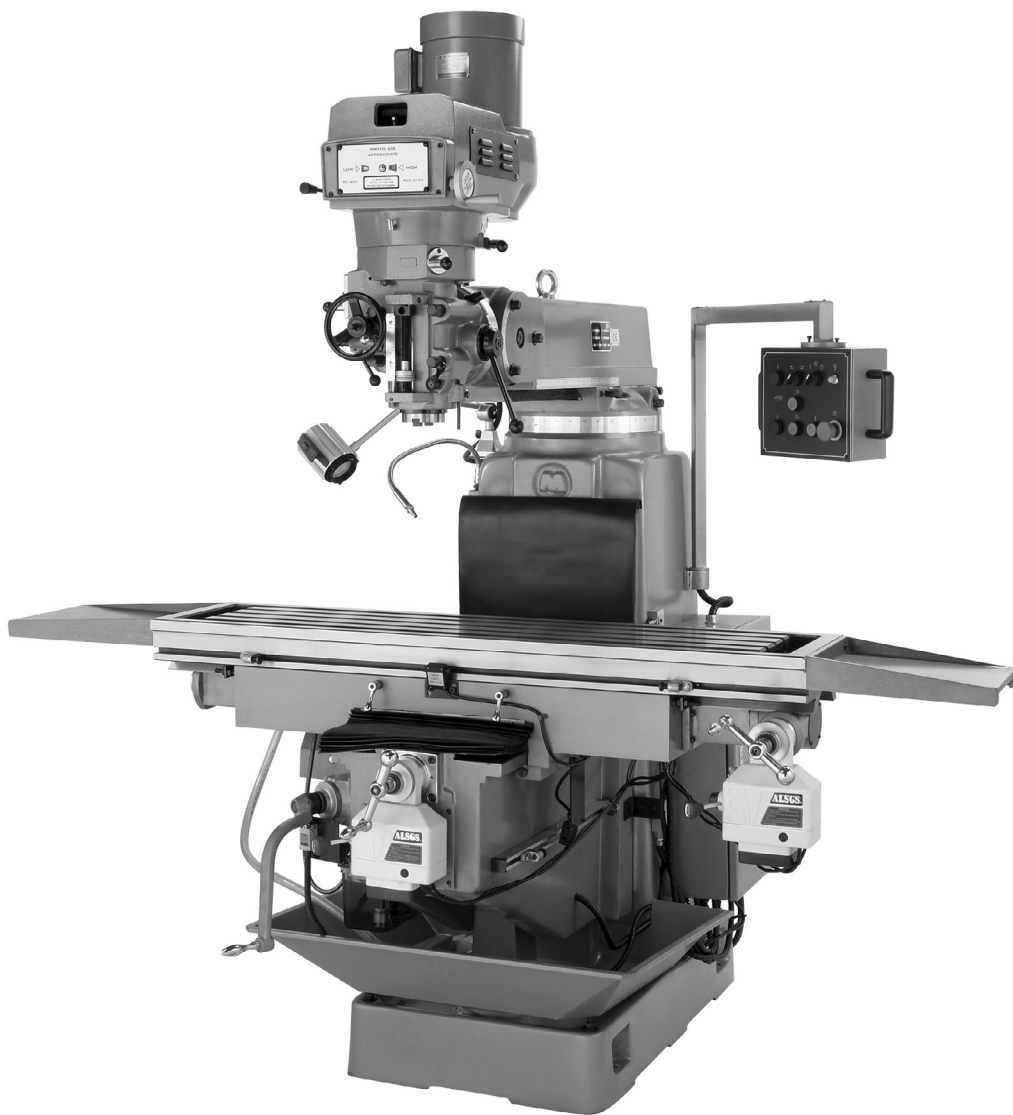




**MODEL G0617  
13" X 59" VERTICAL MILL  
MANUAL INSERT**

This manual insert provides additional safety and machine information for the Model G0617. You must read and understand this information before operating your mill. Keep this insert with your original owner's manual for easy reference.

