

# ***Grizzly*** ***Industrial, Inc.***®

## **MODEL G0763** **6" X 18" SURFACE GRINDER** **w/2-AXIS POWER FEED** **OWNER'S MANUAL** *(For models manufactured since 8/13)*



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE  
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
#TSDM15971 PRINTED IN CHINA

V1.02.14

 **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

This 6 x 18" Surface Grinder allows you to resurface metal workpieces to create high-tolerance flat surfaces. It utilizes a table that moves horizontally and a grinding wheel that moves vertically. By mounting a workpiece to the table, then moving the table and the grinding wheel during the grinding process, extremely small amounts of material can be removed with each pass.

The G0763 is equipped with X- and Y-axis power feeds that provide automated operation. In addition to the convenient front-mounted controls and handwheels, the G0763 includes a magnetic chuck, recycling flood coolant system, halogen work light, and one-shot oiler for lubrication of sliding parts.

For grinding wheel maintenance, the G0763 includes a wheel-balancing tool and a diamond dresser.

## Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support  
1203 Lycoming Mall Circle  
Muncy, PA 17756  
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 contained inside. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive will be slightly different than what is shown in the manual.**

If you find this to be the case, and the difference between the manual and machine leaves you confused about a procedure, check our website for an updated version. We post current manuals and manual updates for free on our website at [www.grizzly.com](http://www.grizzly.com).

Alternatively, you can call our Technical Support for help. Before calling, please write down the **Manufacture Date** and **Serial Number** stamped into the machine ID label (see below). This information helps us determine if updated documentation is available for your machine.

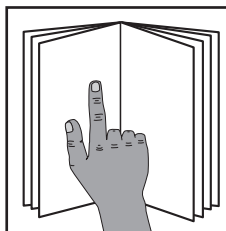
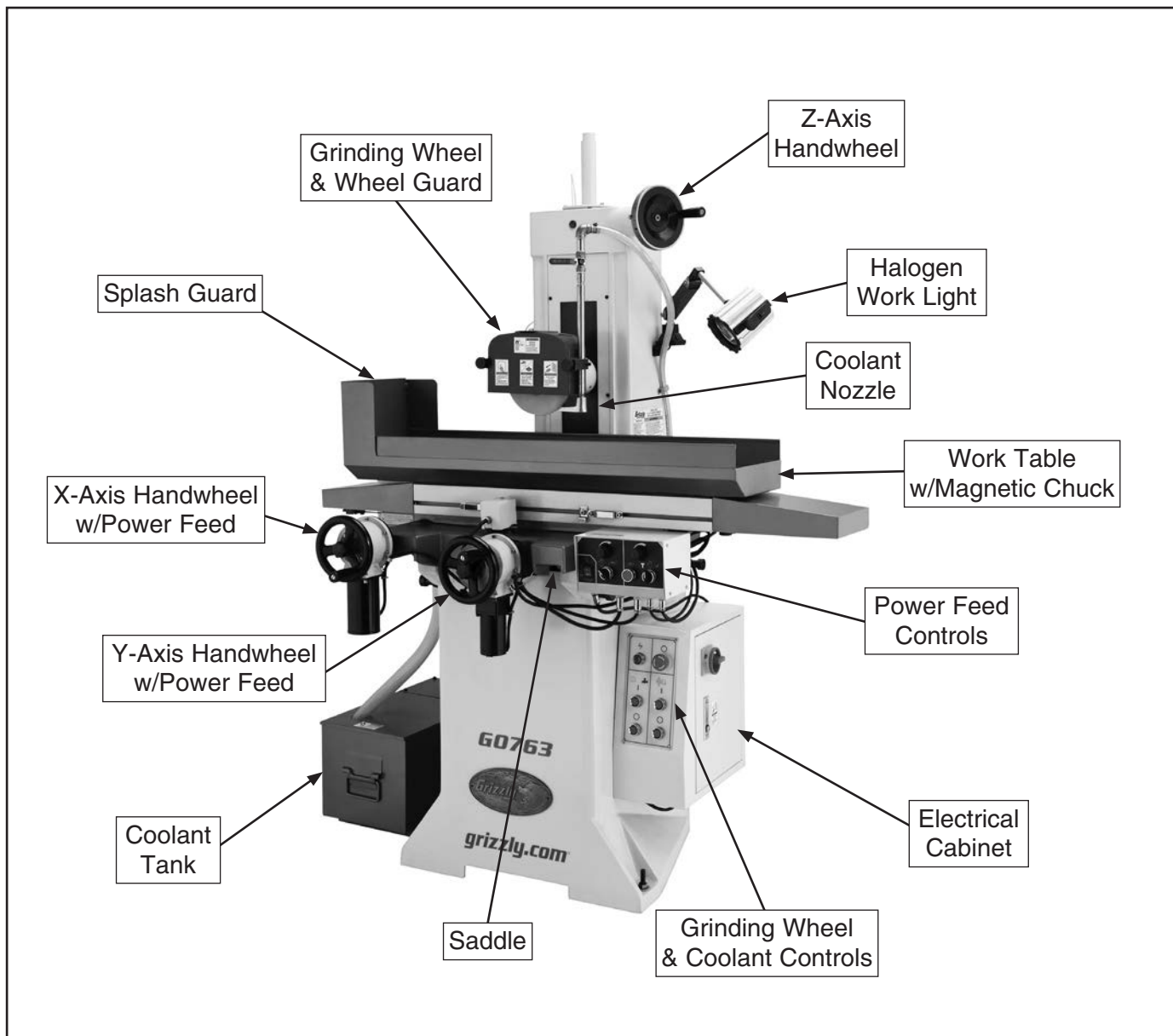
		<b>MODEL GXXXX</b>	
		<b>MACHINE NAME</b>	
<b>SPECIFICATIONS</b>		<b>▲ WARNING!</b>	
Motor:		To reduce risk of serious injury when using this machine:	
Specification:		1. Read manual before operation.	
Specification:		2. Wear safety glasses and respirator.	
Specification:		3. Make sure machine is properly adjusted/setup and	
Specification:		4. power is connected to grounded circuit before starting.	
Weight:		5. Make sure the motor has stopped and disconnect	
		6. power before adjustments, maintenance, or service.	
		7. DO NOT expose to rain or dampness.	
		8. DO NOT modify this machine in any way.	
		9. Machine is ended.	
		10. Use of drugs or alcohol.	
		11. Maintain machine carefully to prevent accidents.	
Manufactured for Grizzly in Taiwan			

Manufacture Date

Serial Number



# Identification



## **⚠️ WARNING**

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

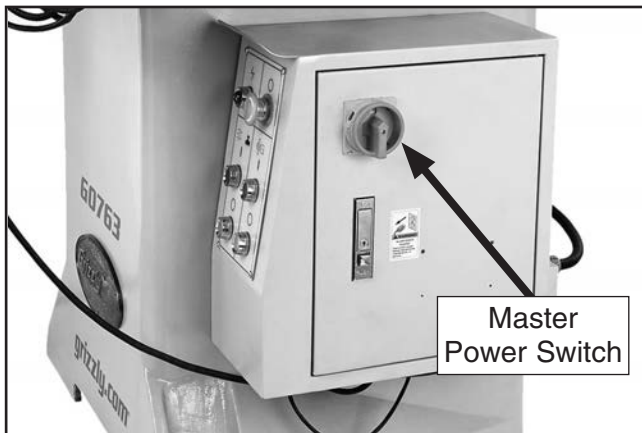


# Basic Controls

Refer to **Figures 1–4** and the following descriptions to develop an understanding of the basic controls used to operate the surface grinder. This knowledge will be necessary to safely complete the **Test Run** later in this manual.

Additional details for certain controls are also located in the **Operations** section.

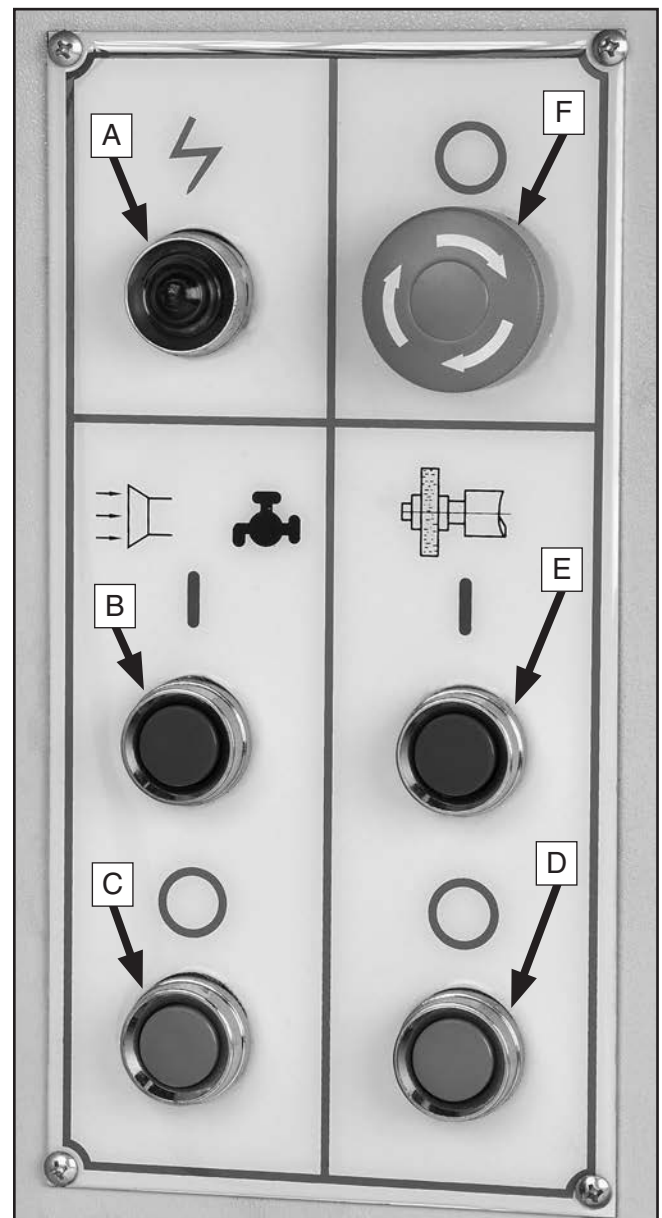
## Master Power Switch



**Figure 1.** Location of master power switch.

**Master Power Switch:** Enables power to flow to the machine when the “I” is visible through the switch.

## Grinding Wheel & Coolant Controls



**Figure 2.** Grinding wheel and coolant controls.

- A. Power Lamp:** Lights when power is flowing to the machine.
- B. Coolant Pump ON Button**
- C. Coolant Pump OFF Button**
- D. Grinding Motor OFF Button**
- E. Grinding Motor ON Button**
- F. Emergency STOP Button:** Disables power to grinding wheel motor and coolant pump. To reset, twist the button clockwise until it pops out.





## Power Feed Controls

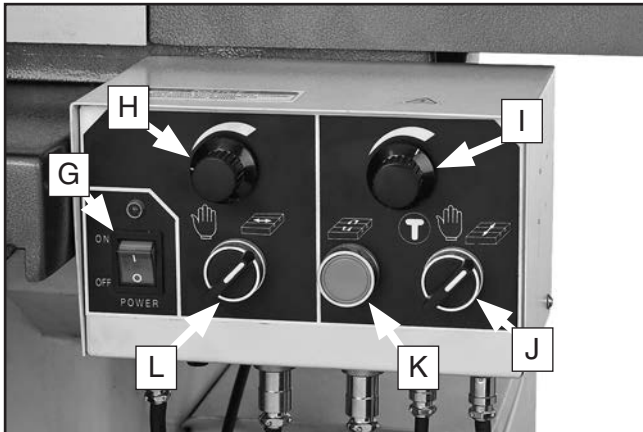


Figure 3. Power feed controls.

Refer to **Power Feeds** on **Page 31** for detailed instructions on operating the power feeds.

- G. ON/OFF Switch:** Enables power to the power feed unit.
- H. X-Axis Speed Control Knob:** Controls the speed of table movement along the X-axis.
- I. Y-Axis Speed Control Knob:** Controls the speed of table movement along the Y-axis.
- J. Y-Axis Mode Selector Switch:** Selects the mode of operation for the Y-axis—jog (the “T”), manual (the “hand”), or automatic (the “table” symbol).
- K. Y-Axis Reverse Button:** Reverses the direction of Y-axis table movement.
- L. X-Axis Mode Selector Switch:** Selects the mode of operation for the X-axis—manual (the “hand”) or automatic (the “table” symbol).

## Handwheels

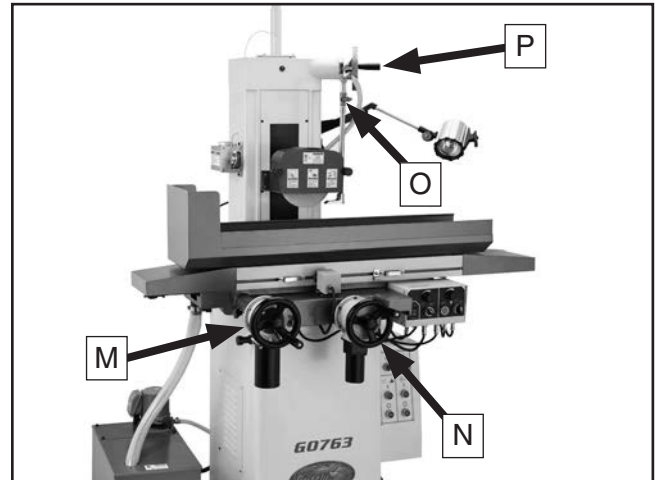


Figure 4. Handwheel controls.

- M. X-Axis Handwheel:** Manually controls X-axis table movement.
- N. Y-Axis Handwheel:** Manually controls Y-axis table movement. The graduated dial has 0.0005" increments with one full revolution equaling 0.1000" of table travel.
- O. Coolant Valve:** Controls the flow of coolant when coolant pump is turned **ON**.
- P. Z-Axis Handwheel:** Manually controls Z-axis grinding wheel movement. The graduated dial has 0.0002" increments with one full revolution equaling 0.0500" of table travel.





# MACHINE DATA SHEET

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

## MODEL G0763 6" X 18" SURFACE GRINDER WITH 2-AXIS TABLE POWER FEED

### Product Dimensions:

Weight..... 1323 lbs.  
 Width (side-to-side) x Depth (front-to-back) x Height..... 54-3/4 x 42 x 73-1/2 in.  
 Footprint (Length x Width)..... 27 x 24 in.

### Shipping Dimensions:

Type..... Wood  
 Content..... Machine  
 Weight..... 1544 lbs.  
 Length x Width x Height..... 46 x 39 x 77 in.  
 Must Ship Upright..... Yes

### Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz  
 Full-Load Current Rating..... 6.6A  
 Minimum Circuit Size..... 15A  
 Connection Type..... Cord & Plug  
 Power Cord Included..... No  
 Recommended Power Cord..... "S"-Type, 3-Wire, 14 AWG, 300 VAC  
 Plug Included..... No  
 Recommended Plug Type..... 6-15

### Motors:

#### Coolant Pump

Type..... TEFC Induction  
 Horsepower..... 1/8 HP  
 Phase..... Single-Phase  
 Amps..... 0.6A  
 Speed..... 3450 RPM  
 Power Transfer ..... Direct Drive  
 Bearings..... Shielded & Permanently Sealed

#### Main

Type..... TEFC Induction  
 Horsepower..... 1-1/2 HP  
 Phase..... Single-Phase  
 Amps..... 6A  
 Speed..... 3450 RPM  
 Power Transfer ..... Direct Drive  
 Bearings..... Shielded & Permanently Sealed





**Main Specifications:**

**Operation Info**

Max. Dist Wheel To Table.....	10-3/4 in.
Max. Distance Table To Spindle Center.....	14-1/4 in.
Longitudinal Travel.....	19 in.
Cross Travel.....	7-1/8 in.
Spindle Dia.....	1 in.
Spindle Speed.....	3450 RPM
Max. Grinding Length.....	17-3/4 in.
Max. Grinding Width.....	6 in.
Grinding Wheel Bore.....	1-1/4 in.
Grinding Wheel Diameter.....	7 in.
Grinding Wheel Width.....	1/2 in.
Vertical Handwheel Graduation.....	0.0002 in.
Vertical Handwheel Revolution.....	0.05 in.
Crossfeed Handwheel Graduation.....	0.0005 in.
Crossfeed Handwheel Revolution.....	0.1 in.

**Table Info**

Table Size Length.....	17-3/4 in.
Table Size Width.....	6 in.
Floor To Table Height.....	39-3/8 in.
T Slot Size Width.....	1/2 in.
T Slot Size Height.....	1 in.
Stud Size.....	3/8 in.
Head Size.....	7/8 in.

**Magnetic Chuck Info**

Magnetic Chuck Size Length.....	17-3/4 in.
Magnetic Chuck Size Width.....	6 in.

**Construction**

Table.....	Cast Iron
Body.....	Cast Iron
Base.....	Cast Iron
Paint.....	Powder-Coated

**Other**

Column Diameter.....	13-3/4 in.
Column Size Width.....	11-3/4 in.
Column Size Length.....	34-1/4 in.
Coolant Tank Width.....	11 in.
Coolant Tank Length.....	19-3/4 in.
Coolant Tank Height.....	11-3/4 in.
Coolant Tank Capacity.....	9-1/4 Gallons

**Other Specifications:**

Country Of Origin .....	China
Warranty .....	1 Year
Approximate Assembly & Setup Time .....	1 Hour
Serial Number Location .....	Machine ID Label
Sound Rating .....	65 dB
ISO 9001 Factory .....	Yes
CSA Certified .....	No



# 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.



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



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



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

**NOTICE**

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

## 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 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 avoid accidental slips, which could cause loss of workpiece control.

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

**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.

**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.

**CHECK DAMAGED PARTS.** Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

**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 Surface Grinders

**WHEEL SPEED RATING.** Wheels operated at a faster speed than rated for may break or fly apart. Before mounting a new wheel, be sure the wheel RPM rating is equal or higher than the speed of the grinder.

**WHEEL FLANGES.** Only use the flanges included with the grinder when mounting wheels. Other flanges may not properly secure the wheel and could cause the wheel to fly off or break apart.

**RING TEST.** Perform a "ring test" on grinding wheels before installation to ensure that they are safe to use. A wheel that does not pass the ring test may break or fly apart during operation.

**STARTING GRINDER.** If a wheel IS damaged, it will usually fly apart shortly after start-up. To protect yourself, always stand away from the grinding wheel when turning the machine **ON** and allow the wheel to gain full speed before standing in front of it.

**CRACKED WHEEL.** Cracked wheels may break and fly apart during operation. Replace cracked wheels immediately!

**PROTECTIVE CLOTHING.** Protect skin from flying sparks by wearing close-fitting long sleeves and buttoned-up shirt. In case of falling heavy objects, wear leather, non-skid boots with added toe protection.

**GRINDING MAGNESIUM.** Grinding material with magnesium content may increase the risk of fire or explosion. Before grinding material with magnesium content, review all available safety information that pertains to grinding magnesium, including the National Fire Protection Association standard NFPA 480, "Storage, Handling and Processing Magnesium."

**WORKPIECE CONTACT.** A heavy impact against the grinding wheel can cause it to break or fly apart, causing serious personal injuries. Avoid jamming the workpiece into the wheel to reduce this risk.

**LUNG PROTECTION.** Grinding produces hazardous dust, which may cause long-term respiratory problems if breathed. Always wear a NIOSH approved dust mask or respirator when grinding, and use coolant when possible to minimize this risk.

**HAND/WHEEL CONTACT.** Grinding wheels have the capability of removing a lot of skin fast. Make sure the workpiece is securely clamped to the table, then position your hands a safe distance away when grinding. Avoid wearing gloves as they may get caught in the grinding wheel and cause even more serious entanglement injuries.

**DUST COLLECTION.** DO NOT connect a surface grinder to a dust collection system that is used with woodworking machines. Sparks emitted from the grinding process may ignite wood particles, resulting in fire or explosion. Only use a metal-specific dust collection system with this machine.

**COOLANT USAGE.** Use the correct personal protection equipment when handling coolant. Follow federal, state, and fluid manufacturer requirements for proper disposal.

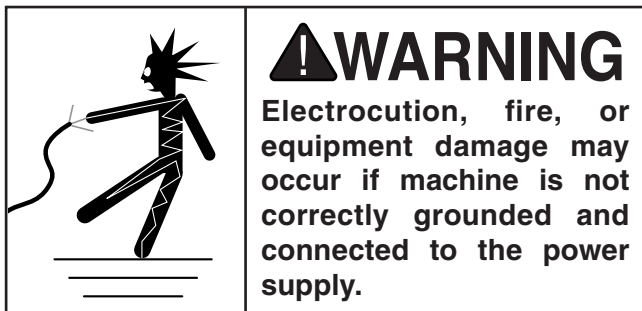
**EYE PROTECTION.** Grinding causes small particles to become airborne at a high rate of speed. ALWAYS wear ANSI-approved eye and face protection when using this machine.



# 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.

### Full-Load Current Rating at 220V .... 6.6 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 requirements in the following section.

## Circuit Requirements for 220V

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

**Nominal Voltage** ..... 208V, 220V, 230V, 240V  
**Cycle** ..... 60 Hz  
**Phase** ..... 1-Phase  
**Power Supply Circuit** ..... 15 Amps  
**Plug/Receptacle** ..... NEMA 6-15  
**Cord** ..... “S”-Type, 3-Wire, 14 AWG, 300 VAC

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.)



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





## Grounding Instructions

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

The power cord and plug specified under "Circuit Requirements for 220V" on the previous page has an equipment-grounding wire and a grounding prong. The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances (see figure below).

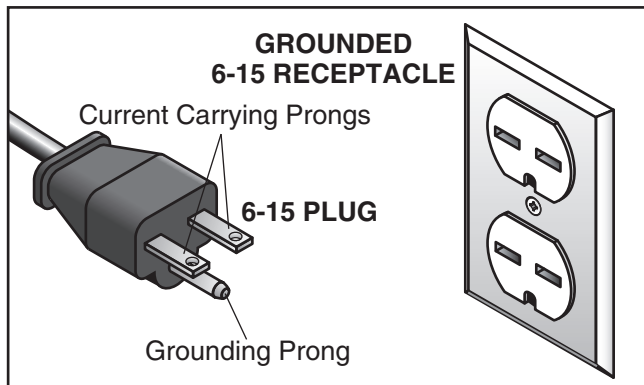
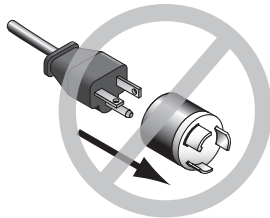


Figure 5. Typical 6-15 plug and receptacle.

## **!**WARNING

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

## **!**CAUTION



**No adapter should be used with the required plug. If the plug does not fit the available receptacle, or the machine must be reconnected for use on a different type of circuit, the reconnection must be made by a qualified electrician and comply with all local codes and ordinances.**

## **!**WARNING

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

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

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

## Extension Cords

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

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

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

**Minimum Gauge Size ..... 14 AWG**  
**Maximum Length (Shorter is Better).....50 ft.**



# SECTION 3: SETUP

## Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately 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.



