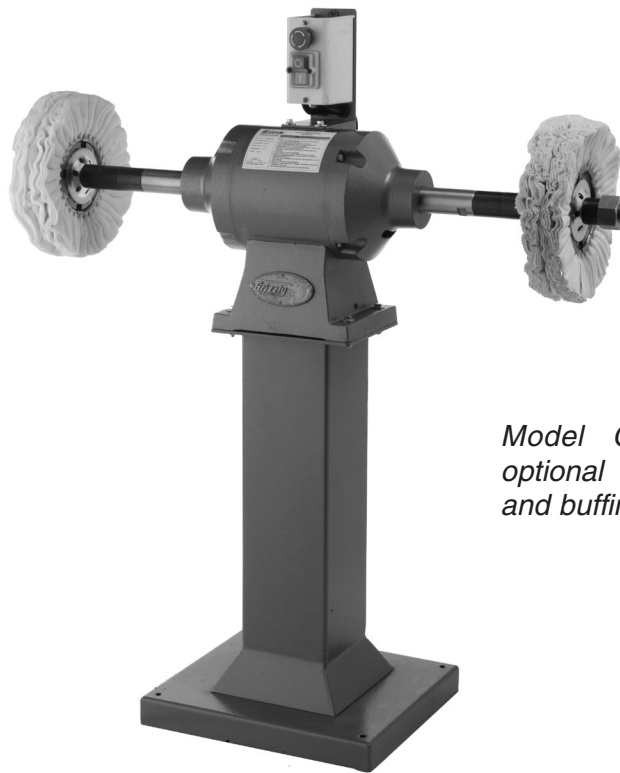




**MODEL G3622/G3623/G3708/
G4787/G4788
INDUSTRIAL BUFFER
OWNER'S MANUAL**



*Model G4787 shown with
optional Model G4789 stand
and buffing wheels.*



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

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

The owner of this machine/equipment 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, blade/cutter 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

Foreword

We are proud to offer the Model G3622-G3623/G3708/G4787/G4788 Industrial Buffer. This machine is part of a growing Grizzly family of fine woodworking and metalworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the G3622/G3623/G3708/G4787/G4788 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at www.grizzly.com. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Functional Overview

A buffer is used to polish metal, wood and plastic workpieces.

The primary components of a buffer are the motor, control box, shafts, arbor nuts, spacers, and buffing wheels.

A buffer is typically set up by removing the arbor nut, sliding the appropriate number of spacers on a shaft with a wheel flange and a buffing wheel or wheels. The assembly is secured with an additional wheel flange, spacer, and an arbor nut.

Standing to the side of the buffer, the operator turns the motor **ON**, causing the spindle to move the buffing wheel clockwise, as viewed from the front left side. When the wheel reaches full speed, the polishing compound is placed on the rotating face of the wheel. While holding the workpiece with both hands, the operator eases it into the lower front face of the wheel, then moves the workpiece back and forth on the edge of the wheel. The downward force of the rotating wheel, combined with the compound, removes scratches and sanding marks from the workpiece, resulting in a polished surface.

The buffer can be mounted to a workbench or the optional Model G4789 stand. Optional wheel flanges provide additional rigidity to the buffing wheels and help prolong their lifespan. Though buffing wheels are not provided with your machine, a wide variety wheel sizes and materials, and buffing compounds can be purchased separately.



Identification

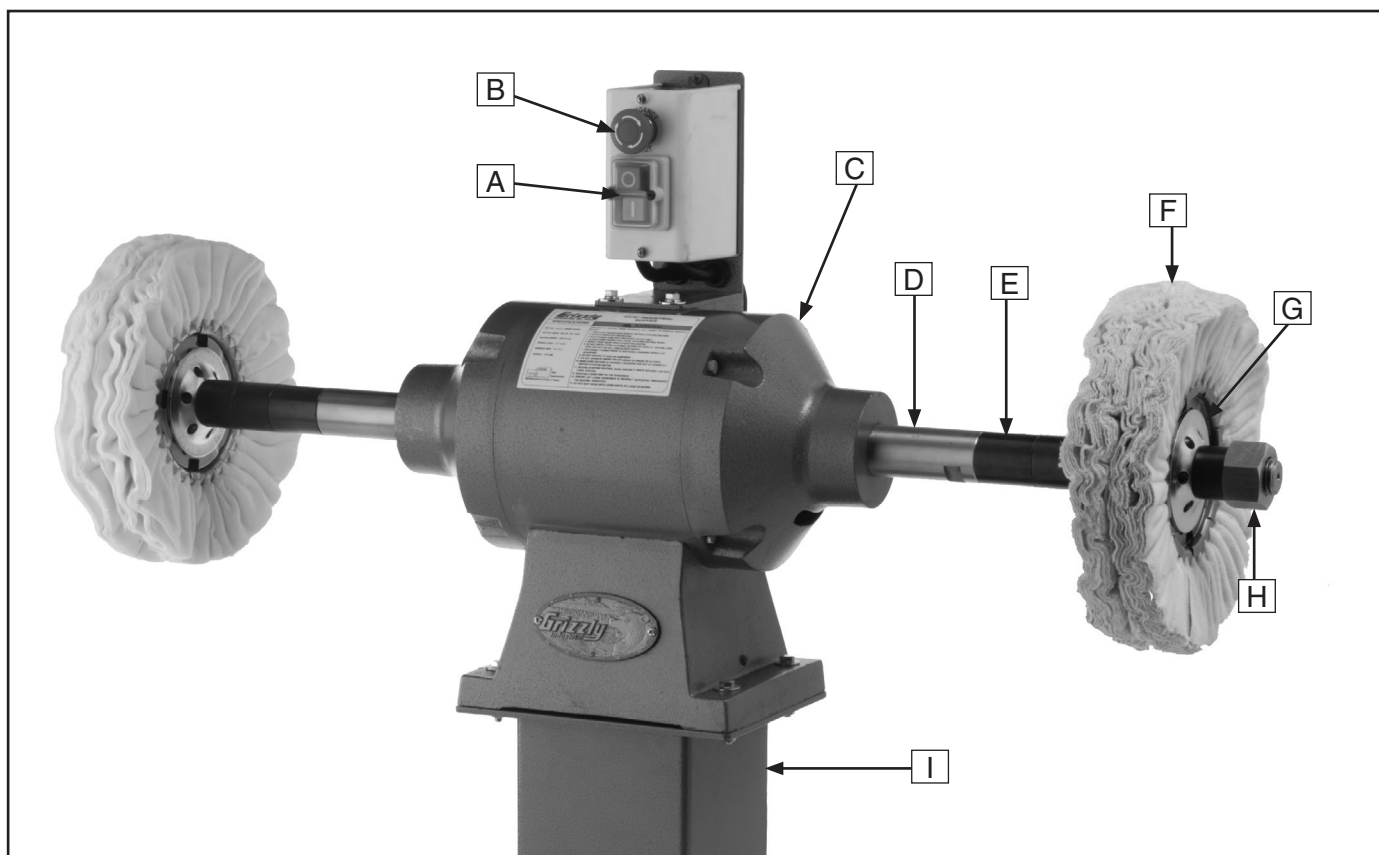


Figure 1. Model G4787 identification.

- A. ON/OFF Switch
- B. Emergency STOP Button
- C. Motor
- D. Shaft
- E. Spacers
- F. Buffing Wheels (Not Included)
- G. Wheel Flange
- H. Arbor Nut
- I. Stand (Not Included)





MACHINE DATA SHEET

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

MODEL G3622/G3623/G3708/G4787/G4788 INDUSTRIAL BUFFER

Model Number	G3622	G3623	G3708	G4787	G4788
Motor	1 HP	2 HP	2 HP	3 HP	5 HP
Voltage	220V	220V	220V	220V	220V
Phase	Single-Phase	Single-Phase	3-Phase	3-Phase	3-Phase
Amps	8	14	6	9	9
Speed	1200 RPM	1200 RPM	1200 RPM	1200 RPM	900 RPM
Switch	Push Button	Push Button	Push Button	Push Button	Push Button
Type	TEFC Capacitor-Start Induction	TEFC Capacitor-Start Induction	TEFC Induction	TEFC Induction	TEFC Induction
Bearings	Shielded & Permanently Lubricated	Shielded & Permanently Lubricated	Shielded & Permanently Lubricated	Shielded & Permanently Lubricated	Shielded & Permanently Lubricated
Height	18¾"	21½"	21½"	21½"	21½"
Height (w/G4789 Stand)	46¾"	49½"	49½"	49½"	49½"
Width	38½"	41"	41"	45"	45"
Depth	7½"	9¼"	9¼"	9½"	8½"
Depth (w/G4789 Stand)	15¾"	15¾"	15¾"	15¾"	15¾"
Footprint Size	7"L x 9½"W	10¼"L x 8¼"W	10¼"L x 8¼"W	8¼"L x 10¼"W	10½"L x 8¼"W
Footprint Size (w/Stand)	17¾"L x 15¾"W	17¾"L x 15¾"W	17¾"L x 15¾"W	17¾"L x 15¾"W	17¾"L x 15¾"W
Net Weight	78 lbs	123 lbs.	116 lbs.	124 lbs.	128 lbs.
Shipping Weight	105 lbs	151lbs	143 lbs	153 lbs	164 lbs.
Crate Size	42"L x 10¼W x 15½"H	47¾"L x 12"W x 17¾"H	43½"L x 12"W x 17¾"H	48"L x 12"W x 17½"H	11½"L x 17"W x 47"H
Total Shaft Length	11¾"	11⅞"	11⅞"	13¾"	13¾"
Shaft Size w/Thread	8" x ⅞"	8" x 1¼"	8" x 1¼"	10" x 1¼"	8" x 1½"
Shaft Height From Base	7½"	9¼"	9¼"	9¼"	8¾"
Wrench Size	1⅝"(2)	1½"(1), 2"(1)	1½"(1), 2"(1)	1½"(1), 2"(1)	1½"(1), 2"(1)
Spacers	1"(4), 1½"(4), 2"(2)	1"(4), 1½"(4), 2"(2)	1"(4), 1½"(4), 2"(2)	1"(4), 1½"(4), 2"(4)	1"(4), 1½"(4), 2"(4)
Country of Origin	Taiwan	Taiwan	Taiwan	Taiwan	Taiwan
Assembly Time (approx.)	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year