*If you have any further questions about this manual insert, contact our Technical Support at (570) 546-9663 or email [techsupport@grizzly.com](mailto:techsupport@grizzly.com).*



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#TS9429 PRINTED IN CHINA



# MACHINE DATA SHEET

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

## MODEL G0617 LARGE 13" X 59" MILL

### Product Dimensions:

Weight .....4740 lbs.  
 Length/Width/Height .....61" x 88½" x 92½"  
 Foot Print (Length/Width).....39¾" x 23⅝"

### Shipping Dimensions:

Type ..... Wood  
 Content..... Machine  
 Weight.....5072 lbs.  
 Length/Width/Height..... 81" x 117" x 86"

### Electrical:

Switch..... Rotary ON/OFF  
 Switch Voltage .....220/440V  
 Recommended Circuit Size ..... 20/15A  
 Phase Converter .....G5845

### Motors:

#### Main

Type ..... TEFC Induction  
 Horsepower..... 5 HP  
 Voltage .....220/440V  
 Phase .....3-Phase  
 Amps ..... 12/7A  
 Speed..... 1725 RPM  
 Cycle ..... 60 Hz  
 Number Of Speeds ..... 1  
 Power Transfer .....Belt Drive  
 Bearings ..... Shielded and Lubricated

#### Coolant

Type ..... TEFC Induction  
 Horsepower..... ⅛ HP  
 Voltage .....220/440V  
 Phase .....3-Phase  
 Amps ..... 1/0.5A  
 Cycle ..... 60 Hz  
 Power Transfer ..... Direct Drive  
 Bearings ..... Shielded and Lubricated

### Table Elevation Motor

Type ..... TEFC Induction  
 Horsepower..... ½ HP  
 Voltage .....220/440V  
 Phase .....3-Phase  
 Amps ..... 2/1A  
 Speed..... 1725 RPM  
 Cycle ..... 60 Hz  
 Number Of Speeds ..... 1  
 Power Transfer ..... Gear  
 Bearings ..... Shielded and Lubricated



### Power Feed Motors (Longitudinal and Cross)

Type .....	ALSGS AL-510S
Maximum Torque .....	450 in.-lb.
Voltage .....	110V
Phase .....	1-Phase
Amps .....	1A
Speed .....	Variable
Cycle .....	60 Hz
Power Transfer .....	Gear Drive
Bearings .....	Shielded and Lubricated

### Main Specifications:

#### Operation Information

Spindle Travel .....	4 <sup>7</sup> / <sub>8</sub> "
Swing .....	60"
Longitudinal Table Travel .....	39 <sup>3</sup> / <sub>8</sub> "
Cross Table Travel .....	10 <sup>1</sup> / <sub>16</sub> "
Vertical Table Travel .....	14 <sup>1</sup> / <sub>2</sub> "
Ram Travel .....	23 <sup>5</sup> / <sub>8</sub> "
Ram Swivel .....	360 deg.
Head Travel .....	5"
Head Tilt Left and Right .....	90 deg.
Head Tilt Forward and Back .....	45 deg.
Maximum Distance Spindle to Column .....	29 <sup>15</sup> / <sub>16</sub> "
Maximum Distance Spindle to Table .....	21 <sup>5</sup> / <sub>8</sub> "
Drilling Capacity for Cast Iron .....	<sup>3</sup> / <sub>4</sub> "
Drilling Capacity for Steel .....	<sup>9</sup> / <sub>16</sub> "
Number of Spindle Speeds .....	Variable
Range of Spindle Speeds .....	60–3750 RPM
Number of Longitudinal Feed Rates .....	Variable
Range of Longitudinal Feed Rates .....	0.2–36 in./min.
Longitudinal Lead Screw TPI .....	5 TPI
Number of Cross Feed Rates .....	Variable
Range of Longitudinal Feed Rates .....	0.2–36 in./min.
Cross Lead Screw TIP .....	5 TPI

#### Spindle Information

Vertical Spindle Taper .....	R-8
Spindle Bearing Type .....	Ball
End Milling Capacity .....	<sup>3</sup> / <sub>4</sub> "
Face Milling Capacity .....	3 <sup>1</sup> / <sub>8</sub> "
Draw Bar Diameter .....	<sup>5</sup> / <sub>8</sub> "
Draw Bar TPI .....	11 TPI
Draw Bar Length .....	24 <sup>13</sup> / <sub>16</sub> "

#### Table Information

Table Length/Width Without Extension Wings .....	59" x 13"
Table Length/Width With Extension Wings .....	88 <sup>1</sup> / <sub>2</sub> " x 13"
Table Thickness .....	3 <sup>3</sup> / <sub>4</sub> "
Number of T-Slots .....	3
T-Slot Width .....	<sup>5</sup> / <sub>8</sub> "
T-Slot Height .....	<sup>5</sup> / <sub>8</sub> "
T-Slot Centers .....	2 <sup>1</sup> / <sub>2</sub> "
Stud Size .....	<sup>1</sup> / <sub>2</sub> "

### Other Specifications:

Country of Origin .....	China
Warranty .....	1 Year
Serial Number Location .....	Machine ID Label on Head Casting



# Safety

## **WARNING**

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

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



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.