## Needed for Setup

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

Description	Qty
• Additional People .....	1
• Safety Glasses .....	1 Pair Per Person
• Cleaner/Degreaser ( <b>Page 15</b> ) ....	As Needed
• Disposable Shop Rags.....	As Needed
• Forklift (rated for at least 2500 lbs.).....	1
• Safety Hooks & Chains (rated for at least 2500 lbs. each).....	4
• Precision Level .....	1
• NLGI#2 Grease* .....	As Needed
• Coolant .....	Approximately 8 Gal.
• ISO 32 Oil* .....	Approximately 1 Pint

\* See **Page 34** for offerings from Grizzly.





# Inventory

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

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

## NOTICE

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

Inventory (Figures 6–8)	Qty
A. Toolbox.....	1
B. Wheel Balancing Base.....	1
C. Magnetic Chuck w/Key.....	1
D. Magnetic Chuck Clamp Assemblies	
—Rubber Pads.....	2
—Cap Screws M10-1.5 x 55.....	2
—T-nuts M-10-1.5.....	2
E. Table Cable Bracket.....	1
F. Leveling Pads.....	3
G. Leveling Pad Bolts M20-2.5 x 80 w/Hex Nuts & Flat Washers.....	3
H. Table Cable Assembly.....	1
I. Fasteners for Table	
—Cap Screw M10-1.5 x 50.....	1
—Cap Screws M10-1.5 x 25.....	2
—Cap Screws M8-1.25 x 12.....	4
—Cap Screws M6-1 x 12.....	4
J. Wrenches 19 x 22mm, 14 x 17mm....	1 Each
K. Hex Wrenches 8, 6, 5, 4, 3mm.....	1 Each
L. Screwdrivers, Flat & Phillips.....	1 Each
M. Diamond Dresser Base.....	1
N. Wheel Balancing Arbor.....	1
O. Splash Guard Base.....	1
P. Splash Guard Sides.....	2
Q. Table Ends.....	2
R. Table Ball Bearing Segments.....	8
S. Grinding Wheel 7"D x 1/2"T x 1 1/4" 80-Grit..	1
T. Handwheel Handles.....	3
U. Arbor Nut.....	1
V. Wheel Sleeve.....	1
W. Wheel Flange.....	1

X. Wheel Flange Wrench.....	1
Y. Wheel Puller.....	1
Z. Diamond Dresser.....	1

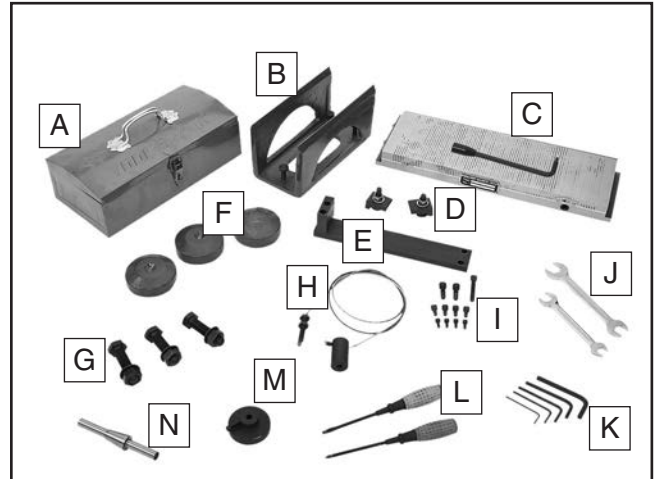


Figure 6. Small parts inventory.

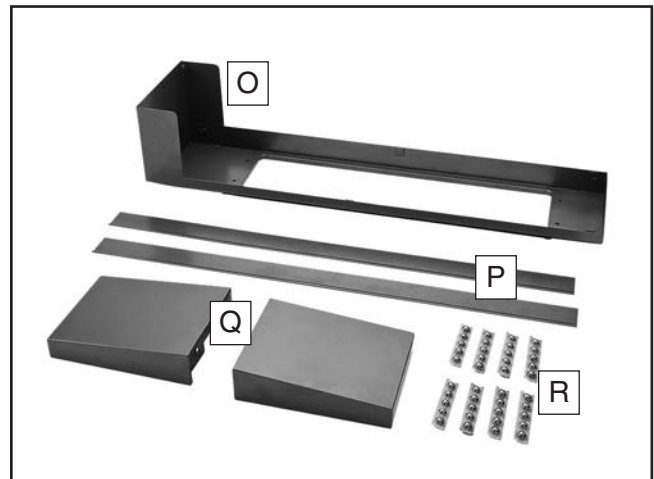


Figure 7. Small parts inventory.



Figure 8. Small parts inventory.



# Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

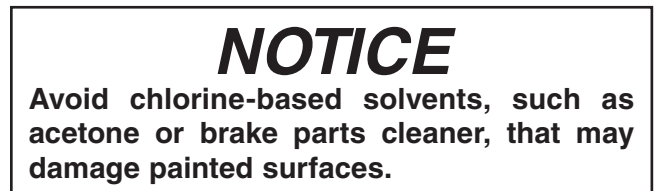
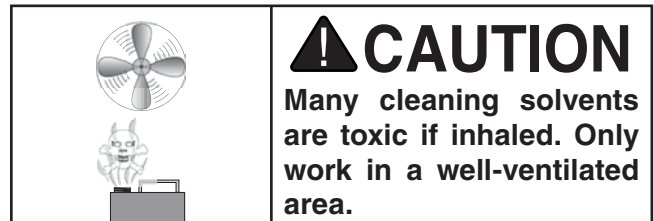
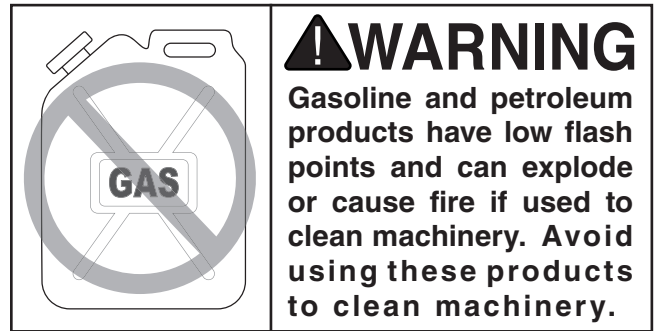
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

## Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

## Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



## T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from your machine during clean up.



Figure 9. T23692 Orange Power Degreaser.



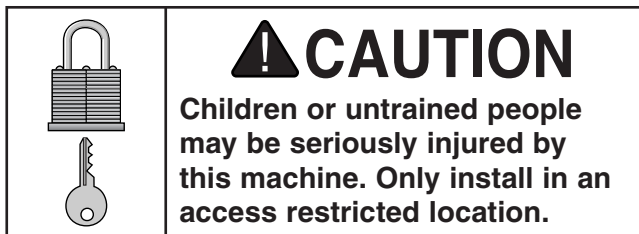
# Site Considerations

## Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

## Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



## Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

## Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device, if required.

## Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

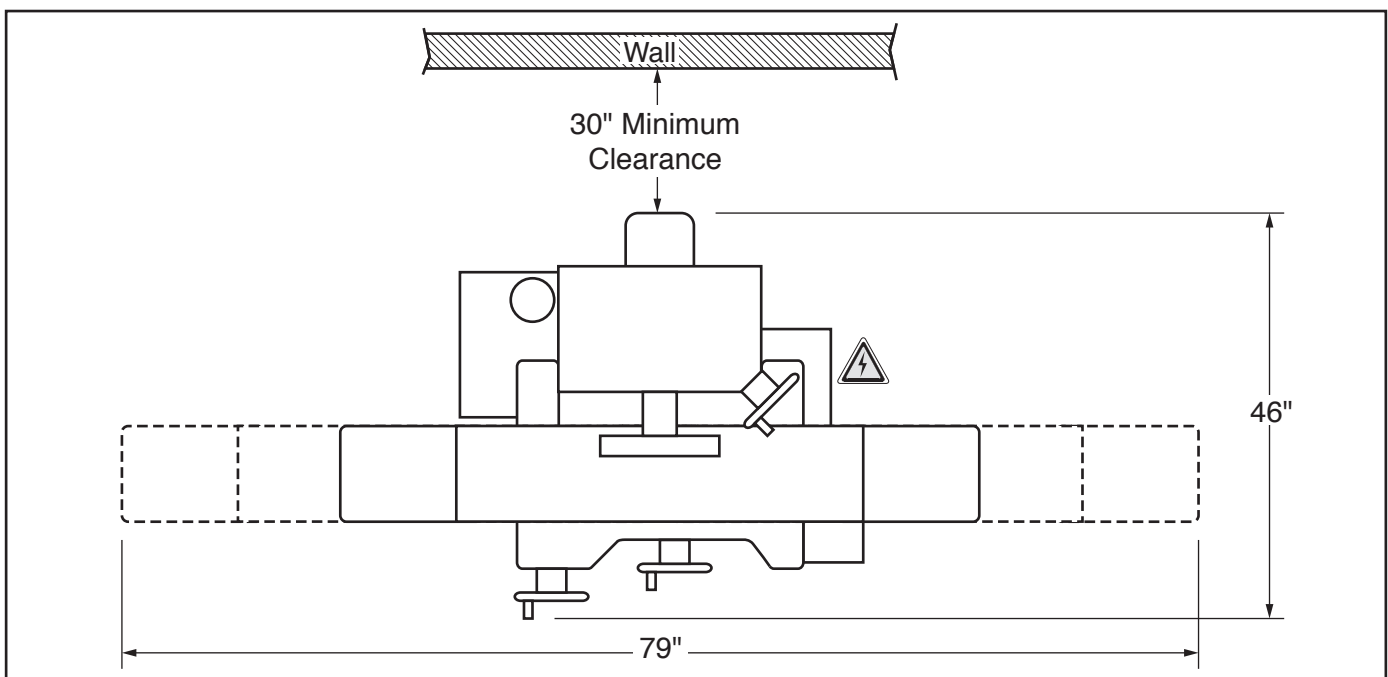
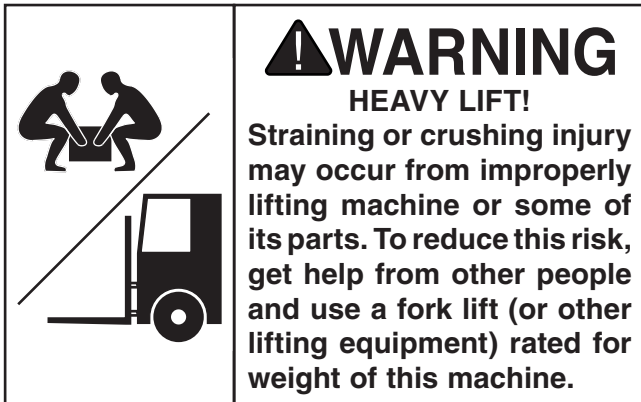


Figure 10. Minimum working clearances.



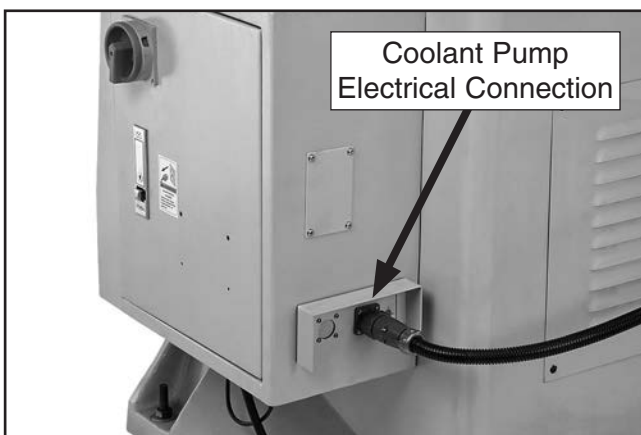
# Lifting & Placing



Lifting and placing the G0763 will require help from at least one other person, a fork lift with four safety hooks and chains (rated for 2500 lbs. each), and a precision level.

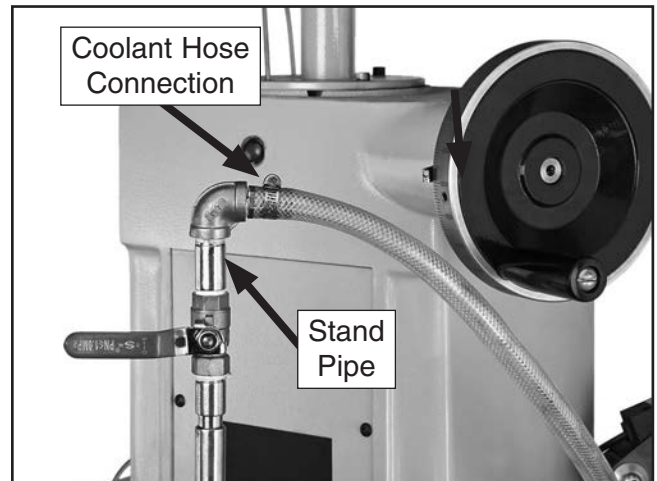
## To lift and place the machine:

1. Remove top crate from shipping pallet.
2. Remove loosely packed items from shipping pallet.
3. Move pallet and machine to selected position.
4. Disconnect coolant power cable from electrical cabinet (see **Figure 11**) by twisting the knurled ring counterclockwise (the ring closest to the electrical cabinet).



**Figure 11.** Location of coolant pump electrical connection to electrical cabinet.

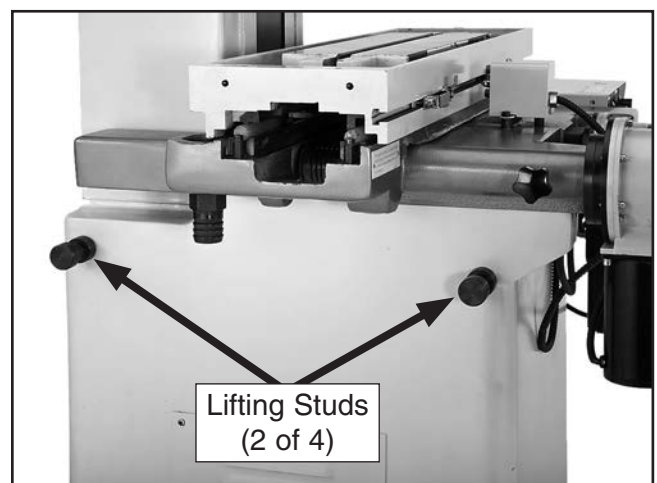
5. Disconnect coolant hose from stand pipe shown in **Figure 12**.



**Figure 12.** Coolant hose connection to stand pipe.

6. Set coolant tank assembly aside.
7. Attach a handle to Y-axis handwheel, then move saddle as close to column as possible.
8. Unbolt machine from shipping pallet.
9. Secure a safety hook and chain to each of four lifting studs (see **Figure 13** for identification).

**Note:** Place padding between chains and machine to prevent scratching machine.

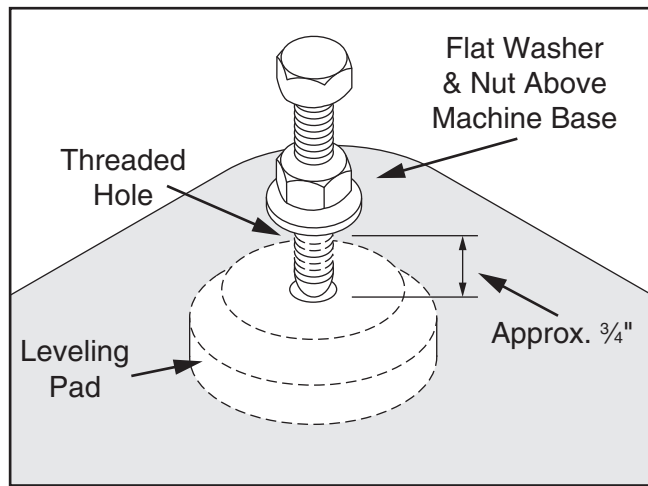


**Figure 13.** Lifting studs (2 of 4 shown).



10. With help from another person to steady the load, lift machine enough to remove pallet.
11. With machine still suspended above floor, thread leveling pad bolts, as illustrated in **Figure 14**, into holes used to bolt machine to pallet.

**Note:** Make sure flat washer and hex nut are above machine base and bottom of bolt extends approximately  $\frac{3}{4}$ " below machine base.



**Figure 14.** Leveling pad and bolt installed.

12. Position leveling pads underneath bolts and lower machine so the bolts rest in center of pads.

## **NOTICE**

**For accurate results and to prevent warping the cast iron ways, the table MUST be level from side to side and from front to back.**

**Recheck the ways 24 hours after installation, two weeks after that, and then annually to make sure they remain level.**

13. Using a precision level on unpainted table surface without magnetic chuck, adjust leveling pad bolts until table is level from side to side and front to back.
14. When table is properly leveled, tighten down hex nuts on bolts to secure settings.
15. Reconnect coolant pump electrical cord and coolant hose.

# **Assembly**

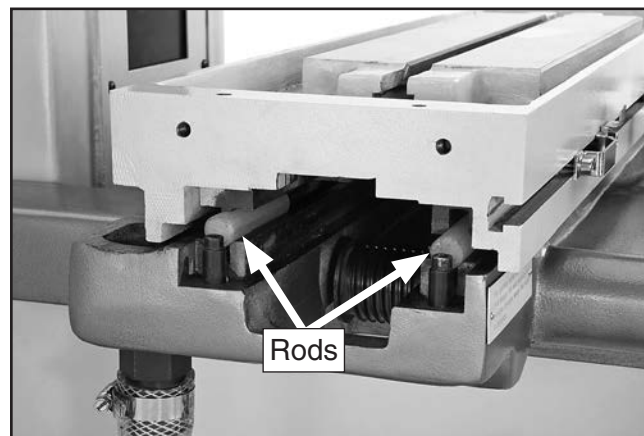
## **To assemble the surface grinder:**

1. Install handles on X- and Z-axis handwheels.
2. Remove table restraints.

## **NOTICE**

**Take care not to damage table or saddle ways. Any damage to these surfaces will be permanent and result in poor finishes.**

3. With help from another person, remove table and place it upside down on a clean, flat surface.
4. Store plastic shipping rods (see **Figure 15**) for future use when storing or moving machine to protect ways.



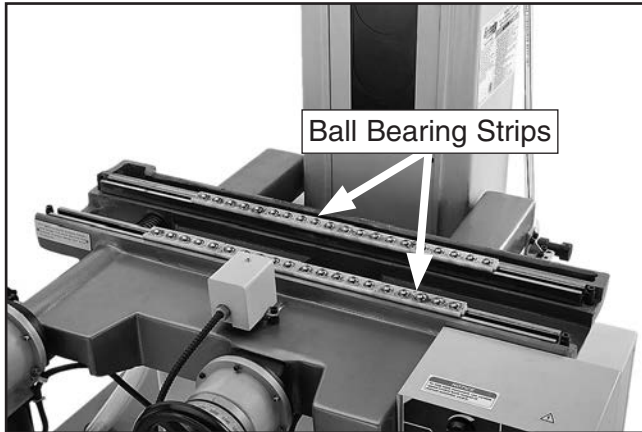
**Figure 15.** Plastic rods used for shipping or storage purposes.

5. Clean the table and saddle ways, and table ball bearing segments, as directed on **Page 15**.



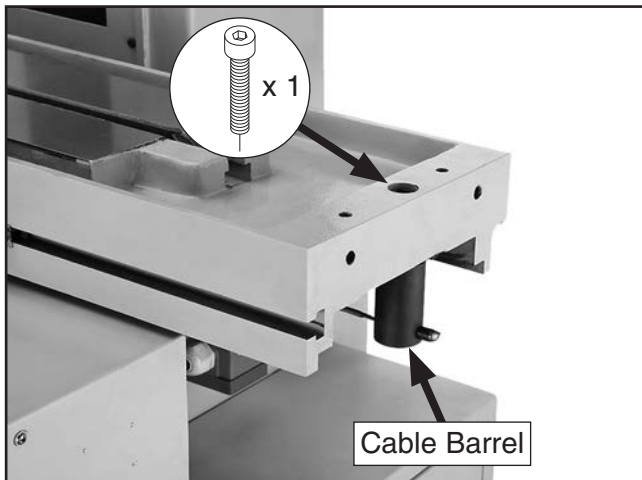


6. Assemble ball bearing segments into two strips of equal size (four segments each).
7. Apply medium coat of NLGI#2 grease to ball bearing strips.
8. Position ball bearing strips in middle of saddle ways, as shown in **Figure 16**.



**Figure 16.** Ball bearing strips positioned on saddle ways.

9. With the help of another person, gently place table right side up on ball bearing strips.
10. Feed table cable under table so that attached cable barrel is on the right of machine, as shown in **Figure 17**.



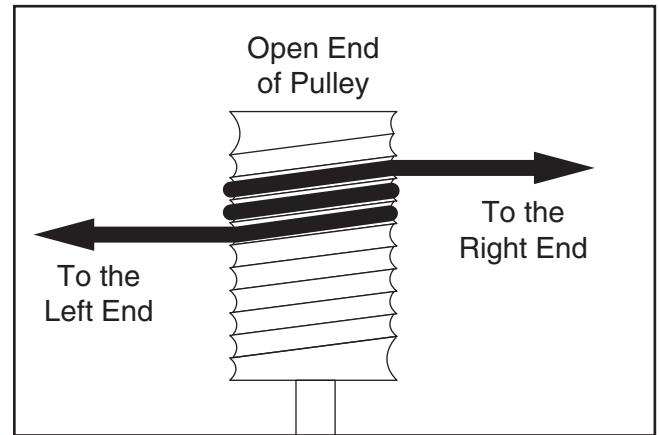
**Figure 17.** Cable barrel attached.

11. Secure barrel to table with (1) M10-1.5 x 50 cap screw.

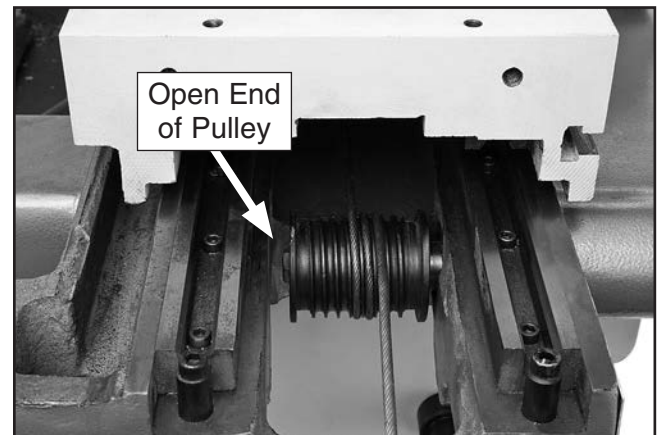
**Note:** When cable is properly wrapped around pulley in next step, have another person maintain enough tension on cable so that it stays in pulley grooves until it can be secured in following steps.