SECTION 1: SAFETY

WARNING

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

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words 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.** Most types of dust (wood, metal, etc.) 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 for Buffers**

1. **EYE/FACE PROTECTION.** Always wear eye protection or a face shield when operating the buffer.
2. **LUNG PROTECTION.** Always wear a respirator when using this machine. Workpiece and buffing compound dust may cause allergies or long-term respiratory health problems.
3. **MOUNTING TO BENCH/STAND.** An unsecured buffer may become dangerously out of control during operation. Make sure buffer is **FIRMLY** secured to a bench/stand before use.
4. **CORRECT ACCESSORIES AND USE.** Never install a grinding wheel on this buffer. It is only designed for buffing and polishing. Never exceed the maximum speed listed on each buffing/polishing wheel.
5. **WORKPIECE CONTROL.** If you cannot hold small workpieces securely, do not buff them with this machine. Secure them with clamps or similar jigs or use a smaller buffer.
6. **OPERATOR POSITION.** Do not stand directly in front of the buffer wheel when turning the machine **ON**, or when buffing. Do not buff material at the rear of the machine.
7. **AVOIDING ENTANGLEMENT.** Keep long hair and loose clothing articles such as sleeves, belts, and jewelry items away from the buffer.
8. **WORKPIECE SELECTION.** Always inspect the condition of your workpiece. **DO NOT** buff pieces with loose knots, large splinters, sharp edges, and **DO NOT** buff knives, cable, chain or other potentially dangerous objects that may be grabbed by the buffing wheel and thrown at the operator.
9. **WORKPIECE FEED.** Allow the wheel to reach full speed, then slowly ease the workpiece into the buffing wheel, holding it in front of and slightly below the wheel center. Do not place the workpiece on the top or sides of the buffing wheel and do not place an edge or corner of the workpiece against the buffing wheel, or jam it against the wheel. The workpiece may eject toward the operator or be torn from the operator's hands, causing serious personal injury.
10. **HAND/WHEEL CONTACT.** Do not allow your hands to come into contact with the buffing wheel. Abrasive accessories can remove skin fast. Keep a firm grip on the workpiece and position your hands at a safe distance away when buffing. Avoid wearing gloves as they may get caught in the buffing wheel and cause entanglement injuries.
11. **ADJUSTMENTS/MAINTENANCE.** Make sure your buffer 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.

WARNING

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



SECTION 2: CIRCUIT REQUIREMENTS

220V Operation

WARNING

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



WARNING

Electrocution or fire could result if machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician!

Full Load Amperage Draw

G3622 220V, 1-Phase	8 Amps
G3623 220V, 1-Phase	14 Amps
G3708 220V, 3-Phase	6 Amps
G4787, G4788 220V, 3-Phase	9 Amps

Power Supply Circuit Requirements

You **MUST** connect your machine to a 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.**

Minimum Circuit Size

(G3622, G3708, G4787, G4788)	15 Amps
Minimum Circuit Size (G3623)	20 Amps

Power Connection Device

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plug listed below and shown in **Figure 2**.

Model	Plug Type
G3622	6-15
G3623	6-20
G3708, G4787, G4788	15-15

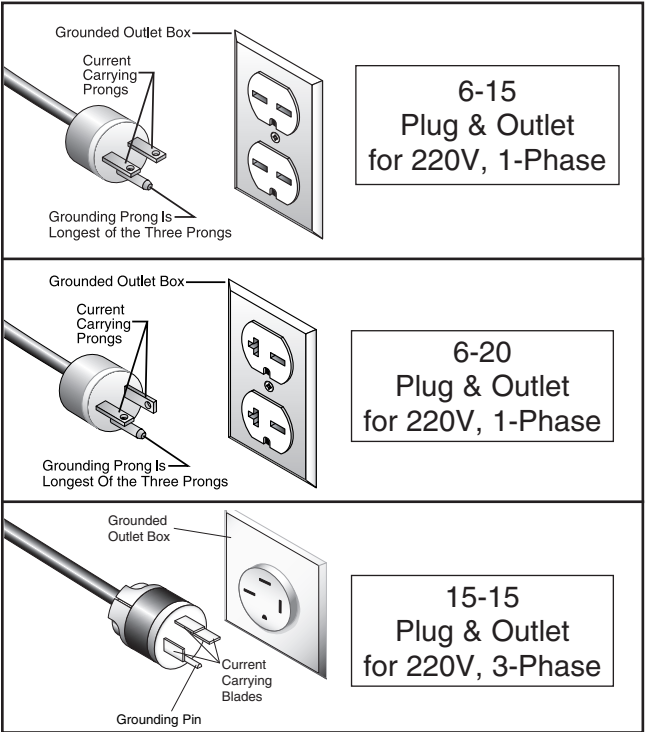


Figure 2. Recommended connection types.

Extension Cords

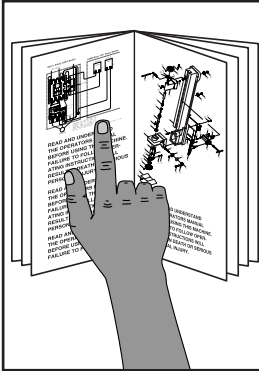
Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 14 gauge cord that does not exceed 50 feet in length!
- The extension cord must also have a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.



SECTION 3: SETUP

Setup Safety



!WARNING

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



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

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

Items Needed for Setup

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

Description	Qty
• Safety Glasses (for each person).....	1
• Helpers for Lifting Assistance	2-3

Unpacking

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

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

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



Inventory

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

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

Model G3622 Crate Contents (Figure 3) Qty

A.	Buffing Motor & Control Box.....	1
B.	RH Thread Arbor Nut $\frac{7}{8}$ "-9	1
C.	LH Thread Arbor Nut $\frac{7}{8}$ "-9.....	1
D.	Spacers	
	—1"	4
	—1 $\frac{1}{2}$ "	4
	—2".....	2
E.	Open End Wrenches $1\frac{3}{8}$ "	2

Fasteners (and where used) Qty

•	Hex Bolts $\frac{5}{16}$ "-18 x $1\frac{3}{4}$ " (Stand).....	4
•	Hex Bolts $\frac{5}{16}$ "-18 x $\frac{1}{2}$ " (Control Box)	4
•	Flat Washers $\frac{5}{16}$ " (Stand, Control Box).....	12
•	Lock Washers $\frac{5}{16}$ " (Stand, Control Box)	8
•	Hex Nuts $\frac{5}{16}$ "-18" (Stand).....	4

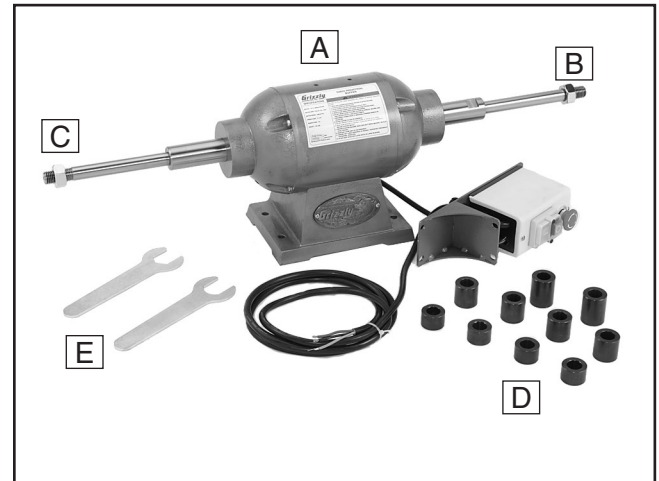
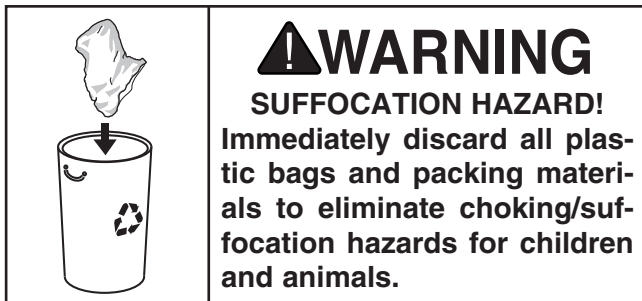


Figure 3. Model G3622 inventory.

