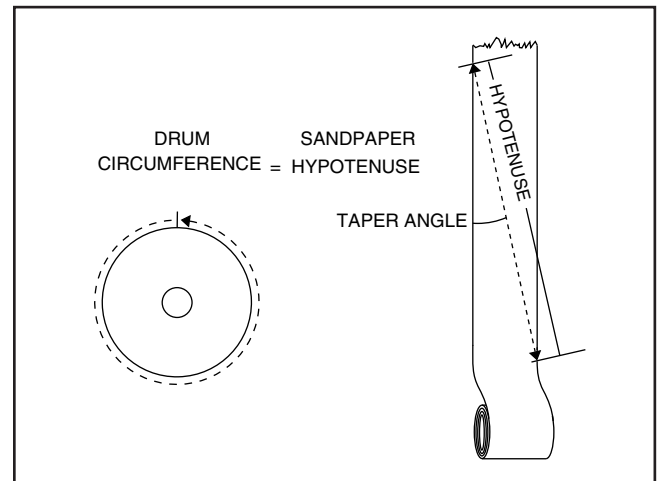


Figure 32. Finding sandpaper taper angle.

7. Start with the left side of the drum, fold the corner of the sandpaper into the spring clip, then install the clip onto the tension wheel. Tap the clip with a hammer or mallet to ensure it is seated. **Note:** *DO NOT pound the clip over the sandpaper. It is not necessary to drive the clip completely on, just make sure it is secure. Too much force will break the clip!*
8. Tightly spiral the paper onto the drum, ensuring there are no bubbles or overlapping edges, leaving a uniform $\frac{3}{16}$ " gap between the spirals as you wind the paper around the drum.
9. Fold the corner of the loose end into the spring clip, then install the clip onto the right tension wheel.
10. Remove the spring tension tool from the ends of the sanding drum to tension the paper, and repeat **Steps 2–10** for the other drum.



SECTION 5: ACCESSORIES

Aluminum Oxide Sanding Rolls, 6" x 50'

H4776—36 Grit: Use for rough sawn boards, thickness sanding, and glue removal.

G2787—60 Grit: Use for thickness sanding and glue removal.

H4777—80 Grit: Use for removing planer marks and initial finish sanding.

G2788—100 Grit: Use for removing planer marks and initial finish sanding.

H4778—120 Grit: Use for finish sanding.

G2789—150 Grit: Use for finish sanding.

H2499—Small Half-Mask Respirator

H3631—Medium Half-Mask Respirator

H3632—Large Half-Mask Respirator

T20539—Cartridge Filter Pair P100

H3635—Cartridge Filter Pair Aerosols

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



Figure 33. Half-mask respirator with disposable cartridge filters.

Call 1-800-523-4777 To Order

H9817—Power Twist® V-Belts, B 5/8" x 6'

Perfect for lathes, table saws, bandsaws and other powered tools. Smooth running with less vibration than solid belts. Power Twist® V-Belts can be customized in minutes to any size—just add or remove sections to fit your needs. Carry a Power Twist® V-Belt in your vehicle for a fix anywhere solution to broken fan belts.

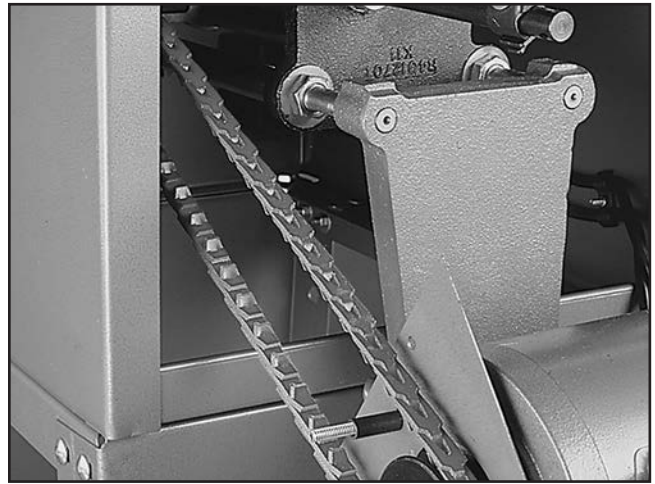
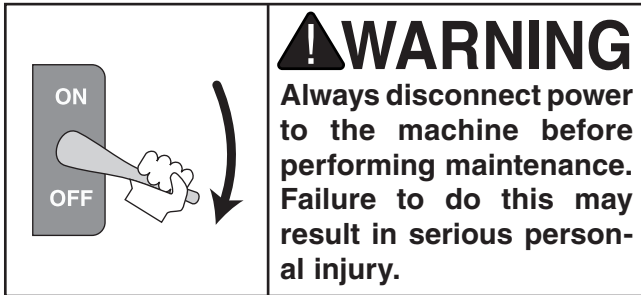


Figure 35. Power Twist® V-Belt.



SECTION 6: MAINTENANCE



Schedule

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

Daily Check:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords or plugs.
- Worn or damaged sandpaper.
- Damaged V-belts.
- Any other unsafe condition.

Cleaning

Cleaning the Model G0449/G0450 is relatively easy. From time to time vacuum wood dust off of the internal components, especially the motor.

Lubrication

Moving parts such as chains should be lubricated periodically with a light machine oil. Motor bearings need no lubrication.

Pillow Bearing: Must be lubricated every 20 hours of operation. Use a high-quality, lithium-based grease. A grease fitting (**Figure 36**) is located on the top of each pillow bearing. Give only one to two pumps of the grease gun. Too much grease can pop seals out.

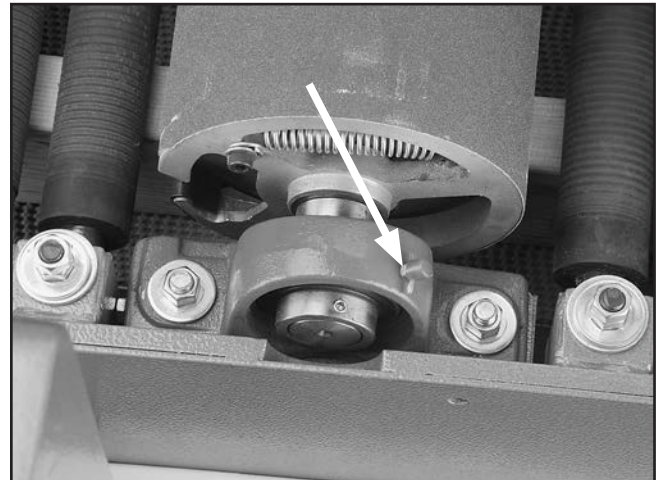


Figure 36. Location to lubricate pillow bearing.

Gearbox: Change the oil in the gearbox every 500 hours with new 80-90W automotive grade gear oil.

1. Remove the variable speed knob, the hex nut, knurled collar, and the four button head screws securing the feed motor cover (see **Figure 37**).



Figure 37. Removing feed motor cover.



2. Remove the feed motor cover, loosen the four button head cap screws (**Figure 38**) that secure the gear box to the motor bracket, and remove the V-belt.

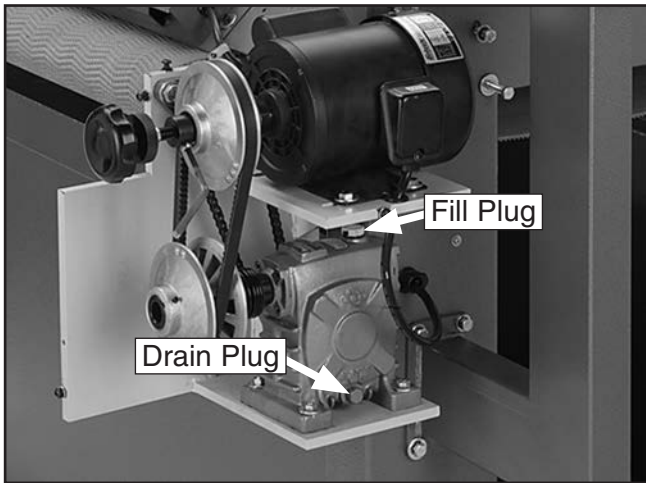


Figure 38. Lubricating gear box.

3. With the oil and gearbox warm, slide the gearbox out, remove the fill plug (**Figure 38**), remove the drain plug, drain the oil, and reinstall the drain plug.
4. Add new oil, reinstall the fill plug, then reinstall the gearbox, cover, and other components removed in **Steps 1 & 2**.

Table Lift Screws (Figure 39): Should be cleaned with mineral spirits and painted with lithium grease every six months. Then, move the table up or down to spread the grease thoroughly over the threads. Do not overlubricate.

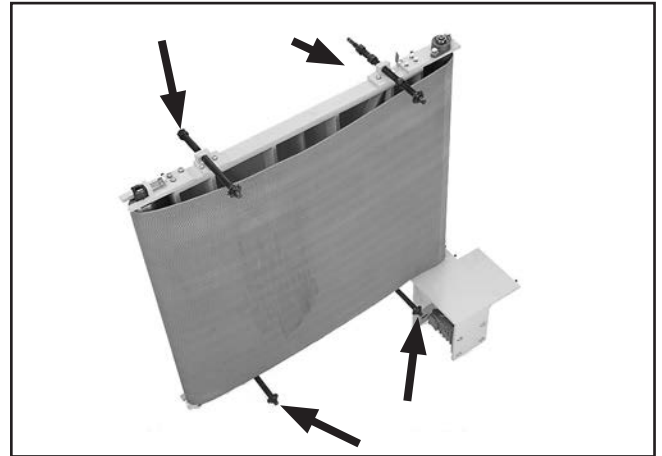


Figure 39. Table lift screws (table removed for clarity).

Worm Gear: Paint a light coat of lithium grease on the worm gear threads (**Figure 40**) once a year.

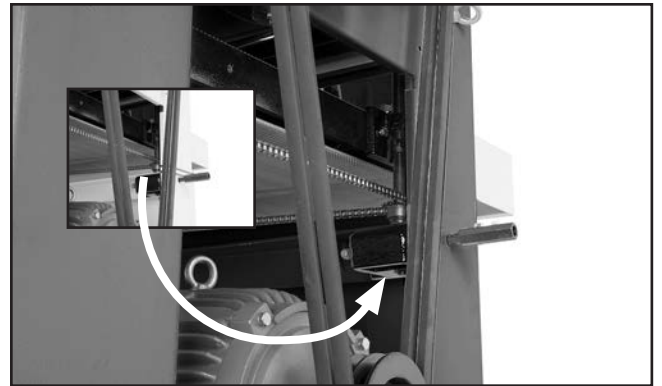


Figure 40. Worm gear threads.

⚠️ WARNING

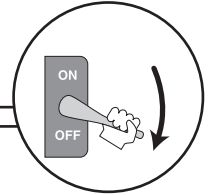
Failure to routinely inspect your drum sander for damage and wear could result in unsatisfactory work results, premature component or machinery failure, or operator injury. We recommend you create a checklist for routine inspection and maintenance. Remember to always disconnect the drum sander from its power source before attempting to inspect, adjust, or repair this machine!



SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> Emergency stop push-button is engaged/faulty. Power supply switched OFF or is at fault. Start capacitor is at fault (G0449 only). Motor connection wired incorrectly. Thermal overload relay has tripped. Wall fuse/circuit breaker is blown/tripped. Contactors not getting energized/has burnt contacts. Wiring is open/has high resistance. Emergency stop push-panel is stuck/switch is at fault. Motor is at fault. 	<ol style="list-style-type: none"> Rotate clockwise slightly until it pops out/replace it. Ensure power supply is switched on; ensure power supply has the correct voltage. Test/replace if faulty (G0449 only). Correct motor wiring connections. Unplug machine, open magnetic switch cover, turn amperage dial on Thermal Protection Circuit Breaker to a higher amperage setting. Ensure circuit size is suitable for this machine; replace weak breaker. Test for power on all legs and contactor operation. Replace unit if faulty. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. Free push-panel from binding; replace faulty switch. Test/repair/replace.
Machine stalls or is overloaded.	<ol style="list-style-type: none"> Feed rate too fast for task. Workpiece material is not suitable for this machine. Run capacitor is at fault (G0449 only). Belt(s) slipping. Motor connection is wired incorrectly. Motor bearings are at fault. Machine is undersized for the task. Contactors not getting energized or has poor contacts. Motor has overheated. 	<ol style="list-style-type: none"> Decrease feed rate. Only cut wood products; make sure moisture content is below 20% and there are no foreign materials in the workpiece. Test/repair/replace (G0449 only). Replace bad belt(s) as a matched set, align pulleys, and re-tension. Correct motor wiring connections. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. Use new sandpaper with appropriate grit; reduce the feed rate/depth of sanding. Test for power on all legs and contactor operation. Replace if faulty. Clean off motor, let cool, and reduce workload.



Motor & Electrical Continued

Symptom	Possible Cause	Possible Solution
Machine stalls or is overloaded.	10. Motor is at fault. 11. Air circulation through the motor restricted.	10. Test/repair/replace. 11. Clean off motor to provide normal air circulation.

Machine Operations

Symptom	Possible Cause	Possible Solution
Drums run backwards (G0450 only).	1. Two of the power wires are reversed (G0450 only).	1. Switch two of the current carrying wires at the main power block (G0450 only). (Page 20)
Machine slows when sanding, making squealing noise, especially on start-up.	1. V-belts loose. 2. V-belts worn out.	1. Tighten V-belts (Page 36). 2. Replace V-belts (Page 37).
Loud repetitious noise coming from machine.	1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belts are defective.	1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace V-belts (Page 37).
Vibration when sanding.	1. Loose drum pillow bearings. 2. Worn drum pillow bearings.	1. Tighten drum pillow bearings. 2. Replace drum pillow bearings.
Grinding, screeching, or rubbing noise when sanding drums are powered up.	1. Drum bearings lack sufficient grease. 2. Drum bearings worn.	1. Grease the pillow bearings (Page 31). 2. Replace the drum bearings.
Short V-belt lifespan.	1. Pulleys not aligned correctly. 2. Improperly tensioned.	1. Align pulleys (Page 37). 2. Properly tension V-belts (Page 36).
Machine lacks power; drums stop turning under load.	1. V-belts loose. 2. Too much pressure on pressure rollers.	1. Tighten V-belts (Page 36). 2. Reduce pressure roller pressure (Page 46).
Conveyor slips under load.	1. Conveyor is too loose. 2. Too much load.	1. Tension conveyor (Page 40). 2. Decrease load.
Conveyor tracks to one side; conveyor hits the roller cover.	1. Conveyor tracking is incorrect.	1. Track the conveyor so it runs straight (Page 41).
Workpiece pulls to one side during sanding operations.	1. One of the sanding drums is not parallel with the table.	1. Adjust the sanding drums parallel to the table (Page 41).
Excessive snipe.	1. Too much pressure roller pressure. 2. Too much pressure from rear pressure rollers. 3. Lack of outfeed support.	1. Reduce pressure roller pressure (Page 46). 2. Reduce rear pressure roller pressure (Page 46). 3. Set up outfeed table or have someone catch the workpiece as it comes out.



Symptom	Possible Cause	Possible Solution
Workpiece kicks out.	1. Not sufficient pressure roller pressure.	1. Increase pressure roller pressure (Page 46).
Sanding drums make scraping noises.	1. Drums scrape dust scoop.	1. Adjust dust scoops so they do not touch sanding drums (Page 48).
Sandpaper tears off drums during operation.	1. Nail/staple in workpiece. 2. Sandpaper not fastened correctly. 3. Drums not perpendicular to the feed direction.	1. Sand only clean workpieces. 2. Install the sandpaper correctly (Page 29). 3. Adjust the drums perpendicular to the feed direction (Page 41).
Table elevation controls are stiff and hard to adjust.	1. Table lock is engaged. 2. Table lift screws dirty or loaded with sawdust. 3. Chain idler roller sprocket lock nuts have been tightened against roller. 4. Elevation handle worm gear is dirty or loaded with sawdust.	1. Disengage table lock. 2. Clean and regrease table lift screws (Page 48). 3. Adjust the lock nuts on the idler roller sprocket so the roller can spin freely. 4. Remove the worm gear box, clean it, and regrease it.
Poor dust collection.	1. Dust collection lines incorrectly sized for this machine. 2. Dust collector underpowered or too far away from this machine.	1. Use at least an 8" main line with two 6" branch lines that each Y into 4" at the machine. 2. Upgrade your dust collector or decrease the distance from the dust collector to the machine.



Gauge Blocks

The gauge blocks described here will be required to complete most of the service procedures in this section. After you have made them, they can be conveniently stored inside of the sander cabinet for future use.

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

To make the gauge blocks:

1. Edge joint the concave edge of a 7' long 2x4 flat on a jointer, as shown in **Figure 41**.

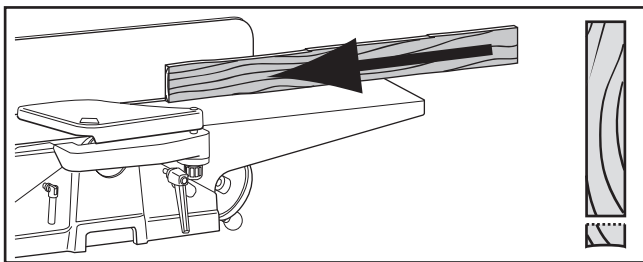


Figure 41. Edge jointing on a jointer.

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**.

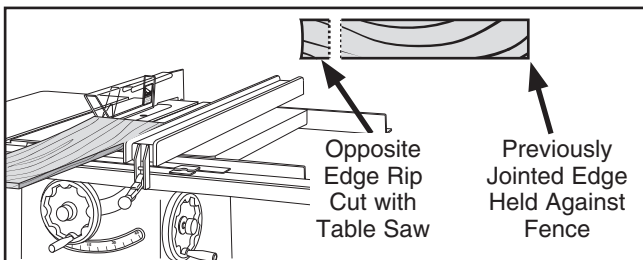


Figure 42. Rip cutting on a table saw.

3. Using a miter saw or circular saw, cut 6" off each end of the board to remove any portions with slight snipe from jointing. Then cut the 2x4 into two even pieces to make two 36" long wood gauge blocks.

Note: Save one of the 6" pieces for making a small gauge block in Drum Adjustments on **Page 41**.

Steps 1 & 2 above can be skipped, but having these wood gauge blocks at an even height is critical to the accuracy of your overall adjustments.

V-Belt Service

Tools Needed:	Qty
Hex Wrench 5mm.....	1
Wrench 19mm.....	2
Straightedge (at least 24").....	1
Ruler.....	1

Tension

New V-belts often stretch and loosen up during the first 16 hours of use. After this period, they should be inspected and re-tensioned if necessary.

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

The correct V-belt tension is achieved when the V-belts can be deflected $\frac{1}{2}$ "– $\frac{3}{4}$ " when pushed in the middle with moderate pressure. See **Figure 43** for an example of how to perform a V-belt deflection test with a straightedge and ruler.

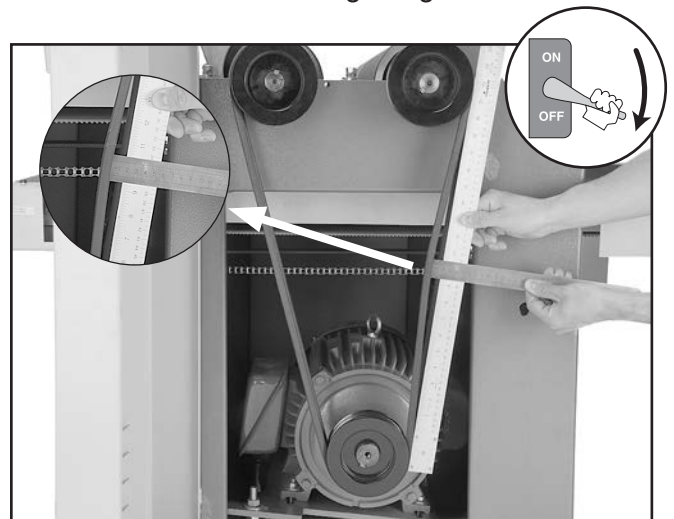


Figure 43. Checking V-belt tension with a straightedge and a ruler.