12. Wrap cable around pulley twice, as shown in **Figures 18–19**.

**Note:** Pay close attention to position and orientation of cable on pulley, as illustrated in **Figure 18**.



**Figure 18.** Cable orientation on pulley.



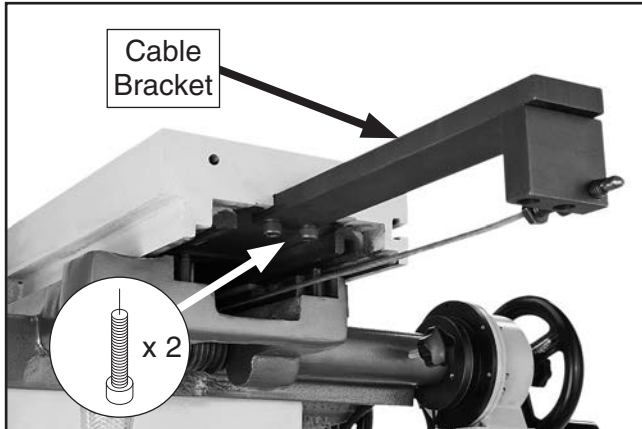
**Figure 19.** Cable on pulley, as viewed from left end of table.

13. While maintaining cable tension, move table back and forth several times to ensure cable position on pulley allows full travel of table.

—If the cable position on the pulley does not allow full travel of table, reposition cable on pulley until it does.

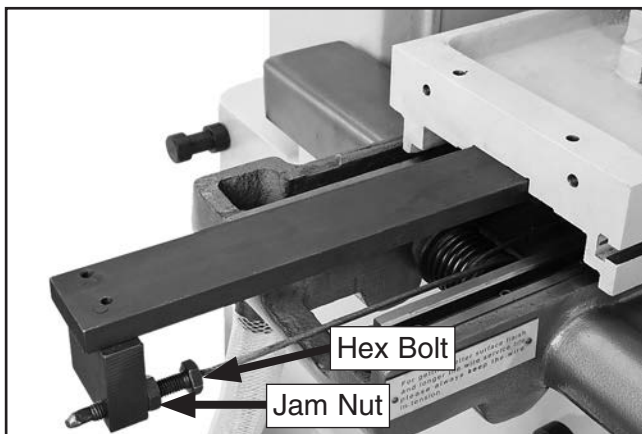


- Secure table cable bracket underneath left end of table with (2) M10-1.5 x 25 cap screws, as shown in **Figure 20**.



**Figure 20.** Cable bracket installed.

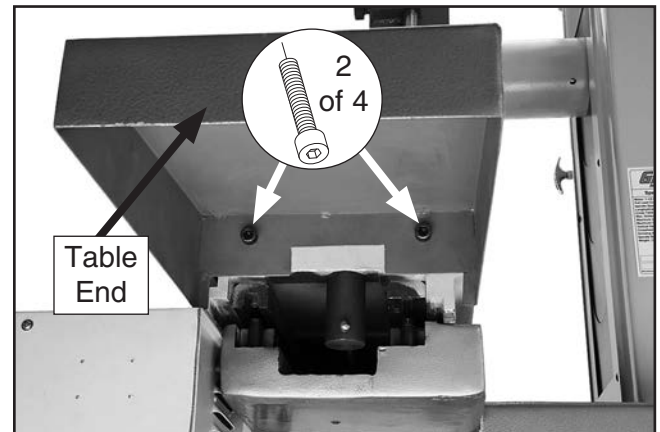
- Thread hex bolt attached to end of cable into cable bracket until cable tension is enough to keep cable tightly wrapped around pulley (see **Figure 21**).



**Figure 21.** Cable attached to cable bracket.

- Tighten jam nut against bracket to secure position of hex bolt.

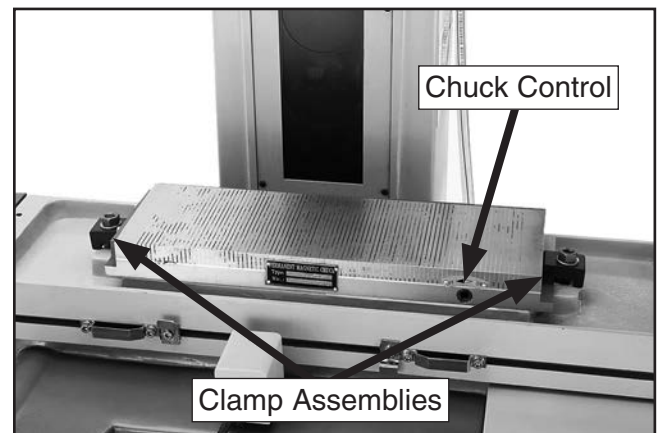
- Attach table ends to table with (4) M8-1.25 x 12 cap screws (see **Figure 22**).



**Figure 22.** Table end attached.

- Stone and clean any burrs from unpainted table surface and bottom of magnetic chuck, then apply a thin coat of ISO 32 oil to both surfaces.

- With help from another person, position magnetic chuck in center of table with chuck control facing front, as shown in **Figure 23**.



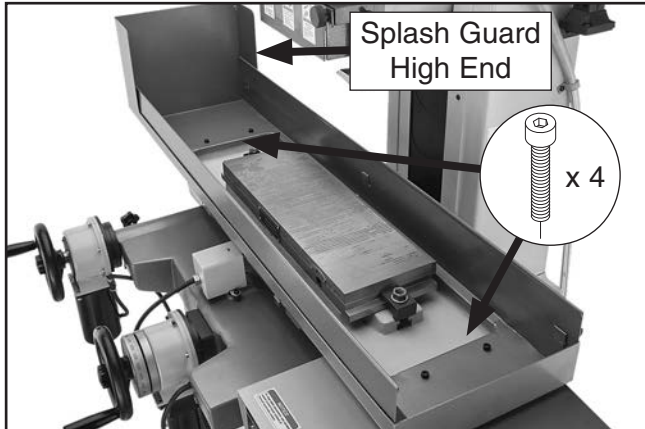
**Figure 23.** Magnetic chuck attached to table.

- Secure magnetic chuck to table with (2) clamp assemblies, as shown in **Figure 23**.



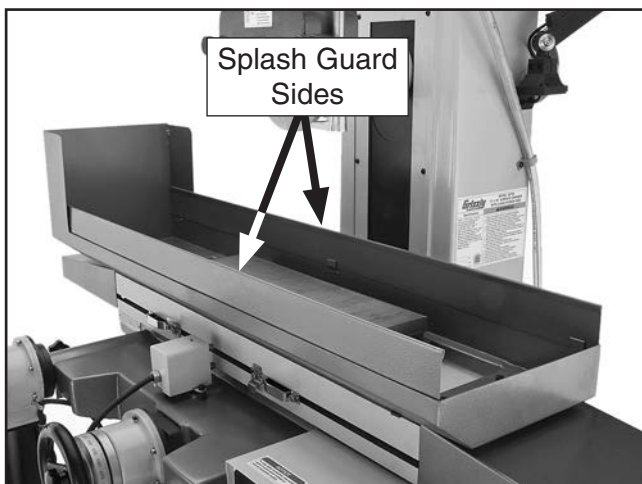


21. Position splash guard base on table with high end to the left of machine, as shown in **Figure 24**.



**Figure 24.** Splash guard base attached.

22. Secure splash guard base with (4) M6-1 x 12 cap screws, as shown in **Figure 24**.
23. Insert splash guard sides into slots on each side of splash guard base, as shown in **Figure 25**.



**Figure 25.** Splash guard sides installed.

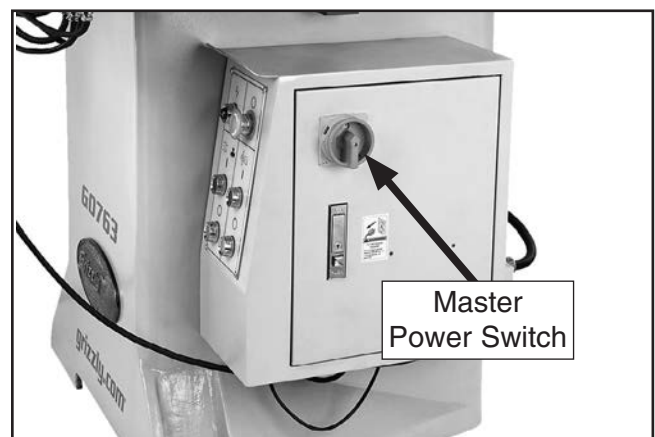
## Power Connection

Before the machine can be connected to the power source, an electrical circuit must be made available that meets the minimum specifications given in **Circuit Requirements for 220V** on **Page 11**. If a power circuit has not been prepared for the machine, do that now.

To ensure a safe and code-compliant setup, all electrical work must be done by an electrician or qualified service personnel.

### To connect the power supply to the machine:

1. Turn master power switch **OFF** (see **Figure 26**), then press latch to open electrical cabinet door.



**Figure 26.** Location of master power switch.

*Continued on next page* →



2. Install a strain relief in available hole in bottom of electrical cabinet, then pull incoming power cord through strain relief.
3. Connect incoming hot wires to bottom of first two terminal bar connectors, then connect incoming ground wire to grounding bar (refer to the **Electrical Cabinet Wiring Diagram** on **Page 42** for additional details).
4. Leave slack in wires inside cabinet, tighten strain relief to secure cord, then tug on power cord outside electrical cabinet to make sure wires do not move inside cabinet.  
  
—If wires do move when you tug on power cord outside electrical cabinet, disconnect wires, reposition cord, then tighten strain relief so that cord will not move when tugged on. Reconnect wires as instructed in **Step 3**.
5. Close electrical cabinet door, but leave master power switch **OFF**.
6. Attach a NEMA 6-15 plug to other end of power cord per manufacturer's directions (refer to **Electrical Cabinet Wiring Diagram** on **Page 42** for additional details).
7. Connect machine to power source by inserting power cord plug into a matching receptacle.

## Test Run

---

Once assembly is complete, test run the machine to ensure the following components are working properly:

- Grinding motor
- Coolant pump
- Emergency STOP button
- Table power feed

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem **BEFORE** operating the machine again. The **Troubleshooting** table on **Page 39** can help.

### **WARNING**

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

### **WARNING**

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

You **MUST** understand the function of the controls to safely complete the **Test Run**. If you are not sure how a control functions or where it is, refer to **Basic Controls** beginning on **Page 4**.

#### To test run the machine:

1. Push Emergency STOP button in.
2. Remove all tools used for setup from the machine.
3. Fill and operate the one-shot oiler (refer to **Lubrication** on **Page 36** for detailed instructions).



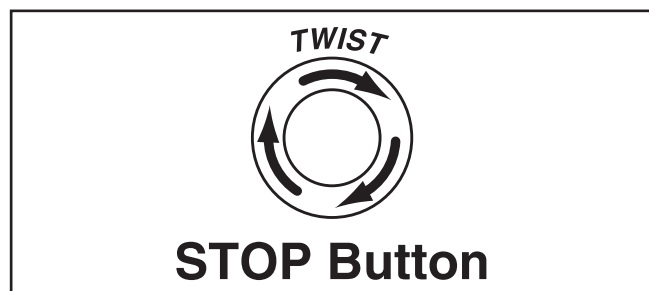
4. Fill the coolant tank with coolant (refer to **Coolant System** on **Page 37** for detailed instructions).

5. If grinding wheel is mounted, make sure it is properly mounted and wheel guard is properly secured (refer to **Mounting/Removing Wheel** on **Page 28** for detailed instructions).

**Note:** *If grinding wheel is not mounted, it is not necessary to mount it to complete **Test Run**.*

6. Turn master power switch **ON**—control panel power lamp should light.

7. Twist Emergency STOP button clockwise until it pops out (see **Figure 27**)—this resets button so machine can start.



**Figure 27.** Resetting the Emergency STOP button.

8. Make sure grinding wheel and guard are safely above magnetic chuck but low enough for coolant to flow onto chuck in a later step without excessive splashing.

9. Press grinding motor ON button. Grinding motor should start.

10. Press grinding motor OFF button. Grinding motor should stop.

11. Make sure coolant nozzle is positioned close to table and pointing to the left, then open coolant valve.

12. Press coolant pump ON button. Coolant should flow from coolant nozzle.

13. Press coolant pump OFF button and close coolant valve. Coolant flow should stop.

14. Press Emergency STOP button.

15. **WITHOUT** resetting the STOP button, press the grinding motor ON button. Machine should not start.

—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.

16. Reset Emergency STOP button.

17. Rotate X- and Y-axis speed control knobs on power feed unit all the way counterclockwise—this prevents unexpected table movement when power is enabled to unit.

18. Turn power feed unit **ON**.

19. Rotate X-axis mode selector switch to the right (pointing at “table” symbol).

**Note:** *In the next steps, keep your hand over the speed control knobs so you can quickly stop table movement if necessary.*

20. Slowly rotate X-axis speed control knob until tables begins to move. Table should travel side-to-side automatically.

21. Rotate Y-axis mode selector switch to the right (pointing at “table” symbol).

22. Slowly rotate Y-axis speed control knob until tables begins to move. Table should move when table completes one X-axis side-to-side cycle.

23. Rotate X- and Y-axis speed control knobs all the way counterclockwise to stop table movement.

24. Rotate X- and Y-axis mode selector switches to point at “hand” symbol to avoid unexpected start up in the future.

25. Turn power feed unit **OFF**.

Congratulations! The **Test Run** is complete. Press the Emergency STOP button in and turn the master power switch **OFF**.

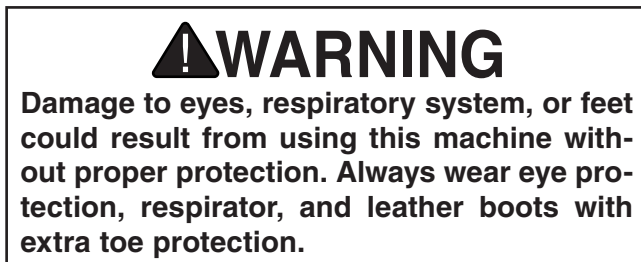


# SECTION 4: OPERATIONS

## Operation Overview

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

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



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

1. Examines the grinding wheel to make sure it is suitable for use.
2. Examines the workpiece to make sure it is properly prepared for grinding.
3. Uses the Z-axis handwheel to raise the grinding wheel assembly to provide clearance for mounting the workpiece.
4. Uses the magnetic chuck to hold the workpiece to the table, then turns the Z-axis handwheel to lower the grinding wheel to just above the top surface of the workpiece.
5. Turns the grinder **ON**, then waits until the wheel reaches full speed.
6. Performs the grinding operation.
7. When the grinding operation is complete, turns the grinder **OFF** and allows the grinding wheel to come to a complete stop.
8. Removes the workpiece from the table.

**Note:** *Because the method for performing each grinding operation varies, specific actions are not listed here.*

## **NOTICE**

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.



# Wheel Selection

Most grinding wheels from major manufacturers are marked in a somewhat uniform manner. Understanding these markings will help you understand the capabilities of various wheels. Always refer to the manufacturer's grinding recommendations when selecting a wheel for your project.

The grinding wheel you choose will depend on several factors related to the operation you plan to perform. The hardness of the material you will be grinding and the surface finish you desire are the two primary factors to consider when selecting a grinding wheel.

An example of the basic format for wheel numbering is shown below. The wheel in this example is a "36A60LV".

Prefix	Abrasive Type	Grit Size	Grade	Bond Type
36	A	60	L	V

The prefix is a manufacturer-specific designation and will vary depending on the manufacturer.

Use the charts below as a basic wheel selection outline for most grinding operations.

## Abrasive Type

Abrasive Type	Application
A	<b>Aluminum Oxide.</b> For grinding common steel.
WA	<b>White Aluminum Oxide.</b> For grinding harder metals (heat treated steel, carbon steel, alloy steel, etc.).
H	For grinding high speed steel.
C	<b>Silicon Carbide.</b> For grinding cast iron and non-ferrous metals.
CG	<b>Ceramic Grain.</b> For extremely hard metals, such as tungsten carbide.

## Grit Size

The ideal grit for an operation depends on a number of considerations. Use the table below to choose a grit suitable for your desired results.

Operation Consideration	Results	
	Coarse Grit (10–46)	Fine Grit (54–180)
Material Removal	Increased	Decreased
Surface Finish	Rough	Smooth
Workpiece Hardness	Soft	Hard
Width of Cut	Wide	Narrow

## Grade

The grade of a wheel is an indicator of its hardness based on an alphabetical scale in which **A** is the softest and **Z** is the hardest.

Operation Consideration	Wheel Hardness	
	Soft A–M	Hard N–Z
Workpiece Hardness	Hard	Soft
Width of Cut	Wide	Narrow
Feed Rate	Slow	Fast
Wheel Speed	Fast	Slow

## Bond Type

This refers to the type of bonding material used to hold the abrasive material. Most general purpose wheels will have a **V** indicating vitrified clay is used, providing high strength and good porosity. The other most common is **B** where synthetic resins are used. These are used to grind cemented carbide and ceramic materials.





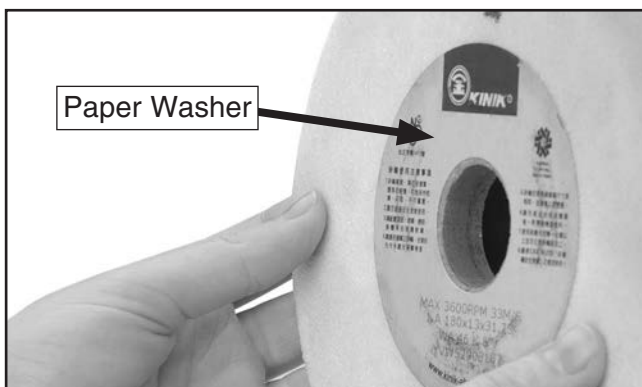
# Wheel Inspection

Do not assume that a wheel is in sound condition just because it is new—damage can often occur during shipping, with age, with prolonged exposure to moisture, or because of improper storage.

## To inspect a wheel for damage:

1. Remove wheel flange and sleeve, then look for any cracks, chips, nicks, or dents in wheel surface. If you see any of these, DO NOT attempt to use wheel.
2. Do a ring test. This test will give you an indication of any internal damage that may not be obvious during a visual inspection.
3. Inspect paper washers on both sides of grinding wheel (see **Figure 28**).

These washers are cushions between wheel sleeve and flange and grinding wheel. Without paper washers, cracks can be spawned from center of wheel when the arbor nut is tightened. Over time, these cracks can radiate outward and the wheel may explode during operation, possibly causing injury.



**Figure 28.** Important wheel paper washer.

**Note:** If you need to replace or install new paper washers, replacements can be cut out of any thick construction paper or card stock. Regular notebook paper or paper from a copy machine is not acceptable, as it is too thin to provide required cushion. Be sure to transfer any RPM limitations and wheel type information to the new paper washers.

# Ring Test

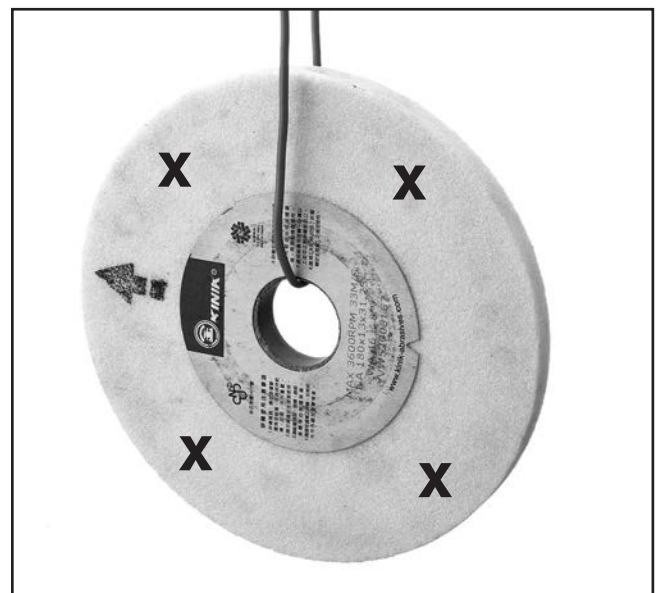
This test will give you an indication of any internal damage that may not be obvious during a visual inspection.

## To perform a ring test:

1. Make sure wheel that you test is clean and dry; otherwise, you may get false results.

**Note:** If wheel is wet with coolant, hang it in a dry location until it is dry (usually overnight).

2. Remove wheel flange and sleeve.
3. Hang wheel in air with a piece of cord or string looped through wheel bore, as shown in **Figure 29**.



**Figure 29.** Ring test setup.

4. At locations shown with an X in **Figure 29**, gently tap wheel with a light non-metallic device such as handle of a screwdriver or a wooden mallet.

An undamaged wheel will emit a clear metallic ring or “ping” sound in each of these spots. A damaged wheel will respond with a dull thud that has no clear tone. If you determine from ring test that wheel is damaged, DO NOT use it!



# Wheel Balancing

An unbalanced wheel can result in a damaged wheel and poor finishes because the edge of the wheel does not contact the workpiece evenly.

Although the new wheel itself is generally balanced by the manufacturer, the addition of the sleeve and flange will require rebalancing. Additionally, the wheel can become unbalanced with wear.

Correctly balancing the wheel assembly will require trial-and-error and patience.

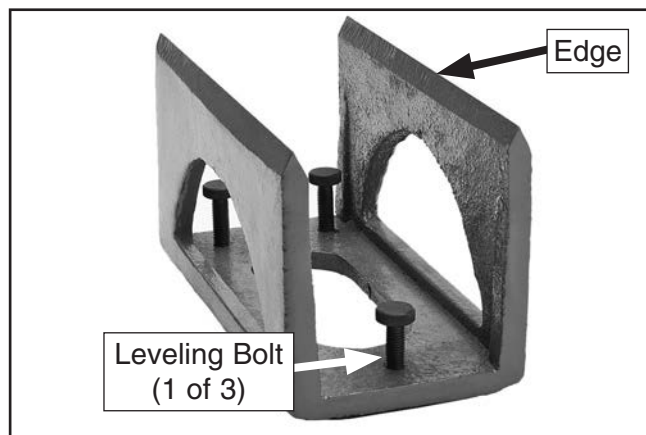
Tools Needed	Qty
Hex Wrench 3mm.....	1
Pencil or Marker .....	1
Wheel Balancing Arbor .....	1
Wheel Balancing Base .....	1

## To balance the grinding wheel assembly:

1. Make sure wheel is clean and dry.

**Note:** *If wheel is wet with coolant, hang it in a dry location until it is dry (usually overnight).*

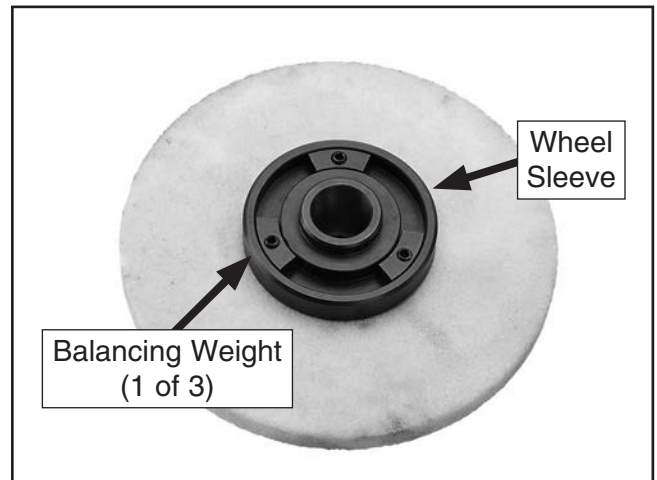
2. Clean rust and debris from edges of wheel balancing base (see **Figure 30**).