Model G3623, G3708, G4787, G4788

Crate Contents (Not Shown) Qty

A.	Buffing Motor & Control Box.....	1
B.	RH Thread Arbor Nut $1\frac{1}{4}$ "-7	
	(G3623, G3708, G4787)	1
	RH Thread Arbor Nut $1\frac{1}{2}$ "-7 (G4788).....	1
C.	LH Thread Arbor Nut $1\frac{1}{4}$ "-7	
	(G3623, G3708, G4787)	1
	LH Thread Arbor Nut $1\frac{1}{2}$ "-7 (G4788)	1
D.	Spacers (G3623, G3708)	
	—1"	4
	—1 $\frac{1}{2}$ "	4
	—2".....	2
	Spacers (G4787, G4788)	
	—1"	4
	—1 $\frac{1}{2}$ "	4
	—2".....	4
E.	Wrenches (G3623, G3708, G4787)	
	—1 $\frac{1}{2}$ "	1
	—2".....	1
	Wrenches (G4788)	
	—1 $\frac{1}{2}$ "	2
	—2".....	1

Fasteners (and where used) Qty

•	Hex Bolts $\frac{5}{16}$ "-18 x 2" (Stand)	4
•	Hex Bolts $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " (Control Box)	4
•	Flat Washers $\frac{5}{16}$ " (Stand, Control Box).....	12
•	Lock Washers $\frac{5}{16}$ " (Stand, Control Box)	8
•	Hex Nuts $\frac{5}{16}$ "-18" (Stand).....	4

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



Hardware Recognition Chart

USE THIS CHART TO MATCH UP
HARDWARE DURING THE ASSEMBLY
PROCESS.

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

○ #10

○ 1/4"

○ 5/16"

○ 3/8"

○ 7/16"

○ 1/2"

○ 4mm

○ 6mm

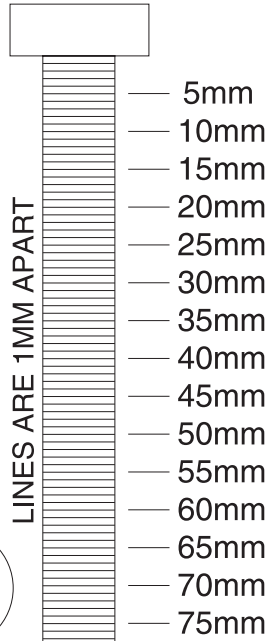
○ 8mm

○ 10mm

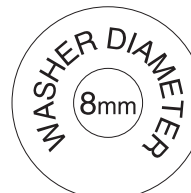
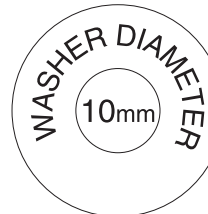
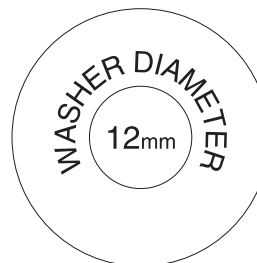
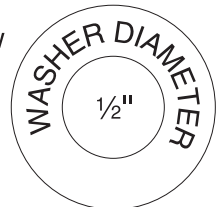
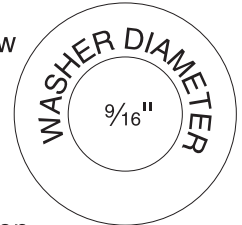
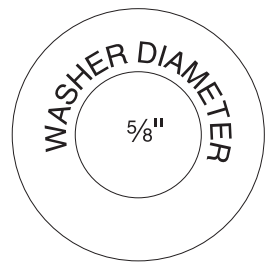
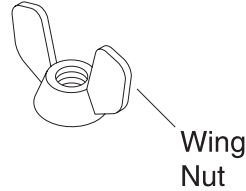
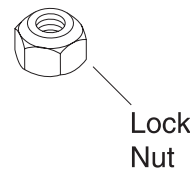
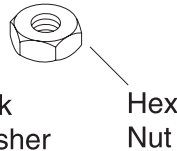
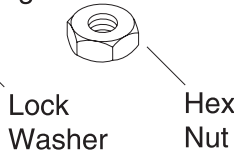
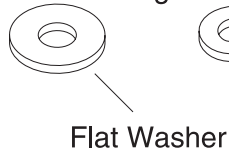
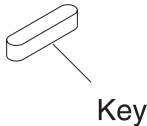
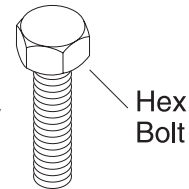
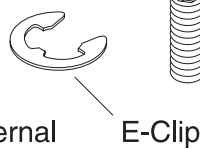
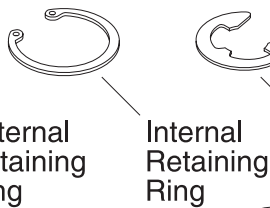
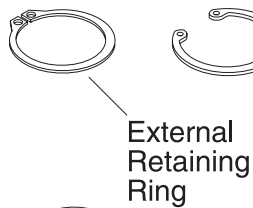
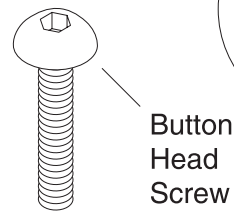
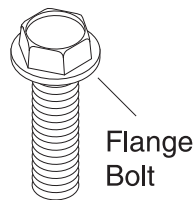
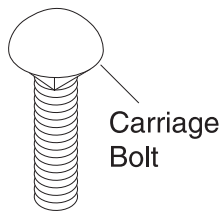
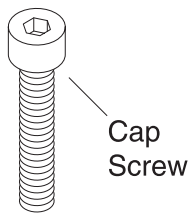
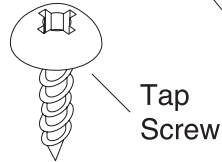
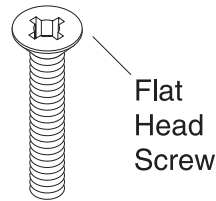
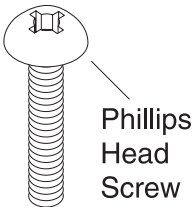
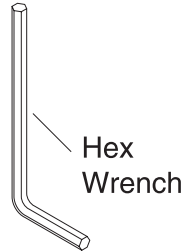
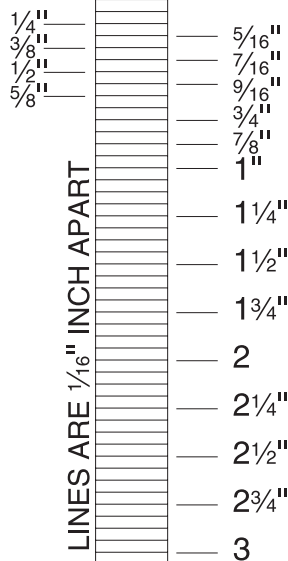
○ 12mm

○ 16mm

LINES ARE 1MM APART



LINES ARE 1/16" INCH APART

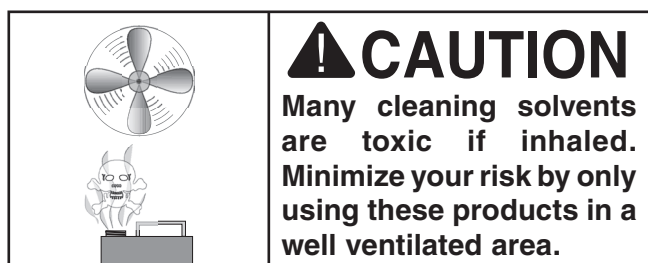
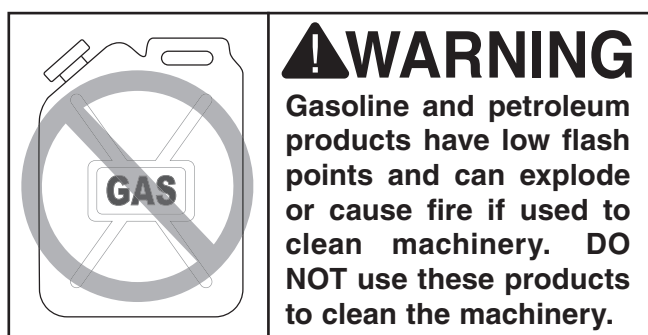


WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser shown in **Figure 4**. For thorough cleaning, some parts must be removed. **For optimum performance from your machine, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.



G2544—Solvent Cleaner & Degreaser
A great product for removing the waxy shipping grease from your machine during clean up.