To adjust V-belt tension:

1. DISCONNECT POWER TO SANDER!
2. Remove the table height handwheel and open the pulley cover.
3. Using a 19mm wrench, turn the motor mount nuts in the direction shown in **Figure 44** to loosen or tighten the V-belts.
4. Close the pulley cover and reinstall the handwheel.

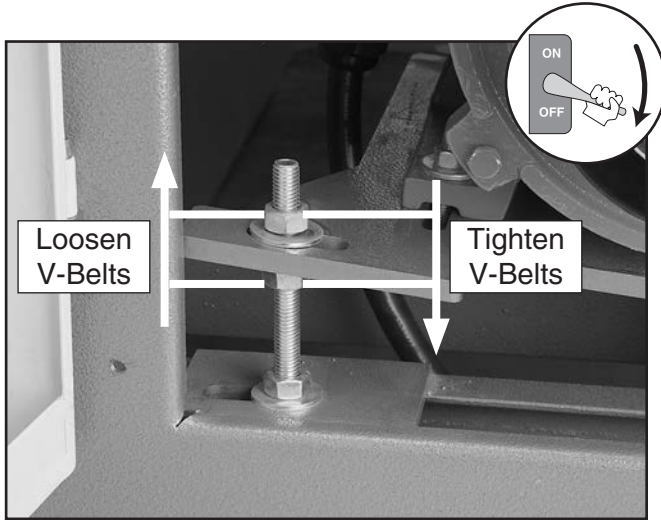


Figure 44. V-belt tension controls.

Removal/Replacement

Replace the V-belt if you notice fraying, cracking, glazing, or any other damage. A worn/damaged V-belt will not provide optimum power transmission from the motor to the drums.

V-belt removal and replacement is simply a matter of loosening the V-belts until you can roll them off the pulleys, replacing them with a **MATCHED** set, then re-tensioning them.

Note: A *matched set* means both the V-belts are the same size and also have the same serial number.

Pulley Alignment

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 (coplanar) 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 SANDER!
2. Remove the table height handwheel, open the pulley cover, and remove the V-belts.
3. Place a straightedge across the face of the motor pulley and the front drum pulley to check the alignment. The straightedge should sit evenly on the top and bottom part of both pulleys, as shown in **Figure 45**.



Figure 45. Checking pulley alignment with a straightedge.

4. Repeat **Step 3** with the straightedge placed against the motor pulley and rear drum pulley.
5. Loosen the pulleys and adjust them as necessary until they are all coplanar with each other.
6. Reinstall the V-belts, close the pulley cover and reinstall the handwheel.



Bearing Replacement

The Model G0449/G0450 is designed for many years of reliable service. But after long periods of heavy use, it may be necessary to replace the pillow bearings. Always replace both bearings on the same drum.

Tools Needed:	Qty
Hex Wrench 3mm.....	1
Wrench/Socket 17mm.....	1
Flat Head Screwdriver.....	1
Grease Gun	1
Grease.....	(As needed)

To replace the pillow bearings:

1. DISCONNECT POWER TO SANDER!
2. Open the top cover, and remove the mounting nuts, washers, and set screws shown in **Figure 46**.

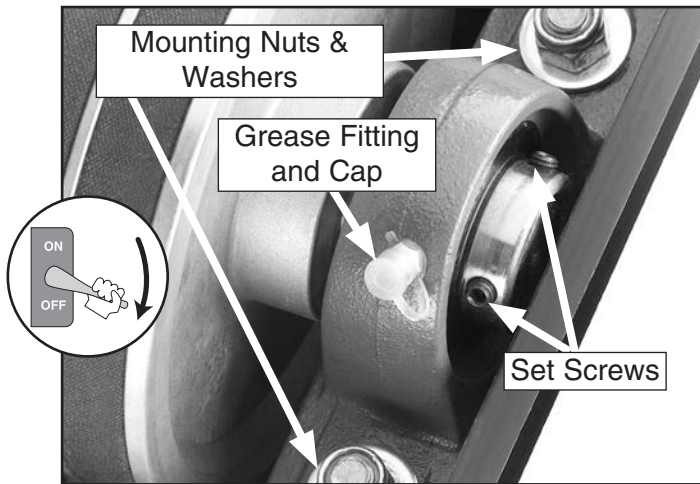


Figure 46. Pillow bearing mounting nuts, washers, and set screws.

NOTICE

Do not hammer on the bearing or housing, as you WILL damage these precision parts.

3. Lift the drum and slide the bearing housing and bearing from the drum shaft.
4. Clean and inspect the drum shaft for cracks, burrs, wear, and other damage; replace/repair as required.
5. Use a screwdriver to pry and rotate the bearing so it is horizontal to the bearing-housing mounting flanges, as shown in **Figure 47**.

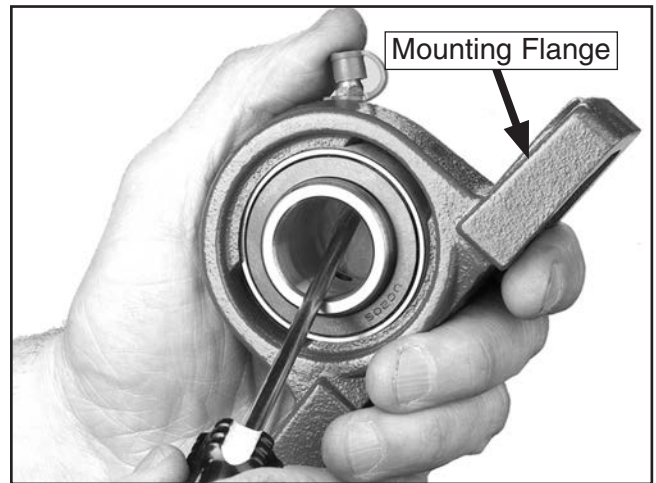


Figure 47. Bearing positioning for removal.

6. Slide the bearing out of the bearing housing, as shown in **Figure 48**.

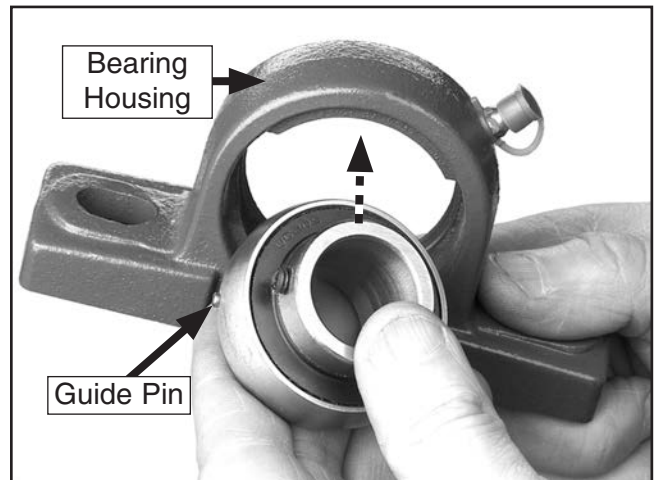


Figure 48. Typical removal and installation bearing positioning.



- Remove any metal or abrasives trapped in the bearing grease groove and grease port (see **Figure 49**), or contaminants will be pumped into the new bearing when you lubricate it, causing bearing failure.

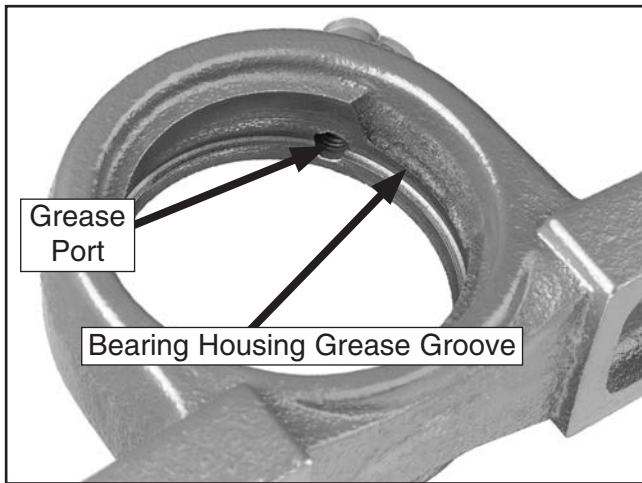


Figure 49. Typical bearing-block grease groove and grease port.

- Clean and inspect the bearing-housing for cracks, burrs, wear, and other damage; replace/repair as required. The bearing race should rotate inside of the bearing housing smoothly. If the race is loose or wobbles inside of the bearing housing, replace the bearing housing (**Figure 48**).

NOTICE

Make sure the bearing grease hole in the bearing lines up with the grease groove in the bearing housing and that no obstructions prevent bearing lubrication.

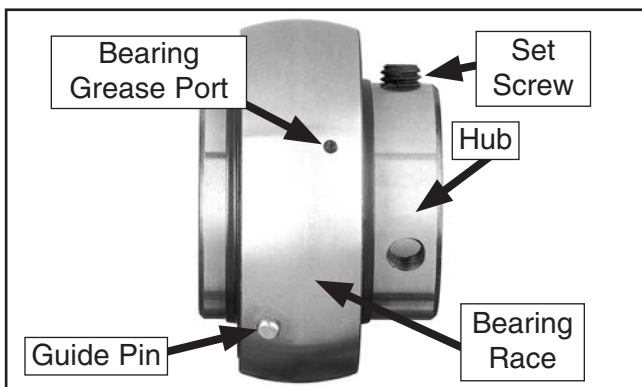


Figure 50. Key bearing parts

- Insert the new bearing into the bearing housing so the set screws and hub are on the same side as the grease fitting on the bearing housing (**Figures 46 and 50**).
- Slide (DO NOT hammer) the bearing housing and bearing onto the drum shaft.
- Lower the drum and pillow bearing onto the mounting studs, and install the flat washers and the nuts. Tighten the nuts in an alternating pattern until snug.
- Install and tighten the set screws.
- Wipe the grease fitting clean, and lubricate the bearing with just enough grease to slightly seep from the dust seal and wipe clean (these bearings are not pre-lubricated). DO NOT over-grease.
- Repeat **Steps 3—13** on all other bearings that need replacement. Always replace both bearings on the same drum.
- Adjust the drums and pressure rollers as outlined on **Pages 41 & 46**.



Conveyor Tensioning & Tracking

Tools Needed:	Qty
Wrench 19mm	1

Tensioning

The conveyor may slightly stretch with continued use and will eventually need to be tensioned. This is most obvious if the conveyor starts slipping on the rollers.

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

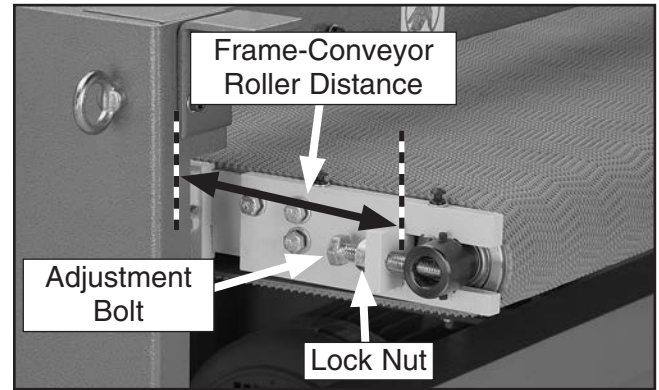
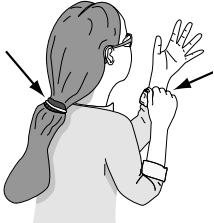


Figure 51. One side of conveyor tensioning & tracking controls (guard removed for clarity).

2. Measure the distance from the frame to the conveyor roller on both sides. Turn the adjustment bolts so the distance between the frame and conveyor roller is identical on both sides. Do not overtighten the conveyor. Your goal is to reach a $\frac{3}{4}$ " gap between the underside of the conveyor and the belt, as shown in **Figure 52**.

! WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

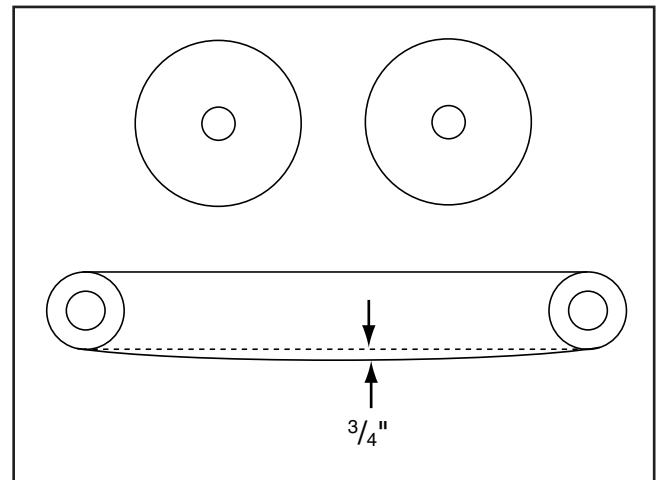


Figure 52. Conveyor belt hanging gap.

To tension the conveyor:

1. Using a 19mm wrench, loosen the lock nut (see **Figure 51**) on both sides of the conveyor.



Tracking

If the conveyor tracks to either side, then the tracking must be corrected or the conveyor will load up to one side and could rip or tear and have to be replaced.

Replacing a damaged conveyor is a big job. Always be careful to make sure that the belt does not travel too far to one side or the other.

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

To track the conveyor:

1. Make sure the drums are perpendicular to the feed direction (parallel with the conveyor roller). Go to **Drum Adjustments**.

After verifying that the drums are perpendicular to the feed direction, continue to the next step.

2. Turn the conveyor **ON** and watch it track.
3. Determine which side the conveyor is tracking towards (the loose side) and tension the adjustment bolt on that side until the conveyor tracks in the opposite direction. **Note:** *Tracking changes may take up to three minutes before they are noticeable.*
4. When the conveyor is near the middle of the rollers or table, loosen the adjustment bolt until the conveyor stops moving and tracks straight.

—If the conveyor tracks too far to the other side, then adjust the bolt as necessary to bring it back and repeat **Steps 2 & 3** until the tracking is correct.

Drum Adjustments

Tools Needed:	Qty
Hex Wrench 3, 5 mm	1ea
Wrench/Socket 17, 19mm.....	1ea
Flat Head Screwdriver.....	1
Measuring Tape.....	1
Feeler Gauge Set.....	1
Gauge Blocks (3' Long 2x4).....	2
Small Gauge Blocks (Page 43).....	2

There are three adjustments for the sanding drums: 1) the drums must be perpendicular to the feed direction (parallel with the conveyor roller, **Figure 53**); 2) the drums must be parallel to the top of the conveyor belt (**Figure 58, Page 44**); 3) the rear drum must be set approximately 0.007" to 0.015" below the front drum (**Figure 62, Page 45**).

At some point, you may need to readjust the rear drum parallel to the conveyor if you change the rear drum height to accommodate for different sandpaper thicknesses or finish requirements. Make sure the rear drum does not sit lower than 0.015" below the front drum.

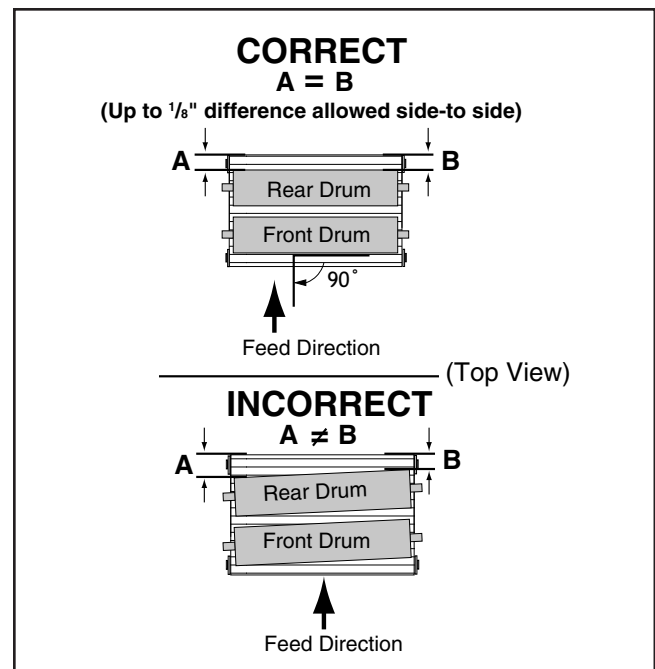


Figure 53. Drum perpendicular to feed direction.



Adjusting Drums Perpendicular to Feed Direction

The tolerances for having the drum perpendicular to the feed direction allow up to $\frac{1}{8}$ " difference from one side to the other (see **Figure 53**). If the drums are not perpendicular to the feed direction (in other words, parallel to the conveyor rollers), they may put a side load on the conveyor belt during operation, forcing the conveyor to track off to the side and possibly causing damage.

To adjust the drums perpendicular to the feed direction:

1. DISCONNECT POWER TO SANDER!
2. Check to make sure the conveyor roller is parallel to the machine frame, and make adjustments if needed. (Refer to **Page 40**.)
3. Open the top and pulley covers and remove the V-belts (refer to **Page 37** for V-belt removal instructions).
4. Remove the sandpaper from the drums for best results.
5. At both ends of the rear drum, measure the distance between the edge of the rear drum and the rear upper frame, as shown in **Figure 54**. The difference between these two measurements will tell you how close the drum is to being perpendicular to the feed direction (assuming that the conveyor roller is parallel to the machine frame).

—If the difference between the two measurements at each end are within $\frac{1}{8}$ ", skip to **Step 8**.

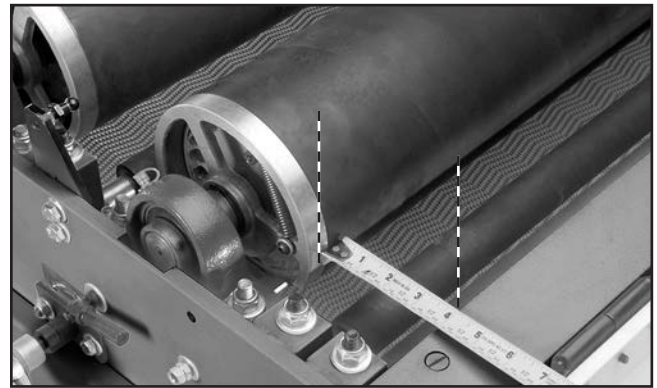


Figure 54. Measuring distance between edge of rear drum and the upper frame.

—If the difference between the two measurements at each end is more than $\frac{1}{8}$ ", continue to the next step.

6. Loosen the rear drum pillow bearing lock nuts, shown in **Figure 55**.

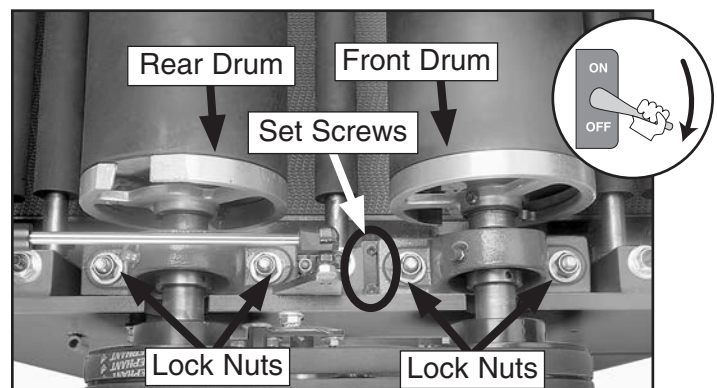


Figure 55. Front and rear drum adjustment locations.

7. Move one end of the drum forward or backward as needed in the slotted holes until the distance between the rear upper frame angle and drum is within $\frac{1}{8}$ " at each end, then tighten the rear drum pillow bearing lock nuts.