## **WARNING**

### **Safety Instructions for Machinery**

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



# WARNING

## Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Maintain stability and balance at all times.
23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.



## **WARNING**

### **Additional Safety Instructions For Mills**

1. **UNDERSTANDING CONTROLS.** Make sure you understand the use and operation of all controls.
2. **SAFETY ACCESSORIES.** Always use a chip guard in addition to your safety glasses when milling to prevent bodily injury.
3. **WORK HOLDING.** Before starting the machine, be certain the workpiece has been properly clamped to the table. NEVER hold the workpiece by hand when using the mill.
4. **CHUCK KEY SAFETY.** Always remove your chuck key, drawbar wrench, and any service tools immediately after use.
5. **SPINDLE SPEEDS.** Select the spindle speed that is appropriate for the type of work and material. Allow the mill to gain full speed before beginning a cut.
6. **POWER DISRUPTION.** In the event of a local power outage during use of the mill, turn **OFF** all switches to avoid possible sudden start up once power is restored.
7. **SPINDLE DIRECTION CHANGES.** Never reverse spindle direction while the spindle is in motion.
8. **STOPPING SPINDLE.** DO NOT stop the spindle using your hand.
9. **CLEAN-UP.** DO NOT clear chips by hand or compressed air. Use a brush, and never clear chips while the mill is turning.
10. **MACHINE CARE AND MAINTENANCE.** Never operate the mill with damaged or worn parts. Maintain your mill in proper working condition. Perform routine inspections and maintenance promptly. Put away adjustment tools after use.
11. **DISCONNECT POWER.** Make sure the mill is turned **OFF**, disconnected from its power source and all moving parts have come to a complete stop before starting any inspection, adjustment, or maintenance procedure.
12. **AVOIDING ENTANGLEMENT.** Keep loose clothing articles such as sleeves, belts or jewelry items away from the mill spindle. Never wear gloves when mill is in operation.
13. **TOOL HOLDING.** Always use the proper tools for your operation. Make sure tools are held firmly in place.
14. **CUTTING TOOL INSPECTION.** Inspect drills and end mills for sharpness, chips, or cracks before each use. Replace dull, chipped, or cracked cutting tools immediately. Handle new cutting tools with care. Leading edges are very sharp and can cause lacerations.
15. **BE ATTENTIVE.** DO NOT leave mill running unattended for any reason.
16. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

## **WARNING**

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



# 220V/440V Circuit Requirements

## **!WARNING**

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

### Full Load Amperage Draw

G0617 220V 3-Phase ..... 16 Amps  
G0617 440V\* 3-Phase..... 9.5 Amps

### Circuit Requirements

We recommend connecting your machine to a dedicated and grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

G0617 220V 3-Phase ..... 20 Amp  
G0617 440V\* 3-Phase..... 15 Amp

### Minimum Cord Requirements

For 220V connection, we recommend using a stranded-copper flexible cord that meets the minimum criteria listed below, does not exceed 50 ft., and has an insulation type that starts with "S." The exact insulation type should account for any exposure to moisture, heat, and oils in the working environment. A qualified electrician should determine the best cord to use in your environment.

For 440V connection, the electrician who hardwires the machine will determine the appropriate wire to use inside the conduit.

G0617 220V 3-Phase ..... 12/4 AWG, 300VAC  
G0617 440V\* 3-Phase..... Electrician to Hardwire

### 220V Plug/Connection Type

G0617 220V 3-Phase ..... L15-20

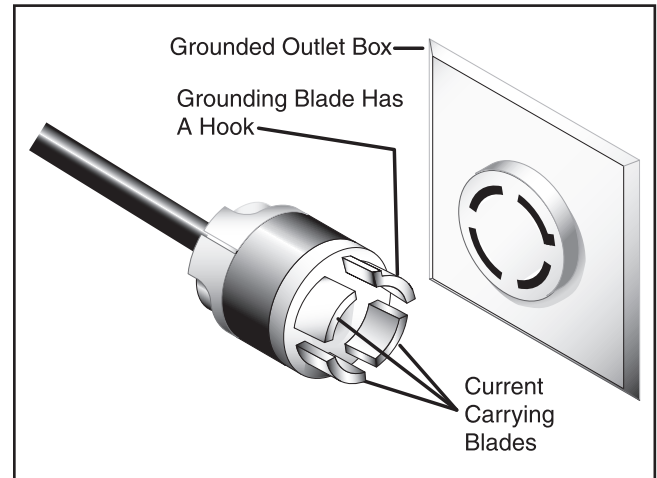


Figure 1. NEMA L15-20 plug and receptacle.