**Figure 30.** Wheel balancing base.

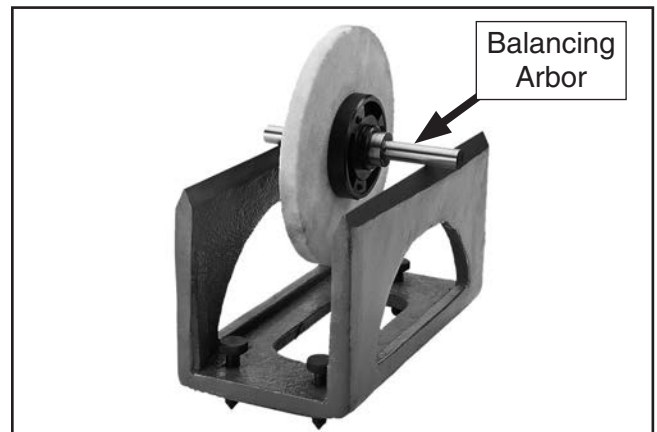
3. Using a precision level and leveling bolts, make sure the edges of the balancing base are level from front to back and side to side.

4. Attach wheel sleeve and flange to wheel, as instructed in **Mounting/Removing Wheel** on **Page 28**.
5. Loosen balancing weight set screws, position weights evenly around wheel sleeve groove, then retighten set screws (see **Figure 31**).



**Figure 31.** Weights evenly distributed around wheel sleeve groove.

6. Using a slightly-oiled lint free cloth, wipe mating surfaces of balancing arbor and internal sleeve taper perfectly clean, then push them together (see **Figure 32**).



**Figure 32.** Wheel assembly on balancing base.

7. Place assembly on balancing base and wait until wheel rotation comes to a complete stop.





8. Mark a line on wheel at six o'clock position to mark heaviest side of wheel assembly.
9. Center nearest weight with line from above step and secure it in place. This weight will remain in place during following steps.
10. Position remaining two weights evenly around sleeve groove.
11. Place wheel assembly on balancing base. Wheel assembly should not rotate if weights are in correct positions.

—If wheel assembly does rotate, reposition two weights from **Step 10** and repeat this step until wheel assembly no longer rotates when placed on balancing base.

12. When you are satisfied with wheel balancing settings, install wheel assembly on machine and test run for 5 minutes to verify balance.

—If any wobble is detected in wheel as it rotates on machine, repeat this procedure until it does not.

13. To make sure entire width of wheel edge is parallel to table, redress wheel as instructed in **Wheel Dressing** on **Page 31**.

# Mounting/Removing Wheel

Before mounting a grinding wheel (new or used), perform the following procedures:

- Wheel Inspection (**Page 26**)
- Ring Test (**Page 26**)
- Wheel Balancing (**Page 27**)

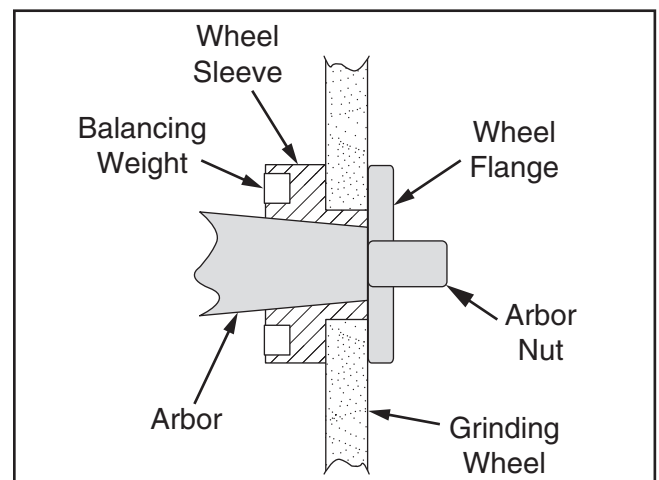
Do not use a wheel that is suspected of having cracks, or if you can see chips, nicks, or dents in the wheel surface. These conditions can lead to wheel failure where the wheel flies apart at operating speed. Always be sure to use a wheel that is rated for operating at speeds of at least 3450 RPM.

## Mounting Wheel

Items Needed	Qty
Grinding Wheel 7" D x 1/2" W x 1 1/4" Bore .....	1
Wheel Sleeve .....	1
Wheel Flange .....	1
Wheel Flange Wrench.....	1
Arbor Nut.....	1
Wrench or Socket 19mm.....	1

### To mount wheel assembly:

1. DISCONNECT MACHINE FROM POWER!
2. Insert wheel sleeve into wheel (see **Figure 33** for component identification).

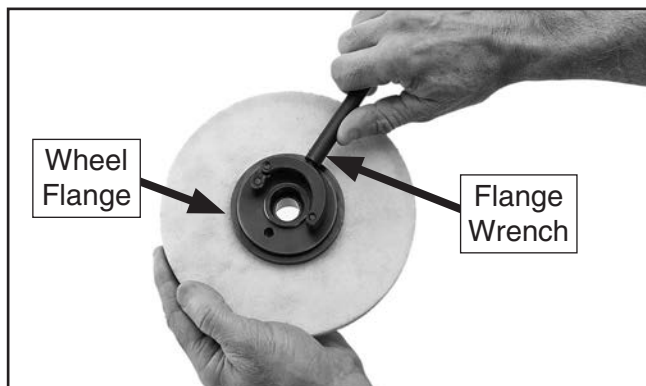


**Figure 33.** Wheel assembly components.



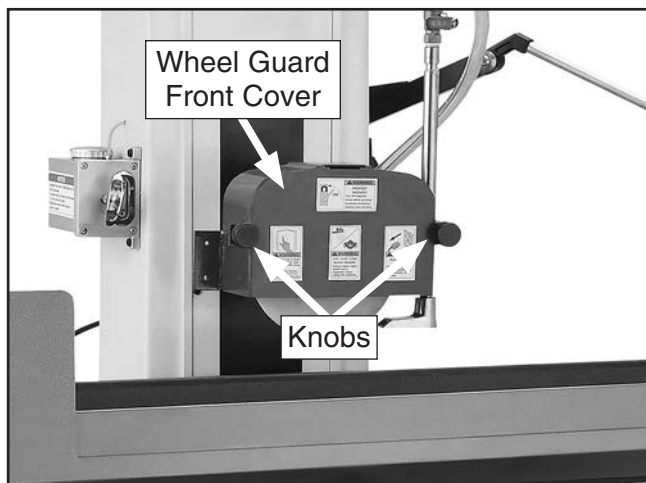
3. Thread wheel flange onto sleeve then tighten it with wheel flange wrench until it is snug (see **Figure 34**)—overtightening may crack wheel.

**Note:** Flange has left-handed threads and threads onto sleeve counterclockwise.



**Figure 34.** Threading wheel flange onto wheel sleeve.

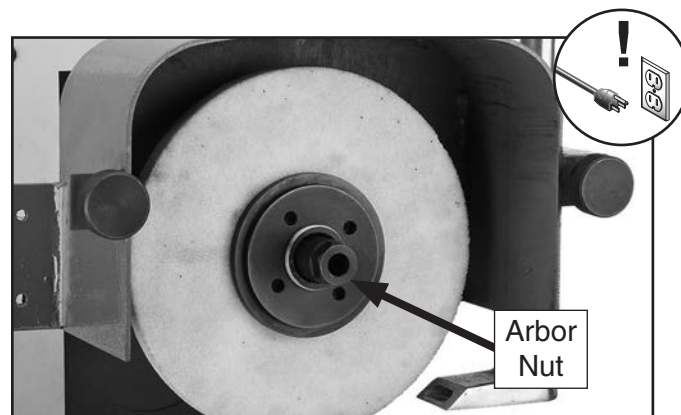
4. Loosen the knurled knobs shown in **Figure 35**, then remove wheel guard front cover.



**Figure 35.** Wheel guard components.

5. Using a slightly-oiled lint free cloth, wipe mating surfaces of machine arbor and internal sleeve taper perfectly clean, then slide wheel assembly onto arbor.
6. Thread arbor nut onto arbor (see **Figure 36**) and tighten it until snug—overtightening may crack wheel.

**Note:** Arbor nut has left-handed threads and threads onto arbor counterclockwise.



**Figure 36.** Wheel assembly and arbor nut installed.

7. Re-install wheel guard front cover before reconnecting machine to power.



## Removing Wheel

Tools Needed	Qty
Wrench or Socket 19mm.....	1
Wheel Puller .....	1
Hex Wrench 5mm.....	1

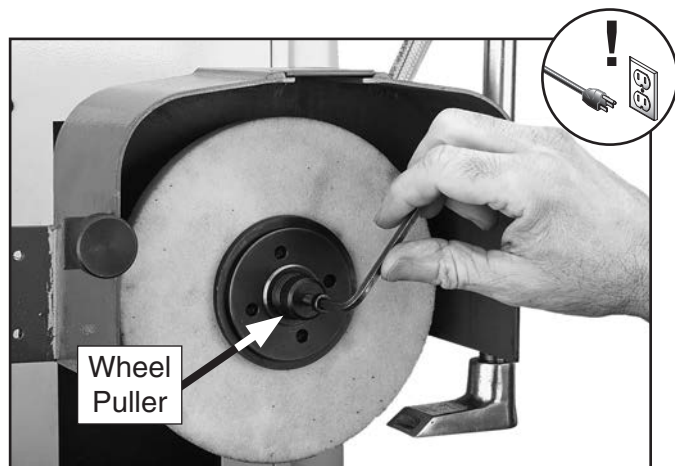
### To remove wheel assembly:

1. DISCONNECT MACHINE FROM POWER!
2. Remove wheel guard front cover.
3. Remove arbor nut.

**Note:** Arbor nut has left-handed threads so it unthreads clockwise.

4. Thread cap screw on wheel puller out and thread puller onto wheel sleeve, as shown in **Figure 37**.

**Note:** Wheel puller has standard right-handed threads and threads onto sleeve clockwise.



**Figure 37.** Using wheel puller.

5. To break taper mating between wheel sleeve and arbor, tighten puller cap screw.
6. Remove wheel assembly, then remove puller from wheel assembly.

—If storing wheel, follow **Wheel Storage** instructions on **Page 38**.

## Wheel Dressing

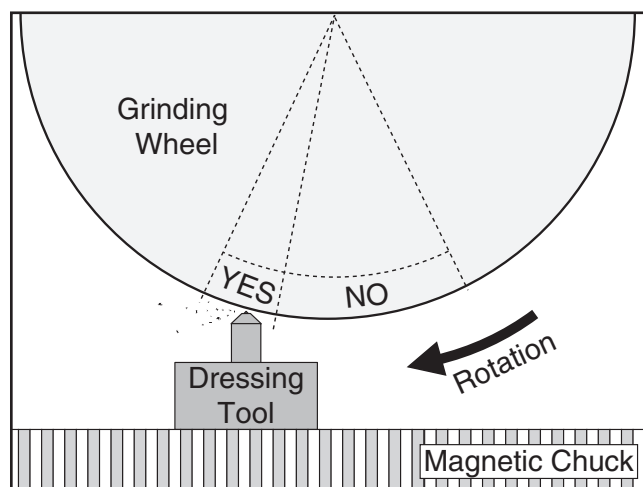
Superior grinding results can only be achieved with a properly balanced and dressed wheel. Do not assume that a wheel will run true on the spindle if it is new or has not been separated from the sleeve and flange.

**IMPORTANT:** Balance wheel, as instructed on **Page 27**, before dressing it.

Dressing the wheel correctly will save you from wasting grinding abrasive and shattering the dressing tool diamond. Additionally, with a properly balanced and dressed wheel you can rest assured that if you have finish problems, the grinding wheel is not the culprit.

Depending on the finish required, varying degrees of roughness can be obtained. For example: A fast dressing at a depth of 0.03mm will prepare a wheel surface for rough cuts; or a slow dressing with multiple light passes of the diamond at a depth of 0.01mm will prepare the same wheel for finish cuts.

Positioning is critical for the dressing tool so you will not shatter the diamond or have poor dressing results. For best results and safe use, the dressing tool must be positioned in the trailing zone of the wheel, as shown in **Figure 38**. If the tool is positioned on the leading side of the wheel, the diamond will be shattered or even grabbed by the wheel and drawn under the grinding wheel, causing severe damage or injury to the operator or bystanders.



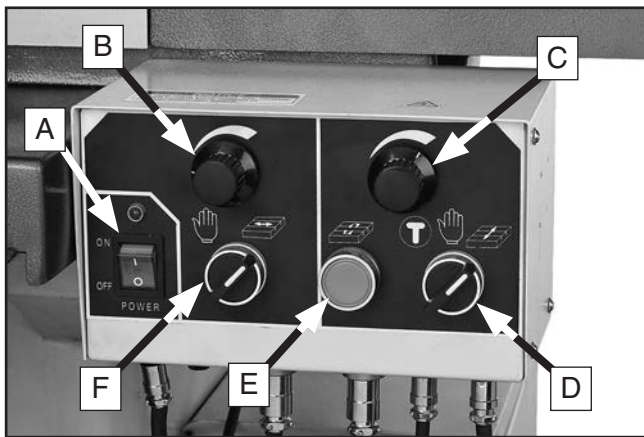
**Figure 38.** Wheel dressing setup.



# Power Feeds

The X- and Y-axis power feeds are designed to work together. When correctly set up, the Y-axis power feed will move the table a specific distance when the table completes a side-to-side cycle along the X-axis. Eventually, the entire workpiece surface will be ground.

Refer to **Figure 39** and following descriptions to become familiar with the power feed controls and their functions.



**Figure 39.** Power feed controls.

- A. ON/OFF Switch:** Enables power to the power feed unit.
- B. X-Axis Speed Control Knob:** Controls the speed of table movement along the X-axis.
- C. Y-Axis Speed Control Knob:** Controls the speed of table movement along the Y-axis.
- D. Y-Axis Mode Selector Switch:** Selects the mode of operation for the Y-axis—jog (the “T”), manual (the “hand”), or automatic (the “table” symbol).
- E. Y-Axis Reverse Button:** Reverses the direction of Y-axis table movement.
- F. X-Axis Mode Selector Switch:** Selects the mode of operation for the X-axis—manual (the “hand”) or automatic (the “table” symbol).

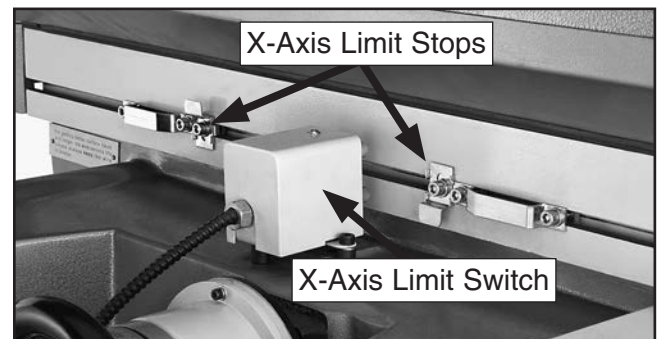
Learning to set the controls is a matter of experience, patience, and trial and error. Use the instructions below for a typical setup to understand how to use the controls to attain the desired results.

Tool Needed	Qty
Hex Wrench 5mm.....	1

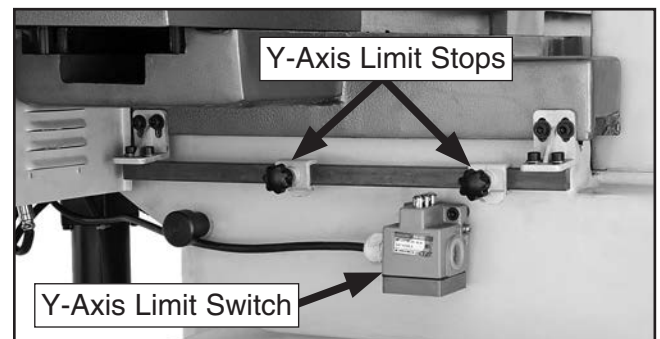
## To set up the power feeds to work together:

1. DISCONNECT MACHINE FROM POWER!
2. Position X- and Y-axis limit stops (see **Figures 40–41**) so that grinding wheel will cover desired length and width of workpiece surface.

**Note:** When limit stops contact limit switch, table travel will reverse.



**Figure 40.** X-axis limit switch and stops.



**Figure 41.** Y-axis limit switch and stops.



3. Rotate both speed controls knobs all the way counterclockwise. This will prevent power feeds from starting table movement when power feed unit is turned **ON**.
4. Reconnect machine to power.
5. Position grinding wheel above workpiece without making contact. This position will be used to test run limit stop setup.
6. Select automatic operation by turning X-axis mode selector switch to the right (pointing at "table" symbol).
7. Turn X-axis speed control knob clockwise to slowly begin table travel.
8. Make sure grinding wheel travels desired distance over workpiece in X-axis.

—If grinding wheel does not travel desired distance over workpiece, rotate X-axis speed control knob all the way counterclockwise to stop table travel, then reposition X-axis limit stops.

## **NOTICE**

**To prevent damage to power feed unit, ONLY stop table travel by rotating speed control knobs all the way counterclockwise. Do NOT use ON/OFF switch or mode selector switches to stop table travel.**

9. Stop X-axis table travel by rotating X-axis speed control all the way counterclockwise.
10. Hold Y-axis mode selector all the way to left (pointing at "T" symbol) to jog Y-axis table movement, and make sure grinding wheel travels the desired distance over workpiece in the Y-axis.

—If grinding wheel does not travel the desired distance over workpiece, rotate Y-axis mode selector to the center (pointing at "hand" symbol), then reposition Y-axis limit stops.

11. Using the Z-axis handwheel, lower grinding wheel until it just touches the highest point of workpiece surface.

**Note:** *Better results are attained with multiple light passes than a few deep passes.*

12. Start coolant flow and grinding wheel rotation.
13. With both mode selector switches rotated to the right (pointing at "table" symbol), rotate the speed control knobs to the desired table travel speed.

**Note:** *When table completes one side-to-side cycle in X-axis path, then table will travel for a short time along the Y-axis path and stop. The distance the table travels along Y-axis path depends upon setting of Y-axis speed control knob.*

*You can reverse Y-axis direction any time by pushing the Y-axis reverse button.*

14. Allow the grinding wheel to surface the desired workpiece surface until there are no more sparks generated before lowering the grinding wheel with Z-axis crank for additional surfacing.

## **WARNING**

**Do NOT leave machine unattended when operating in power feed mode to prevent an unexpected occurrence from damaging machine/workpiece or causing a safety hazard.**





# SECTION 5: ACCESSORIES

## **! WARNING**

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

## **NOTICE**

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

**SB1365—South Bend Lathe Way Oil, 12 oz.**

**T23962—ISO 68 Moly-D Machine/Way Oil 5-gal**

**T23963—ISO 32 Moly-D Machine Oil 5-gal**

Moly-D oils are some of the best we've found for maintaining the critical components of machinery because they tend to resist run-off and maintain their lubricity under a variety of conditions—as well as reduce chatter or slip. Buy in bulk and save with 5-gallon quantities.



Figure 42. 12 oz. way oil & 5 gallon machine oil.

### **Friable Surface Grinding Wheels, Aluminum Oxide**

Model	Size	Bore	Grit	Type
G7433	7" x 1/2"	1 1/4"	46	1
G7434	7" x 1/2"	1 1/4"	60	1

**T23964—Armor Plate with Moly-D Multi-Purpose Grease, 14.5 oz. (NLGI#2 Equivalent)**

Armor Plate with Moly-D is a rich green moly grease that provides excellent stability and unsurpassed performance under a wide range of temperatures and operating conditions. Armor Plate grease is entirely unique due to the fact that the moly in it is solubilized, which provides superior performance to other greases containing the black solid form of molybdenum disulfide.



Figure 43. T23964 Armor Plate with Moly-D Multi-Purpose Grease

### **H5618—Parallels for Magnetic Chuck**

Use these parallels on your magnetic chuck for setups that normally require 1-2-3 blocks. They're great for trapping parts that are difficult to hold. Parallels measure 1" x 2" x 4". Sold in pairs.

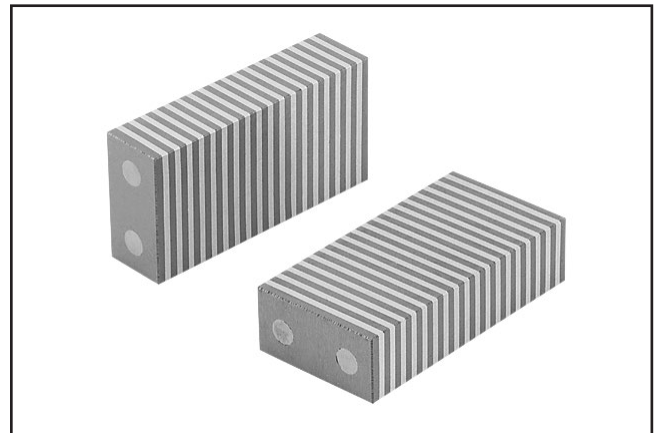


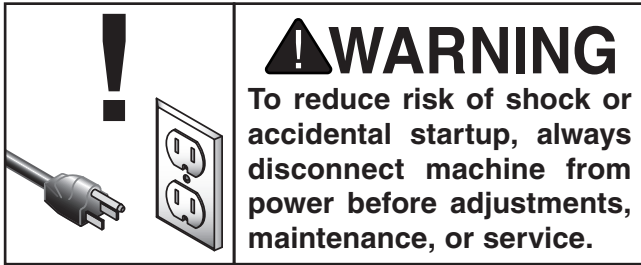
Figure 44. H5618 Parallels for Magnetic Chuck.

**order online at [www.grizzly.com](http://www.grizzly.com) or call 1-800-523-4777**



# SECTION 6: MAINTENANCE

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## Schedule

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To keep this machine in the best operating condition, make sure to complete the following maintenance items within the minimum intervals listed below.

### Daily:

- Use/fill one-shot oiler (**Page 36**).
- Check/fill coolant tank.
- Check/correct loose mounting bolts.
- Check/replace damaged or cracked grinding wheel.
- Check/correct worn or damaged wires.
- Clean and protect machine.
- Correct any other unsafe condition.

### Monthly:

- Drain oil sump (**Page 36**).
- Lubricate table ball bearing strips (**Page 36**).
- Check/change coolant (**Page 37**).

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## Cleaning & Protecting

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Typically, the easiest way to clean swarf from the table is to use a wet/dry shop vacuum that is dedicated for this purpose only. The small chips left over after vacuuming can be wiped up with a slightly oiled rag. Avoid using compressed air to blow off chips, as it may drive them deeper into moving surfaces and could cause sharp chips to fly into your face or hands.

The magnetic chuck and the unpainted table surface underneath the chuck should be wiped down daily to keep them rust-free and in top condition. Then apply a thin film of ISO 32 oil to provide protection (see **Page 34** for an offering from Grizzly).