8. Measure the distance between the rear and front drum, as shown in **Figure 56**, on both sides.

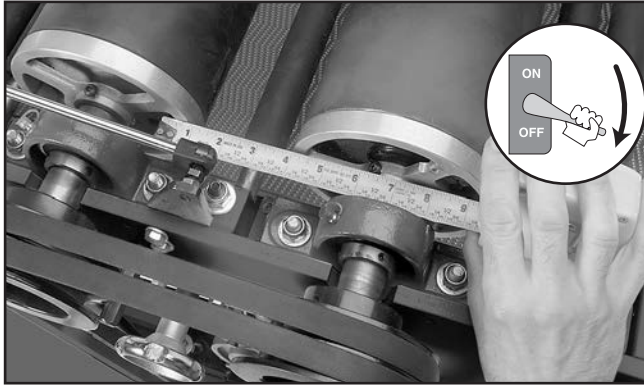


Figure 56. Measuring distance between rear and front drums.

—If the difference between the two measurements at each end is equal or less than $\frac{1}{8}$ ", skip to **Step 13**.

—If the difference between the two measurements at each end is more than $\frac{1}{8}$ ", continue to the next step.

9. Make two gauge blocks the same width as your measurement in **Step 8**.
10. Place the small gauge blocks on each end of the pressure roller between both drums as shown in **Figure 57**.

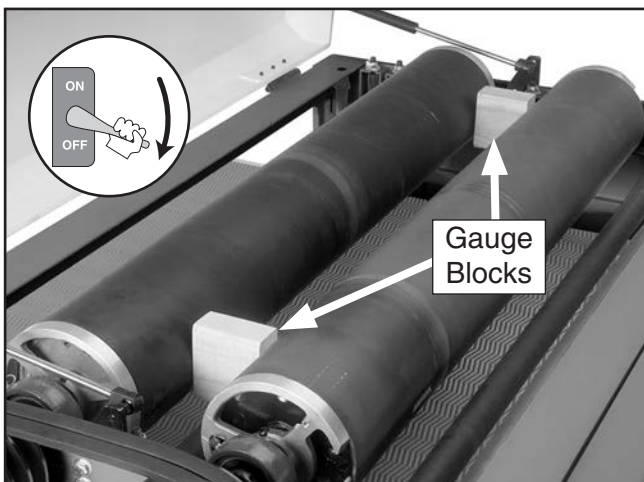


Figure 57. Example of small gauge block positioned between front and rear drums.

11. Loosen the front drum pillow bearing lock nuts (**Figure 55**).
12. Slide the front drum against the gauge blocks until they are snug between the front and rear drum. This will make the front drum parallel to the rear drum—which is parallel to the rear frame (conveyor rollers) and perpendicular to the feed direction.
13. Now, go to **Setting Rear Drum Height & Adjusting Drums Parallel to Conveyor Belt** on **Page 44**.
14. Tighten the front drum pillow bearing lock nuts.



Adjusting Drum Height & Drum-to-Conveyor Parallelism

The rear drum can be adjusted parallel to the conveyor belt in fine increments at the pillow bearings with the micro-adjust knobs, or the front drum can be adjusted parallel to the conveyor with the set screws on the pillow bearings. If, after performing the following procedure, you cannot adjust the drums parallel to the conveyor belt, it is possible that the conveyor table needs further adjustment. In that case, follow instructions on **Page 48** for adjusting the table parallel to the drums at the table lift screws.

Keep in mind that having the drums parallel to the top of the conveyor belt (see **Figure 58**) is critical to the sanding operation. Take care to adjust the drums parallel to the conveyor surface within 0.002" from one side to the other.

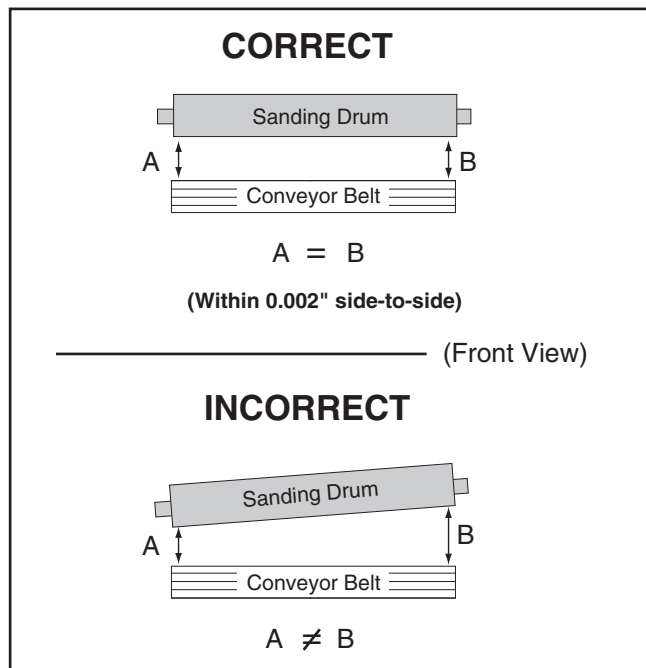


Figure 58. Drum parallel to conveyor belt.

To adjust the rear drum height and adjust the drums parallel to the conveyor belt:

1. DISCONNECT POWER TO SANDER!
2. Open the top and pulley covers, remove the V-belts, and remove sandpaper from the drums for best results.

3. Place the gauge blocks (refer **Page 36**) on the conveyor table and position them under the drums, as shown in **Figure 59**.

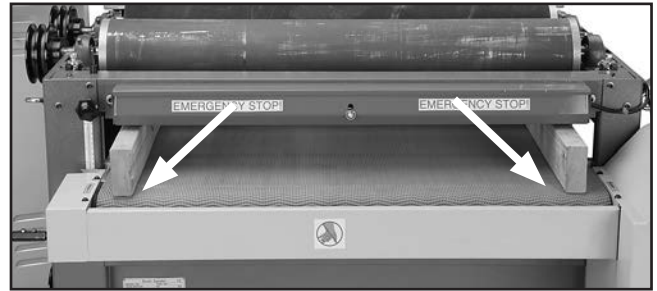


Figure 59. Gauge blocks positioned under the ends of the drums.

4. Raise the table up until the gauge blocks are approximately 0.010" below the rear drum, checking with a feeler gauge. This setting will be used to determine rear drum-conveyor bed parallelism.

Note: Each full turn of the table height handwheel raises the conveyor table approximately 0.020".

5. Loosen the lock lever or lock handle (see **Figures 60 & 61**) at one end of the rear drum.

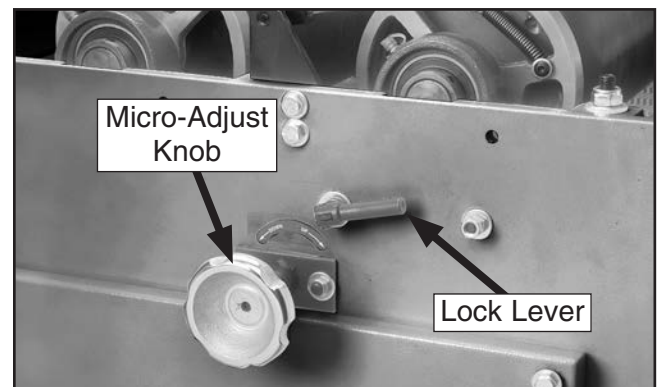


Figure 60. Rear right sanding drum micro-adjusting knob.



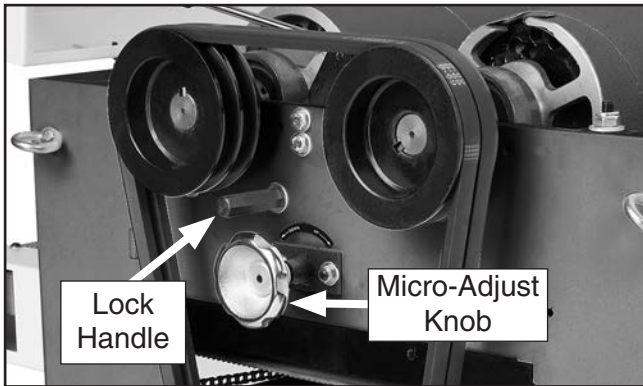


Figure 61. Rear left sanding drum micro-adjusting knob.

6. Turn the micro-adjustment knob until a 0.010" feeler gauge fits between the drum and gauge board (**Figure 62**).

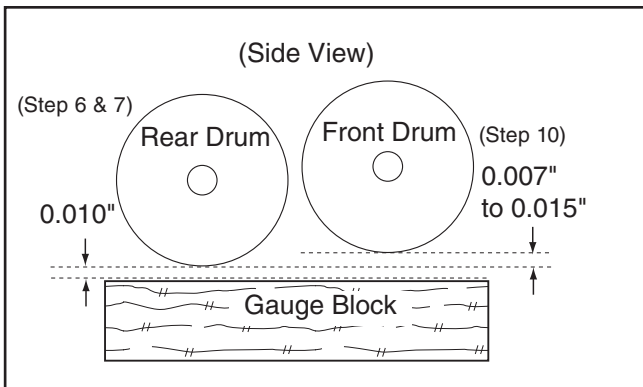


Figure 62. Rear drum set below front drum.

7. Repeat the adjustment in **Step 6** on the other side of the rear drum until the height difference between both ends is 0.002" or less.
8. Lock the micro-adjustment lock lever and lock handle.
9. Loosen the front drum pillow bearing lock nuts (**Figure 55, Page 43**).

10. Adjust the height of the front drum ends by adjusting the set screws (**Figure 55**) on the pillow bearing up or down until the largest size feeler gauge you can fit between the front drum and 36" long gauge blocks (at both ends) is 0.017"–0.025.

Note: The 0.017"–0.025" setting is a recommended range and includes the 0.010" setting on the rear drum and the additional 0.007" to 0.015" height from **Step 12** (See **Figure 62**). Some trial-and-error may be needed to find the optimal setting based upon the sandpaper grit size you use (ie, coarse grit = smaller number; fine grit = larger number).

11. Tighten the front pillow bearing lock nuts.
12. Check to make sure that when you tightened the nuts the front drum did not move horizontally, and that the front drum is still parallel with the rear drum, using the small gauge blocks.

—If the gauge blocks are snug between the front and rear drums, go to **Step 14**.

—If the gauge blocks are not snug between the front and rear drums, repeat **Step 11 and 12** on **Page 43**.

13. Calibrate the scale pointer as described on **Page 47**.
14. Remove all gauge blocks, reinstall the sandpaper on the drums, reinstall the V-belts, and close the pulley and top covers.



Pressure Roller Height

Tools Needed:	Qty
Wrenches/sockets 17mm.....	1
Gauge Blocks (see Page 36).....	2

Factory Setting:
Distance Below Rear Drum.....0.039"–0.078"

The pressure rollers are factory set at 0.039"–0.078" below the bottom of the rear sanding drum and are fully adjustable either up/down with the lock nuts shown in **Figure 63**.

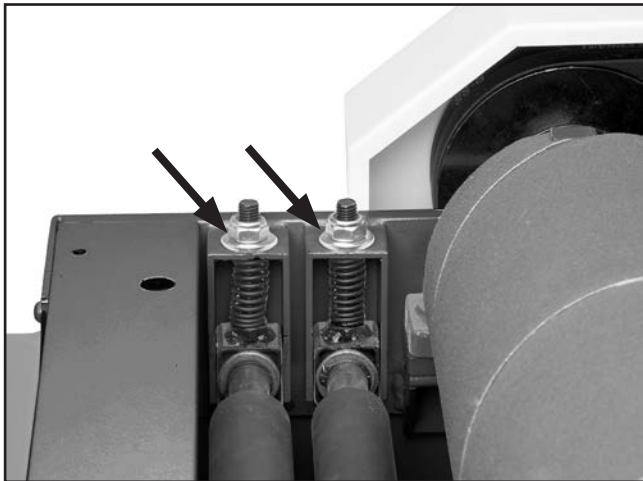


Figure 63. Pressure roller adjustment nuts.

Proper pressure on the workpiece helps avoid kickback and keeps the workpiece from slipping. However, as pressure increases on the workpiece, snipe also increases (snipe is normal with all brands of drum sanders).

If snipe becomes a problem, you can minimize it by reducing pressure (raising pressure roller height). However, you can only minimize it so much before the workpiece will slip or kick out, causing a hazard to the operator. If this happens, you have raised the pressure rollers too high for them to function as intended—the pressure rollers **MUST** then be lowered to prevent injury.

Note: An additional trick for eliminating snipe is to reduce pressure on the rear rollers, but not the front rollers. Conditions will vary with wood types, so use trial-and-error to find the best results for your application.

These instructions will restore the pressure rollers to the factory setting.

To adjust the pressure rollers to the factory setting:

1. DISCONNECT POWER TO SANDER!
2. Open the top cover.
3. Place the gauge blocks on the conveyor table and position them under all the pressure rollers, as shown in **Figure 64**.



Figure 64. Gauge blocks in position for adjusting the pressure roller height.

4. Adjust the conveyor table up so the gauge blocks just touch the bottom of the rear drum.
5. Rotate the handwheel eight full turns clockwise, counting from the point of actual table movement so handwheel freeplay does not affect your count.
6. With all the pressure rollers: 1) Raise one end off of the gauge block, then move it back down until it just touches the gauge block; 2) repeat with the other side; 3) tighten the lock nuts together to make sure the adjustments are locked in place.



Scale Pointer Calibration

Tools Needed:	Qty
Phillips Head Screwdriver.....	1

For the scale pointer to be accurate, it must be calibrated.

We recommend calibrating your scale pointer any time you adjust the drum heights or table lift screws.

To calibrate the scale pointer:

1. Sand a workpiece with the drum sander and measure the thickness of the sanded workpiece.
2. Loosen the screw that secures the scale pointer, adjust it to the thickness of the workpiece, then tighten it.



Figure 65. Scale pointer screw.

Dust Scoops

Tools Needed:	Qty
Hex Wrench 4, 5mm.....	1ea

The dust scoops and metal scoop plates are correctly positioned on the top cover at the factory, however these may loosen and move during shipping. Some trial and error will be needed to adjust the dust scoops so they do not contact the sanding drums.

To adjust a dust scoop:

1. DISCONNECT POWER TO SANDER!
2. Remove the handwheel and open the pulley cover.
3. Loosen the button head cap screws and acorn nuts securing a metal scoop plate to the top cover (**Figure 66**), move the scoop up a little, tighten the button head cap screws and nuts, close the top cover, and rotate the V-belt to see if the drum scrapes the scoop.

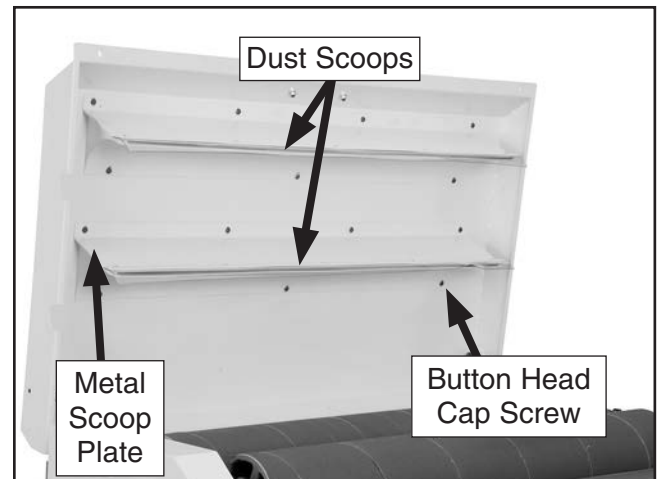


Figure 66. Location to adjust dust scoop.

4. Adjust each scoop in this manner until the sanding drums do not scrape the scoops, then close the pulley cover and reinstall the handwheel.



Table Lift Screws

Tools Needed:	Qty
Wrench/Socket 14mm	2
Flat Head Screwdriver	1
Chalk, White-out, or Paint	1

The table lift screws are connected by a chain and driven by the table elevation handwheel. When the chain is removed from a sprocket on one of the lift screws, that lift screw can adjust that portion of the table up/down independently to assist in setting the table parallel to the drums.

Adjusting the table lift screws will only be necessary if you need to adjust the drum heights more than allowed at the pillow bearing adjustments, or if you have removed the table or chain during a service procedure and you need to reset the drums parallel to the table.

Each tooth on the sprocket represents 0.006" of table elevation movement. For example, if the rear of the table was 0.006" low, rotate both rear table lift screws to the next sprocket tooth in the same chain position. You can easily rotate the sprockets from the top of the table lift screws with a flat head screwdriver.

After adjusting the table lift screws, check to make sure the drums and conveyor are parallel within 0.002" from one side to the other. If they are not within this range, then additional fine adjustments should be made at the drum pillow bearings.

To adjust the table lift screws:

1. DISCONNECT POWER TO SANDER!
2. Open the side cover.
3. Raise the table up to at least the 1" mark on the height scale.
4. At the lift screw that needs to be adjusted, mark the end of a sprocket tooth and the chain hole where that tooth is meshed, as shown in **Figure 67**.

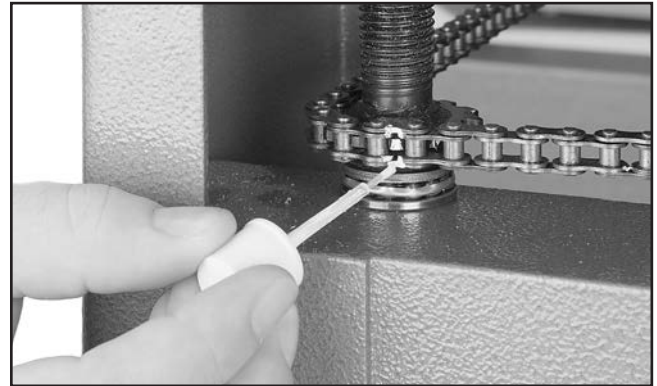


Figure 67. Marking sprocket tooth and chain.

5. Using two 14mm wrenches, loosen the adjustable idler roller (**Figure 68**).

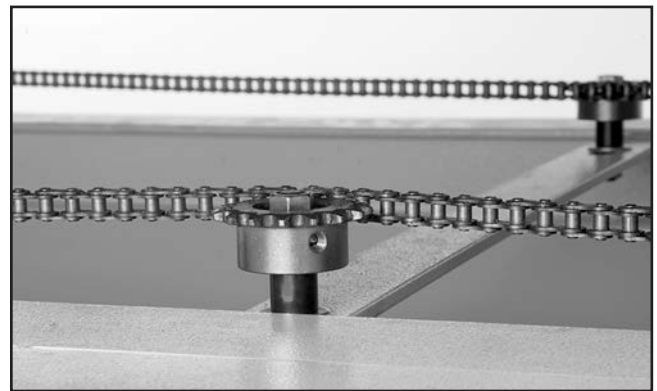


Figure 68. Adjustable idler roller sprocket.

6. Carefully move the chain off of only the marked sprocket.
7. Keep track of the marked chain hole and rotate the sprocket the necessary number of teeth away from the marked one to meet the difference in height needed.
8. Fit the chain back over the sprocket, making sure the new sprocket tooth is inserted into the marked chain hole.
9. Re-tension the chain and check the new height setting.
10. Repeat **Steps 5–9** as needed until the table height is parallel to the drums in all four corners, and calibrate the scale pointer (refer to **Page 47**).
11. Follow instructions in **Drum Adjustments** (Refer to **Page 41**) for adjusting the drums parallel to the conveyor within 0.002" side-to-side.



Conveyor Belt Replacement

Tools Needed:	Qty
Hex Wrench 8mm.....	1
Hex Wrench 5mm.....	1
Hex Wrench 4mm.....	1
Hex Wrench 3mm.....	1
Wrench/Socket 19mm	1
Wrenches/Sockets 14mm.....	2
Wrench 13mm	1
Wrench/Socket 12mm	1
Wrench 10mm	1
Phillips Head Screwdriver.....	1
Measuring Tape.....	1
Gauge Blocks (see Page 36)	2
Feeler Gauge Set.....	1
Assistants for Lifting Help.....	3
Flashlight or Work Light.....	1

Replacing the conveyor belt is a big job and requires moderate mechanical skill and a fair amount of patience. For planning purposes, expect to have your machine out of operation for at least a few hours.

As you remove hardware to complete these instructions, we recommend putting all the bolts, screws, washers, etc. back into the holes from which they came. This simple habit will take slightly longer when disassembling the machine, but it will save you a lot of time and reduce frustration during reassembly.

To replace the conveyor belt:

1. DISCONNECT POWER TO SANDER!
2. Remove the top cover (6 button head screws), table height handwheel, and open the pulley cover.