Figure 4. Cleaner/degreaser available from Grizzly.

Site Considerations

Floor Load

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

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 5** for the minimum working clearances.

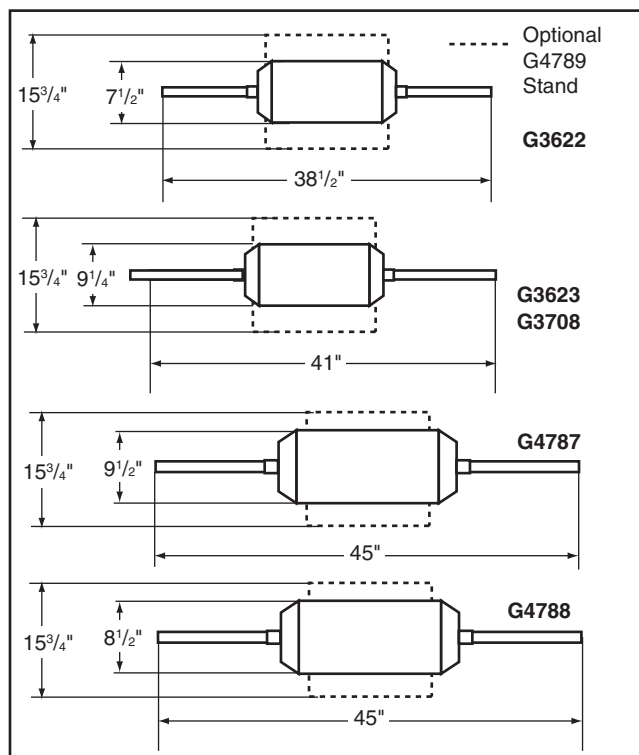
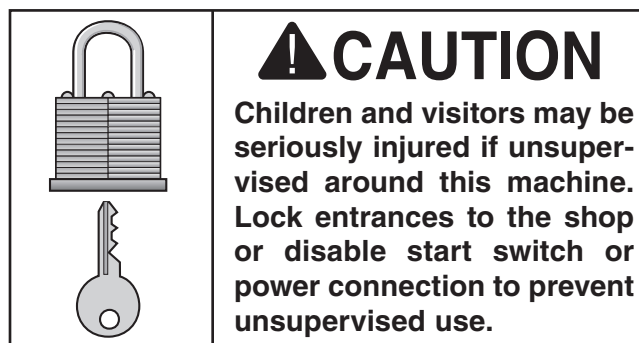


Figure 5. Minimum working clearances.



Mounting

Mount the buffer on the optional Model G4789 stand (see **Page 22**) or a workbench that is sturdy enough to hold the weight of the machine.

The stand or workbench should be level, rigid, and attached to the floor, so it will not move during operation.



Mounting to G4789 Stand

1. Bolt the stand to the floor.

Note: Because floor materials may vary, floor mounting hardware is not included.

2. With the assistance of a helper, place the buffer on the stand and secure with the four $\frac{5}{16}$ "-18 x $1\frac{3}{4}$ " hex bolts (Model G3622) or the four $\frac{5}{16}$ "-18 x 2" hex bolts (all other models), eight flat washers, and four lock washers and hex nuts, as shown in **Figure 6**.

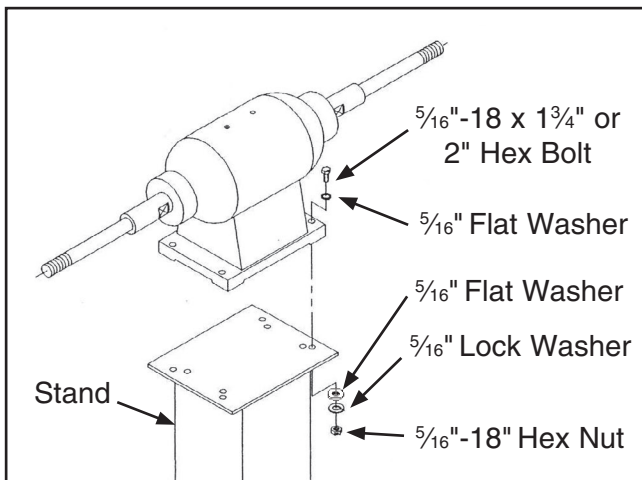


Figure 6. Mounting buffer to optional G4789 stand.

Bolting Stand to Concrete Floors

Lag shield anchors with lag bolts (**Figure 7**) and anchor studs (**Figure 15**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

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

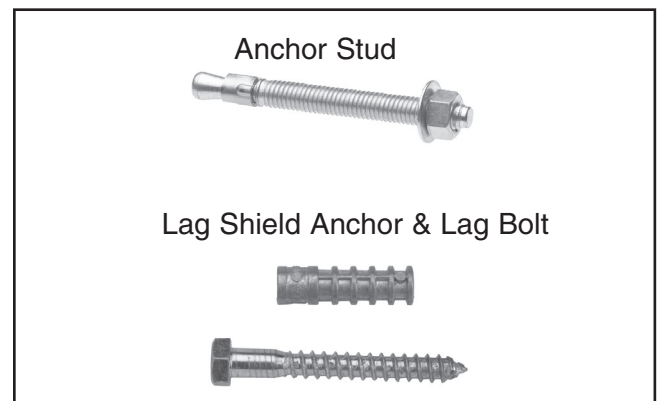


Figure 7. Typical fasteners for mounting to concrete floors.

Mounting to Workbench

The strongest mounting option is a "Through Mount" where holes are drilled all the way through the workbench, and hex bolts, washers, and hex nuts are used to secure the buffer to the workbench, as shown in **Figure 6**.

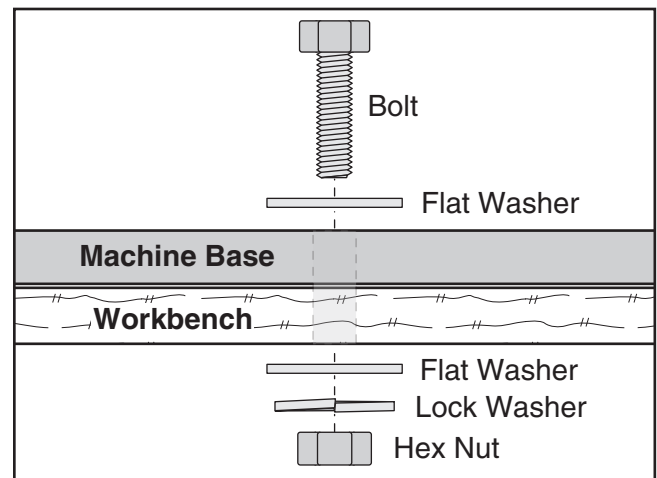


Figure 8. Example of a through mount setup.



You can use the $\frac{5}{16}$ "-18 x $1\frac{3}{4}$ " or $\frac{5}{16}$ "-18 x 2" hex bolts and other fasteners shown in **Figure 6** to mount the buffer to a workbench. However, your workbench thickness or setup may require longer hex bolts and additional washers, which you will have to provide.

Another option for mounting is a "Direct Mount" where the machine is simply secured to the workbench with a lag screw.

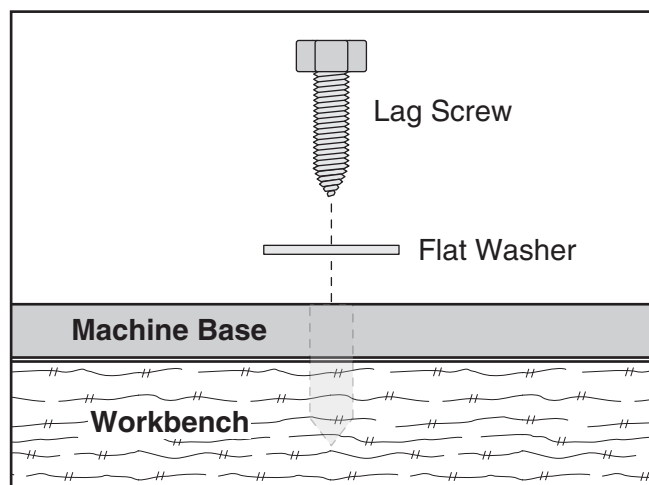


Figure 9. Example of a direct mount setup.

Control Box

To install the control box:

1. Place the control box on the motor and align the mounting holes.
2. Secure the control box with the four $\frac{5}{16}$ "-18 x $\frac{1}{2}$ " hex bolts (Model G3622) or $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " hex bolts (all other models), and four flat washers and lock washers, as shown in **Figure 10**.

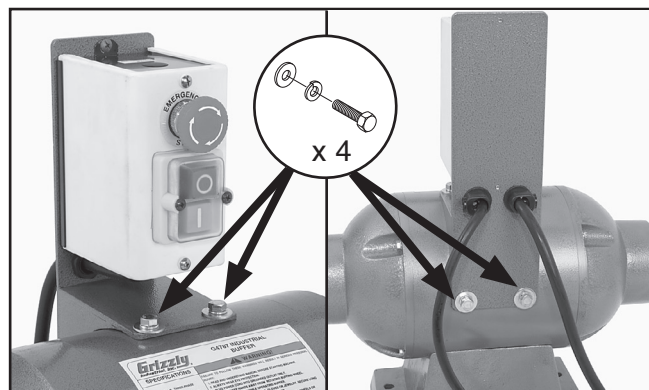


Figure 10. Control box installed.