# Lubrication

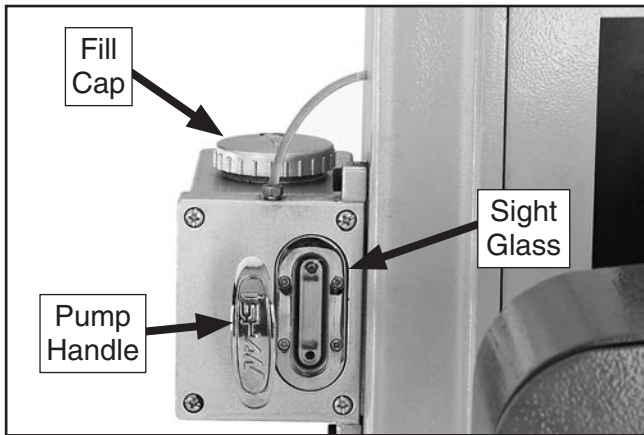
Other than the lubrication points covered in this section, all other bearings are internally lubricated and sealed at the factory. Simply leave them alone unless they need to be replaced.

## One-Shot Oiler

Type.....Model T23963 or ISO 32 Equivalent  
Amount ..... 1-2 Pumps  
Lubrication Frequency..... 4-8 Hrs. of Operation

The one-shot oiler provides lubrication to the vertical leadscrew, the cross feed ways, and the cross feed leadscrew.

To use the one-shot oiler, pull the pump handle out (see **Figure 45**) and push it back in with moderate force. Move the grinding head up and down a few times through the full Z-axis path to distribute the oil on the leadscrew. Do the same with the Y-axis handwheel.



**Figure 45.** One-shot oiler components.

Use the sight glass to check the oil level and fill when needed.

## Oil Sump

As the one-shot oiler sends oil to the cross feed ways, any excess oil will exit tubes in the rear and drain into a sump in the column. Check and drain the sump at least once a month to avoid overflow.

To drain the oil sump, use a 10mm hex wrench to remove the drain plug on the rear of the column (see **Figure 46**).



**Figure 46.** Location of oil sump drain plug.

Wipe up any spilled oil from the machine and floor before continuing operation.

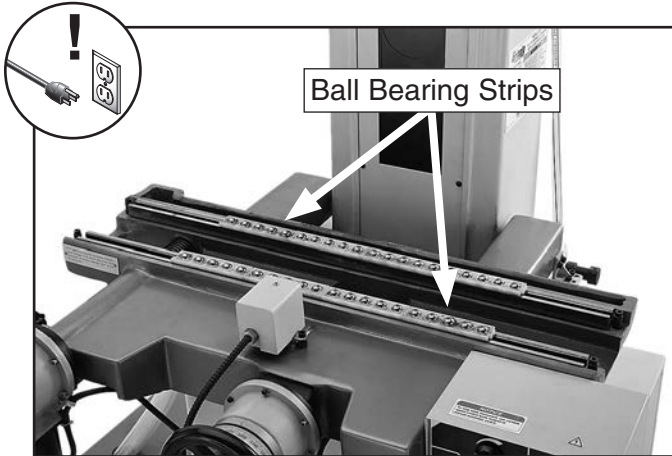


## Table Ball Bearing Strips

Type.....T23964 or NLGI#2 Equivalent  
Amount.....As Needed  
Lubrication Frequency.....Monthly

### To lubricate table ball bearing strips:

1. DISCONNECT MACHINE FROM POWER!
2. Remove table to expose ball bearing strips (see **Figure 47**).



**Figure 47.** Table ball bearing strips exposed.



3. Use mineral spirits, stiff brush, and shop rags to clean old grease and grim from strips, saddle ways, and table ways.
4. When dry, apply a medium coat of NLGI#2 grease to strips.
5. Re-install table.
6. Move table back and forth several times to distribute lubrication.

## Coolant System

### Hazards

As some coolant ages, dangerous microbes can proliferate and create a biological hazard. The risk of exposure to this hazard can be greatly reduced by replacing the old coolant on a regular basis, as indicated in the maintenance schedule.

The important thing to keep in mind when working with the coolant is to minimize exposure to your skin, eyes, and respiratory system by wearing the proper PPE (personal protective equipment), such as splash-resistant safety glasses, long-sleeve gloves, protective clothing, and a NIOSH approved respirator.

	<b>WARNING</b> <b>BIOLOGICAL &amp; POISON HAZARD!</b>
	Use the correct personal protection equipment when handling coolant. Follow federal, state, and fluid manufacturer requirements for proper disposal.

A small amount of coolant is lost during normal operation. Check the coolant tank regularly and fill it if necessary. We recommend changing the coolant every three months or sooner if it develops an unpleasant odor. However, be sure to follow the coolant manufacturer's instructions when checking, adding, or changing coolant.

### **NOTICE**

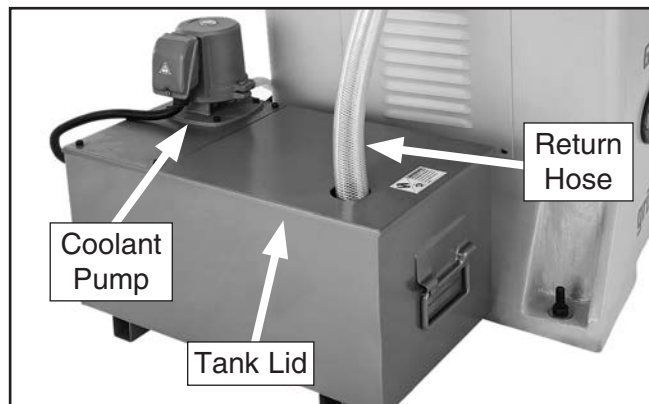
Running the coolant pump without adequate coolant in the tank may permanently damage the coolant pump, which will not be covered by the warranty.



## Check/Adding Coolant

Lift the coolant tank lid shown in **Figure 48** to check the coolant level. If necessary, add coolant until the level is a couple of inches from the top of the tank.

The coolant tank holds approximately 8 gallons of fluid.



**Figure 48.** Coolant tank components.

## **NOTICE**

**Use a high-quality, water-soluble oil coolant that is non-flammable. Generally, synthetics last longer.**

## Changing Coolant

Items Needed	Qty
5 Gallon Buckets w/Lids.....	2
Hex Wrench 5mm.....	1
Standard Screwdriver #2.....	1

### To change coolant:

1. DISCONNECT MACHINE FROM POWER!
2. Remove return hose and both lids from tank.
3. Empty tank contents into buckets and dispose of fluid following federal, state, and fluid manufacturer requirements.
4. Thoroughly clean tank and pump with hot soapy water.
5. When dry, refill tank with coolant (approximately 8 gallons).
6. Replace lids and return hose.



## Wheel Storage

Store grinding wheels in a dry area that is not subject to extreme temperature changes or freezing. Some abrasive bonds may be adversely affected by excessive humidity, dampness, or extreme temperature changes.

Store the wheels on edge (vertically) in racks that provide a cushioned two-point cradle support to prevent rolling. Also, provide partitions that prevent the wheels from tipping over.

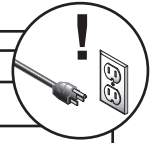


# SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663.

**Note:** Please gather the serial number and manufacture date of your machine before calling.

## Troubleshooting



Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none"> <li>1. Power supply switched <b>OFF</b> or has incorrect voltage.</li> <li>2. Blown fuse/tripped circuit breaker at main panel.</li> <li>3. Break or short in wiring; or loose connections.</li> <li>4. ON/OFF switch at fault.</li> <li>5. Motor connection wired incorrectly.</li> <li>6. Motor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Switch power supply <b>ON</b> or verify voltage.</li> <li>2. Correct the cause of overload, then reset/replace fuse or breaker.</li> <li>3. Trace/replace broken or corroded wires; fix loose connections.</li> <li>4. Replace switch.</li> <li>5. Wire motor correctly (<b>Page 44</b>).</li> <li>6. Test for shorted windings, bad bearings, and repair or replace.</li> </ol>
Machine has excessive vibration or noise.	<ol style="list-style-type: none"> <li>1. Motor fan rubbing on fan cover.</li> <li>2. Motor is loose.</li> <li>3. Grinding wheel out of balance.</li> <li>4. Motor bearings worn or damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fix/replace fan cover; replace loose or damaged fan.</li> <li>2. Tighten any loose fasteners.</li> <li>3. Inspect, ring test, balance, and dress grinding wheel.</li> <li>4. Replace motor bearings or replace motor.</li> </ol>
Machine stalls or slows when operating.	<ol style="list-style-type: none"> <li>1. Motor is being overloaded.</li> <li>2. Motor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce depth of cut.</li> <li>2. Test for shorted windings, bad bearings, and repair or replace.</li> </ol>
Handwheel binds or is difficult to move.	<ol style="list-style-type: none"> <li>1. Ways/ball bearing strips need lubrication.</li> <li>2. Gears/rack and pinion are worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Relubricate ways/ball bearing strips (<b>Page 36</b>).</li> <li>2. Replace gears/rack and pinion.</li> </ol>
Vibration when grinding, poor surface finish, or incorrect final dimensions.	<ol style="list-style-type: none"> <li>1. Grinding wheel is out-of-round, loaded up with material, or damaged.</li> <li>2. Missing or torn grinding wheel paper washers.</li> <li>3. Incorrect grinding wheel hardness or grit rating.</li> <li>4. Improperly installed magnetic chuck.</li> <li>5. Workpiece is loose.</li> <li>6. Loose machine component.</li> <li>7. Ways/ball bearing strips need lubrication.</li> <li>8. Grinding wheel has varying densities, or is of poor quality.</li> <li>9. Coolant is incorrect or incorrectly mixed.</li> <li>10. Motor or motor bearings at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect, ring test, dress, and balance grinding wheel.</li> <li>2. Remove and replace paper washers, then inspect, ring test, balance, and dress grinding wheel.</li> <li>3. Match wheel grade and grit rating with workpiece hardness.</li> <li>4. Stone table and chuck surfaces, and remove all burrs and foreign material from mating surfaces, and reinstall the chuck.</li> <li>5. Replace or repair chuck for poor holding power.</li> <li>6. Inspect all machine connections, and tighten any loose fasteners.</li> <li>7. Relubricate ways/ball bearing strips (<b>Page 36</b>).</li> <li>8. Replace grinding wheel with acceptable brand.</li> <li>9. Refer to coolant manufacturer's workpiece verses coolant type recommendations and correct coolant.</li> <li>10. Replace motor or replace bearings.</li> </ol>
Power feed unit will not start.	<ol style="list-style-type: none"> <li>1. Power feed unit fuse is blown.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace fuse.</li> </ol>



# SECTION 8: WIRING

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

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

## WARNING

### Wiring Safety Instructions

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

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

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

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

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

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




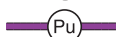

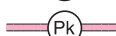
**CAPACITORS/INVERTERS.** Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

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

#### NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.grizzly.com](http://www.grizzly.com).

#### COLOR KEY

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



# Wiring Overview

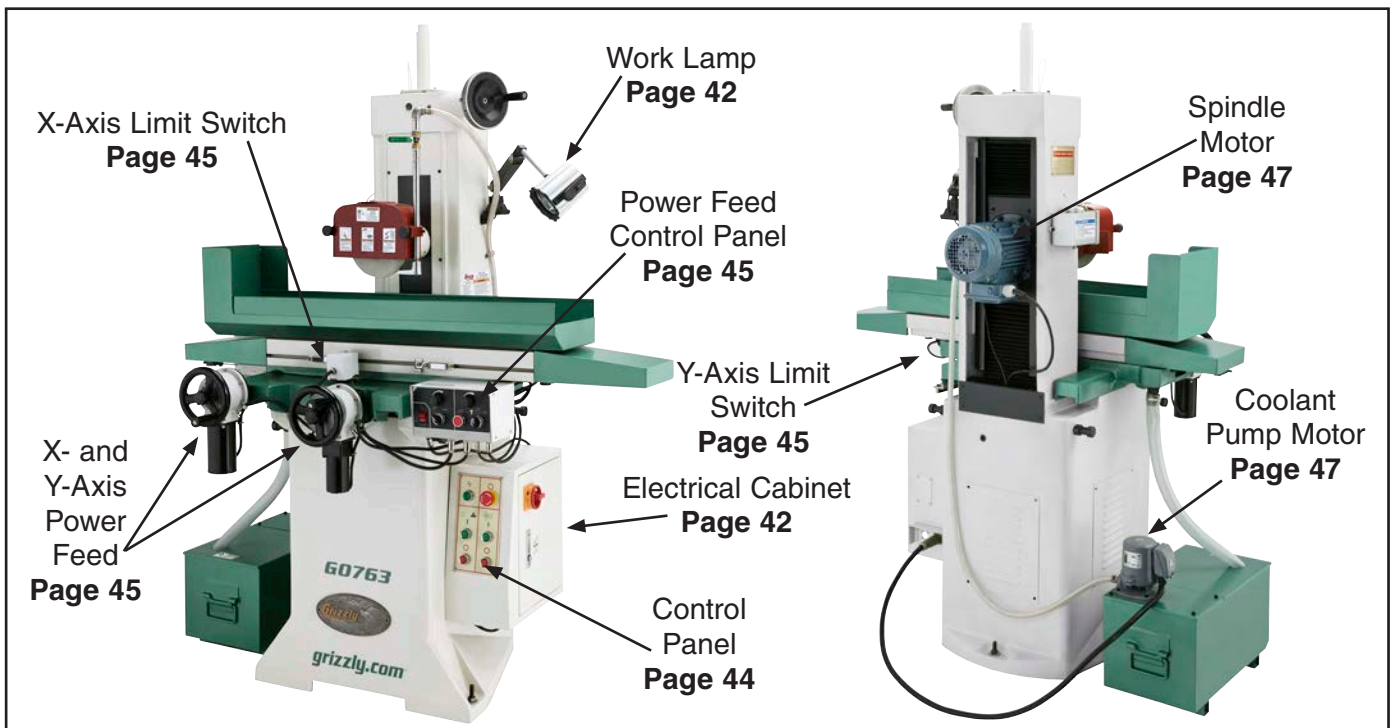
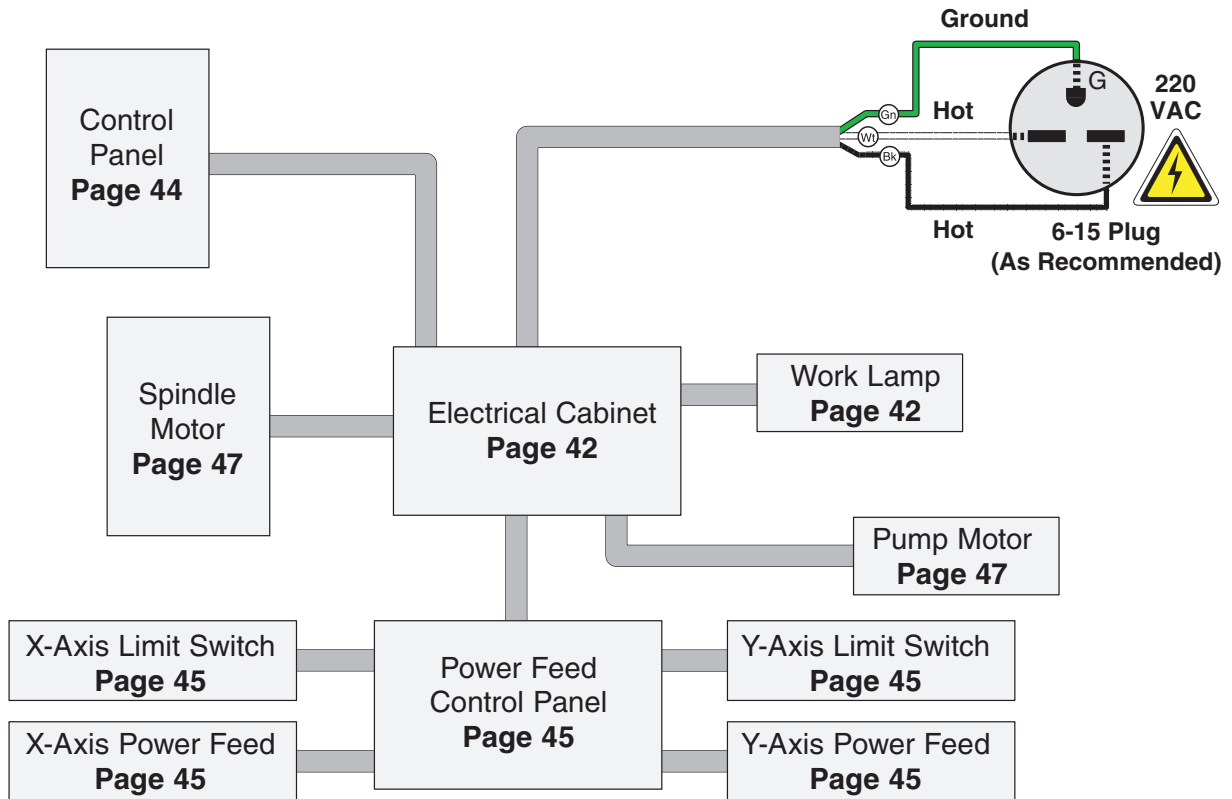
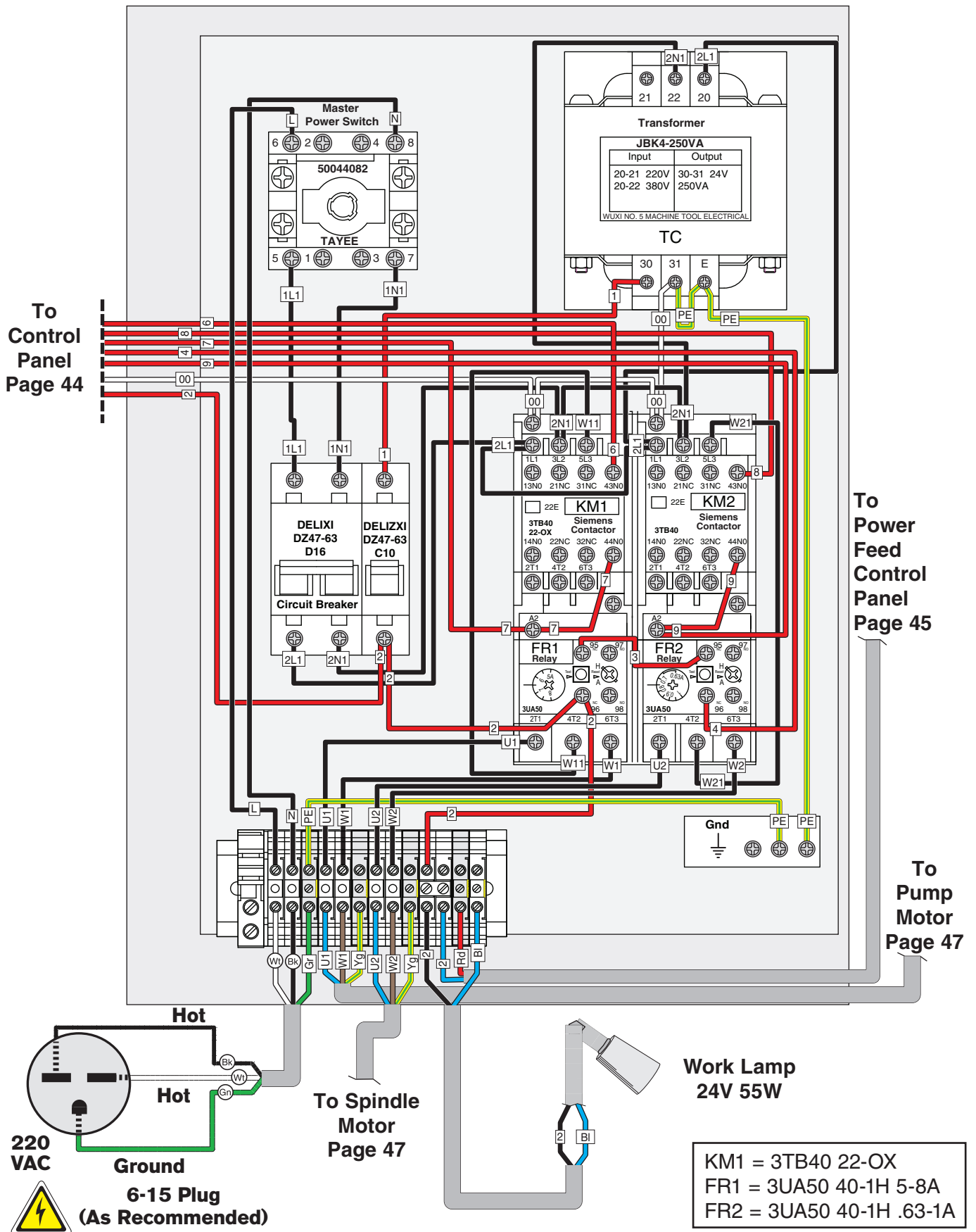


Figure 49. Wiring overview.



# Electrical Cabinet Wiring





# Electrical Panel & Control Panel



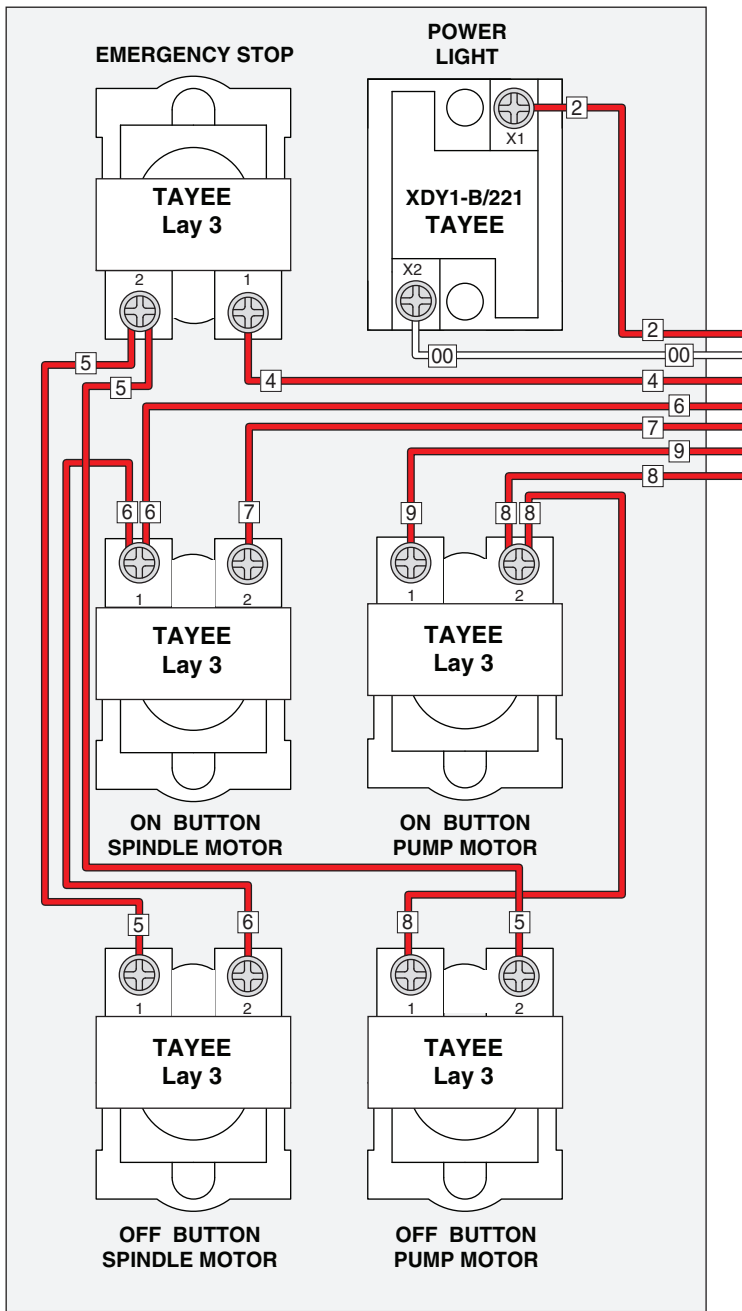
Figure 50. Electrical panel and control panel wiring.