3. Remove the V-belts (see **Page 37** for help). The drum sander should now look similar to **Figure 69**.



Figure 69. Drum sander disassembled to **Step 4**.

4. Remove the sanding drums (4 mounting nuts and 4 flat washers on each drum).
5. Place the gauge blocks face down, as shown in **Figure 70**, raise the table to relieve the spring pressure on the pressure rollers, remove the pressure roller nuts, and lower the table to remove the pressure rollers.

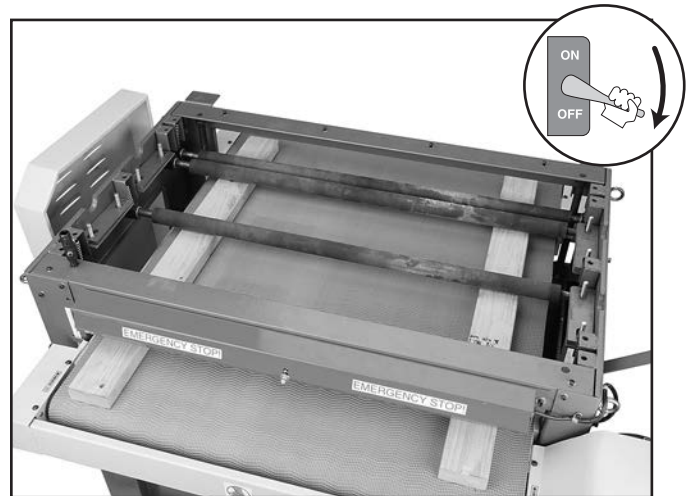


Figure 70. Gauge blocks set under pressure rollers to relieve spring tension with the table.



6. Remove the front and rear upper frame angles (4 cap screws, 4 lock washers, and 4 flat washers on each one).
7. Remove the table height lock knob.
8. Remove the feed motor cover (4 button head screws and setscrew on knob).
9. Remove the front conveyor guard (4 button head screws) and the cord clamp, and set the front conveyor guard off to the side of the machine.
10. Remove the rear conveyor end guards (4 button head screws). The drum sander should now look similar to **Figure 71**.



Figure 71. Drum sander disassembled to **Step 11**.

11. Raise the table up to the 1" mark on the scale.
12. Mark the position of the chain and sprockets.
13. Loosen the chain idler adjustment sprocket, carefully pull the chain off of all the sprockets, and remove it from the cabinet by undoing the chain master link, as shown in **Figure 72**.

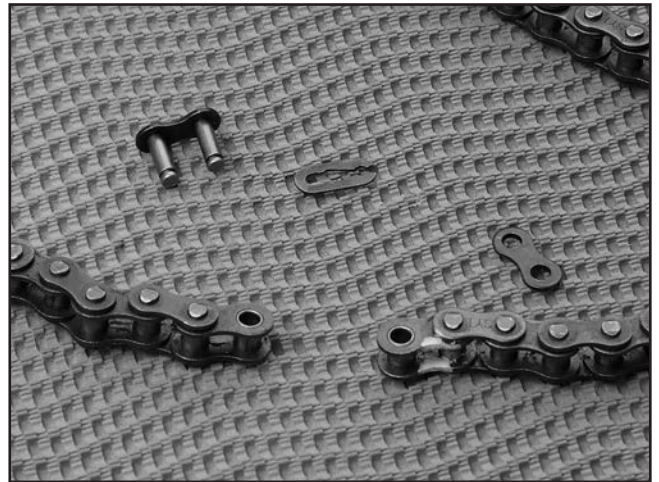


Figure 72. Chain removed from table by removing the master link.

14. Loosen the conveyor belt from the rear adjustments, as shown in **Figure 73**.



Figure 73. Conveyor belt loosened at the rear adjustment.



15. Remove the control panel and set it to the side without disconnecting any wiring.
16. Loosen the strain relief on the conveyor motor cord, and disconnect wiring inside the conveyor motor junction box.
17. Remove the conveyor feed motor. The sander should now be disassembled as shown in **Figure 74**.

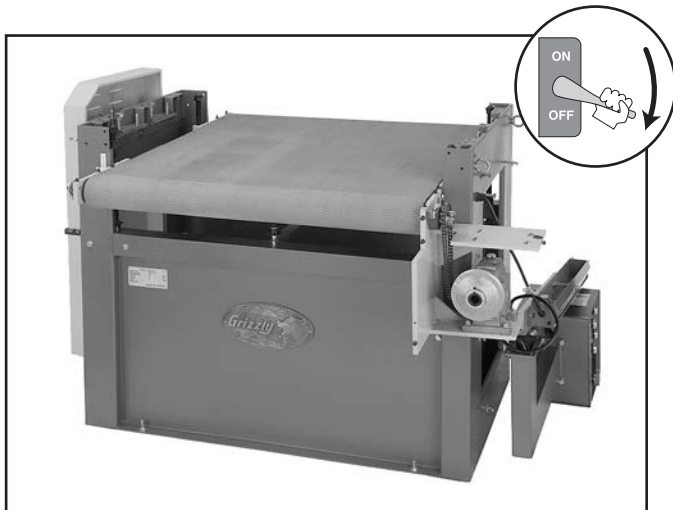


Figure 74. Drum sander disassembled to **Step 16**.

18. Using four strong people (or a forklift w/ straps), carefully lift the table off of the drum sander cabinet, as shown in **Figure 75**.

Note: When removing the table, be careful with the ball thrust bearings located under the table elevation shafts (part #378 in the breakdown drawing), as they can be easily knocked onto the ground.



Figure 75. Lifting the table off of the drum sander cabinet with four people.

19. Remove the brackets from the left side of the table and remove the belt (see **Figure 76**).

Note: Leave the front pillow bearing connected to the bracket, but disconnect that bracket from the table.

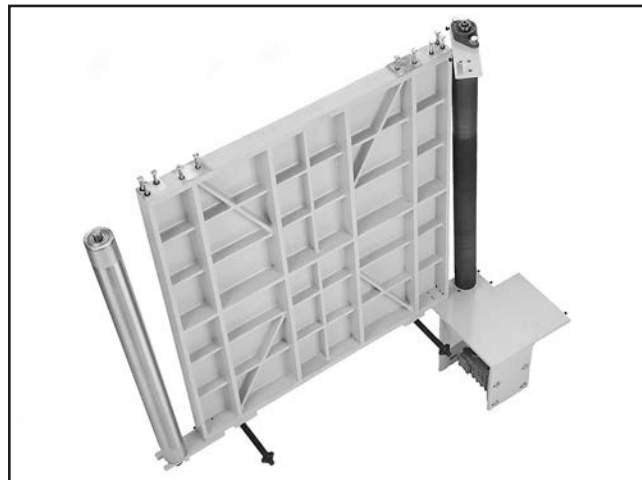


Figure 76. Conveyor belt removed from table.

20. Install the new belt and reassemble the drum sander by reversing the disassembly steps.
21. After reassembly, adjust the drums and pressure rollers to their proper settings. See **Drum Adjustments** on **Page 41** and **Pressure Roller Height** on **Page 46**.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this section carefully. If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine.

WARNING
















Wiring Safety Instructions

1. **SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!
2. **QUALIFIED ELECTRICIAN.** Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.
3. **WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.
4. **WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.
5. **MODIFICATIONS.** Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.
6. **MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
7. **CAPACITORS.** Some capacitors store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on capacitors.
8. **CIRCUIT REQUIREMENTS.** You MUST follow the requirements on **Page 11** when connecting your machine to a power source.
9. **EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

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

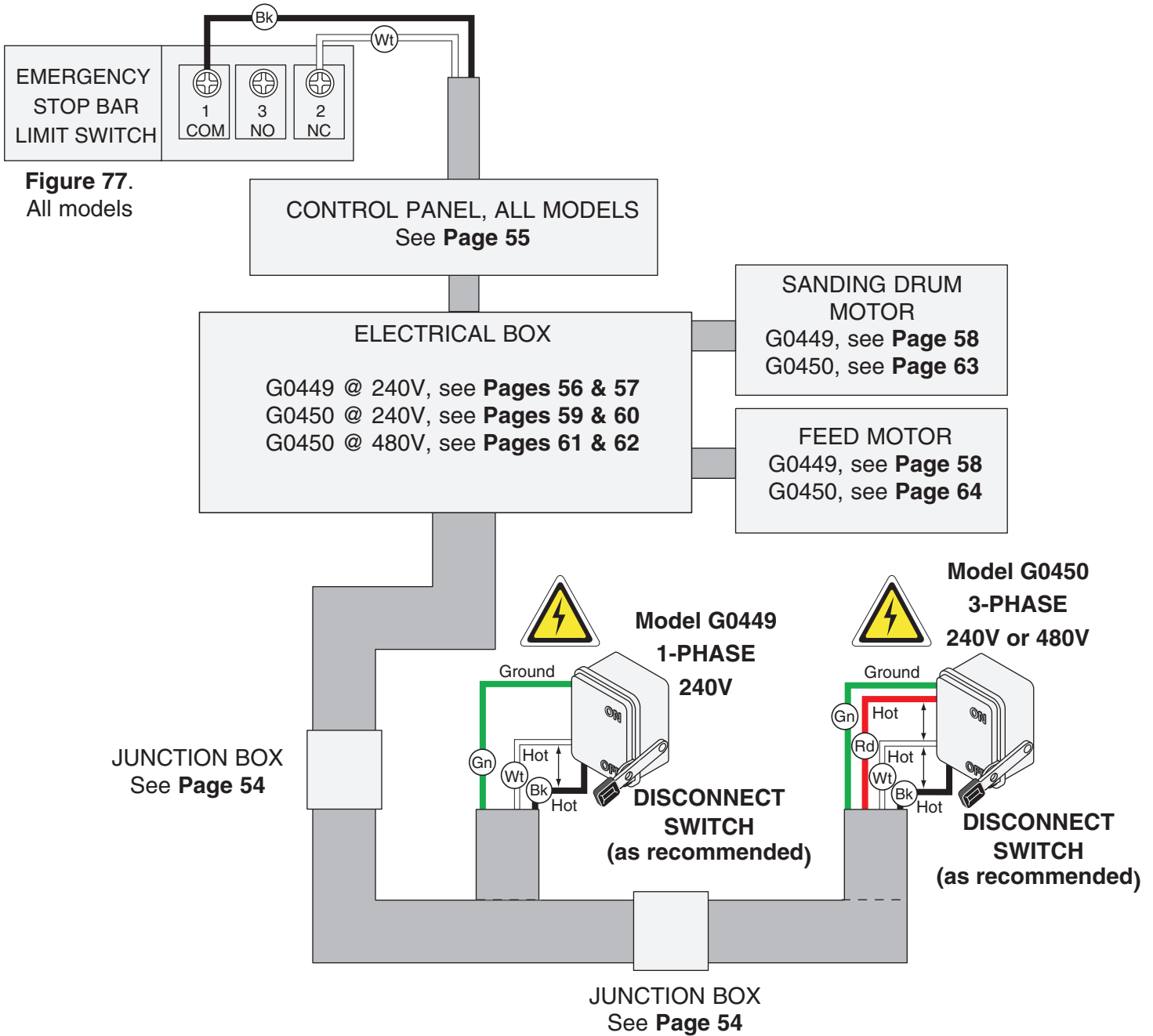
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WHITE 	BROWN 	YELLOW GREEN 	BLUE WHITE 
GREEN 	GRAY 	PURPLE 	TURQUOISE 
RED 	ORANGE 	PINK 	



G0449/G0450 Wiring Overview



Figure 77. Emergency stop bar limit switch.



G0449 Junction Box

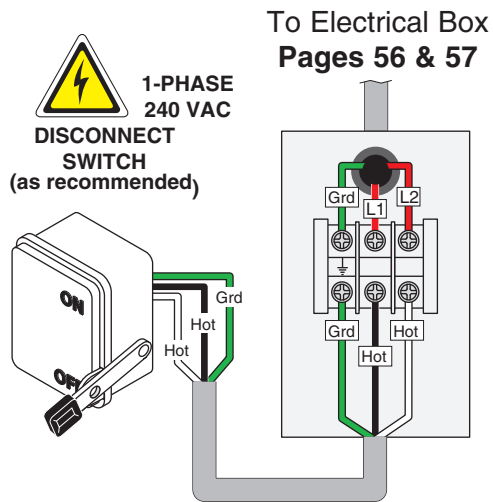


Figure 78. G0449 power junction box.

G0450 Junction Box

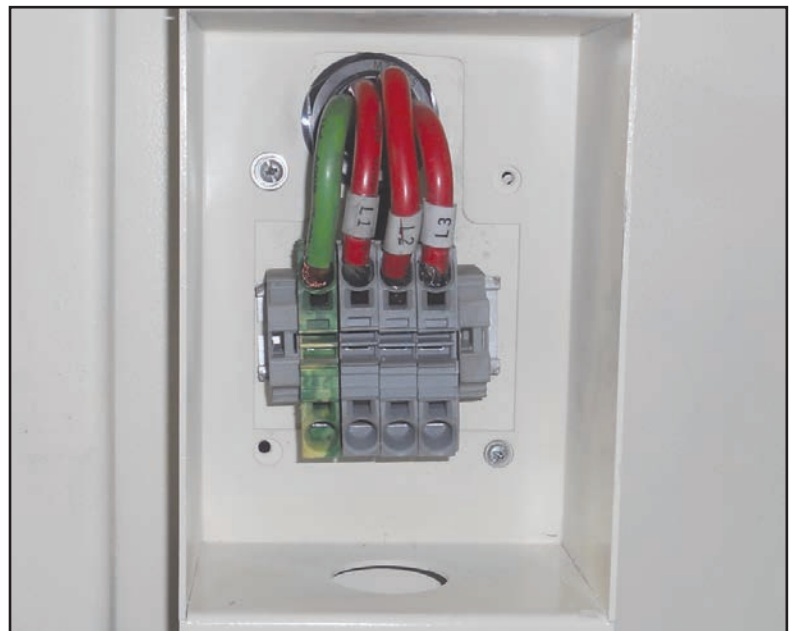
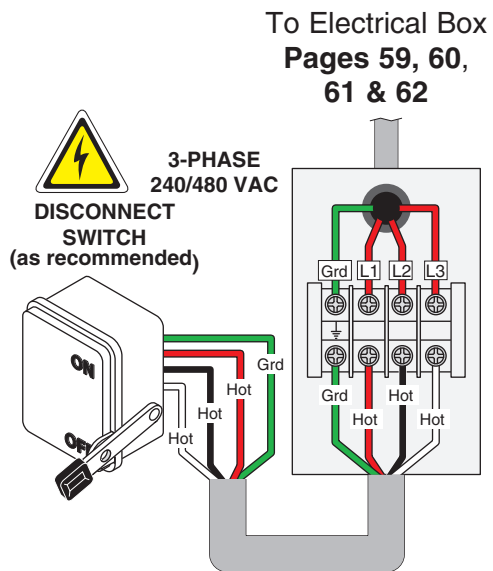


Figure 79. G0450 power junction box.



G0449/G0450 Control Panel

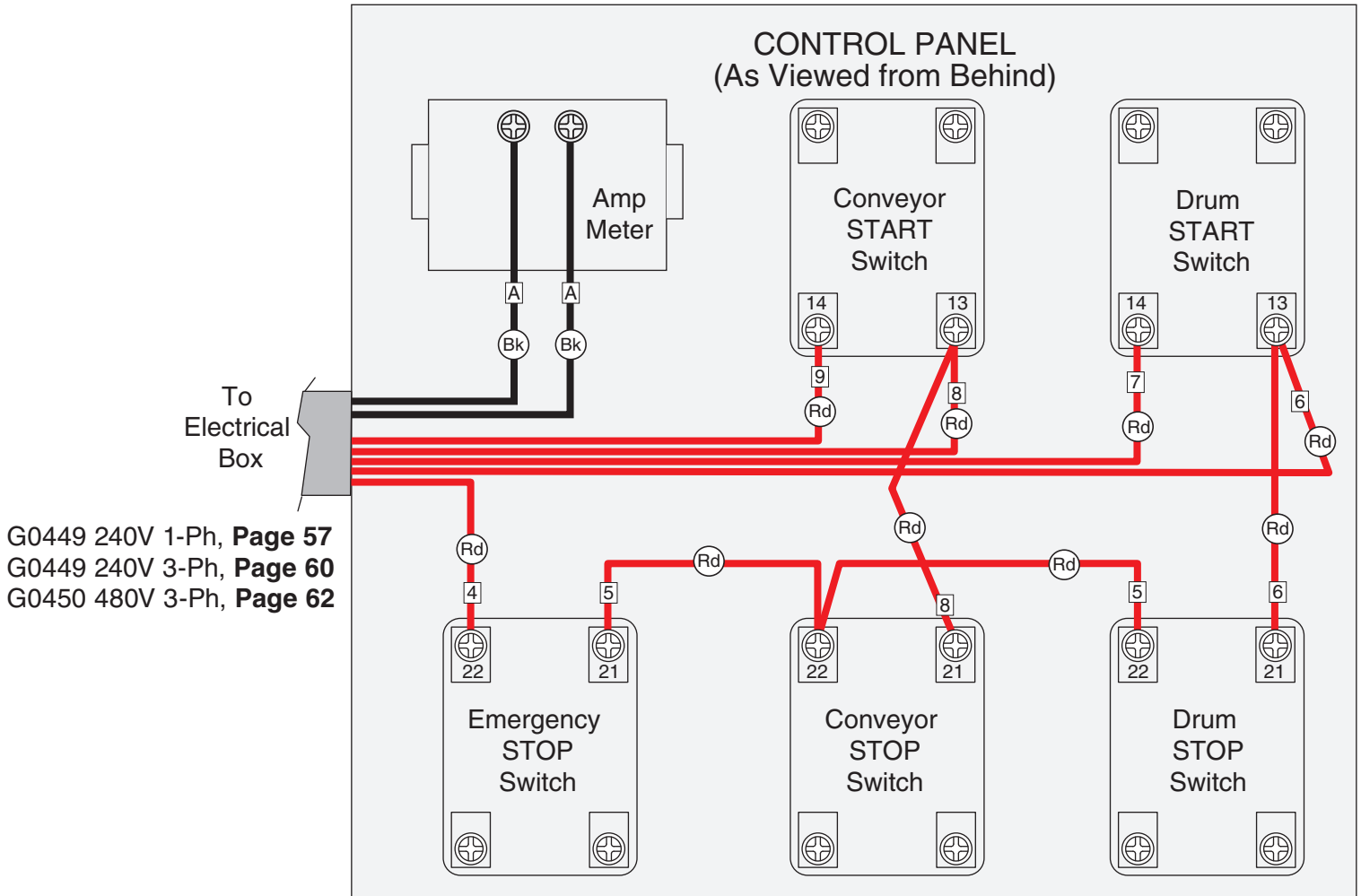


Figure 80. G0449/G0450 control panel wiring.

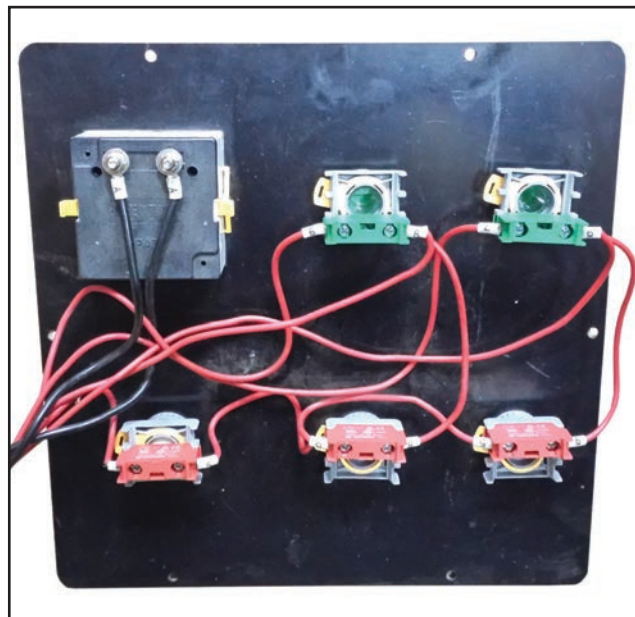


Figure 81. G0449/G0450 control panel.