Buffing Wheel Installation

Buffing operations on your machine will vary. Depending on the type of material to be buffed, multiple buffing wheels will be necessary, and for other tasks, single wheels will be used. Refer to **Accessories, Page 22** for a list of buffing wheels and wheel flanges that are available for your buffer.

A variety of spacers have been provided to accommodate many combinations of buffing wheels.

NOTICE

This machine is not a grinder and is not designed to accommodate grinding wheels. ONLY use buffing wheels on this machine.

Single Buffing Wheels With Metal Centers (Airway Style)

1. DISCONNECT BUFFER FROM POWER!
2. Remove the arbor nut.
3. Install spacers on the shaft.
4. Sandwich the buffing wheel between a pair of wheel flanges (sold separately), as shown in **Figure 11**.

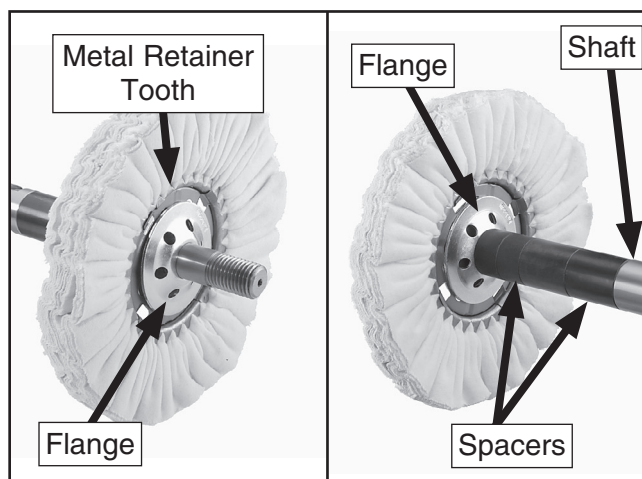


Figure 11. Wheel flanges installed on wheel (outside and inside views shown for clarity).



NOTICE

Spacers must be configured in such a way that the flanges and arbor nut are able to mount the buffing wheel tightly.

We strongly recommend installing Grizzly wheel flanges (see **Accessories** on **Page 22**), as they will give wheels extra rigidity and extend their lifespan.

When using a wheel with a center metal retainer, like the one shown in **Figure 11**, make sure the flange fits inside the retainer without touching the retainer teeth in the buffing wheel.

5. Install an additional spacer on the outer part of the shaft, so the spacer overlaps onto the arbor threads and the arbor nut clamps the buffing wheel(s) tightly without bottoming out against the un-threaded portion of the arbor.
6. Thread the arbor nut onto the arbor.
7. Use the arbor wrenches, as shown in **Figure 12**, to hold the shaft and tighten the arbor nut.

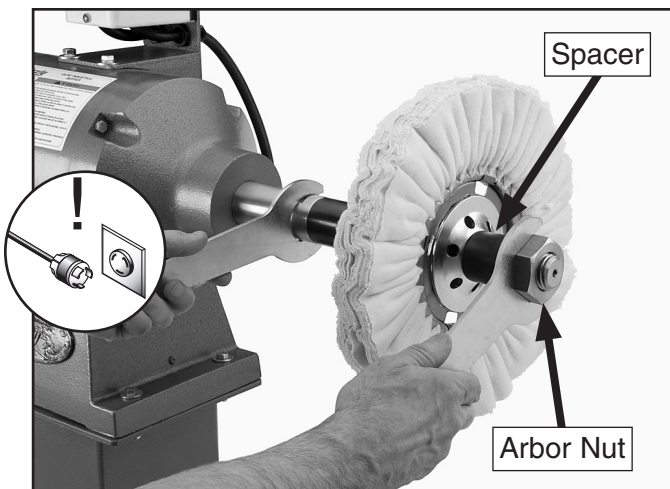


Figure 12. Securing single buffing wheel and spacers.

Multiple Buffing Wheels With Metal Centers (Airway Style)

1. DISCONNECT BUFFER FROM POWER!
2. Remove the arbor nut.
3. Install the appropriate number of spacers on the shaft based on the number of buffing wheels to be used.
4. Sandwich each buffing wheel between a pair of wheel flanges (sold separately), as shown in **Figure 13**.

Note: A spacer can be placed between each wheel and flange set if needed.

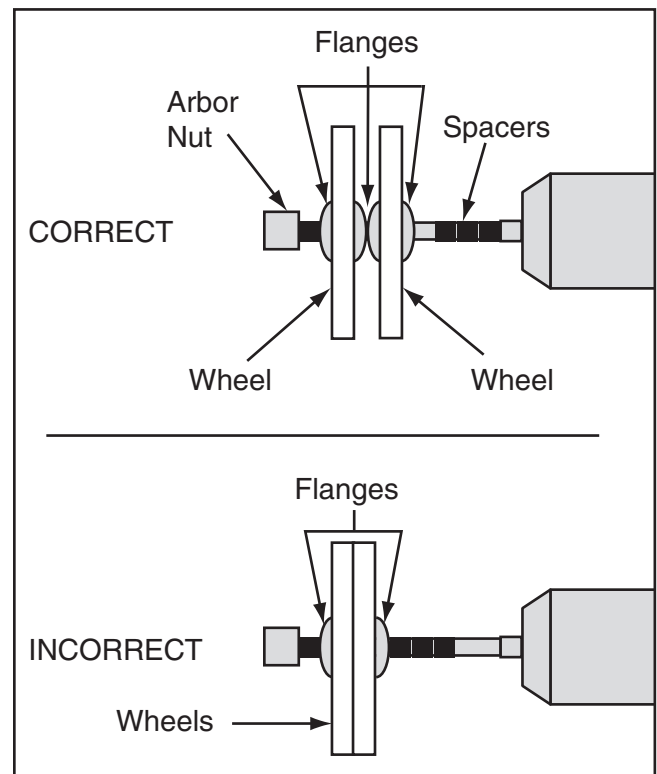


Figure 13. Multiple buffing wheel installation order.

CAUTION

Stacking multiple buffing wheels without flanges is dangerous. The center metal retainer may deform, causing the wheel to fly apart, possibly causing serious personal injury.

5. Repeat **Steps 5-7, Single Buffing Wheels With Metal Centers** on **Page 14**.



Buffing Wheels Without Metal Centers

1. Repeat **Steps 1-3, Single Buffing Wheels With Metal Centers on Page 14.**
2. Sandwich a single solid body buffing wheel or multiple wheels—such as the muslin or sisal types shown on **Page 23**, between a pair of wheel flanges, as shown in **Figure 14.**

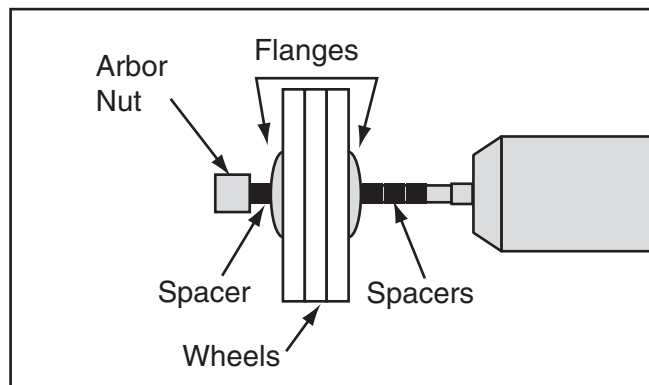


Figure 14. Stacking multiple wheels without steel centers.

We strongly recommend installing Grizzly wheel flanges (see **Accessories on Page 22**), as they will give wheels extra rigidity and extend their lifespan.

When using a solid body buffing wheel, the flange size depends upon how aggressive your buffing will be. Use a smaller flange for less aggressive buffing; use a larger flange for more aggressive buffing.

3. Repeat **Steps 5-7, Single Buffing Wheels With Metal Centers on Page 14.**

NOTICE

Spacers must be configured in such a way that the flanges and arbor nut are able to mount the buffing wheel tightly.

Test Run

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

The test run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the stop button safety feature works correctly, and 3) the motor turns the correct direction (machine is wired in phase).

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting on Page 25.**

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

! WARNING

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

To test run the machine:

1. Read this manual and make sure you understand **SECTION 1: SAFETY on Page 5.**
2. Review **CIRCUIT REQUIREMENTS on Page 8**, and make any necessary changes.
3. Remove all tools and foreign objects from the machine.
4. Connect the machine to the power source.
5. Push the EMERGENCY STOP button in, then twist it clockwise so it pops out. When the EMERGENCY STOP button pops out, the switch is reset and ready for operation (see **Figure 15**).