# Control Panel Wiring

Control Panel  
(Viewed from behind)



To  
Electrical  
Cabinet  
Page 42

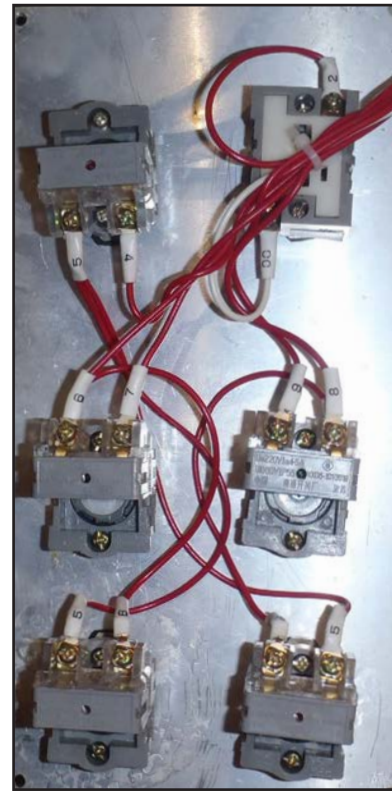
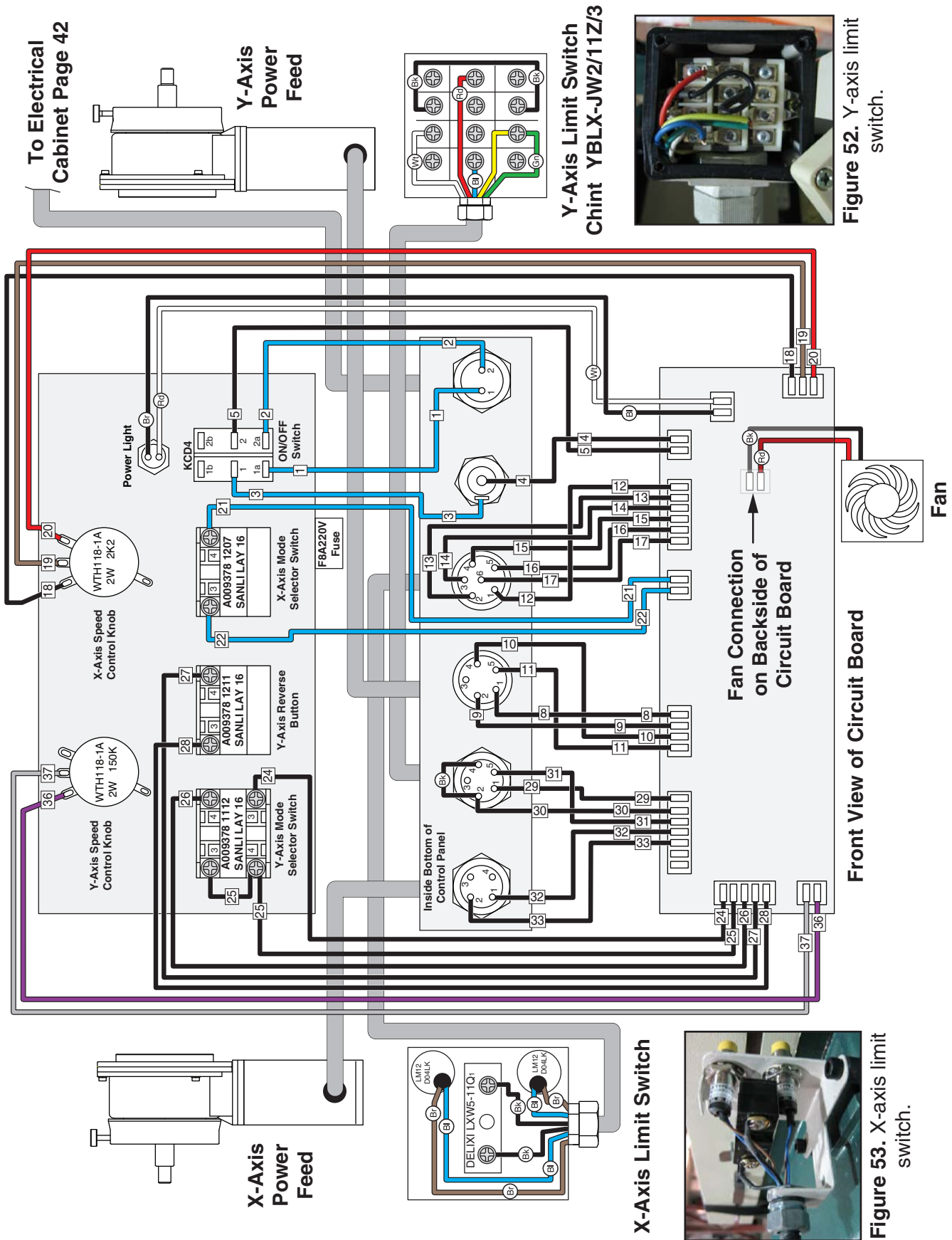


Figure 51. Control panel wiring.



# Power Feed Control Panel Wiring



# Power Feed Control Panel

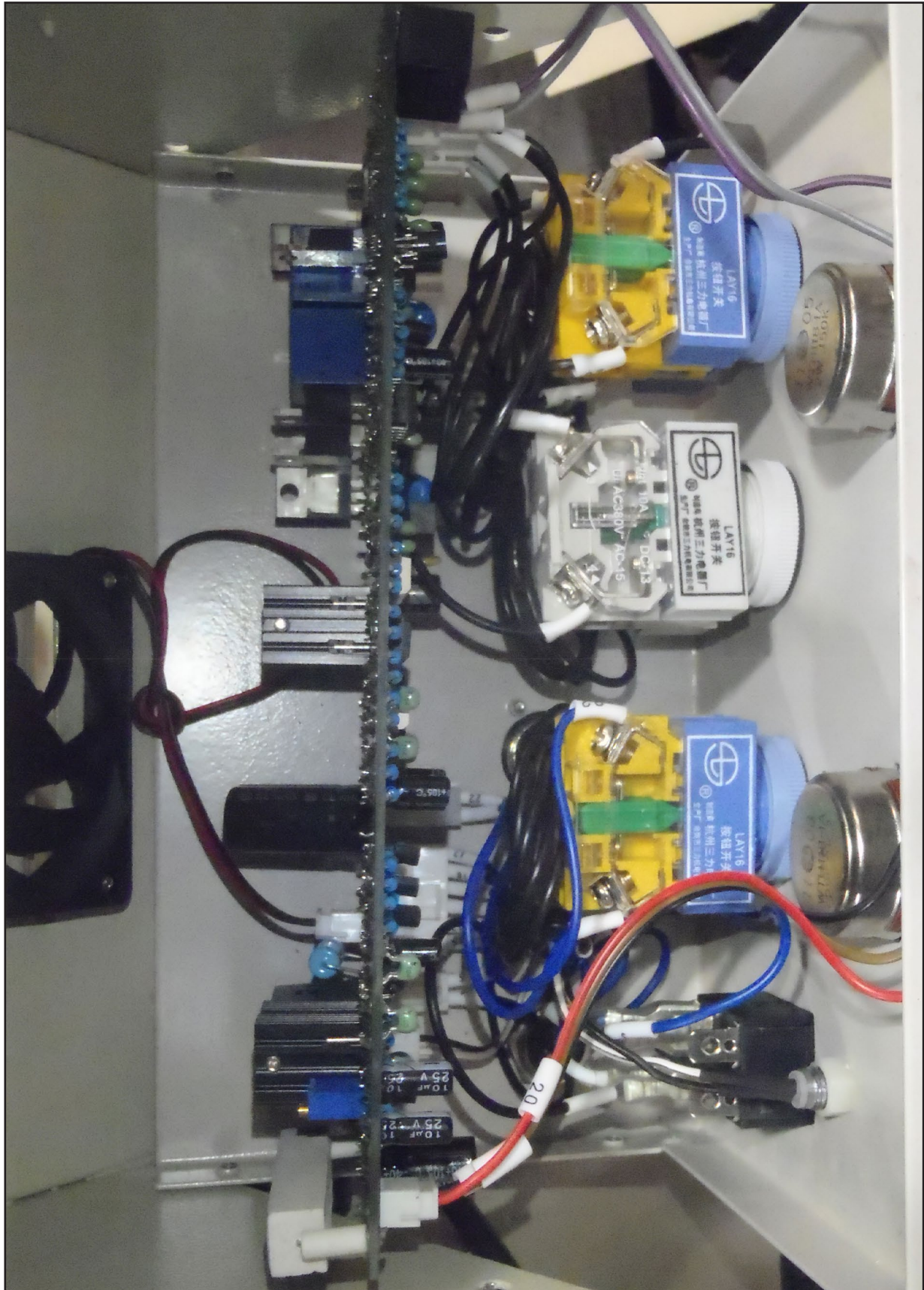


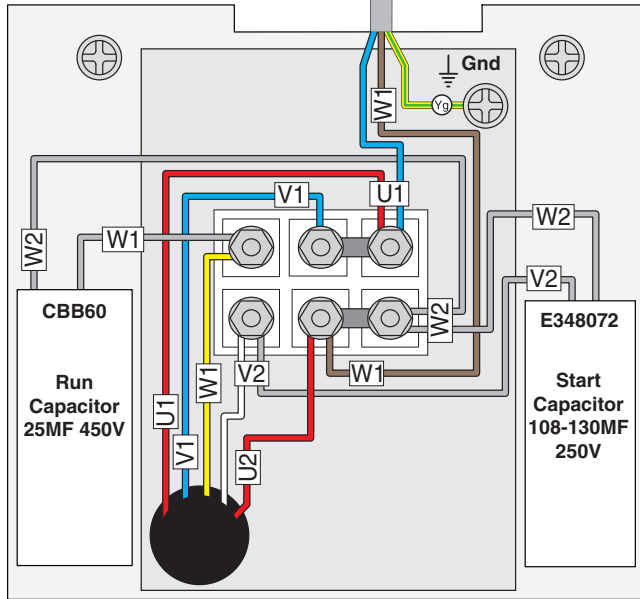
Figure 54. Power feed controls wiring.



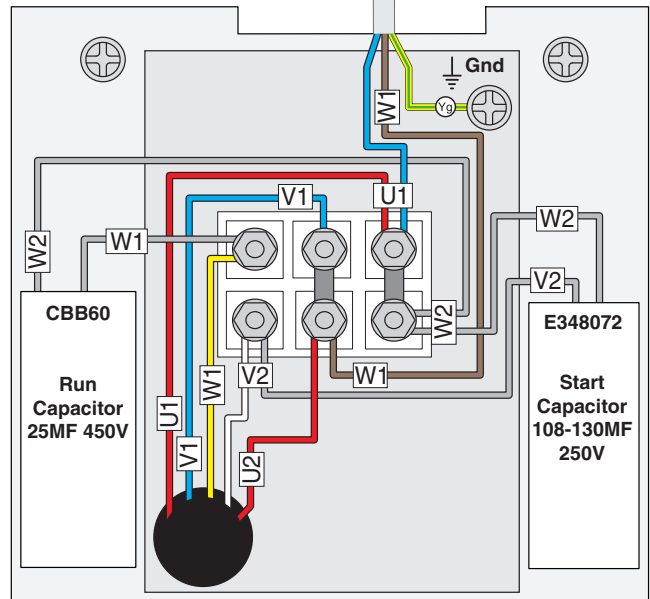


# Motor Wiring Diagrams

To Electrical Cabinet Page 42

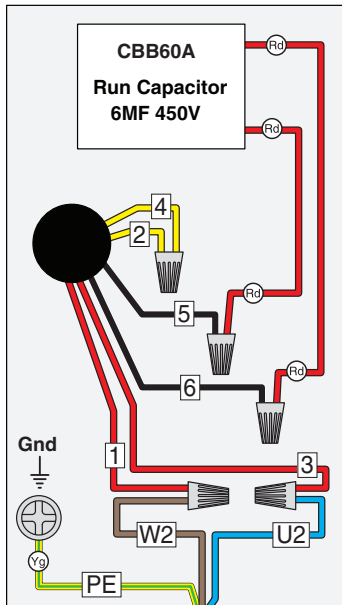


Spindle Motor Wiring (clockwise)



Spindle Motor Wiring (counterclockwise)

Coolant Pump Motor  
220V (Prewired)



Coolant Pump Motor  
(Rewired to 110V)

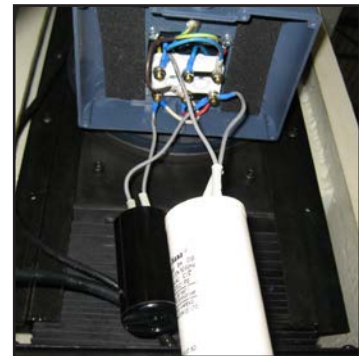
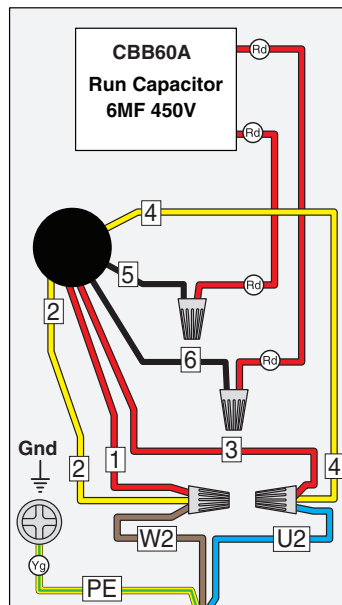


Figure 55. Spindle motor wiring (clockwise).

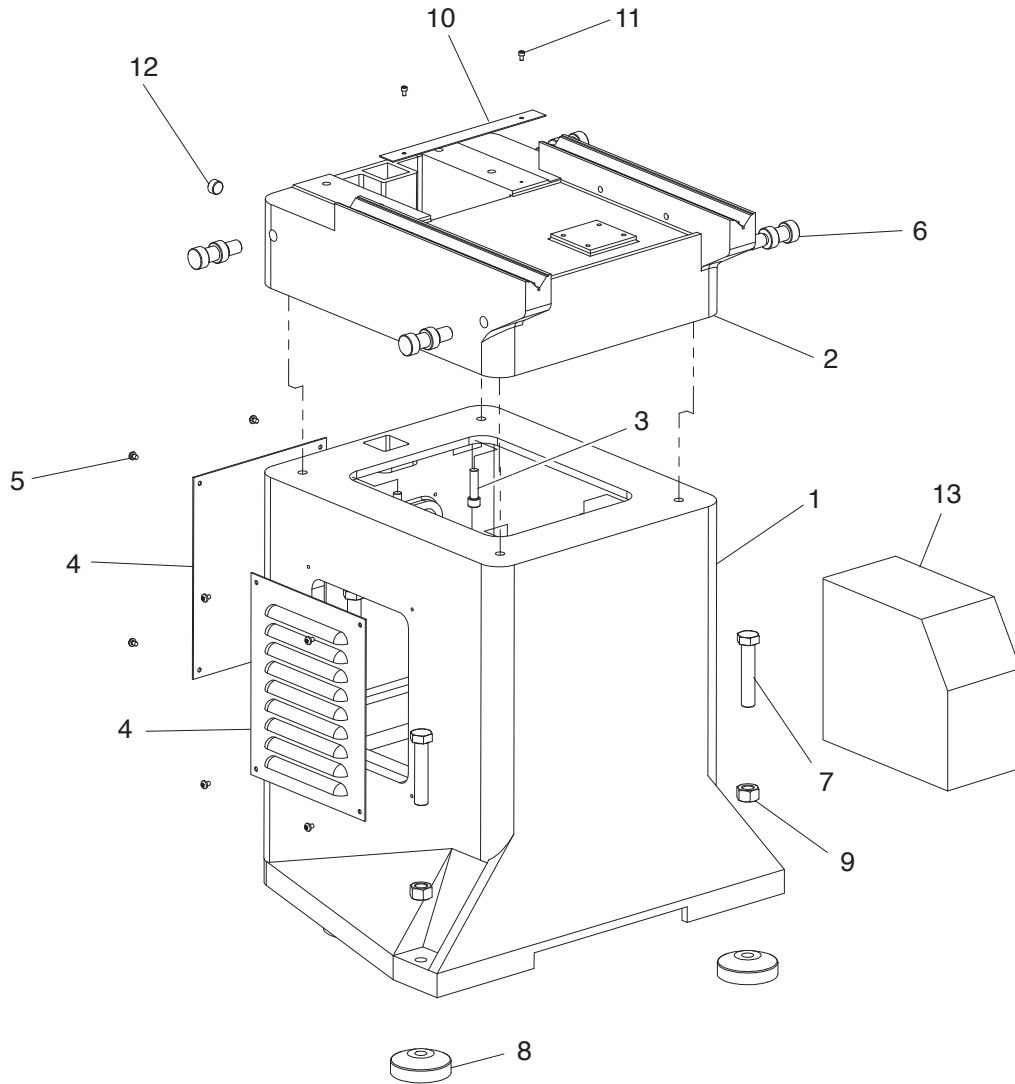


Figure 56. Coolant motor wiring (220V).



# SECTION 9: PARTS

## Base



REF	PART #	DESCRIPTION
1	P0763001	STAND
2	P0763002	BASE
3	P0763003	CAP SCREW M12-1.75 X 45
4	P0763004	STAND SIDE COVER
5	P0763005	BUTTON HD CAP SCR M6-1 X 8
6	P0763006	LIFTING STUD
7	P0763007	LEVELING BOLT M20-2.5 X 75

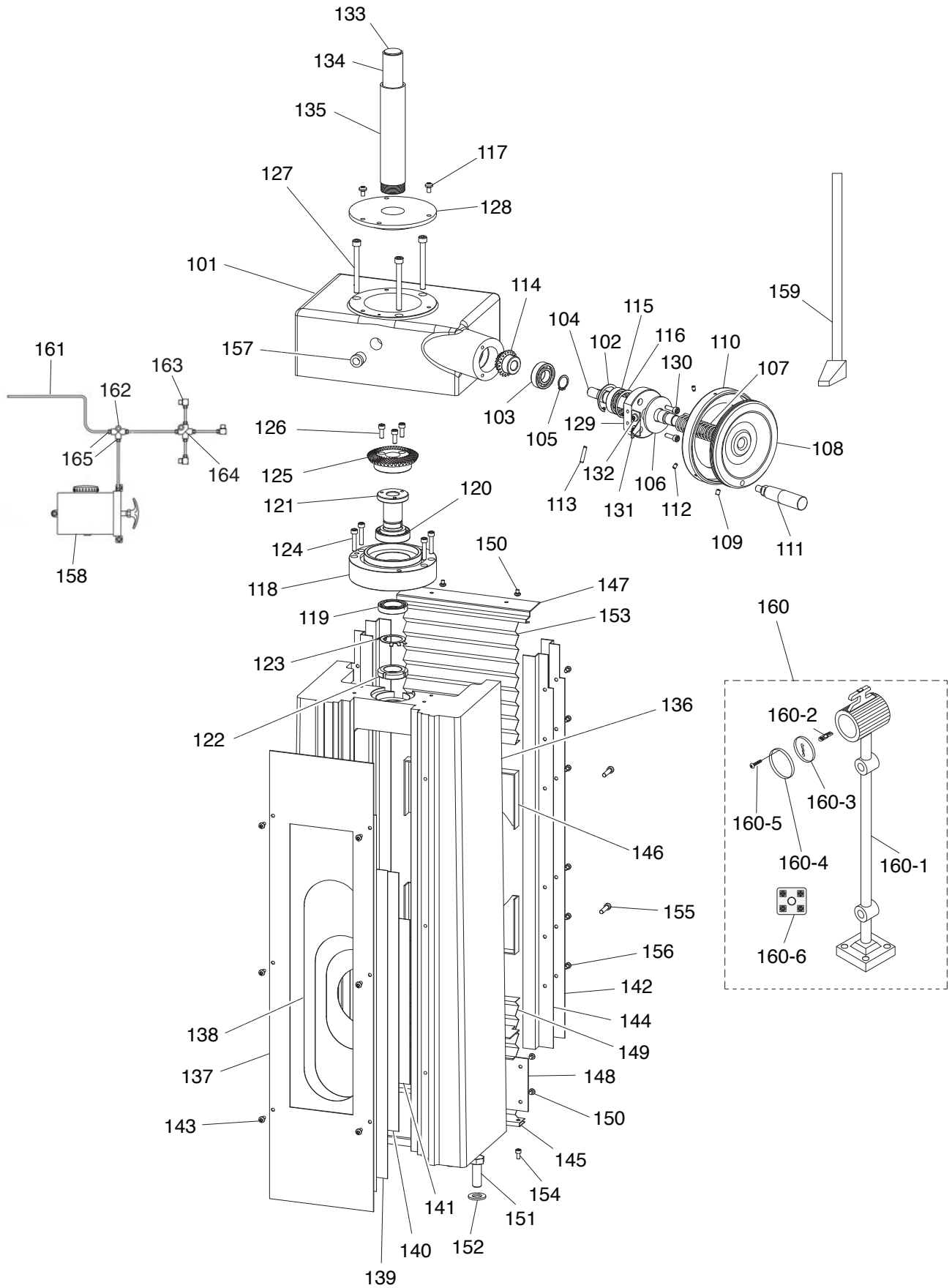
REF	PART #	DESCRIPTION
8	P0763008	LEVELING PAD
9	P0763009	HEX NUT M20-2.5
10	P0763010	CHIP COVER
11	P0763011	CAP SCREW M5-.8 X 8
12	P0763012	OIL DRAN PLUG 1" NPT
13	P0763013	ELECTRICAL CABINET W/DOOR