G0449 Electrical Box 240V

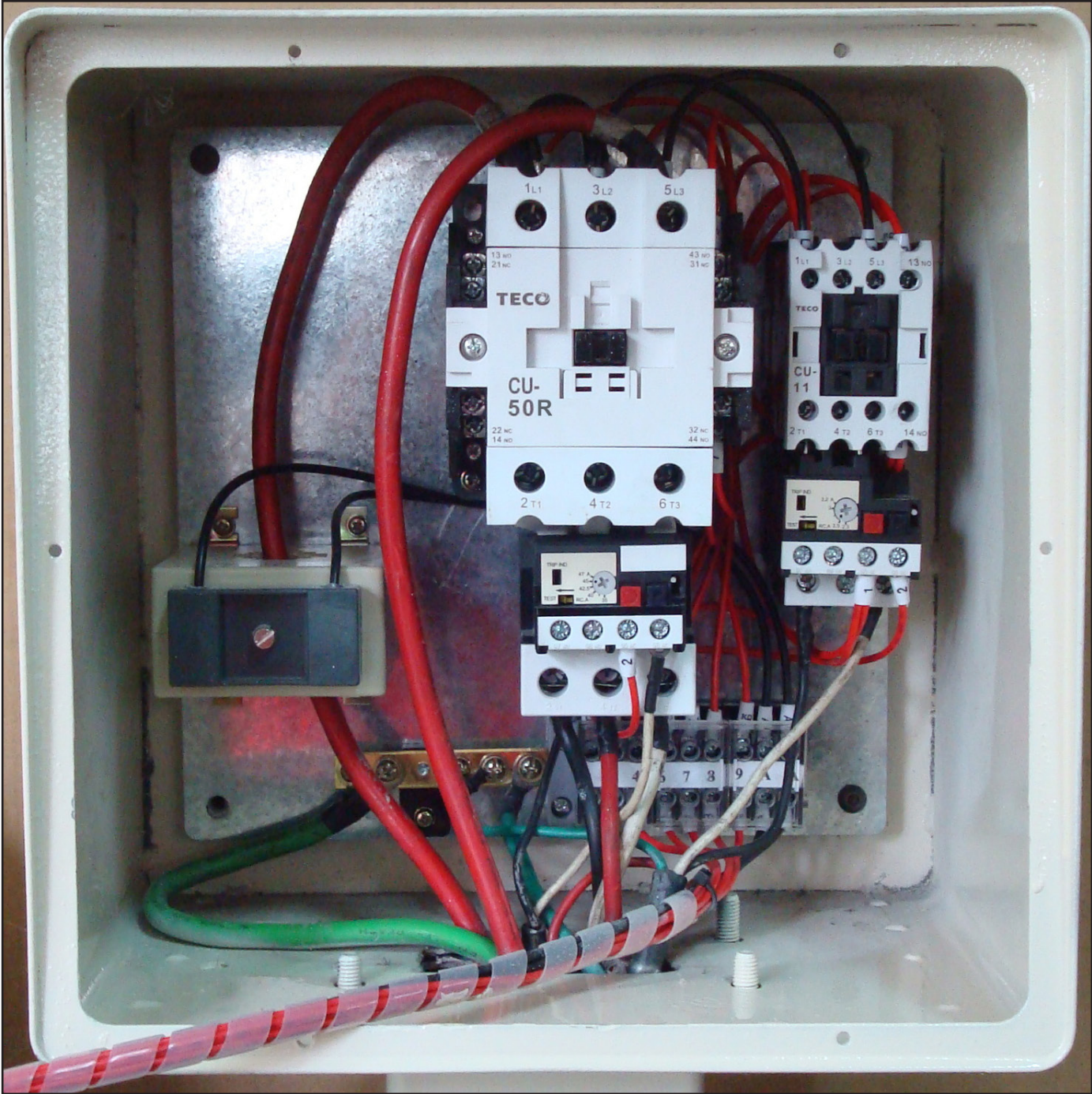
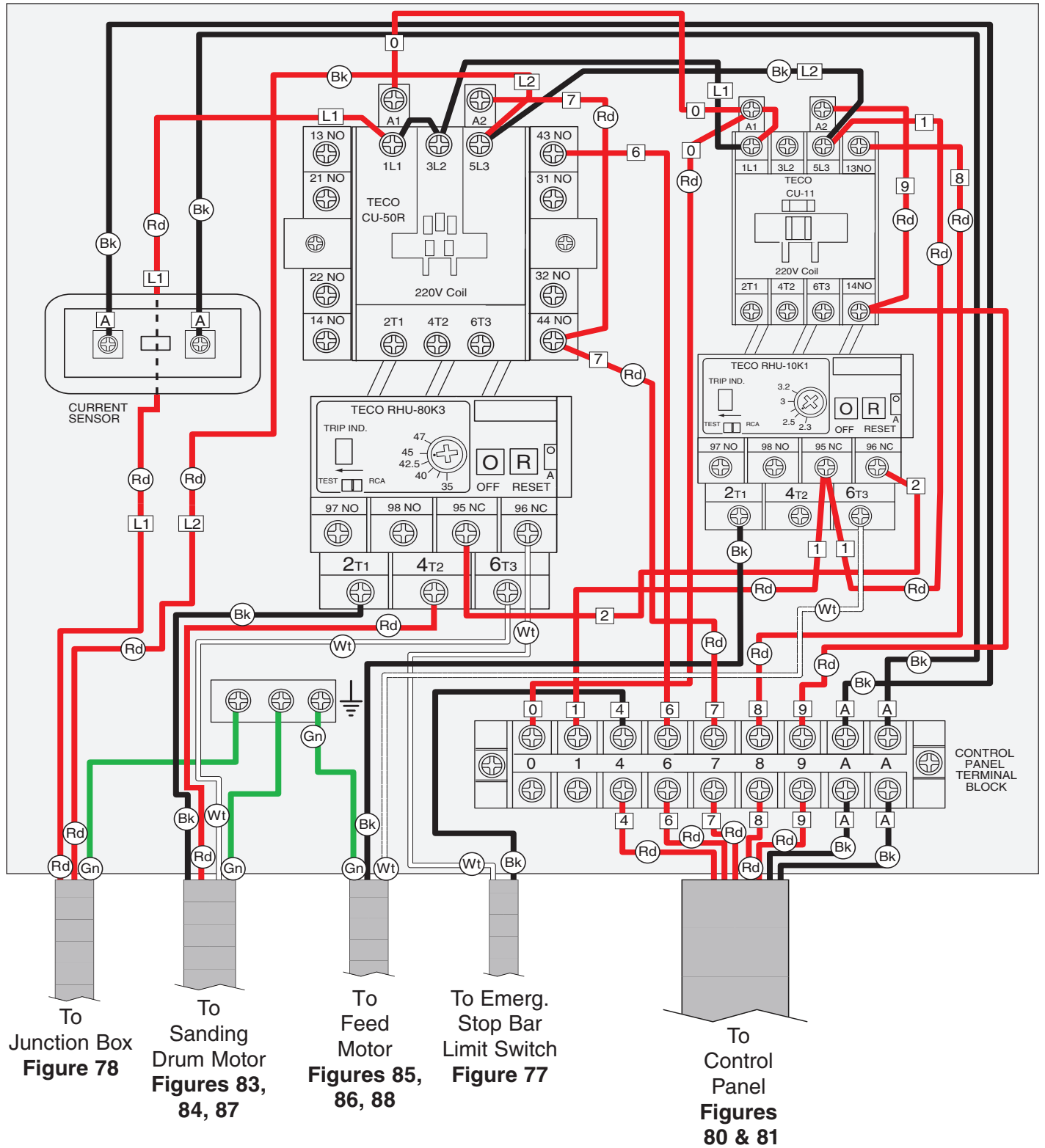


Figure 82. G0449 electrical box.



G0449 Electrical Box Wiring 240V



G0449 Sanding & Feed Motors



Figure 83. G0449 sanding drum motor wiring and start capacitors.

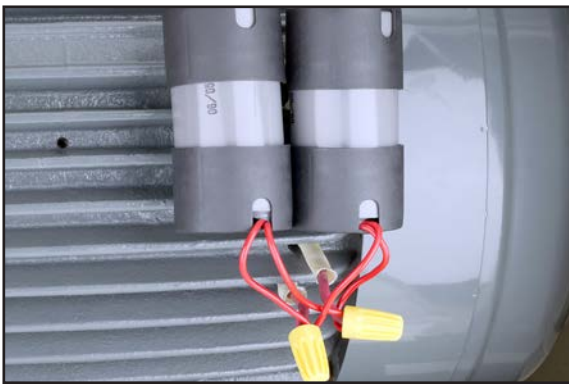


Figure 84. G0449 sanding drum motor run capacitors.

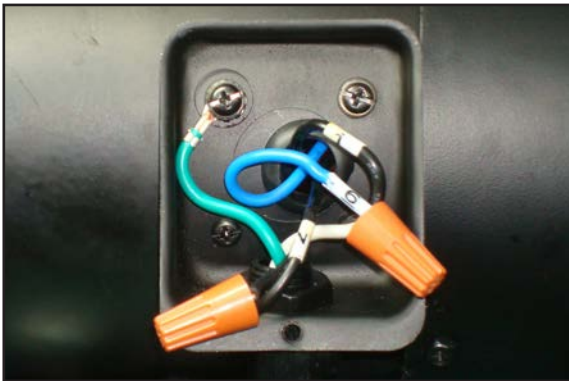


Figure 85. G0449 feed motor wiring.

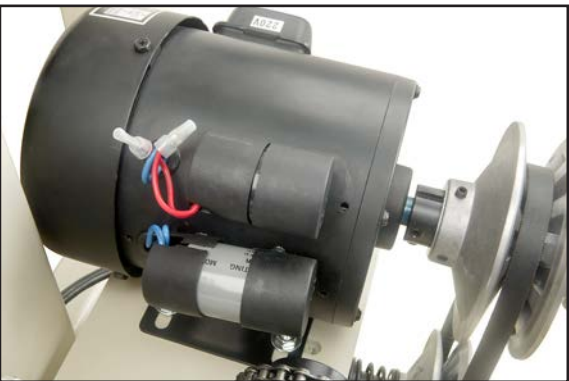


Figure 86. G0449 feed motor capacitors.

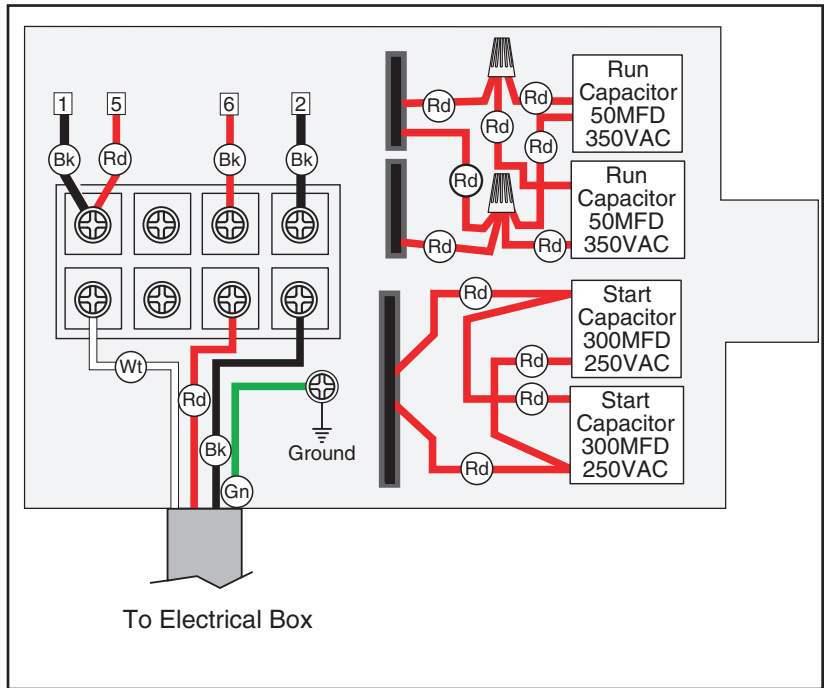


Figure 87. G0449 sanding drum motor, 240V single-phase.

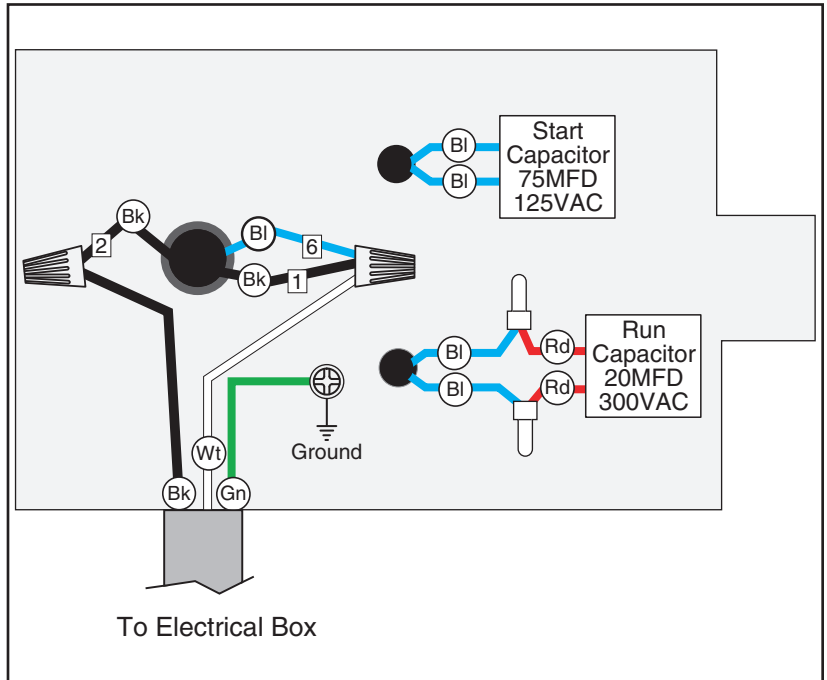


Figure 88. G0449 feed motor, 240V single-phase.



G0450 Electrical Box 240V

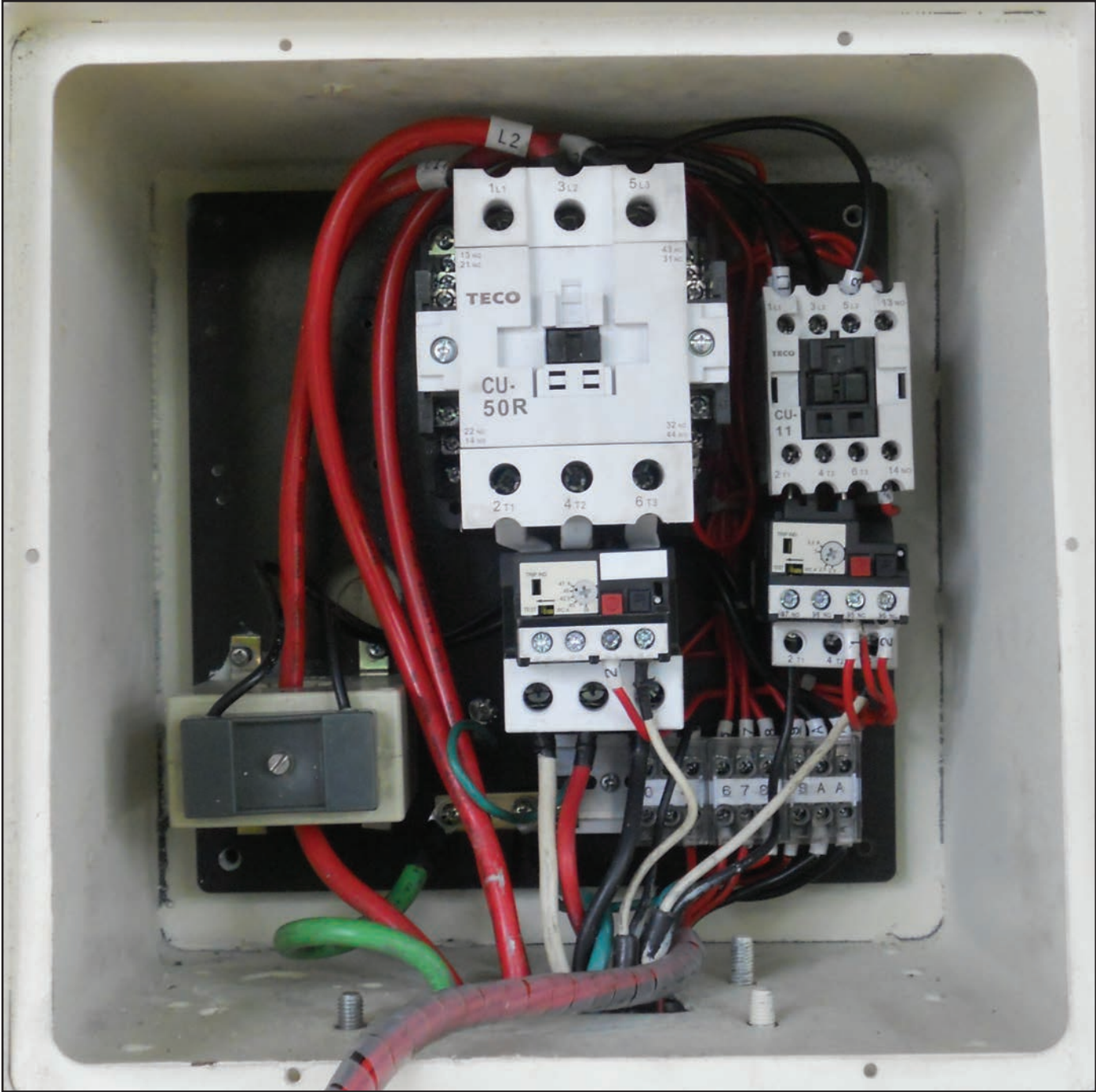
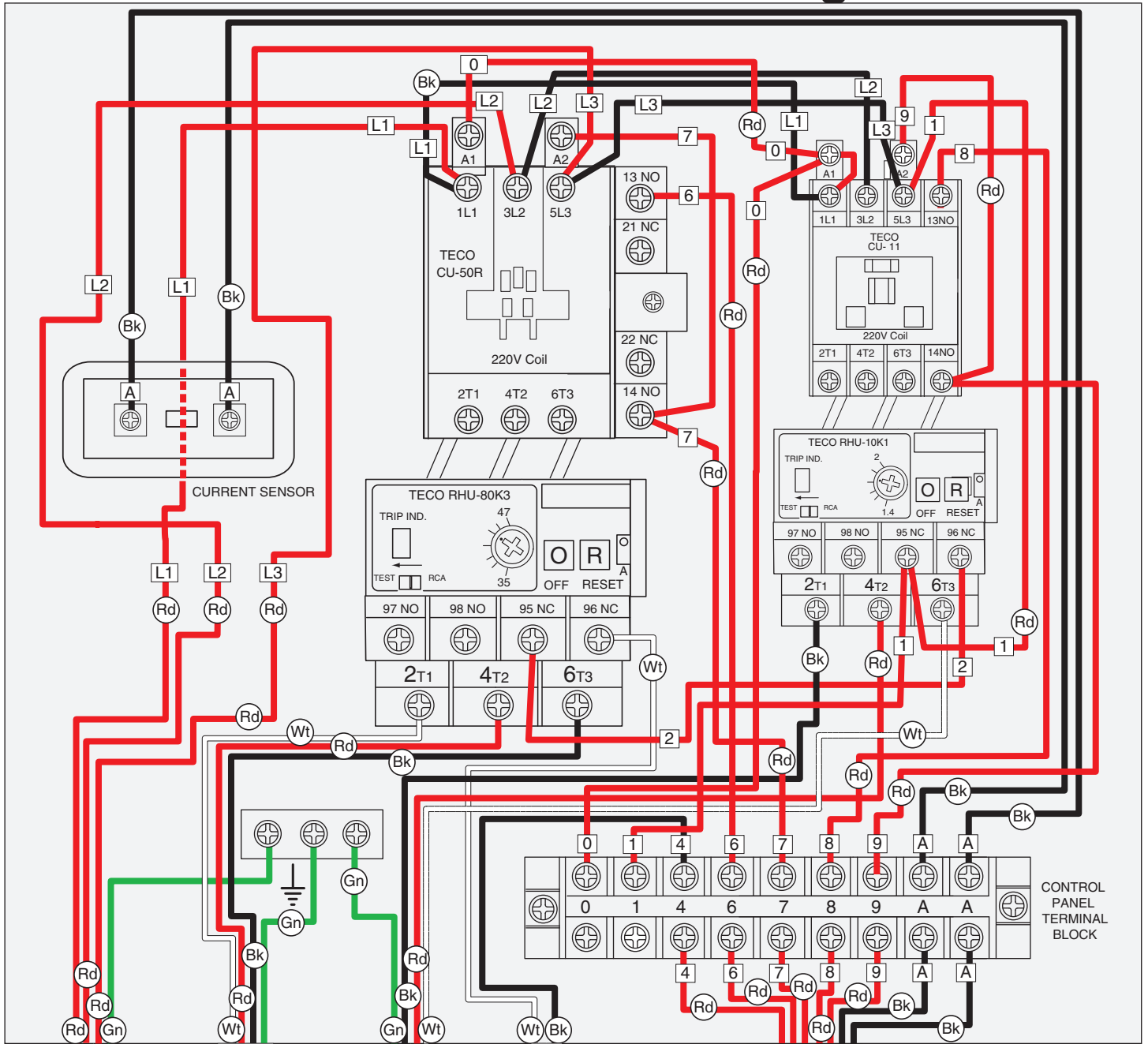


Figure 89. G0450 240V 3-phase electrical box wiring.