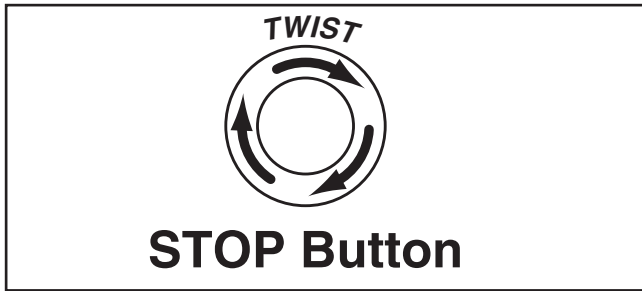


Figure 15. Resetting the switch.

6. Verify that the machine is operating correctly by pushing the ON button.

- When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

- Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always stop the machine and disconnect it from power before investigating or correcting potential problems.

7. Press the EMERGENCY STOP button to stop the machine.

8. WITHOUT resetting the switch, press the ON button. The machine should not start.

- If the machine does not start, the OFF button safety feature is working correctly.

- If the machine does start (with the 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.

9. Push the EMERGENCY STOP button in, then twist it clockwise so it pops out.

10. Press the ON button, then immediately press the OFF button.

- If the machine turns OFF, the OFF button is working correctly.

- If the machine does stop, disconnect power to the machine. The OFF button is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

11. **Model G3708, G4787, G4788 only.** Verify that the power is not connected out of phase by starting/stopping the machine to determine if the motor turns in the correct direction, using the criteria below:

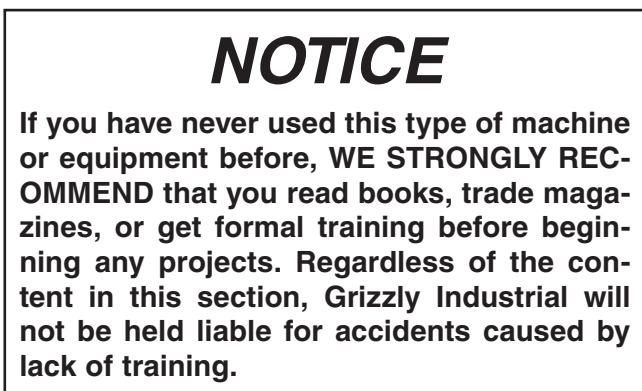
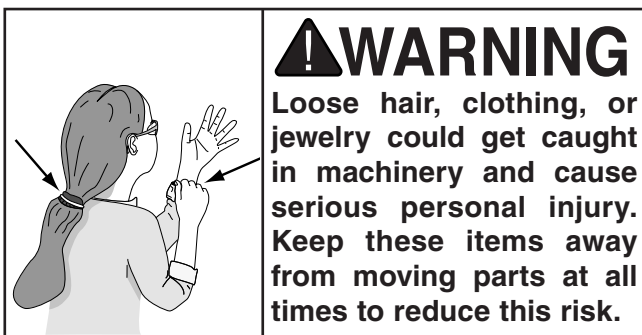
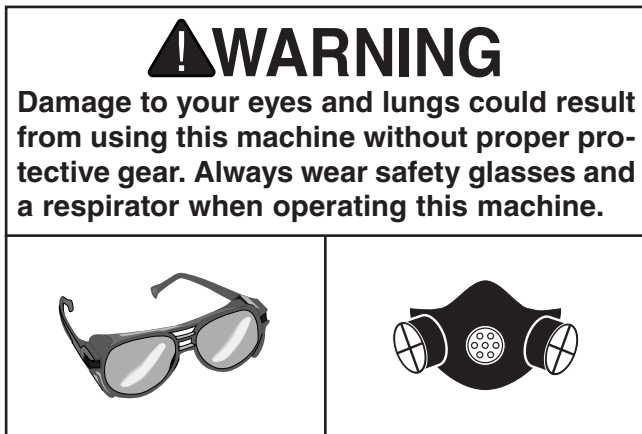
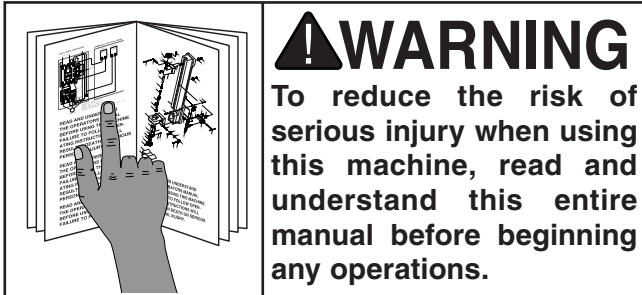
- If the shaft turns clockwise (as standing at the front left side of the machine), it is turning in the correct direction.

- If the shaft turns counterclockwise (as standing at the front left side of the machine), it is turning in the wrong direction. Stop the machine, shut **OFF** the power source, then swap any two of the three power wires that connect to the machine at the plug, as shown on **Page 32** (G3708), **Page 34** (G4787) or **Page 36** (G4788).



SECTION 4: OPERATIONS

Operation Safety



Check the following safety points before buffing:

- Make sure the buffer is secured to the floor or workbench (see **Page 13**).
- Make sure all buffing wheels are securely mounted, in serviceable condition, and the arbor nuts are tight (see **Page 15**).
- Remove tools and wrenches from the buffer shaft or on top of the control box.
- Inspect the workpiece for nails, loose knots, large splinters, and any other condition that may cause the buffing wheel to grab and eject the workpiece or object.

Basic Controls

This section covers the basic controls used during routine buffer operation.

On Button: Starts motor only if the EMERGENCY STOP button is in the out position.

Off Button: Stops motor when pushed in.

Emergency STOP Button: Disables the ON button. Enable the ON button by twisting the EMERGENCY STOP button until it pops out.

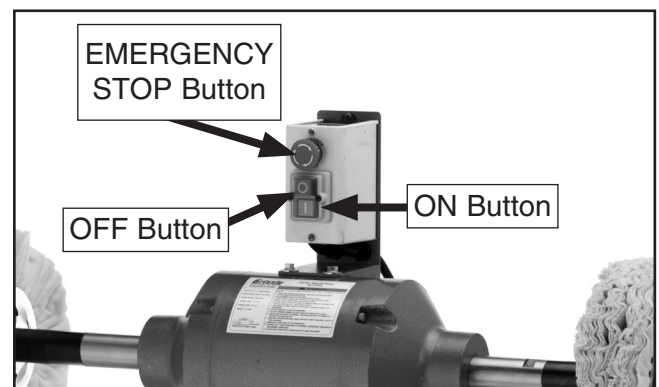


Figure 16. ON/OFF button locations.



Buffing Tips

Here are some quick tips for getting the most out of your buffer:

- Thoroughly clean all parts that you plan to buff. Any kind of dirt, oil, rust, paint or other film must be removed either chemically or sprayed off with water. Make sure to dry off parts with a rag after cleaning.
- Apply buffing compounds in small amounts at a time. Apply paste-type compounds with a wand or directly to the part. For wax-based polishing stick-type compounds, press the compound on the wheel for a couple of seconds while the machine is running. Avoid using too much compound.
- Put your workpiece under the wheel when you are loading the compound on the buffing wheel. This way, you will catch any compound that would normally be wasted on the floor.
- Only use the area indicated in **Figure 17** to do the actual buffing. Contacting the workpiece on areas outside the correct area may flip the workpiece out of your hands.

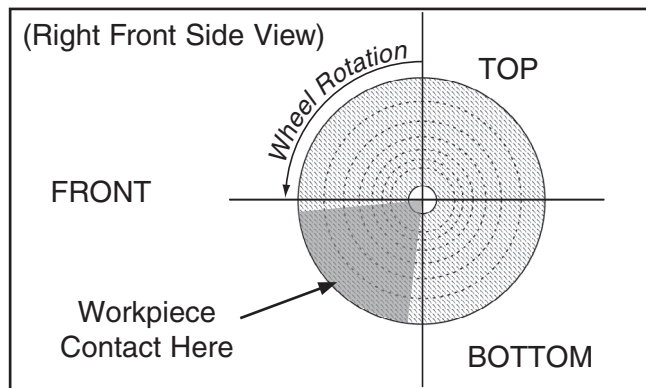


Figure 17. Location where workpiece should contact wheel.

- Hold the workpiece tightly at all times while buffing. Placing one hand near the contact point will give you better control.

- Keep buffing wheels raked out before each use and when buildup gets heavy during use. Raking means to clean the buffing wheels with a wheel rake, such as Model H4383 (**Accessories, Page 22**), to remove built-up compounds and metal particles. ALWAYS use light pressure when raking wheels!
- Do not mix two different compounds on the same wheel. For best results, use a separate wheel for each compound.
- Use an upward stroke with heavy to moderate pressure for cutting. Use a downward stroke with light to pressure for polishing. See **Figure 18**.