**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](http://www.grizzly.com) to check for availability.





# Column



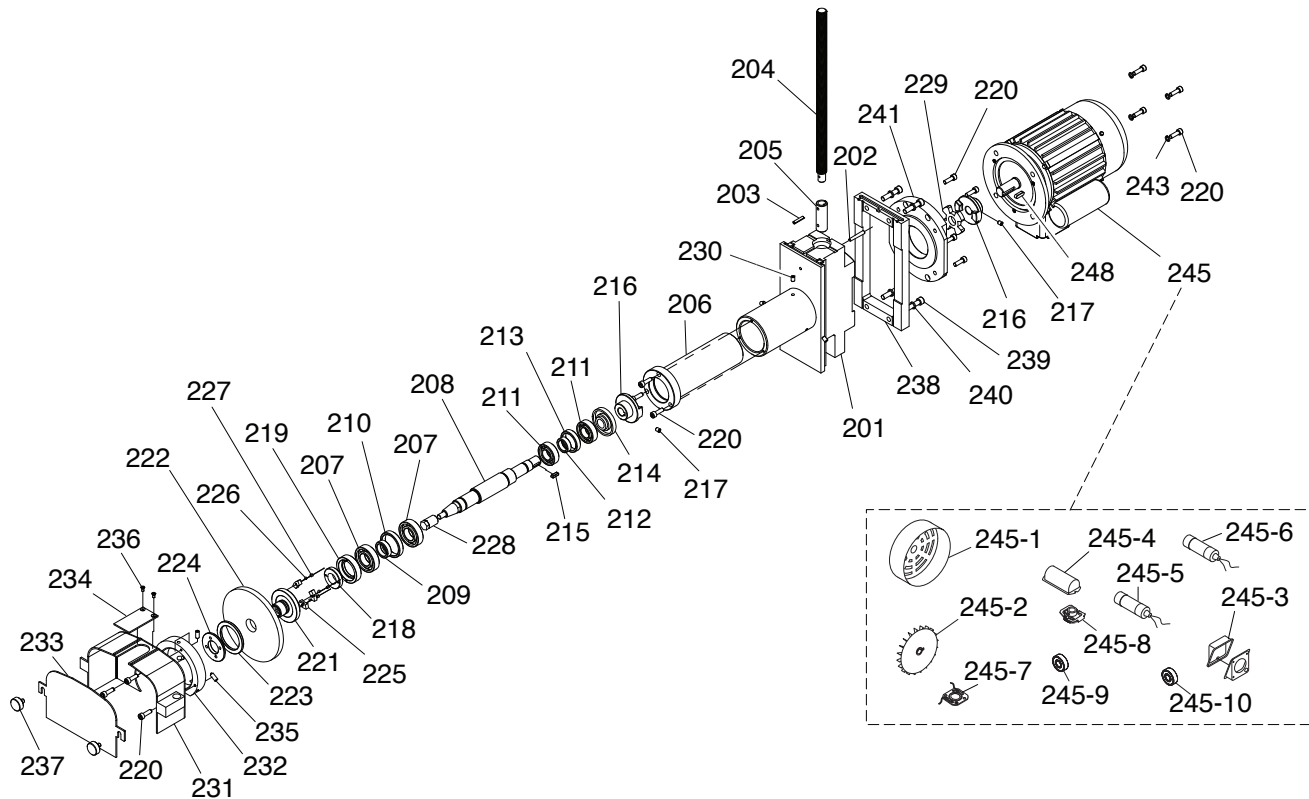
# Column

REF	PART #	DESCRIPTION
101	P0763101	COLUMN CAP
102	P0763102	INT RETAINING RING 42MM
103	P0763103	BALL BEARING 6004ZZ
104	P0763104	Z-AXIS SHAFT
105	P0763105	EXT RETAINING RING 20MM
106	P0763106	RETAINING PLATE
107	P0763107	COMPRESSION SPRING 2.5 X 25 X 85MM
108	P0763108	HANDWHEEL
109	P0763109	SET SCREW M6-1 X 8
110	P0763110	GRADUATED DIAL
111	P0763111	HANDWHEEL HANDLE M10-1.5 X 20
112	P0763112	SET SCREW M5-.8 X 8 DOG-PT
113	P0763113	ROLL PIN 5 X 26
114	P0763114	BEVEL GEAR 20T
115	P0763115	SPANNER NUT M18-1.5
116	P0763116	SPANNER NUT LOCK WASHER 18MM
117	P0763117	BUTTON HD CAP SCR M6-1 X 10
118	P0763118	BEARING SEAT
119	P0763119	BALL BEARING 6906ZZ
120	P0763120	TAPER ROLLER BEARING 32006
121	P0763121	Z-AXIS LEADSCREW NUT
122	P0763122	SPANNER NUT M30-1.5
123	P0763123	SPANNER NUT LOCK WASHER 30MM
124	P0763124	CAP SCREW M6-1 X 30
125	P0763125	BEVEL GEAR 40T
126	P0763126	CAP SCREW M6-1 X 16
127	P0763127	CAP SCREW M8-1.25 X 90
128	P0763128	COLUMN CHIP COVER
129	P0763129	FLANGE COVER
130	P0763130	CAP SCREW M6-1 X 20
131	P0763131	INDICATOR
132	P0763132	PHLP HD SCR M6-1 X 8
133	P0763133	Z-AXIS LEADSCREW TUBE CAP
134	P0763134	Z-AXIS LEADSCREW TUBE (INNER)
135	P0763135	Z-AXIS LEADSCREW TUBE (OUTER)
136	P0763136	COLUMN

REF	PART #	DESCRIPTION
137	P0763137	Z-AXIS CHIP COVER RETAINING PLATE
138	P0763138	Z-AXIS CHIP COVER (OUTER)
139	P0763139	Z-AXIS CHIP COVER (MIDDLE OUTER)
140	P0763140	Z-AXIS CHIP COVER (MIDDLE INNER)
141	P0763141	Z-AXIS CHIP COVER (INNER)
142	P0763142	COLUMN WAY COVER RETAINER (RIGHT)
143	P0763143	BUTTON HD CAP SCR M5-.8 X 10
144	P0763144	COLUMN WAY COVER RETAINER (LEFT)
145	P0763145	WAY COVER CLAMP PLATE (LOWER)
146	P0763146	MOTOR WAY COVER PLATE (UPPER)
147	P0763147	WAY COVER CLAMP PLATE (UPPER)
148	P0763148	MOTOR WAY COVER PLATE (LOWER)
149	P0763149	WAY COVER (LOWER)
150	P0763150	BUTTON HD CAP SCR M5-.8 X 6
151	P0763151	HEX BOLT M14-2 X 40
152	P0763152	FLAT WASHER 14MM
153	P0763153	WAY COVER (UPPER)
154	P0763154	CAP SCREW M5-.8 X 10
155	P0763155	CAP SCREW M6-1 X 25
156	P0763156	CAP SCREW M5-.8 X 8
157	P0763157	OIL SIGHT GLASS 3/4" NPT
158	P0763158	ONE-SHOT OILER ASSEMBLY
159	P0763159	COOLANT NOZZLE ASSY W/VALVE
160	P0763160	HALOGEN LAMP ASSEMBLY
160-1	P0763160-1	LAMP BODY
160-2	P0763160-2	HALOGEN BULB 24V
160-3	P0763160-3	LENS
160-4	P0763160-4	LENS RETAINER
160-5	P0763160-5	PHLP HD SCR M3-.5 X 10
160-6	P0763160-6	LAMP TERMINAL BLOCK 2P
161	P0763161	OIL TUBE 4MM (NYLON)
162	P0763162	OIL FITTING 3-WAY PJ-3/CS-4/CB-4
163	P0763163	TUBE CASTING CONNECTOR
164	P0763164	OIL FITTING 4-WAY PJ-4/CS-4/CB-4
165	P0763165	TUBE FITTING CONNECTOR SA-4/CB-4/CS-4



# Motor & Downfeed System

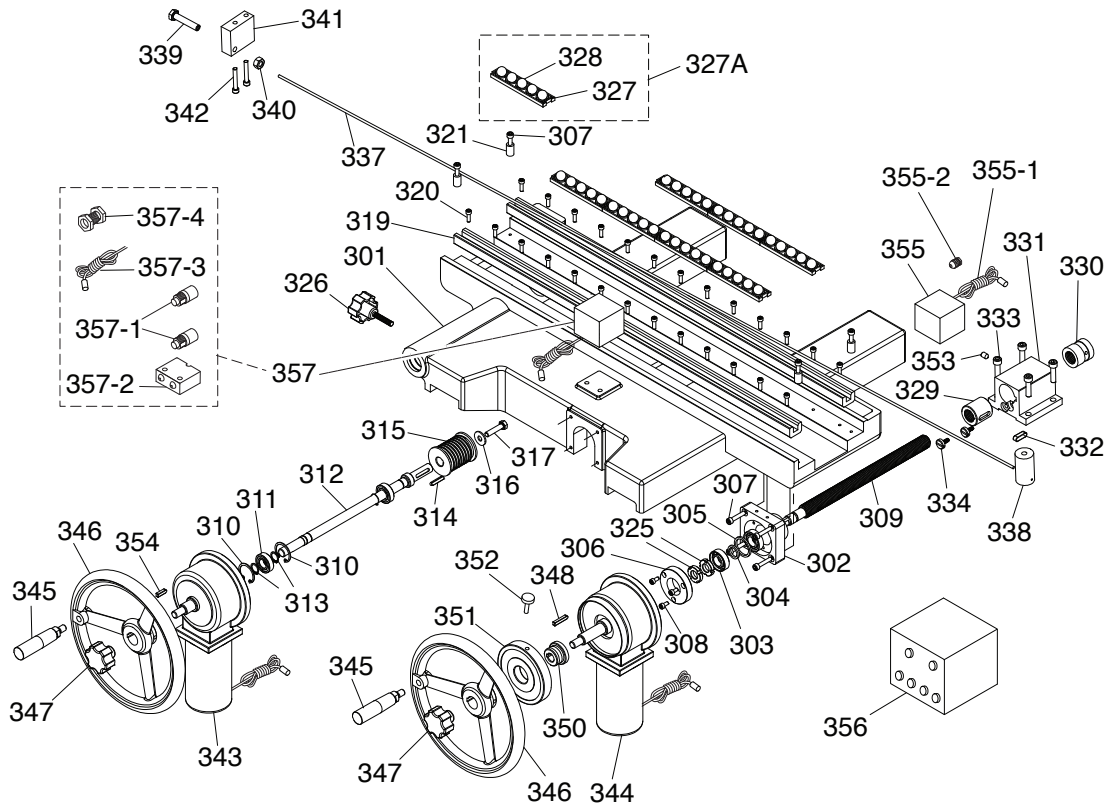


REF	PART #	DESCRIPTION
201	P0763201	HEADSTOCK CASTING
202	P0763202	TAPERED PIN 6 X 45
203	P0763203	ROLL PIN 6 X 45
204	P0763204	Z-AXIS LEADSCREW
205	P0763205	Z-AXIS LEADSCREW NUT
206	P0763206	QUILL
207	P0763207	ANGULAR CONTACT BEARING 7206C
208	P0763208	SPINDLE
209	P0763209	SPACER
210	P0763210	SPACER
211	P0763211	ANGULAR CONTACT BEARING 7205C
212	P0763212	SPACER
213	P0763213	SPACER
214	P0763214	BEARING SEAT
215	P0763215	KEY 6 X 6 X 20
216	P0763216	MOTOR SHAFT COUPLING
217	P0763217	SET SCREW M8-1.25 X 12
218	P0763218	SPINDLE END RING
219	P0763219	BEARING SEAT
220	P0763220	CAP SCREW M8-1.25 X 25
221	P0763221	WHEEL SLEEVE
222	P0763222	GRINDING WHEEL 7" X 1/2" X 1-1/4" 80G
223	P0763223	WHEEL FLANGE RING
224	P0763224	WHEEL FLANGE
225	P0763225	BALANCE WEDGE
226	P0763226	STEEL BALL 4MM
227	P0763227	SET SCREW M5-.8 X 6

REF	PART #	DESCRIPTION
228	P0763228	ARBOR NUT M14-2 LH
229	P0763229	CLUTCH (PLASTIC)
230	P0763230	SET SCREW M8-1.25 X 12
231	P0763231	WHEEL HOUSING
232	P0763232	HOUSING MOUNT RING
233	P0763233	WHEEL COVER
234	P0763234	HOUSING TOP PLATE
235	P0763235	SET SCREW M8-1.25 X 20
236	P0763236	FLAT HD SCR M5-.8 X 10
237	P0763237	KNURLED KNOB BOLT M8-1.25 X 10
238	P0763238	HEADSTOCK MOUNT
239	P0763239	CAP SCREW M10-1.5 X 45
240	P0763240	LOCK WASHER 10MM
241	P0763241	MOTOR MOUNT
243	P0763243	LOCK WASHER 8MM
245	P0763245	MOTOR 1-1/2HP 220V 1-PH
245-1	P0763245-1	MOTOR FAN COVER
245-2	P0763245-2	MOTOR FAN
245-3	P0763245-3	MOTOR JUNCTION BOX
245-4	P0763245-4	CAPACITOR COVER
245-5	P0763245-5	S CAPACITOR 108-130M 250V
245-6	P0763245-6	R CAPACITOR 25M 450V 1-5/8 X 3-1/8
245-7	P0763245-7	CONTACT PLATE
245-8	P0763245-8	CENTRIFUGAL SWITCH
245-9	P0763245-9	BALL BEARING 6204ZZ
245-10	P0763245-10	BALL BEARING 6204ZZ
248	P0763248	KEY 6 X 5 X 25



# Saddle

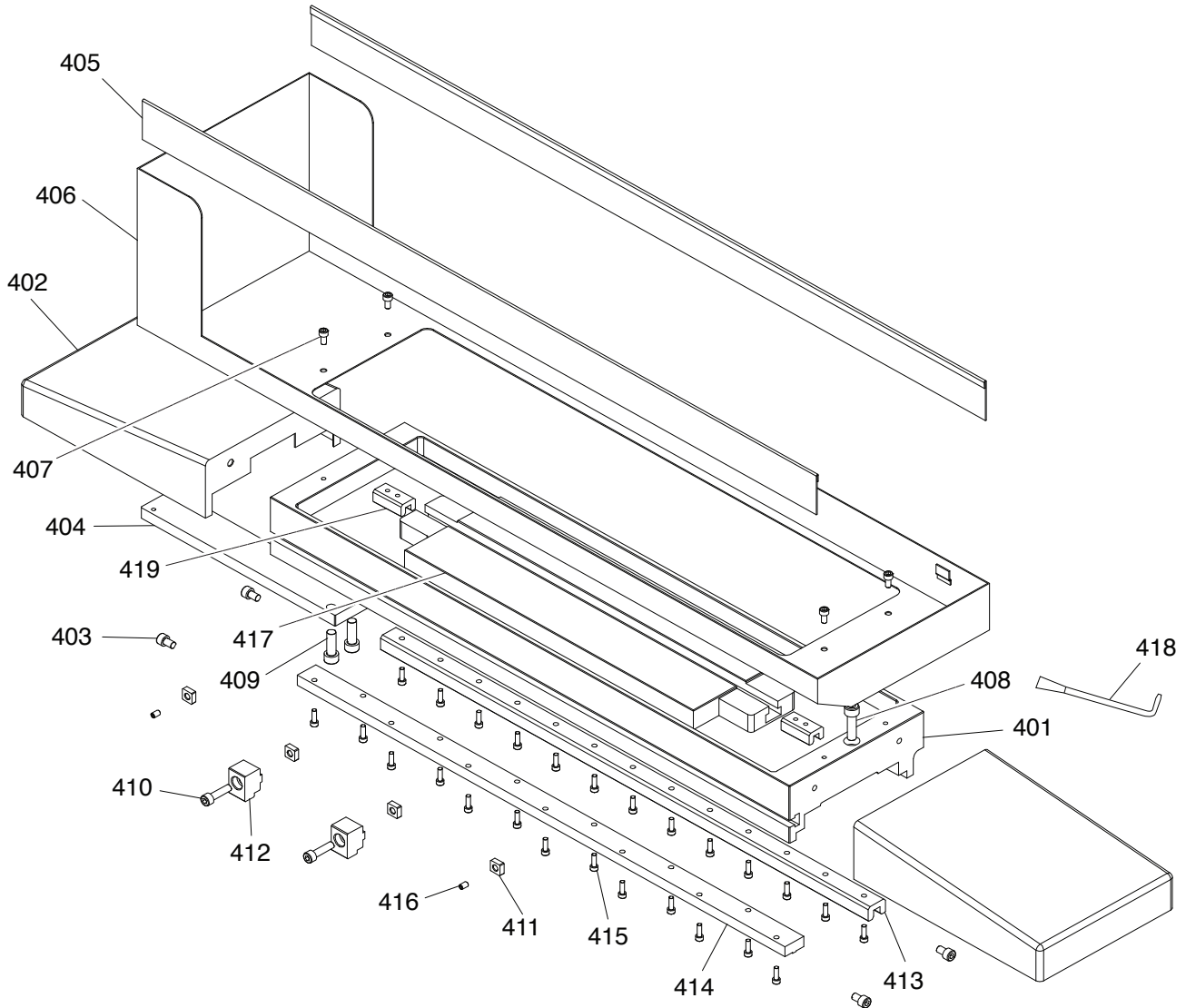


REF	PART #	DESCRIPTION
301	P0763301	SADDLE
302	P0763302	BEARING SEAT
303	P0763303	ANGULAR CONTACT BEARING 7003AC
304	P0763304	SPACER
305	P0763305	SPACER
306	P0763306	BEARING COVER
307	P0763307	CAP SCREW M6-1 X 30
308	P0763308	CAP SCREW M5-.8 X 10
309	P0763309	Y-AXIS LEADSCREW
310	P0763310	INT RETAINING RING 32MM
311	P0763311	BALL BEARING 6002ZZ
312	P0763312	CABLE PULLEY SHAFT
313	P0763313	EXT RETAINING RING 15MM
314	P0763314	KEY 5 X 5 X 28
315	P0763315	CABLE PULLEY
316	P0763316	FLAT WASHER 8MM
317	P0763317	HEX BOLT M8-1.25 X 35
319	P0763319	SADDLE WAY
320	P0763320	CAP SCREW M5-.8 X 16
321	P0763321	TABLE STOP
325	P0763325	SPANNER NUT M16-1.5
326	P0763326	KNOB BOLT M8-1.25 X 40
327A	P0763327A	BALL BEARING STRIP ASSEMBLY
327	P0763327	BALL BEARING STRIP
328	P0763328	STEEL BALL 15.875MM
329	P0763329	CROSS LEADSCREW NUT (FRONT)
330	P0763330	CROSS LEADSCREW NUT (REAR)
331	P0763331	CROSS LEADSCREW NUT HOUSING
332	P0763332	KEY 8 X 7 X 25

REF	PART #	DESCRIPTION
333	P0763333	CAP SCREW M8-1.25 X 30
334	P0763334	CROSS BACKLASH SCREW
337	P0763337	X-AXIS CABLE
338	P0763338	CABLE BARREL
339	P0763339	CABLE BOLT
340	P0763340	HEX NUT M10-1.5
341	P0763341	CABLE MOUNT
342	P0763342	CAP SCREW M6-1 X 40
343	P0763343	X-AXIS POWER FEED W/CABLE
344	P0763344	Y-AXIS POWER FEED W/CABLE
345	P0763345	HANDWHEEL HANDLE M10-1.5 X 16
346	P0763346	HANDWHEEL
347	P0763347	KNOB BOLT M12-1.75 X 50
348	P0763348	KEY 6 X 6 X 30
350	P0763350	DIAL SLEEVE
351	P0763351	GRADUATED DIAL
352	P0763352	DIAL KNOB BOLT M6-1 X 22
353	P0763353	SET SCREW M8-1.25 X 12
354	P0763354	KEY 6 X 5 X 20
355	P0763355	Y-AXIS LIMIT SWITCH CHINT YBLX-JW2/11Z/3
355-1	P0763355-1	Y-AXIS LIMIT SWITCH CORD 16G 4W 48"
355-2	P0763355-2	STRAIN RELIEF 5/8" NPT TYPE-3
356	P0763356	POWER FEED CONTROL BOX ASSEMBLY
357	P0763357	X-AXIS LIMIT SWITCH ASSEMBLY
357-1	P0763357-1	PROXIMITY SENSOR LM12-D04LK
357-2	P0763357-2	LIMIT SWITCH DELIXI LXW5-11Q1
357-3	P0763357-3	X-AXIS LIMIT SWITCH CORD 16G 2W 48"
357-4	P0763357-4	STRAIN RELIEF 5/8" NPT TYPE-5



# Table



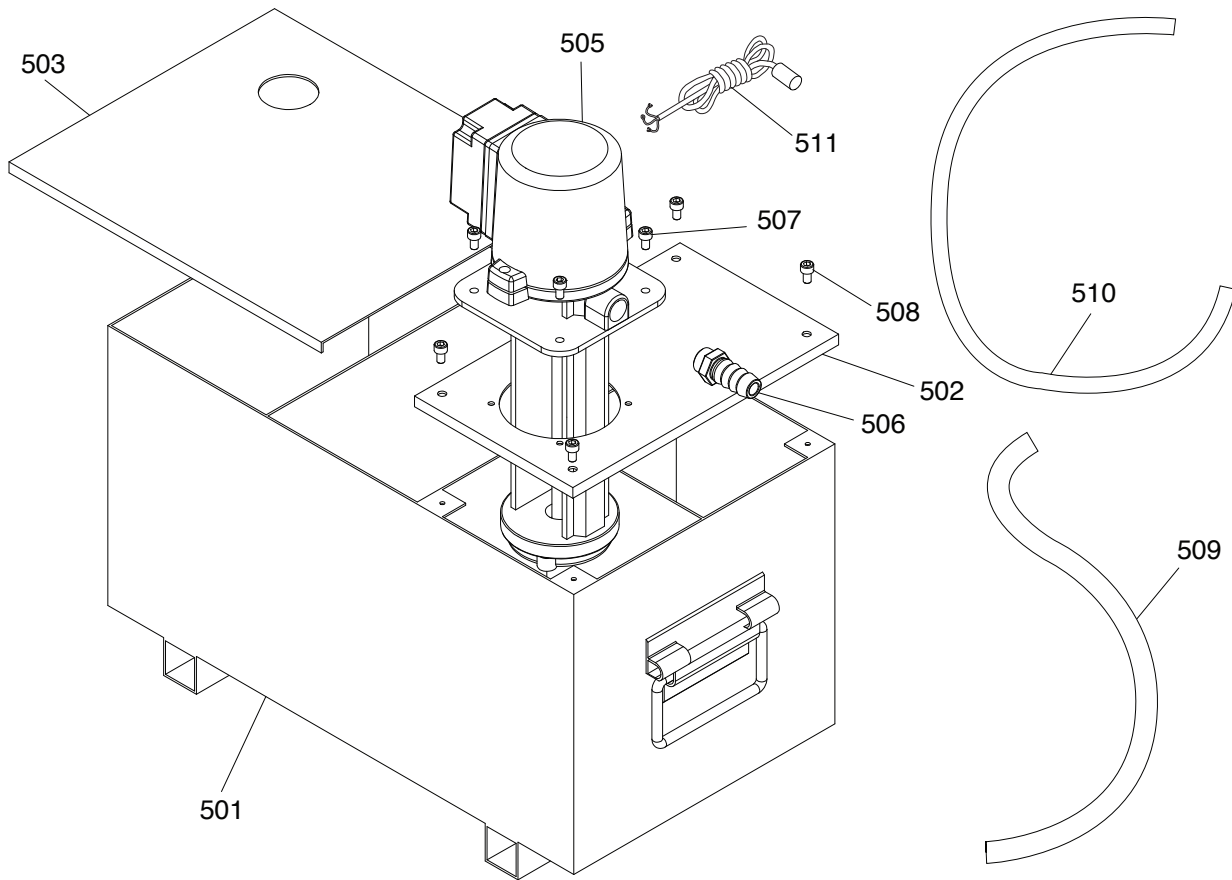
REF	PART #	DESCRIPTION
401	P0763401	TABLE
402	P0763402	TABLE END
403	P0763403	CAP SCREW M8-1.25 X 12
404	P0763404	CABLE BRACKET
405	P0763405	SPLASH SIDE PLATE
406	P0763406	SPLASH GUARD
407	P0763407	CAP SCREW M6-1 X 12
408	P0763408	CAP SCREW M10-1.5 X 35
409	P0763409	CAP SCREW M10-1.5 X 30
410	P0763410	CAP SCREW M8-1.25 X 30