G0450 Electrical Box Wiring 240V



To Junction Box
Figure 79

To Sanding Drum Motor
Figure 91

To Feed Motor
Figure 93

To Emerg. Stop Bar Limit Switch
Figure 77

To Control Panel
Figures 80 & 81



G0450 Electrical Box 480V

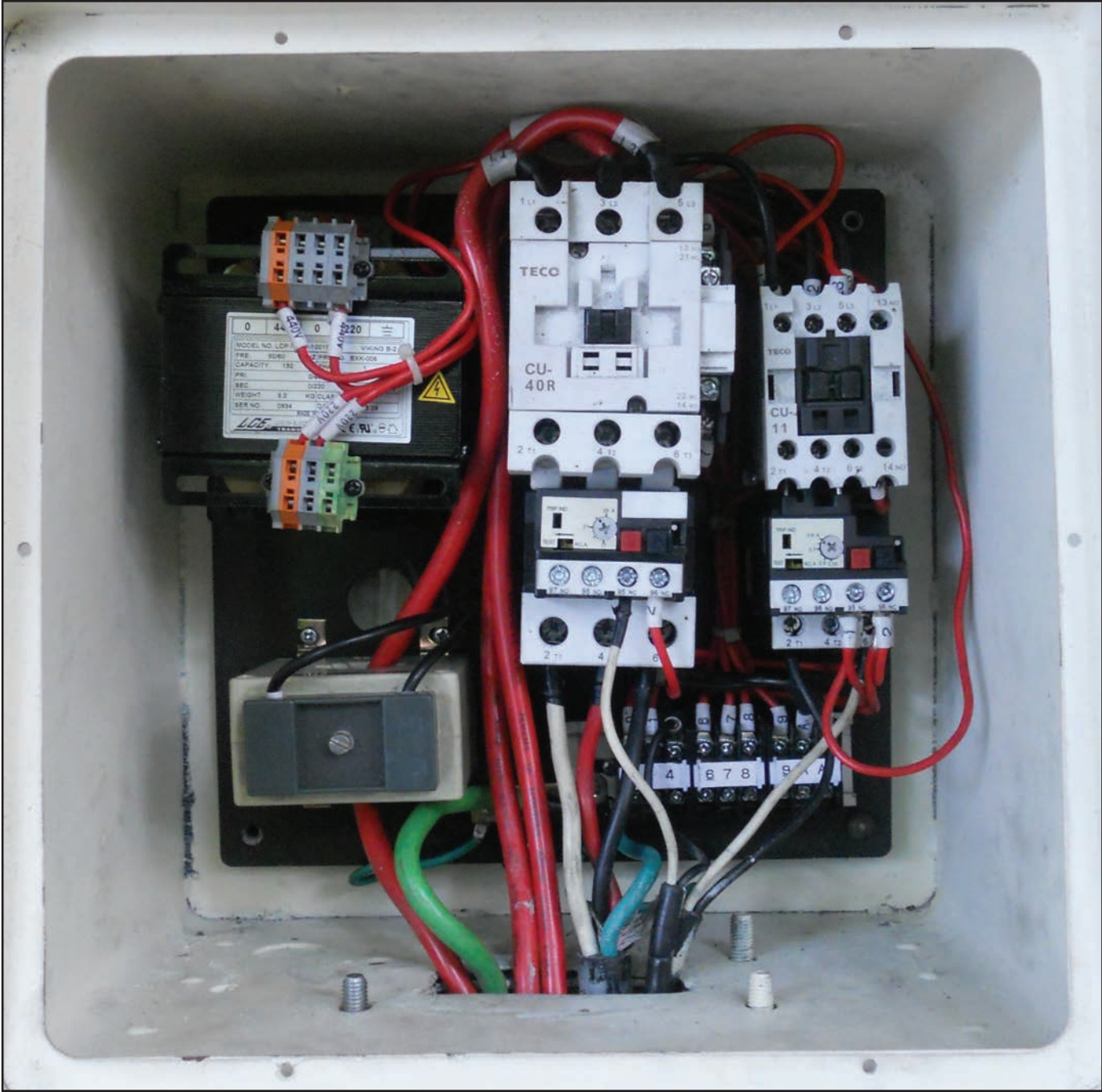
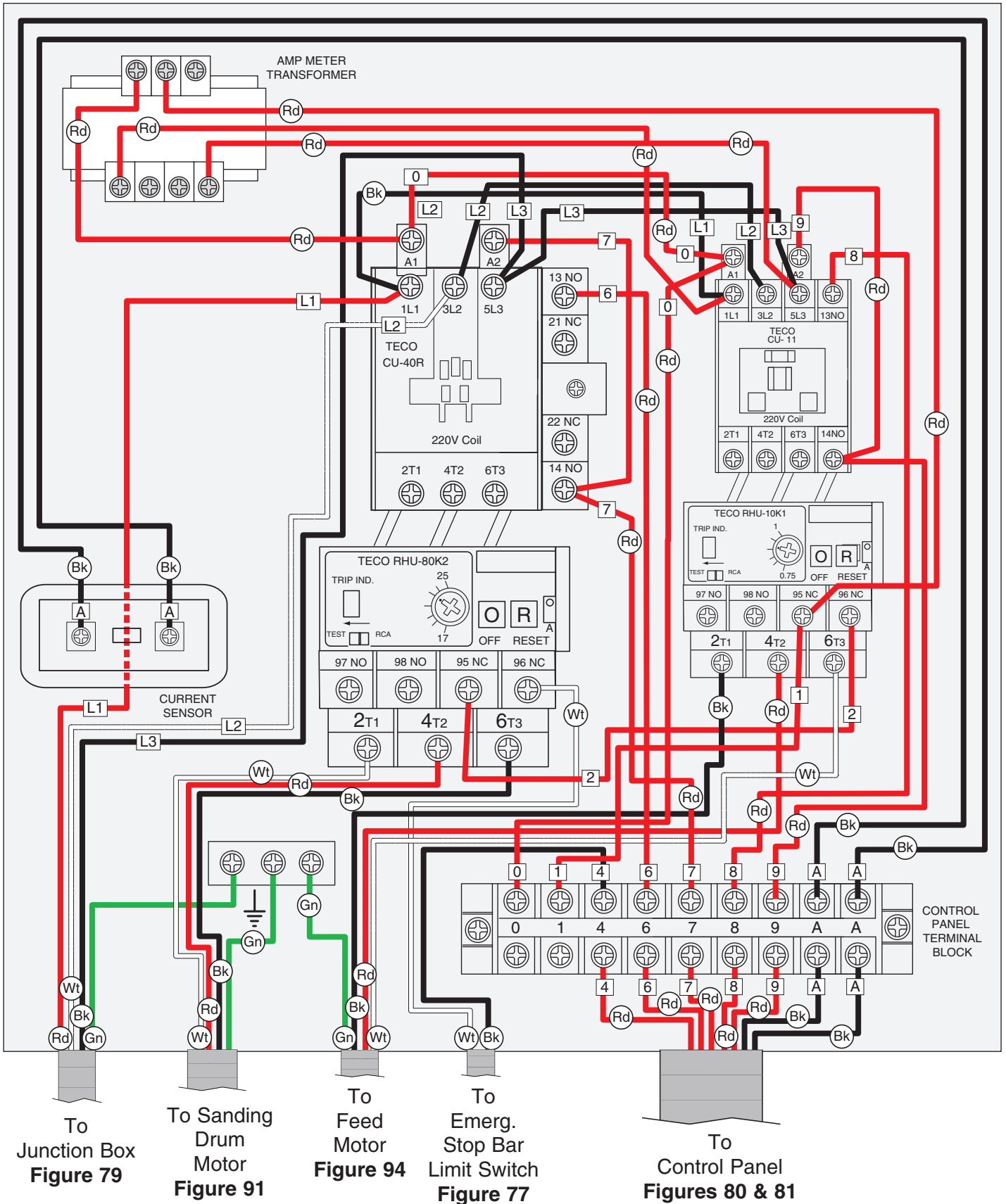


Figure 90. G0450 480V 3-phase electrical box wiring.



G0450 Electrical Box Wiring 480V



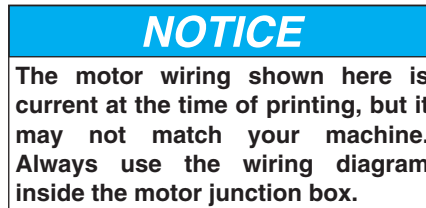
G0450 Sanding Drum Motor



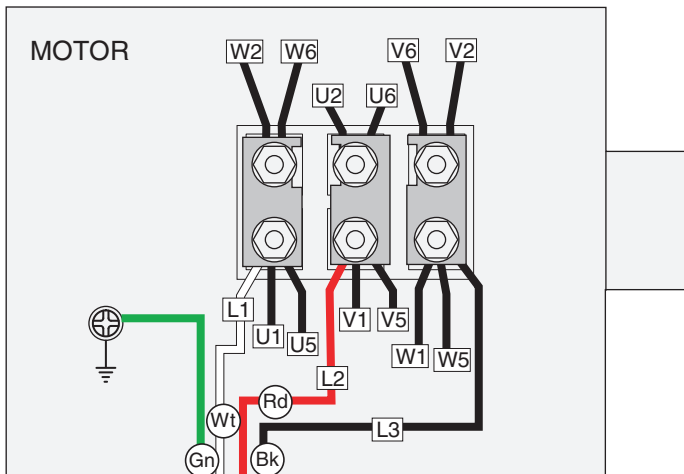
Figure 91. G0450 240V sanding drum motor wiring.



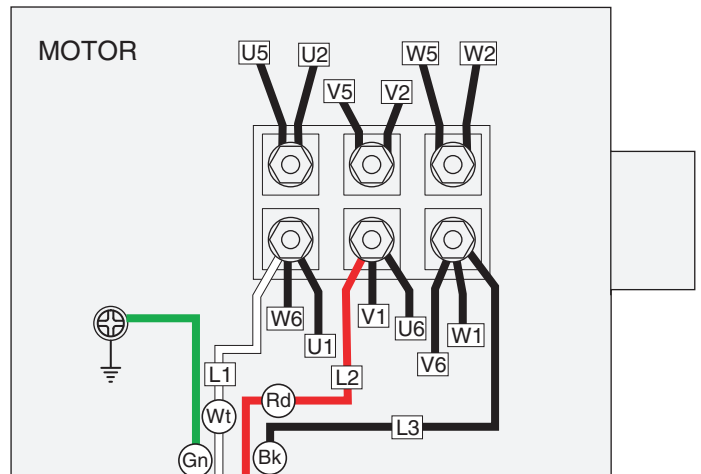
Figure 92. G0450 480V sanding drum motor wiring.



240V



480V



(additional conversions required for 480V operation)

To Electrical Box

G0450 240V 3-Phase **Page 60** or
G0450 480V 3-Phase **Page 62**



G0450 Feed Motor



Figure 93. G0450 240V feed motor wiring.

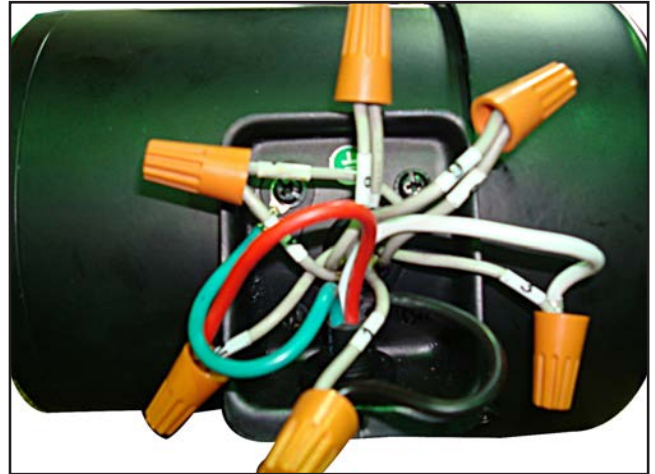


Figure 94. G0450 480V feed drum motor wiring.



⚠ WARNING!

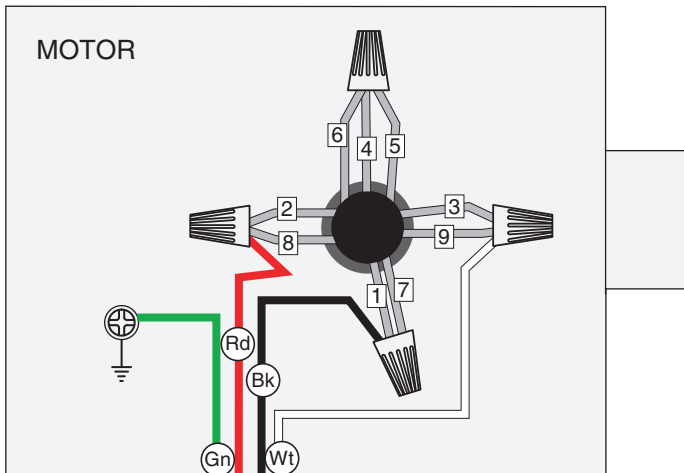
SHOCK HAZARD!
Disconnect power before working on wiring.



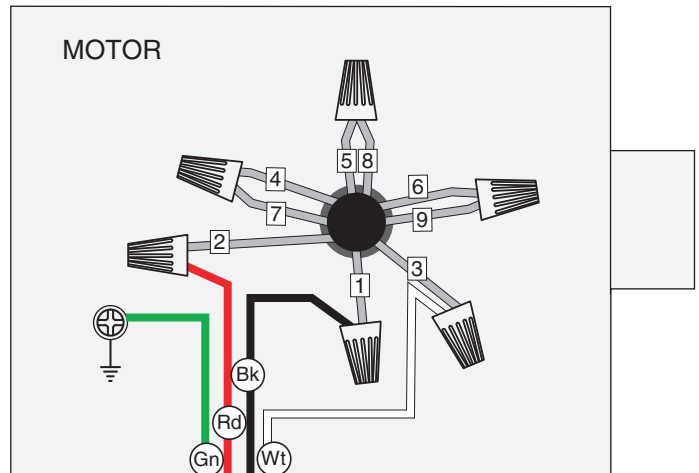
NOTICE

The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

240V



480V



(additional conversions required for 480V operation)

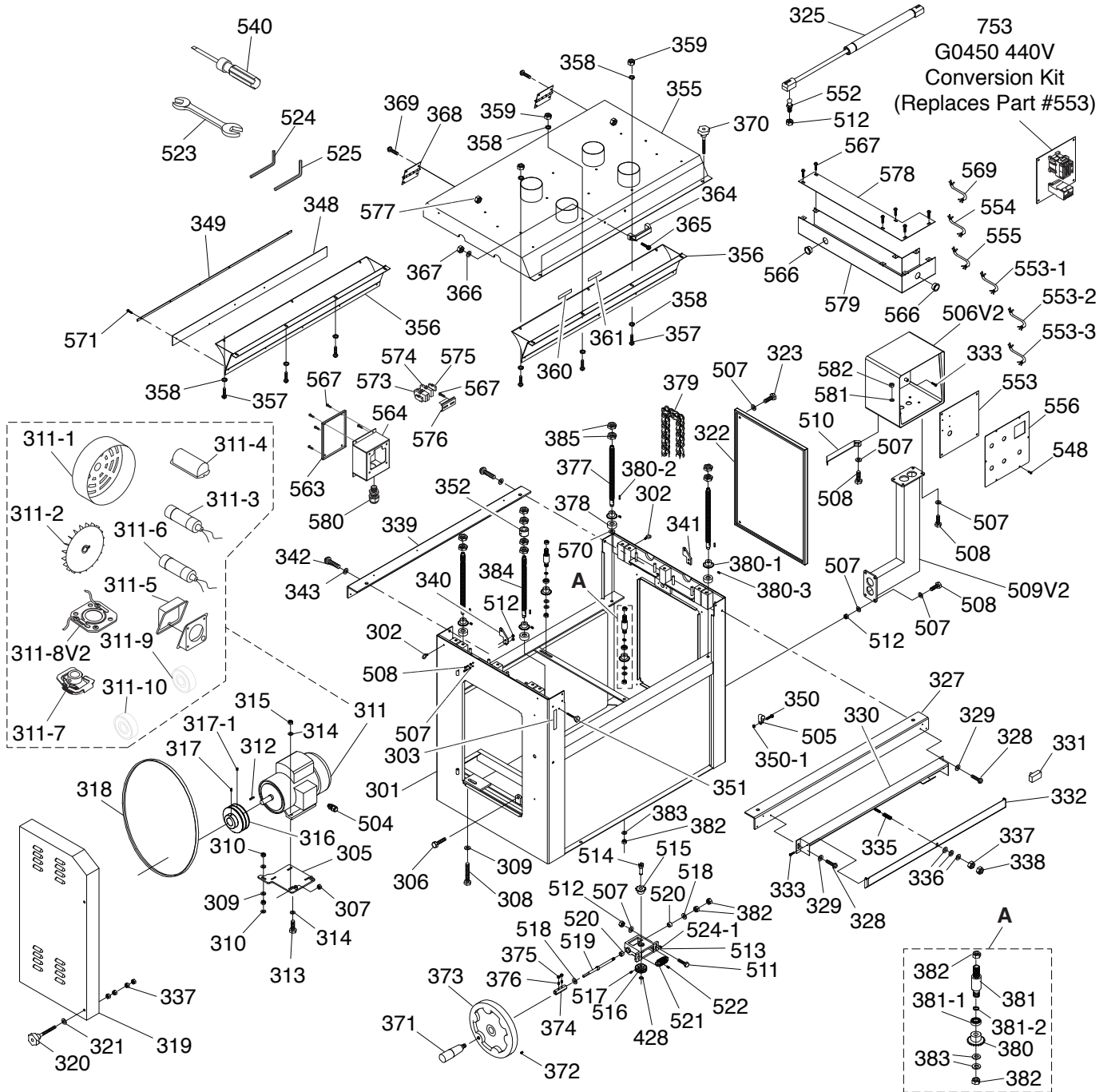
To Electrical Box

G0450 240V 3-Ph, **Page 60** or
G0450 480V 3-Ph, **Page 62**



SECTION 9: PARTS

Frame



Frame

REF	PART #	DESCRIPTION
301	P0449301	FRAME
302	P0449302	LIFTING EYE BOLT 1/2-13
303	P0449303	ELEVATION SCALE
305	P0449305	MOTOR MOUNT
306	P0449306	HEX BOLT M12-1.75 X 35
307	P0449307	HEX NUT M12-1.75
308	P0449308	HEX BOLT M12-1.75 X 120
309	P0449309	FLAT WASHER 12MM
310	P0449310	HEX NUT M12-1.75
311	P0449311	SANDING MOTOR 10HP 240V 1-PH (G0449)
311	P0450311	SANDING MOTOR 15HP 240/480V 3-PH (G0450)
311-1	P0449311-1	MOTOR FAN COVER (G0449)
311-1	P0450311-1	MOTOR FAN COVER (G0450)
311-2	P0449311-2	MOTOR FAN (G0449)
311-2	P0450311-2	MOTOR FAN (G0450)
311-3	P0449311-3	R CAPACITOR 50M 350V 1-3/4 X 3-5/16 (G0449)
311-4	P0449311-4	CAPACITOR COVER (G0449)
311-5	P0449311-5	MOTOR JUNCTION BOX (G0449)
311-5	P0450311-5	MOTOR JUNCTION BOX (G0450)
311-6	P0449311-6	S CAPACITOR 300M 250V 1-3/4 X 3-3/4 (G0449)
311-7	P0449311-7	CENTRIFUGAL SWITCH (G0449)
311-8V2	P0449311-8V2	CONTACT POINTS 2PC V2.08.07 (G0449)
311-9	P0449311-9	BALL BEARING 6308-2RS
311-10	P0449311-10	BALL BEARING 6206-2RS
312	P0449312	KEY 8 X 10 X 75
313	P0449313	HEX BOLT M10-1.5 X 45
314	P0449314	FLAT WASHER 10MM
315	P0449315	HEX NUT M10-1.5
316	P0449316	SANDING MOTOR PULLEY
317	P0449317	SET SCREW M8-1.25 X 10
317-1	P0449317-1	SET SCREW M8-1.25 X 20
318	P0449318	V-BELT B69
319	P0449319	BELT COVER
320	P0449320	KNOB BOLT M6-1 X 105
321	P0449321	FLAT WASHER 6MM
322	P0449322	SIDE PANEL
323	P0449323	HEX BOLT M8-1.25 X 30
325	P0449325	GAS STRUT
327	P0449327	FRONT UPPER FRAME ANGLE
328	P0449328	BUTTON HD CAP SCR M6-1 X 12
329	P0449329	FLAT WASHER 6MM
330	P0449330	MOUNTING BRACKET
331	P0449331	EMERGENCY STOP SWITCH MJ2-1307
332	P0449332	EMERGENCY STOP BAR
333	P0449333	BUTTON HD CAP SCR M6-1 X 12
335	P0449335	COMPRESSION SPRING
336	P0449336	FLAT WASHER 6MM
337	P0449337	HEX NUT M6-1
338	P0449338	HEX NUT M6-1
339	P0449339	REAR UPPER FRAME ANGLE
340	P0449340	SUPPORT PLATE (LH)
341	P0449341	SUPPORT PLATE (RH)