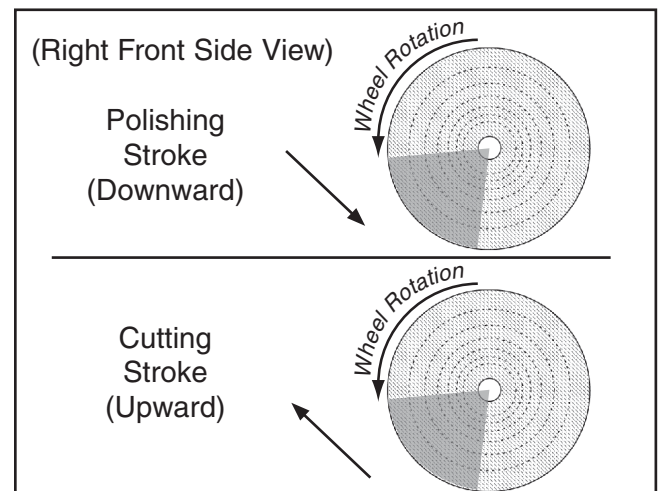


Figure 18. Cutting and polishing strokes.

- Wear safety equipment when buffing. If the buffer forces the workpiece out of your hand, be prepared for it to come flying at you! Wear safety glasses or a face shield and a heavy leather apron. Also, wear a dust mask to protect your lungs from microscopic particulate that will be flying off the wheel.

Remember, there is no substitute for experience. Learning how to hold the workpiece, how much pressure to apply, how to move the workpiece against the wheel and how much compound to use will require some trial-and-error.



Basic Buffing

Buffing operations on your buffer will vary depending on the type of material to be buffed, the type of buffing wheel used, and the finished result you need.

Be careful when polishing plated metals; there is a chance that the thin plated material may be damaged. A light pressure is all that is needed for quality work.

To operate the buffer:

1. Put on safety glasses and a respirator.
2. Stand out of the way of the buffer, and turn the buffer **ON**.
3. Allow the buffer reach full speed.
4. Select the appropriate stick of polishing compound for your operation and apply to the rotating face of the wheel.
5. Stand firmly and hold the workpiece with two hands or use a jig to hold the workpiece if it is too small.
6. Slowly ease the workpiece into the buffing wheel. DO NOT push a sharp edge or corner into the buffing wheel, which could grab the workpiece.
7. Lightly and evenly move the workpiece back and forth on the edge of the buffing wheel in the area indicated in **Figure 17, Page 19**, until the workpiece surface is buffed to your satisfaction.

Wheel Removal

To remove the buffing wheels:

1. DISCONNECT BUFFER FROM POWER!
2. Hold the shaft with one hand while loosening the nut with a wrench. Remember, the left-hand nut and shaft have left-handed threads.

Buffing Compound Selection

Most colors of abrasives have similar applications, but always check with the manufacturer of your particular compound.

Grizzly offers the following compounds (see **Accessories on Page 22**) :

Red Rouge — Made for fine polishing on brass and gold. Provides an excellent shine when used with the loose muslin buffing wheel.

Green (Extra Fine) — Great for extra-fine polishing on most metals to bring out that mirror finish. Works best with loose muslin and spiral sewn buffing wheels.

White — Great for ivory, plastic and resins when used successively with the soft spiral sewn and soft airway buffing wheels.

Black — Designed to be used with sisal and airway hard buffing wheels, this compound is perfect for the initial rough cut on stainless steel and iron.

Tripoli — A true middle-of-the-road abrasive, Tripoli provides an excellent medium cut for brass, aluminum and zinc alloy.

Green (Fine) — Slightly more abrasive than the extra fine green, this green compound is great for a medium to fine polish with most softer metals.

Refer to the chart below to determine the compound combination you need for your project.

	Plastics Soft Metals			Thin Plating Gold Silver			Chrome & Nickel Plate			Copper Brass Aluminum			Iron Steel Stainless		
	R	F	P	R	F	P	R	F	P	R	F	P	R	F	P
Compound Type															
Tripoli	X						X			X					
Dark Rouge						X			X		X	X			X
White Rouge		X	X												
Black Rouge													X	X	

Buffing Sequence: R = Rough F= Final Cut, Initial Polish P = Final Polish

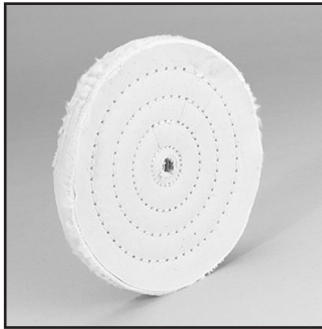


Buffing Wheel Selection

Buffing wheels are available for most types of metals and for different stages in the buffing process. The following pictures and descriptions describe some of the more common wheel types:

Loose Muslin

Soft feather-edged muslin stitched together near the center leaves the outer edge to provide a wide angle, fine polishing surface. Perfect for polishing stainless steel, chrome, gold or silver.



Airway Soft

Made of 100% cotton sheets and held together with a steel retainer. Pleats in the material help hold compound. These wheels are great for polishing soft metals and plastics.



Spiral Sewn

Consist of layers of 100% unbleached cotton sheeting that are spiral sewn 1/8" apart. Works well for initial polish on brass, stainless steel, aluminum, bronze and cast iron.



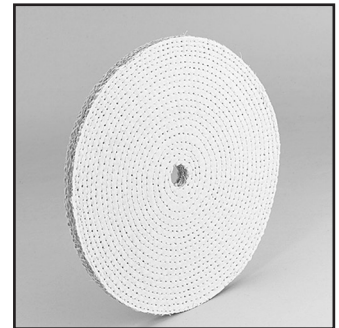
Airway Hard

Made of 100% cotton sheets that are treated to stiffen the material. Pleats in the material help hold compound. These are great for rough cutting plastics and initial polishing a wide variety of metals.



Laminated Sisal

Designed for rough cutting, sisal works well with various steels, copper, aluminum, and brass to remove scratches and prepare the piece for polishing.



Refer to **Accessories, Page 23**, for a selection of buffing wheels available from Grizzly.

Refer to the chart below to determine the buffing wheel type you need for your project.

	Plastics Soft Metals			Thin Plating Gold Silver			Chrome & Nickel Plate			Copper Brass Aluminum			Iron Steel Stainless		
	R	F	P	R	F	P	R	F	P	R	F	P	R	F	P
Buff Style															
Loose Muslin-Soft			X			X			X			X			X
Loose Muslin-Hard										X			X	X	
Airway Hard	X									X			X		
Airway Soft			X			X			X			X			
Laminated Sisal										X			X		
Spiral Sewn		X						X			X			X	

Buffing Sequence: R = Rough F= Final Cut, Initial Polish P = Final Polish



SECTION 5: ACCESSORIES

G4789—Buffing Stand

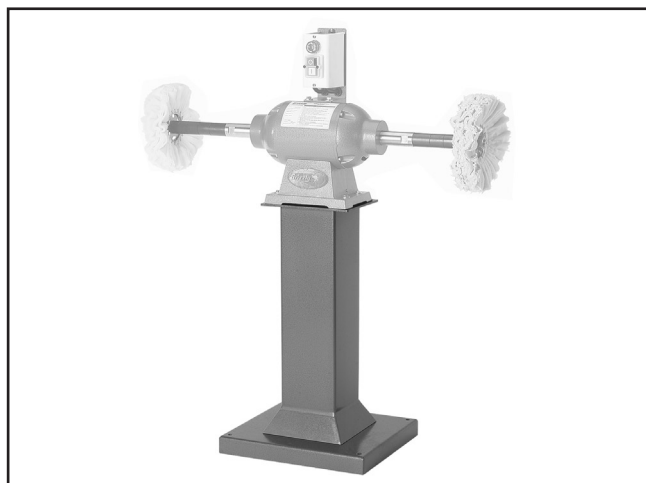


Figure 19. Model G4789 Buffing Stand (Shown with G3622.

Menzerna Buffing Compounds

H0811—Brown-Tripoli Prepolish Compound

H0812—Yellow-Prepolish Compound

H0813—Yellow-Fine Polishing Compound

H0814—White Polishing Compound for Polyester Finishes

H0815—High Gloss Compound for Stainless Steel

H0822—Green-Prepolish For Aluminum & Stainless Steel

H0823—Fine High Gloss Compound

H0824—High Gloss Compound for Stainless Steel



Figure 20. Menzerna H0811 Tripoli Prepolish Compound.

H2605—Red Rouge Buffing Compound

H2606—Green-Extra Fine Buffing Compound

H2607—White Buffing Compound

H2608—Black Buffing Compound

H2609—Tripoli Buffing Compound

H2614—Green-Fine Buffing Compound



Figure 21. Model 2605-09, H2614 Buffing Compounds.

H2798—Buffing Wheel Flange 4" Dia. x 7/8"

H2800—Buffing Wheel Flange 4" Dia. x 1 1/4"

H2799—Buffing Wheel Flange 6" Dia. x 1 1/4"

These flanges are used to "sandwich" the buffing wheels to give them rigidity and to prolong wheel life. Sold in pairs.



Figure 22. Model H2798 Buffing Wheel Flange.