REF	PART #	DESCRIPTION
411	P0763411	T-SLOT NUT M8-1.25 1/2" SLOT
412	P0763412	TABLE STOP
413	P0763413	TABLE WAY, V-SHAPE
414	P0763414	TABLE WAY, FLAT
415	P0763415	CAP SCREW M5-.8 X 16
416	P0763416	SET SCREW M6-1 X 10
417	P0763417	MAGNETIC CHUCK
418	P0763418	MAGNETIC CHUCK KEY
419	P0763419	MAGNETIC CHUCK CLAMP ASSEMBLY





# Coolant System



## REF PART # DESCRIPTION

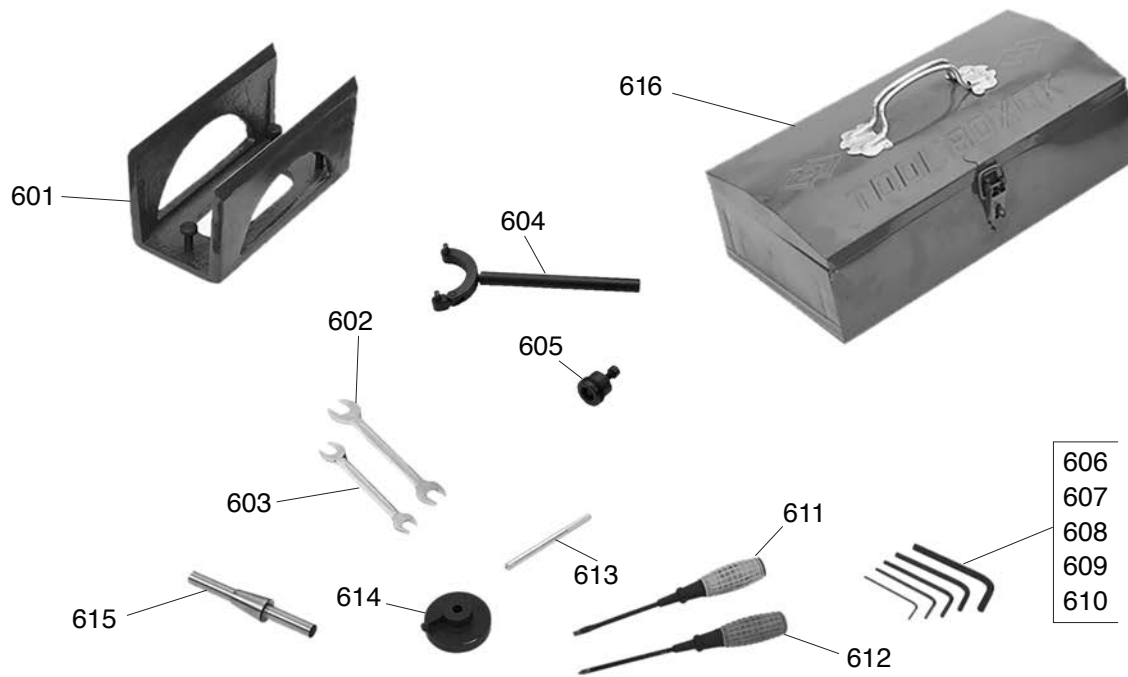
REF	PART #	DESCRIPTION
501	P0763501	COOLANT TANK
502	P0763502	TANK COVER (OUTLET)
503	P0763503	TANK COVER (RETURN)
505	P0763505	COOLANT PUMP ASSY 1/8HP 220V 1-PH
506	P0763506	HOSE CONNECTOR

## REF PART # DESCRIPTION

REF	PART #	DESCRIPTION
507	P0763507	CAP SCREW M6-1 X 10
508	P0763508	CAP SCREW M6-1 X 8
509	P0763509	RETURN HOSE
510	P0763510	OUTLET HOSE
511	P0763511	PUMP POWER CORD ASSEMBLY



# Accessories

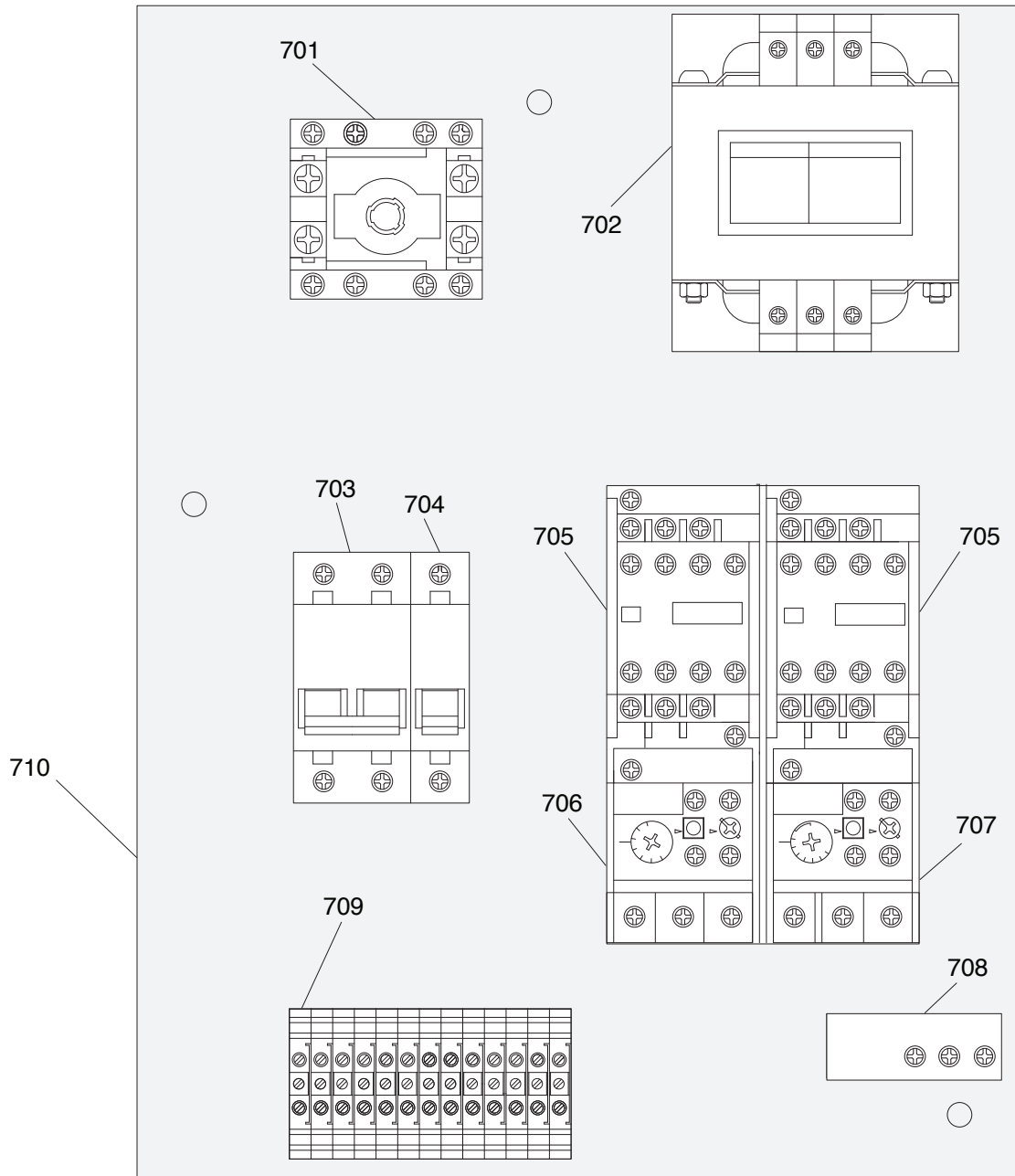


REF	PART #	DESCRIPTION
601	P0763601	WHEEL BALANCING BASE ASSY
602	P0763602	WRENCH 19 X 22MM OPEN-ENDS
603	P0763603	WRENCH 14 X 17MM OPEN-ENDS
604	P0763604	WHEEL FLANGE WRENCH
605	P0763605	WHEEL PULLER
606	P0763606	HEX WRENCH 8MM
607	P0763607	HEX WRENCH 6MM
608	P0763608	HEX WRENCH 5MM

REF	PART #	DESCRIPTION
609	P0763609	HEX WRENCH 4MM
610	P0763610	HEX WRENCH 3MM
611	P0763611	SCREWDRIVER FLAT #2
612	P0763612	SCREWDRIVER PHILLIPS #2
613	P0763613	DIAMOND DRESSER
614	P0763614	DRESSER BASE ASSEMBLY
615	P0763615	WHEEL BALANCING ARBOR
616	P0763616	TOOLBOX



# Electrical Cabinet

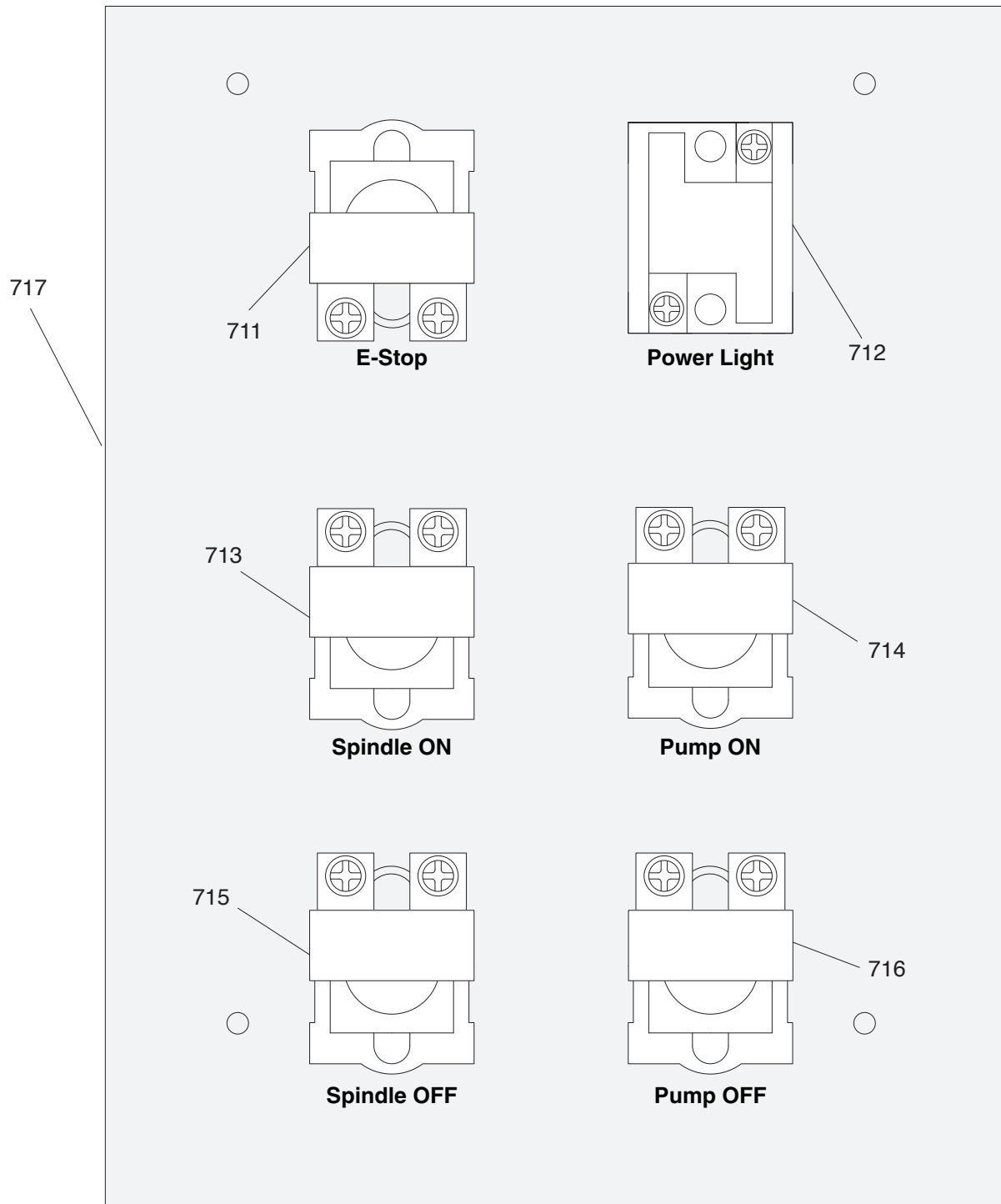


REF	PART #	DESCRIPTION
701	P0763701	MASTER POWER SWITCH TAYEE 50044082
702	P0763702	TRANSFORMER WUXI JBK4-250VA 24-380V
703	P0763703	CIRCUIT BREAKER DELXI D16
704	P0763704	CIRCUIT BREAKER DELXI C10
705	P0763705	CONTACTOR SIEMENS 3TB40 24V

REF	PART #	DESCRIPTION
706	P0763706	OL RELAY SIEMENS 3UA50 5-8A
707	P0763707	OL RELAY SIEMENS 3UA50 0.63-0.9A
708	P0763708	GROUND TERMINAL BAR
709	P0763709	TERMINAL BAR 1P
710	P0763710	ELECTRICAL MOUNTING PLATE



# Main Control Panel

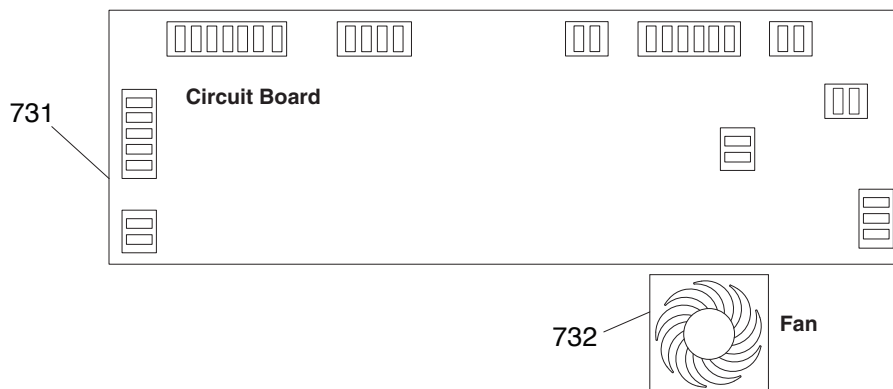
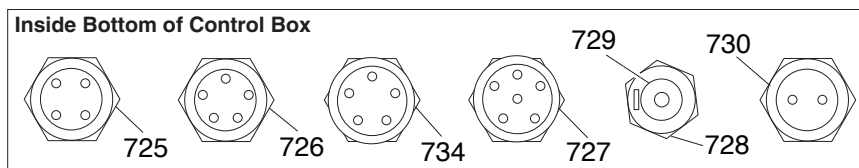
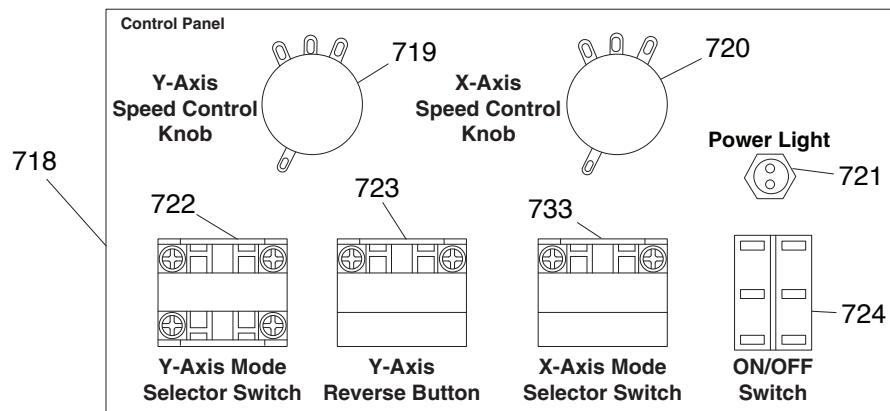


REF	PART #	DESCRIPTION
711	P0763711	E-STOP BUTTON LAY3 22MM
712	P0763712	POWER LIGHT XDY1-B/221 22MM
713	P0763713	SPINDLE ON BUTTON GRN LAY3 22MM
714	P0763714	PUMP ON BUTTON GRN LAY3 22MM

REF	PART #	DESCRIPTION
715	P0763715	SPINDLE OFF BUTTON RED LAY3 22MM
716	P0763716	PUMP OFF BUTTON RED LAY3 22MM
717	P0763717	MAIN CONTROL PANEL PLATE



# Power Feed Control Box



## REF PART # DESCRIPTION

718	P0763718	PF CONTROL PANEL PLATE
719	P0763719	POTENTIOMETER WTH118-1A 150K 2W
720	P0763720	POTENTIOMETER WTH118-1A 2K2 2W
721	P0763721	POWER LIGHT
722	P0763722	SWITCH SANLI LAY16-1112 22MM 3-POS
723	P0763723	BUTTON SANLI LAY16-1211 22MM RED
724	P0763724	ON/OFF TOGGLE SWITCH KCD4
725	P0763725	PLUG MALE 4-PRONG
726	P0763726	PLUG MALE 5-PRONG, SMALL

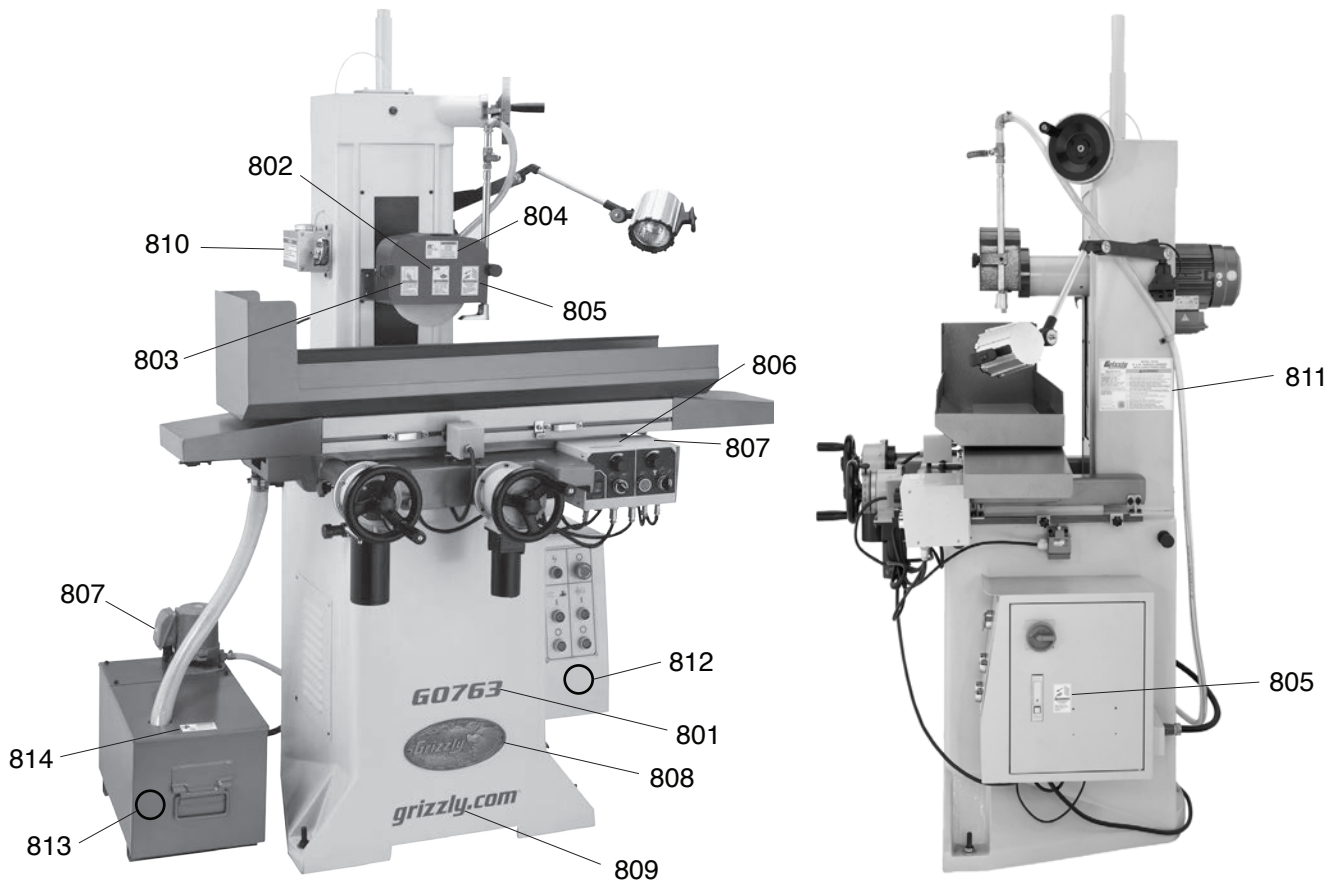
## REF PART # DESCRIPTION

727	P0763727	PLUG MALE 6-PRONG
728	P0763728	FUSE HOLDER
729	P0763729	FUSE 8A 250V 0.18" FAST-ACTING, GLASS
730	P0763730	PLUG MALE 2-PRONG
731	P0763731	CIRCUIT BOARD CHCO CK-XY-03
732	P0763732	FAN 2-3/4" X 2-3/4" X 1/2"
733	P0763733	SWITCH SANLI LAY16-1207 22MM 2-POS
734	P0763734	PLUG MALE 5-PRONG, LARGE





# Labels & Cosmetics



REF	PART #	DESCRIPTION
801	P0763801	MODEL NUMBER LABEL P-568C
802	P0763802	FACE SHIELD/RESPIRATOR WARNING LABEL
803	P0763803	READ MANUAL LABEL
804	P0763804	MAGNETIC CHUCK WARNING LABEL
805	P0763805	DISCONNECT POWER WARNING LABEL
806	P0763806	STOPPING TABLE NOTICE LABEL
807	P0763807	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
808	P0763808	GRIZZLY LOGO PLATE
809	P0763809	GRIZZLY.COM LABEL P-568C
810	P0763810	ONE-SHOT OILER NOTICE LABEL
811	P0763811	MACHINE ID LABEL
812	P0763812	GRIZZLY PUTTY TOUCH-UP PAINT
813	P0763813	GRIZZLY GREEN TOUCH-UP PAINT
814	P0763814	BIOHAZARD WARNING 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](http://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 & RETURNS

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

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

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

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

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

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

# *grizzly.com*<sup>®</sup>

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24 HOURS A DAY!  
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