REF	PART #	DESCRIPTION
342	P0449342	CAP SCREW M6-1 X 12
343	P0449343	FLAT WASHER 6MM
348	P0449348	RUBBER PLATE 1005 X 65 X 2MM
349	P0449349	PLATE
350	P0449350	PHLP HD SCR 10-24 X 1/2
350-1	P0449350-1	HEX NUT 10-24
351	P0449351	KNOB M8-1.25 X 55
352	P0449352	LOCK BUSHING
355	P0449355	TOP COVER
356	P0449356	FRONT DUST SCOOP
357	P0449357	BUTTON HD CAP SCR M6-1 X 10
358	P0449358	FLAT WASHER 6MM
359	P0449359	ACORN NUT M6-1
360	P0449360	ADHESIVE FOAM STRIP 15 X 95
361	P0449361	ADHESIVE FOAM STRIP 15 X 130
364	P0449364	HANDLE
365	P0449365	CAP SCREW 5/16-18 X 3/4
366	P0449366	FLAT WASHER 5/16
367	P0449367	HEX NUT 5/16-18
368	P0449368	HINGE
369	P0449369	BUTTON HD CAP SCR M6-1 X 12
370	P0449370	KNOB BOLT M6-1 X 12
371	P0449371	HANDWHEEL HANDLE
372	P0449372	SET SCREW 3/8-16 X 1/2
373	P0449373	HANDWHEEL
374	P0449374	HANDWHEEL SLEEVE
375	P0449375	SET SCREW M6-1 X 10
376	P0449376	HEX NUT M6-1
377	P0449377	LIFT SCREW M20-2.5
378	P0449378	THRUST BEARING 51103
379	P0449379	CHAIN 3/8" PITCH
380	P0449380	SPROCKET
380-1	P0449380-1	SPROCKET
380-2	P0449380-2	KEY 5 X 5 X 20
380-3	P0449380-3	SET SCREW 1/4-20 X 1/4
381	P0449381	SHAFT
381-1	P0449381-1	BALL BEARING 6000-2RS
381-2	P0449381-2	INT RETAINING RING 10MM
382	P0449382	HEX NUT M10-1.5
383	P0449383	FLAT WASHER 10MM
384	P0449384	DRIVING LIFT SCREW M20-2.5
385	P0449385	HEX NUT M20-2.5
428	P0449428	EXT RETAINING RING 11MM
504	P0449504	MOTOR JUNCTION BOX STRAIN RELIEF
505	P0449505	CABLE CLAMP
506V2	P0449506V2	ELECTRICAL BOX V2.08.13
507	P0449507	FLAT WASHER 8MM
508	P0449508	HEX BOLT M8-1.25 X 25
509V2	P0449509V2	CONTROL PANEL PEDESTAL ARM V2.08.13
510	P0449510	SUPPORT STRAP
511	P0449511	HEX BOLT M8-1.25 X 30
512	P0449512	HEX NUT M8-1.25

Please Note: We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call (800) 523-4777 or visit our online parts store at www.grizzly.com to check for availability.



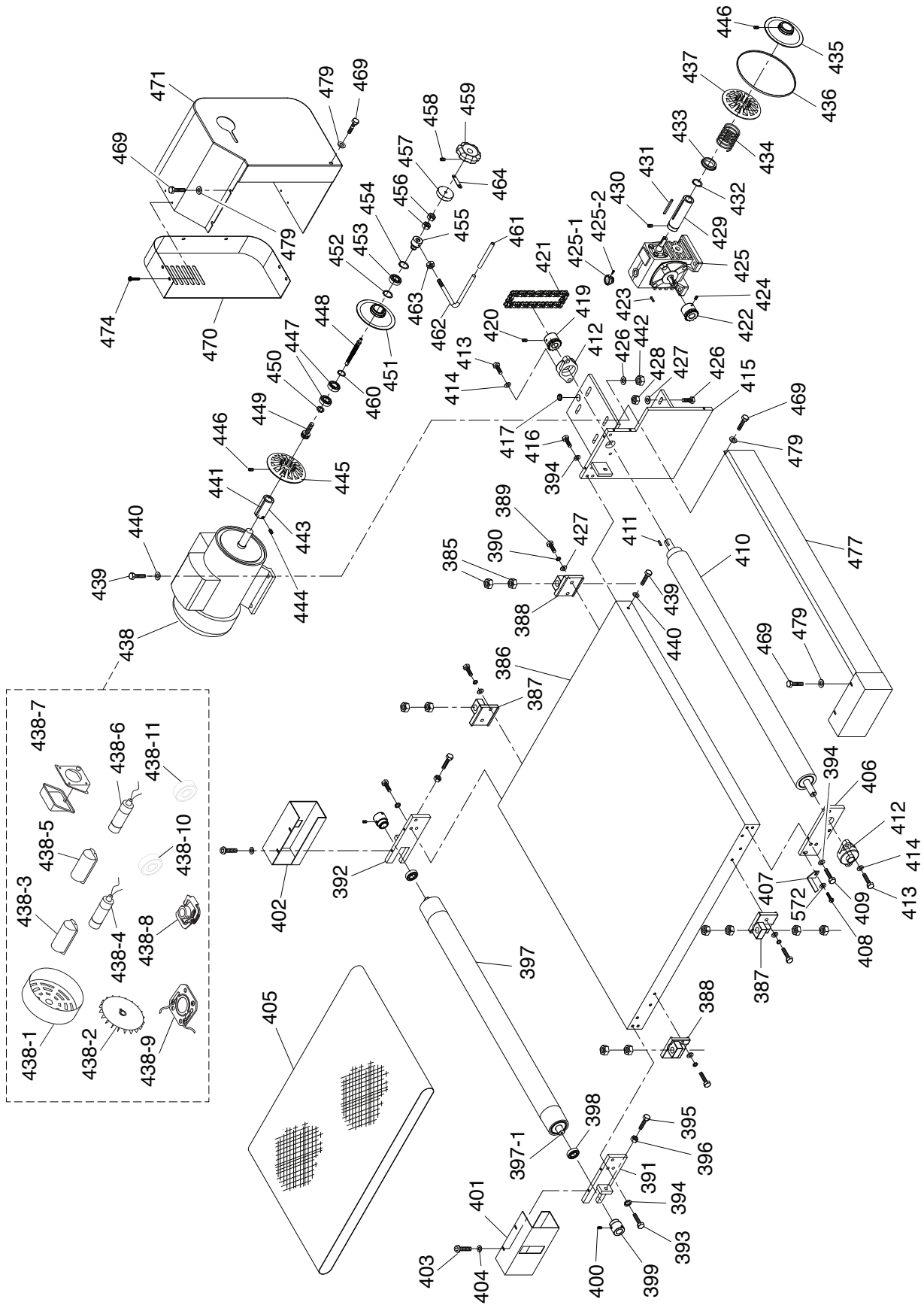
Frame

REF	PART #	DESCRIPTION
513	P0449513	GEARBOX
514	P0449514	CONNECTING SHAFT
515	P0449515	BUSHING
516	P0449516	GEAR 20T
517	P0449517	SET SCREW M6-1 X 10
518	P0449518	FLAT WASHER 10MM
519	P0449519	WORM GEAR
520	P0449520	BUSHING
521	P0449521	WORM GEAR
522	P0449522	SET SCREW M6-1 X 6
523	P0449523	WRENCH 12 X 14MM OPEN-ENDS
524	P0449524	HEX WRENCH 4MM
524-1	P0449524-1	SET SCREW M6-1 X 10
525	P0449525	HEX WRENCH 5MM
540	P0449540	SCREWDRIVER PHILLIPS #2
548	P0449548	PHLP HD SCR M4-.7 X 10
552	P0449552	GAS STRUT PIVOT SCREW
553	P0449553	ELECTRICAL PANEL
553-1	P0449553-1	SANDING MOTOR CORD 10G 4W 98"
553-2	P0449553-2	FEED MOTOR CORD 14G 3W 79"
553-3	P0449553-3	CORD 16G 2W 98"

REF	PART #	DESCRIPTION
554	P0449554	CORD 6G 3W 98"
555	P0449555	GROUND WIRE 8G 1C 2.5" (GREEN)
556	P0449556	CONTROL PANEL PLATE
563	P0449563	POWER JUNCTION BOX COVER
564	P0449564	POWER JUNCTION BOX
566	P0449566	STRAIN RELIEF LT STRAIGHT
567	P0449567	FLANGE SCREW M5-.8 X 10
569	P0449569	CORD 6G 3W 86"
570	P0449570	FLAT WASHER 16MM
571	P0449571	BUTTON HD CAP SCR M6-1 X 10
573	P0449573	TERMINAL BAR 1P
574	P0449574	GROUND TERMINAL BAR 1P
575	P0449575	TERMINAL BAR LOCKING SEGMENT
576	P0449576	TERMINAL BAR MOUNT
577	P0449577	HEX NUT M6-1
578	P0449578	POWER CORD CONDUIT COVER
579	P0449579	POWER CORD CONDUIT
580	P0449580	STRAIN RELIEF PGB 29-25 ST PLASTIC
581	P0449581	EXT TOOTH WASHER 5/16
582	P0449582	HEX NUT 5/16
753	P0450753	480V CONVERSION KIT (G0450)



Conveyor



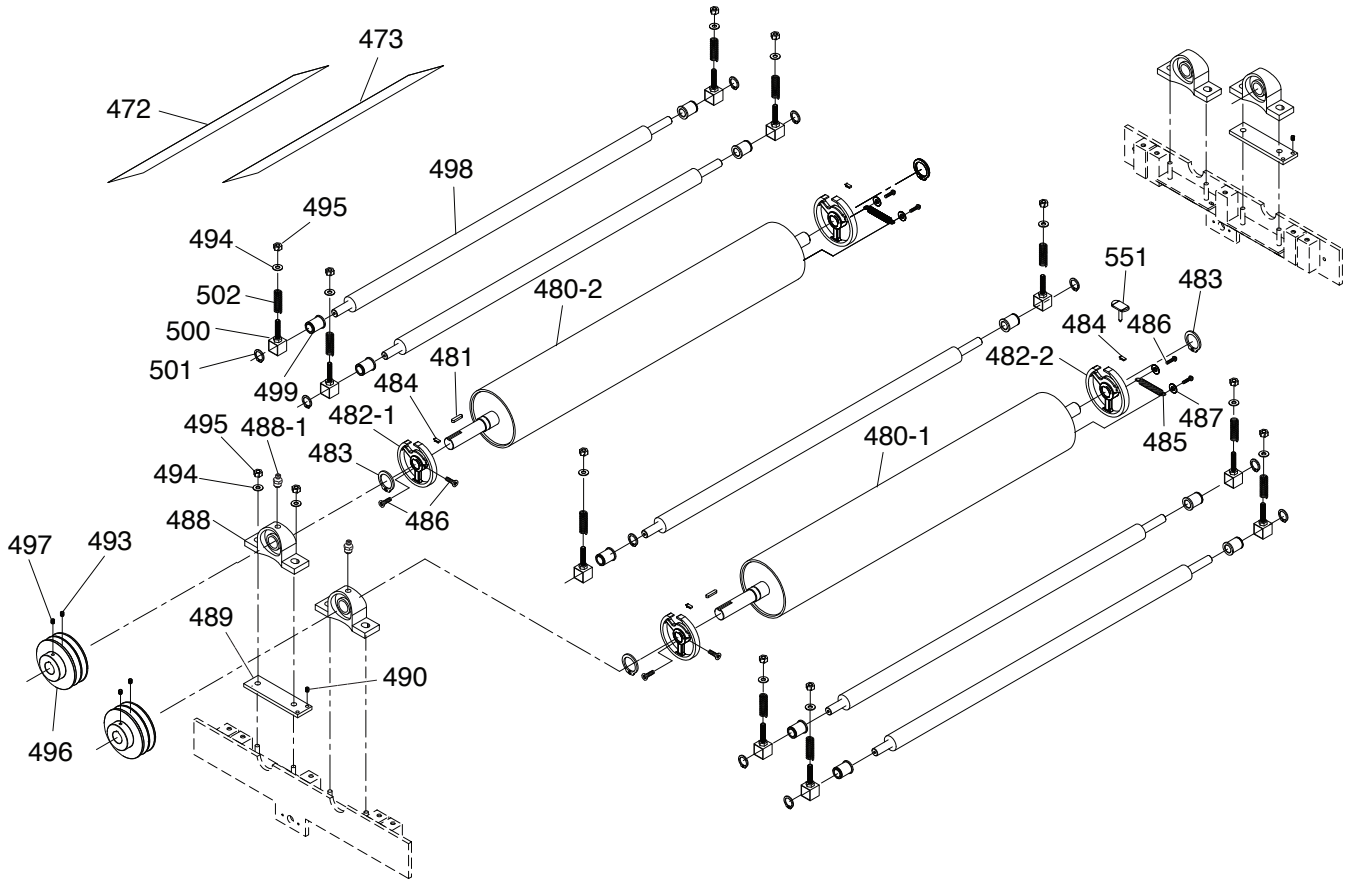
Conveyor

REF	PART #	DESCRIPTION
385	P0449385	HEX NUT M20-2.5
386	P0449386	TABLE
387	P0449387	TABLE SUPPORT (FL, RR)
388	P0449388	TABLE SUPPORT (FR, RL)
389	P0449389	HEX BOLT M8-1.25 X 30
390	P0449390	LOCK WASHER 8MM
391	P0449391	OUTFEED ROLLER SUPPORT BRACKET (LH)
392	P0449392	OUTFEED ROLLER SUPPORT BRACKET (RH)
393	P0449393	HEX BOLT M8-1.25 X 30
394	P0449394	LOCK WASHER 8MM
395	P0449395	HEX BOLT M12-1.75 X 80
396	P0449396	HEX NUT M12-1.75
397	P0449397	OUTFEED ROLLER
397-1	P0449397-1	OUTFEED ROLLER SHAFT
398	P0449398	BALL BEARING 6204-2RS
399	P0449399	LOCK COLLAR
400	P0449400	SET SCREW M6-1 X 10
401	P0449401	OUTFEED ROLLER COVER (LH)
402	P0449402	OUTFEED ROLLER COVER (RH)
403	P0449403	BUTTON HD CAP SCR M6-1 X 12
404	P0449404	FLAT WASHER 6MM
405	P0449405	CONVEYOR BELT 930 X 2290MM
406	P0449406	INFEED ROLLER SUPPORT BRACKET (LH)
407	P0449407	POINTER
408	P0449408	PHLP HD SCR M5-.8 X 10
409	P0449409	HEX BOLT M8-1.25 X 30
410	P0449410	INFEED ROLLER
411	P0449411	KEY 5 X 5 X 25
412	P0449412	FLANGE BEARING UCFL204
413	P0449413	HEX BOLT M10-1.5 X 25
414	P0449414	FLAT WASHER 10MM
415	P0449415	INFEED ROLLER SUPPORT BRACKET (RH)
416	P0449416	HEX BOLT M8-1.25 X 30
417	P0449417	GROMMET
419	P0449419	ROLLER SPROCKET
420	P0449420	SET SCREW M8-1.25 X 10
421	P0449421	CHAIN 3/8
422	P0449422	MOTOR SPROCKET
423	P0449423	KEY 5 X 5 X 35
424	P0449424	SET SCREW M8-1.25 X 10
425	P0449425	GEAR BOX 1/40
425-1	P0449425-1	OIL FILL PLUG 5/8-18
425-2	P0449425-2	PHLP HD SCR M3-.5 X 10
426	P0449426	HEX BOLT M8-1.25 X 40
427	P0449427	FLAT WASHER 8MM
428	P0449428	EXT RETAINING RING 11MM
429	P0449429	GEARBOX SHAFT SLEEVE
430	P0449430	SET SCREW M8-1.25 X 10
431	P0449431	KEY 5 X 5 X 80
432	P0449432	EXT RETAINING RING 32MM
433	P0449433	COLLAR
434	P0449434	COMPRESSION SPRING
435	P0449435	GEARBOX OUTSIDE PULLEY