### 440V\* Connection to Power

Have a qualified electrician hardwire this machine to a dedicated locking shut-off switch that is connected to the main power source.

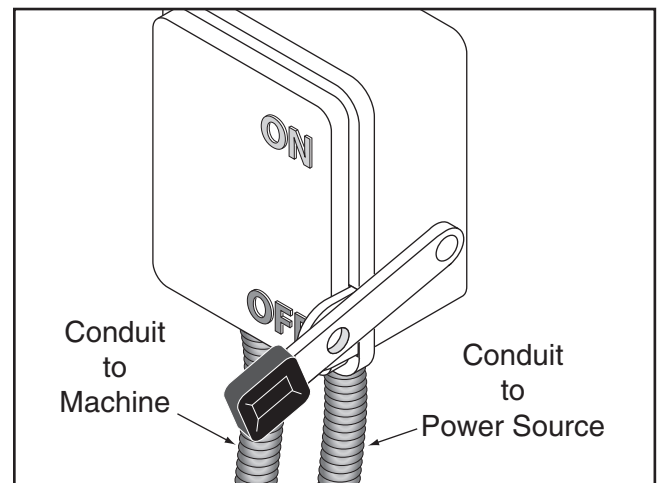


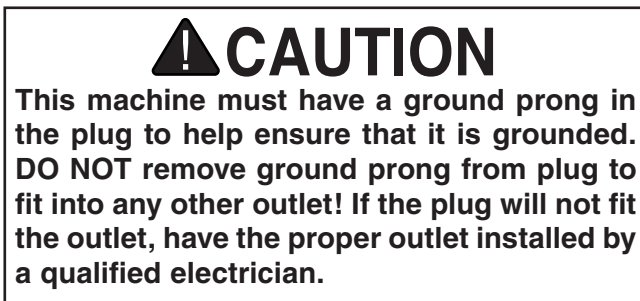
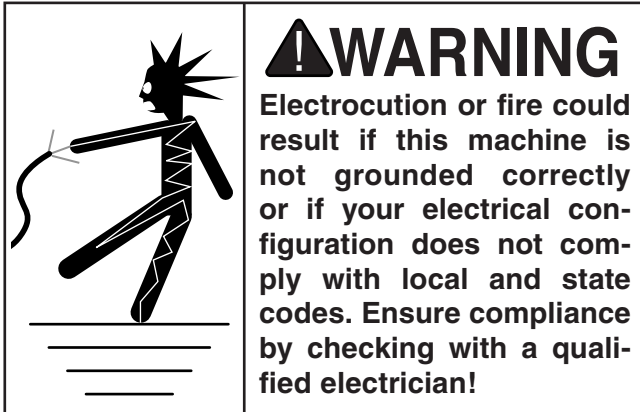
Figure 2. Power shut-off switch.

**\* To run on 440V, you must rewire the motor and replace the 220V magnetic switch assembly with the 440V magnetic switch assembly. To obtain the 440V Conversion Kit call our customer service at (800) 523-4777.**



## Grounding

In the event of an electrical short, grounding reduces the risk of electric shock. The grounding wire in the power cord must be properly connected to the grounding prong on the plug; likewise, the outlet must be properly installed and grounded. All electrical connections must be made in accordance with local codes and ordinances.



## Extension Cords

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We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

If you find it absolutely necessary to use an extension cord with your machine, the extension cord must also contain a ground wire and ground pin.

### 220V Operation

Use at least a 12 gauge cord that does not exceed 50 feet in length!

### 440V Operation

Do not use an extension cord with 440V!

## Phase Converter

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The power from the manufactured power leg (wild wire) of a phase converter fluctuates, which may damage electrical components if connected to the wrong incoming power terminal. If you must use a phase converter for 3-phase power, only connect the "wild wire" to the **L2 terminal**.