REF	PART #	DESCRIPTION
436	P0449436	V-BELT AX25
437	P0449437	GEARBOX INSIDE PULLEY
438	P0449438	FEED MOTOR 1/3HP 240V 1-PH (G0449)
438	P0450438	FEED MOTOR 1/3HP 240/480V 3-PH (G0450)
438-1	P0449438-1	MOTOR FAN COVER (G0449)
438-1	P0450438-1	MOTOR FAN COVER (G0450)
438-2	P0449438-2	MOTOR FAN (G0449)
438-2	P0450438-2	MOTOR FAN (G0450)
438-3	P0449438-3	CAPACITOR COVER
438-4	P0449438-4	S CAPACITOR 75M 125V (G0449)
438-5	P0449438-5	CAPACITOR COVER
438-6	P0449438-6	R CAPACITOR 20M 300V 1-5/16 X 2 (G0449)
438-7	P0449438-7	MOTOR JUNCTION BOX (G0449)
438-7	P0450438-7	MOTOR JUNCTION BOX (G0450)
438-8	P0449438-8	CENTRIFUGAL PLATE (G0449)
438-9	P0449438-9	CONTACT PLATE (G0449)
438-10	P0449438-10	BALL BEARING 6203-2RS (G0449)
438-10	P0450438-10	BALL BEARING 6203-2RS (G0450)
438-11	P0449438-11	BALL BEARING 6202-2RS (G0449)
438-11	P0450438-11	BALL BEARING 6202-2RS (G0450)
439	P0449439	HEX BOLT M8-1.25 X 25
440	P0449440	FLAT WASHER 8MM
441	P0449441	KEY 5 X 5 X 55
442	P0449442	HEX NUT M8-1.25
443	P0449443	MOTOR SHAFT SLEEVE
444	P0449444	SET SCREW M8-1.25 X 10
445	P0449445	VS INSIDE PULLEY
446	P0449446	SET SCREW M6-1 X 10
447	P0449447	BALL BEARING 608-2RS
448	P0449448	SHAFT
449	P0449449	HEX BOLT M6-1 X 12
450	P0449450	LOCK WASHER 6MM
451	P0449451	VS OUTSIDE PULLEY
452	P0449452	EXT RETAINING RING 17MM
453	P0449453	BALL BEARING 6003ZZ
454	P0449454	EXT RETAINING RING 35MM
455	P0449455	PULLEY NUT 1/2-12
456	P0449456	HEX NUT M10-1.5
457	P0449457	KNURLED COLLAR
458	P0449458	SET SCREW M6-1 X 10
459	P0449459	HANDWHEEL
460	P0449460	INT RETAINING RING 10MM
461	P0449461	SLEEVE
462	P0449462	L-BAR
463	P0449463	LOCK NUT M6-1
464	P0449464	KNOB SUPPORT PLATE
469	P0449469	BUTTON HD CAP SCR M6-1 X 12
470	P0449470	CONVEYOR MOTOR COVER DOOR
471	P0449471	CONVEYOR MOTOR COVER
474	P0449474	PHLP HD SCR M5-.8 X 6
477	P0449477	INFEED GUARD
479	P0449479	FLAT WASHER 6MM



Roller & Drum

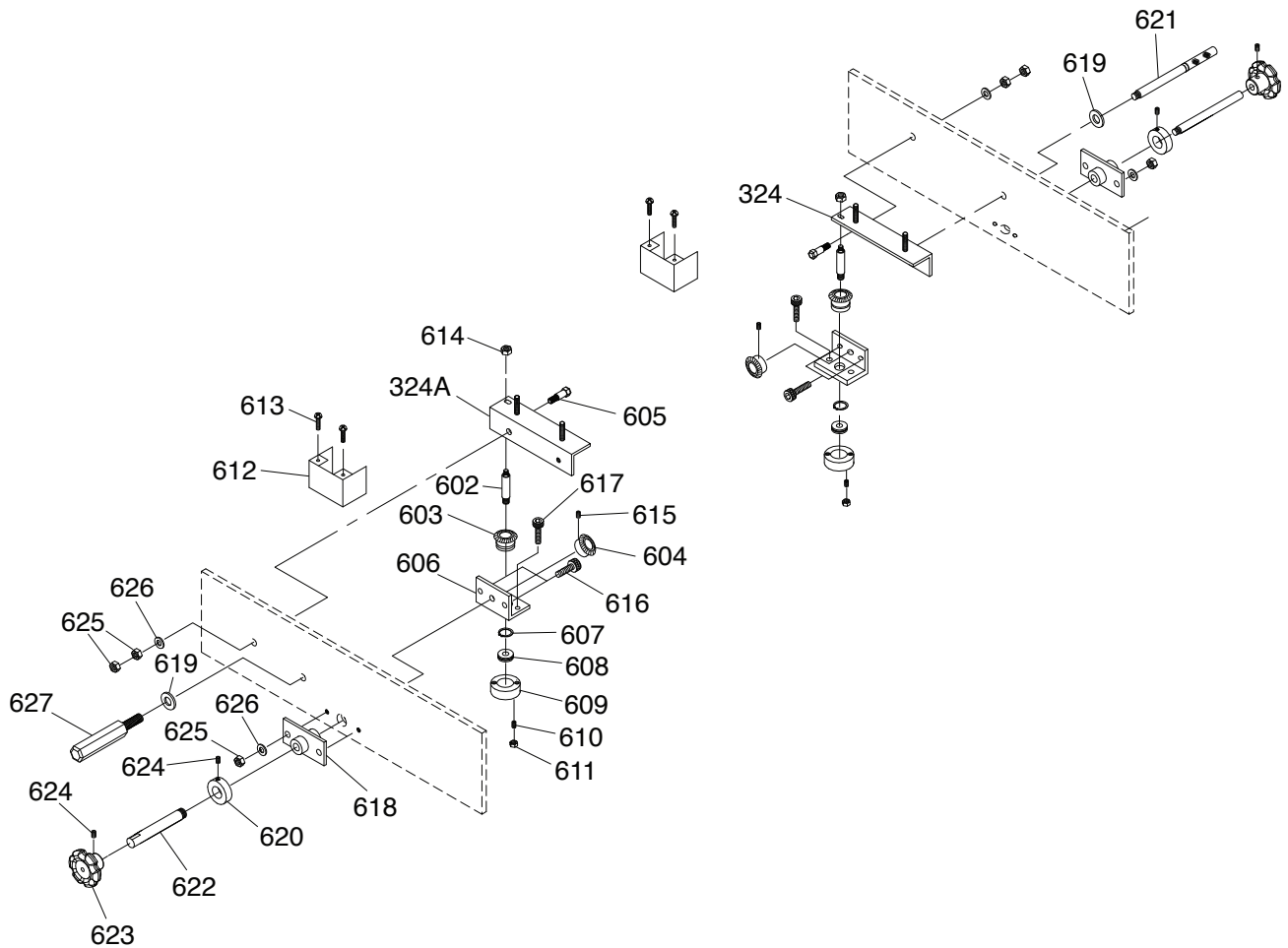


REF	PART #	DESCRIPTION
472	P0449472	SANDING PAPER ROLLS #60
473	P0449473	SANDING PAPER ROLLS #100
480-1	P0449480-1	SANDING DRUM (FRONT)
480-2	P0449480-2	SANDING DRUM (REAR)
481	P0449481	KEY 7 X 7 X 40
482-1	P0449482-1	SANDPAPER TENSIONING WHEEL (LH)
482-2	P0449482-2	SANDPAPER TENSIONING WHEEL (RH)
483	P0449483	EXT RETAINING RING 34MM
484	P0449484	SANDPAPER HOLDING CLIP
485	P0449485	EXTENSION SPRING
486	P0449486	BUTTON HD CAP SCR M6-1 X 12
487	P0449487	FLAT WASHER 6MM
488	P0449488	PILLOW BEARING UCP206
488-1	P0449488-1	GREASE FITTING 1/8" NPT STRAIGHT

REF	PART #	DESCRIPTION
489	P0449489	ADJUSTMENT PLATE
490	P0449490	SET SCREW 5/16-24 X 1/2
493	P0449493	SET SCREW M8-1.25 X 20
494	P0449494	FLAT WASHER 10MM
495	P0449495	LOCK NUT M10-1.5
496	P0449496	SANDING DRUM PULLEY
497	P0449497	SET SCREW M8-1.25 X 15
498	P0449498	HOLD DOWN ROLLER
499	P0449499	HOLD DOWN ROLLER BUSHING
500	P0449500	ROLLER BUSHING SUPPORT
501	P0449501	EXT RETAINING RING 19MM
502	P0449502	ROLLER COMPRESSION SPRING
551	P0449551	SPRING TENSION TOOL



Micro-Adjust

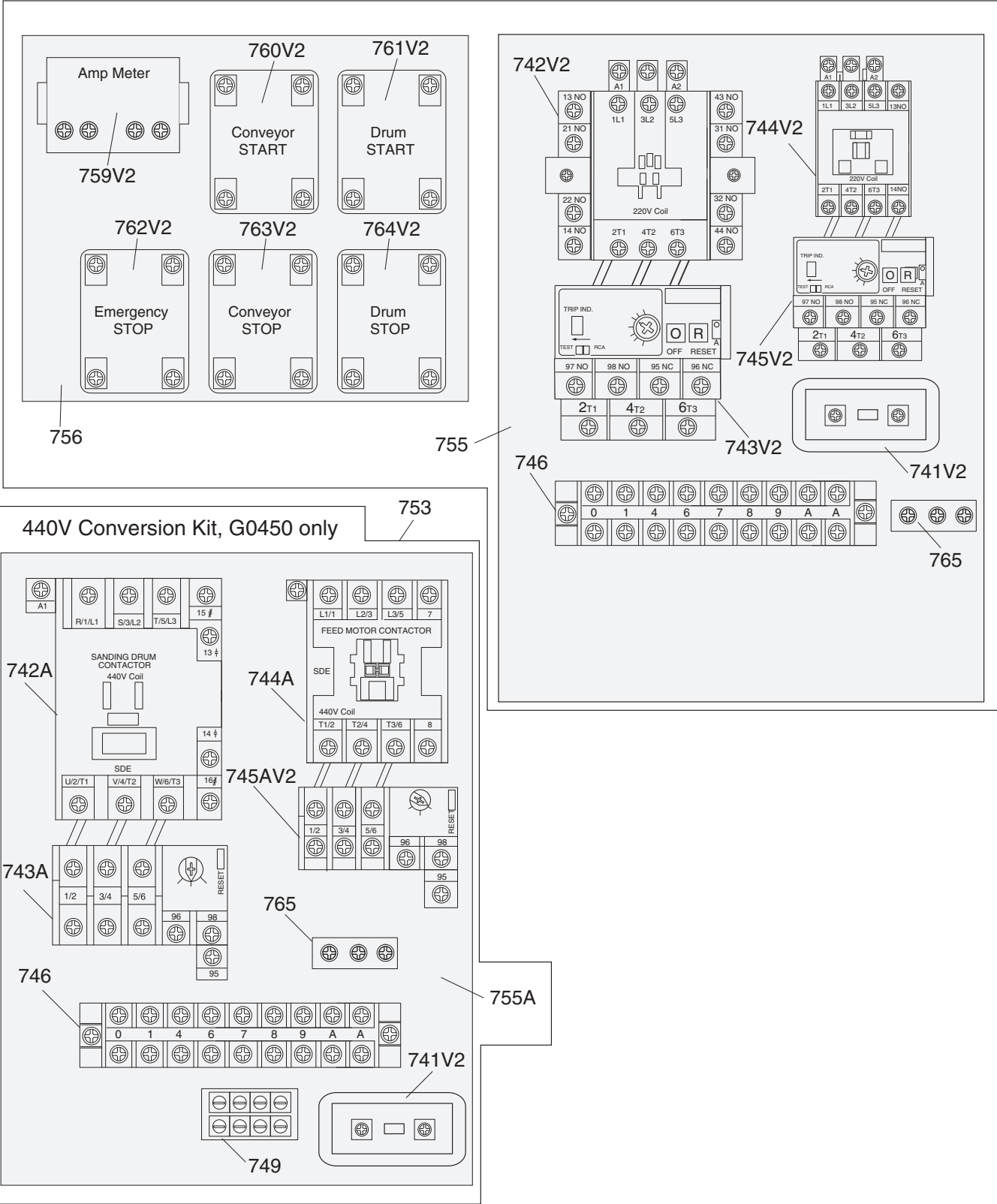


REF	PART #	DESCRIPTION
324	P0449324	BEVEL GEAR COVER (RH)
324A	P0449324A	BEVEL GEAR COVER (LH)
602	P0449602	MICRO-ADJUST SCREW 1/4-20
603	P0449603	BEVEL GEAR A 25T
604	P0449604	BEVEL GEAR B 25T
605	P0449605	STEP BOLT 5/16-18
606	P0449606	MOUNTING BRACKET
607	P0449607	EXT RETAINING RING 20MM
608	P0449608	THRUST BEARING 51101
609	P0449609	THRUST BEARING SEAT
610	P0449610	SET SCREW 10-24 X 1/4
611	P0449611	HEX NUT 10-24
612	P0449612	DUST COVER
613	P0449613	TAP SCREW #10 X 3/8

REF	PART #	DESCRIPTION
614	P0449614	LOCK NUT 1/4-20
615	P0449615	SET SCREW 10-24 X 1/4
616	P0449616	CAP SCREW 5/16-18 X 1-1/4
617	P0449617	CAP SCREW 1/4-20 X 5/8
618	P0449618	DRIVE SHAFT BRACKET
619	P0449619	FLAT WASHER 5/16
620	P0449620	LOCK COLLAR
621	P0449621	LOCK LEVER
622	P0449622	DRIVE SHAFT
623	P0449623	CONTROL KNOB
624	P0449624	SET SCREW 1/4-20 X 5/16
625	P0449625	HEX NUT 5/16-18
626	P0449626	FLAT WASHER 5/16
627	P0449627	LOCK HANDLE



Electrical



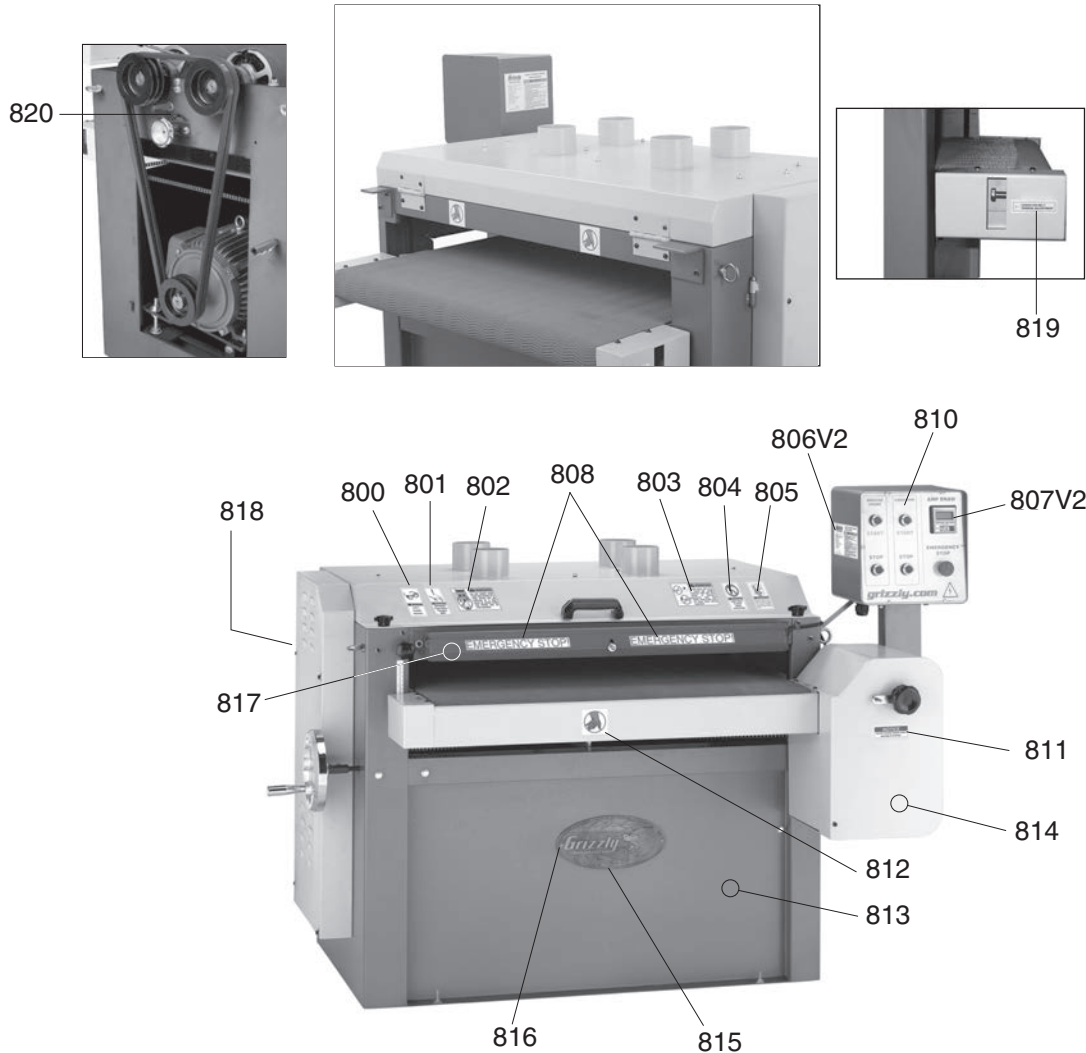
Electrical

REF	PART #	DESCRIPTION
741V2	P0449741V2	CURRENT COIL TH30 100/5A
742V2	P0449742V2	CONTACTOR TECO CU-50R 220V (G0449 240V)
742V3	P0450742V3	CONTACTOR TECO CU-50R 220V (G0450 240V)
742AV2	P0450742AV2	CONTACTOR TECO CU-40R 440V (G0450 480V)
743V2	P0449743V2	OL RELAY TECO RHU-80K3 (G0449, G0450 240V)
743AV2	P0450743AV2	OL RELAY TECO RHU-80K2 (G0450 480V)
744V2	P0449744V2	CONTACTOR TECO CU-11 220V (G0449, G0450 240V)
744AV2	P0450744AV2	CONTACTOR TECO CU-11 440V (G0450 480V)
745V2	P0449745V2	OL RELAY TECO RHU-10K1 2.3-3.2A (G0449 240V)
745V2	P0450745V2	OL RELAY TECO RHU-10K1 1.4-2A (G0450 240V)
745AV3	P0450745AV3	OL RELAY TECO RHU-10K1 0.75-1A (G0450 480V)
746	P0449746	TERMINAL BAR 9P

REF	PART #	DESCRIPTION
749	P0450749	AMP METER TRANSFORMER (G0450 480V)
753	P0450753	480V CONVERSION KIT (G0450)
755	P0449755	ELECTRICAL PANEL (G0449, G0450 240V)
755A	P0450755A	ELECTRICAL PANEL (G0450 480V)
756	P0449756	CONTROL PANEL PLATE
759V2	P0449759V2	ANALOG AMP METER 100/5A V2.11.13
760V2	P0449760V2	START BUTTON GBF-221 22MM GRN V2.11.13
761V2	P0449761V2	START BUTTON GBF-221 22MM GRN V2.11.13
762V2	P0449762V2	E-STOP BUTTON GLEB-221 22MM V2.11.13
763V2	P0449763V2	STOP BUTTON GBF-221 22MM RED V2.11.13
764V2	P0449764V2	STOP BUTTON GBF-221 22MM RED V2.11.13
765	P0449765	GROUND TERMINAL



Label Placement



REF	PART #	DESCRIPTION
800	P0449800	SAFETY GLASSES LABEL
801	P0449801	UNPLUG 220V LABEL
802	P0449802	FEED ONLY ONE LABEL
803	P0449803	HAND PINCH IN BELT LABEL
804	P0449804	KEEP DOOR CLOSED LABEL
805	P0449805	READ MANUAL LABEL
806V2	P0449806V2	MACHINE ID LABEL CSA (G0449)
806V2	P0450806V2	MACHINE ID LABEL CSA (G0450)
807V2	P0449807V2	AMP LOAD LABEL CSA (G0449)
807V2	P0450807V2	AMP LOAD LABEL CSA (G0450)
808	P0449808	EMERGENCY STOP LABEL

REF	PART #	DESCRIPTION
810	P0449810	CONTROL PANEL PLATE LABEL
811	P0449811	DON'T CHANGE SPEEDS LABEL
812	P0449812	HAND WARNING LABEL
813	P0449813	GRIZZLY GREEN TOUCH-UP PAINT
814	P0449814	GRIZZLY PUTTY TOUCH-UP PAINT
815	P0449815	LARGE GRIZZLY NAMEPLATE
816	P0449816	PHLP HD SCR M3-.5 X 10
817	P0449817	RED TOUCH UP PAINT
818	P0449818	BELT TENSION ADJUST LABEL (LH)
819	P0449819	BELT TENSION ADJUST LABEL (RH)
820	P0449820	MICRO-ADJUST KNOB LABEL

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 CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____
 Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

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

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

3. What is your annual household income?

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

4. What is your age group?

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

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

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

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

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value?

Yes No

8. Would you recommend Grizzly Industrial to a friend?

Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times.

Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place Stamp Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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

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TOOL WEBSITE

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