Call 1-800-523-4777 To Order



H0816—Coarse Prepolishing Paste

Coarse prepolysh paste compound for removing 400-600 grit sanding marks. Leaves a smooth matte finish, or can be followed with H0817 and H0818 for a high-gloss finish. Use with a lamb's wool buffing pad at approximately 1200-1400 RPM. 1.65 lb. Can.

H0817—Medium Prepolishing Paste

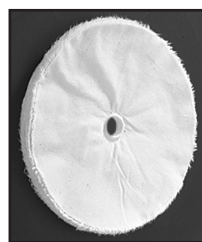
Medium prepolysh paste compound for removing 600-800 grit sanding marks. Leaves a semi-gloss surface and can be followed with H0818 for a high-gloss finish. Use with a lamb's wool buffing pad at approximately 1200-1400 RPM. 1.65 lb. Can.



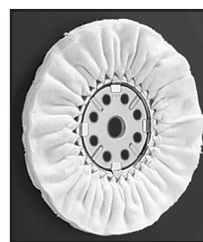
Figure 23. Model H0816-H0817 Prepolishing Paste.

Buffing Wheels

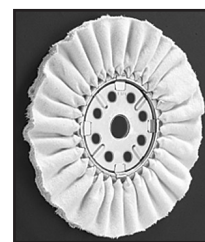
MODEL	TYPE	SIZE	MAX RPM
H2791	Muslin Buff	12" x 1¼" x 40 Ply	3,000
H2792	Muslin Buff	12" x 1¼" x 60 Ply	3,000
H2793	Domet Flannel	12" x 1¼" x 16 Ply	3,000
H2794	Canton Flannel	12" x 1¼" x 16 Ply	3,000
H2833	Muslin Buff	10" x 7⁄8" x 40 Ply	3,200
H2834	Domet Flannel	10" x 7⁄8" x 16 Ply	3,200
H2835	Canton Flannel	10" x 7⁄8" x 16 Ply	3,200
H2836	Muslin Buff	12" x 1¼" x 40 Ply	3,200
H2837	Muslin Buff	10" x 1¼" x 60 Ply	3,200
H2838	Domet Flannel	10" x 1¼" x 16 Ply	3,200
H2839	Canton Flannel	10" x 1¼" x 16 Ply	3,200



MUSLIN



DOMET



CANTON

H4383—Buffing Rake

H4384—Replacement Rake

Great for removing dried compound from buffing wheels. Simply guide the rake across the spinning buff.



Figure 24. Model H4383 Buffing Rake.



SECTION 6: MAINTENANCE



Schedule

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

Daily Check:

- Loose mounting bolts.
- Damaged buffing wheels.
- Worn or damaged wires.
- Any other unsafe condition.

Weekly/Monthly Check:

- Worn or damaged shaft bearings.
- Worn or damaged cord.
- Worn switch.

Cleaning

Cleaning the Model G3622/3623, G3708, G4787/G4788 Industrial Buffer is relatively easy. Vacuum excess wood chips, sawdust, or metal shavings and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the shaft by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

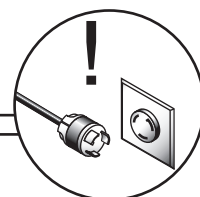
Keep the shaft rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 22** for more details).



SECTION 7: SERVICE

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

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Emergency stop push-button is engaged/faulty. 2. Power supply switched OFF or is at fault. 3. Start capacitor is at fault (G3622, G3623). 4. Thermal overload relay has tripped. 5. Contactor not getting energized/has burnt contacts. 6. Wiring is open/has high resistance. 7. Motor ON button or ON/OFF switch is at fault. 8. Motor is at fault. 	<ol style="list-style-type: none"> 1. Rotate clockwise slightly until it pops out/replace it. 2. Ensure power supply is switch on; ensure power supply has the correct voltage. 3. Test/replace if faulty (G3622, G3623). 4. Turn cut-out dial to increase working amps and push the reset pin. Replace if tripped multiple times (weak relay). 5. Test for power on all legs and contactor operation. Replace unit if faulty. 6. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary. 7. Replace faulty ON button or ON/OFF switch. 8. Test/repair/replace.
Machine stalls or is overloaded.	<ol style="list-style-type: none"> 1. Motor connection is wired incorrectly. 2. Motor bearings are at fault. 3. Contactor not getting energized or has poor contacts. 4. Motor has overheated. 5. Motor is at fault. 6. Buffing wheel is too large/wide or exceeds recommended wheel rating. 	<ol style="list-style-type: none"> 1. Correct motor wiring connections. 2. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 3. Test for power on all legs and contactor operation. Replace if faulty. 4. Let cool, clean off motor, and reduce workload. 5. Test/repair/replace. 6. Replace with smaller wheel or reduce wheel width.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Incorrectly mounted to workbench. 3. Motor fan is rubbing on fan cover. 4. Motor bearings are at fault. 5. Motor shaft is bent. 6. Buffing wheel has become loose, worn, or components (steel center hub) are dislodged. 	<ol style="list-style-type: none"> 1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Shim or tighten mounting hardware. 3. Replace dented fan cover; replace loose/damaged fan. 4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 5. Test with dial indicator and replace motor. 6. Replace buffing wheel.



SECTION 8: ELECTRICAL

Review the photographs and wiring diagrams in this section to understand the electrical systems of your machine. If repairs are necessary and you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

WARNING

Electrical Safety Instructions

- 1. PRINTED INFORMATION.** The electrical information included in this section is current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical system of future machines. Study the photos and diagrams in this section carefully. If you notice differences between your machine and these diagrams, call Technical Support at (570) 546-9663 for assistance.
- 2. SHOCK HAZARD.** Disconnect the power from the machine before servicing electrical components. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death.
- 3. GROUNDED CIRCUIT.** Electrocution or fire could result if the machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician.
- 4. CIRCUIT REQUIREMENTS.** You **MUST** read and understand the **CIRCUIT REQUIREMENTS** section on **Page 8**. **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.**
- 5. MOTOR WIRING.** The motor wiring shown in these diagrams are current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
- 6. EXPERIENCING DIFFICULTIES.** If at any time 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.



G3622 Electrical Components

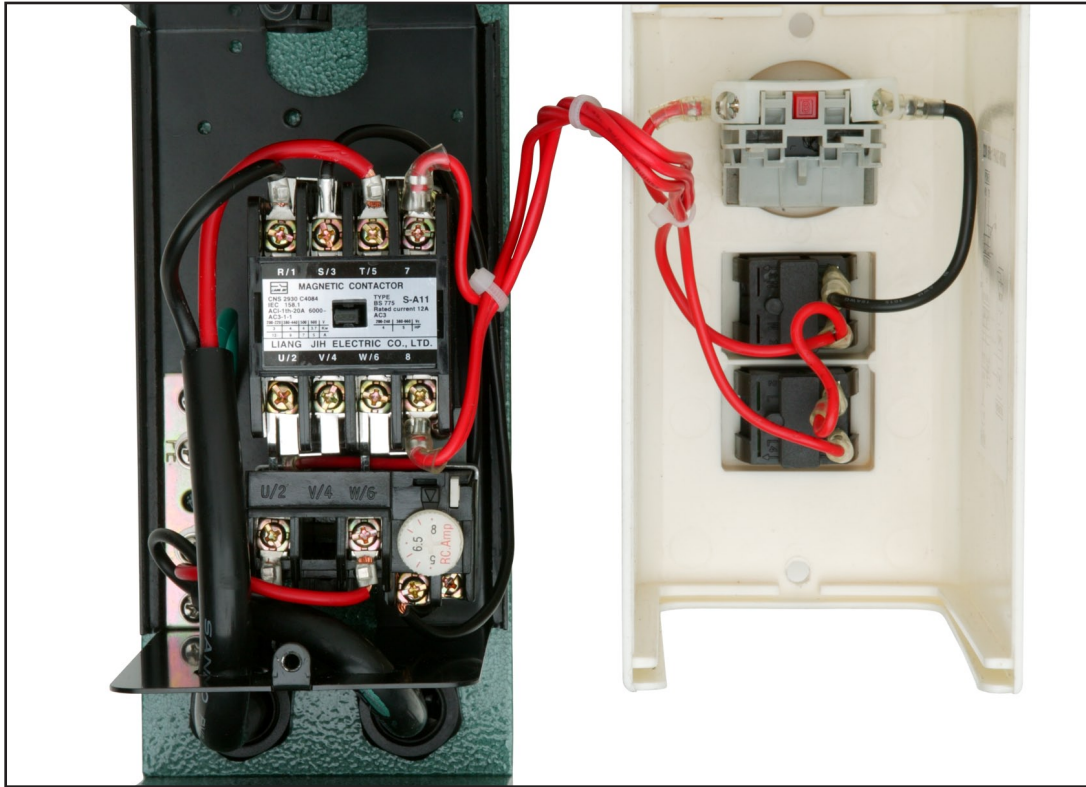


Figure 25. G3622 magnetic switch and controls.



Figure 26. G3622 motor wiring.



G3622 Wiring Diagram 220V, 1-Ph

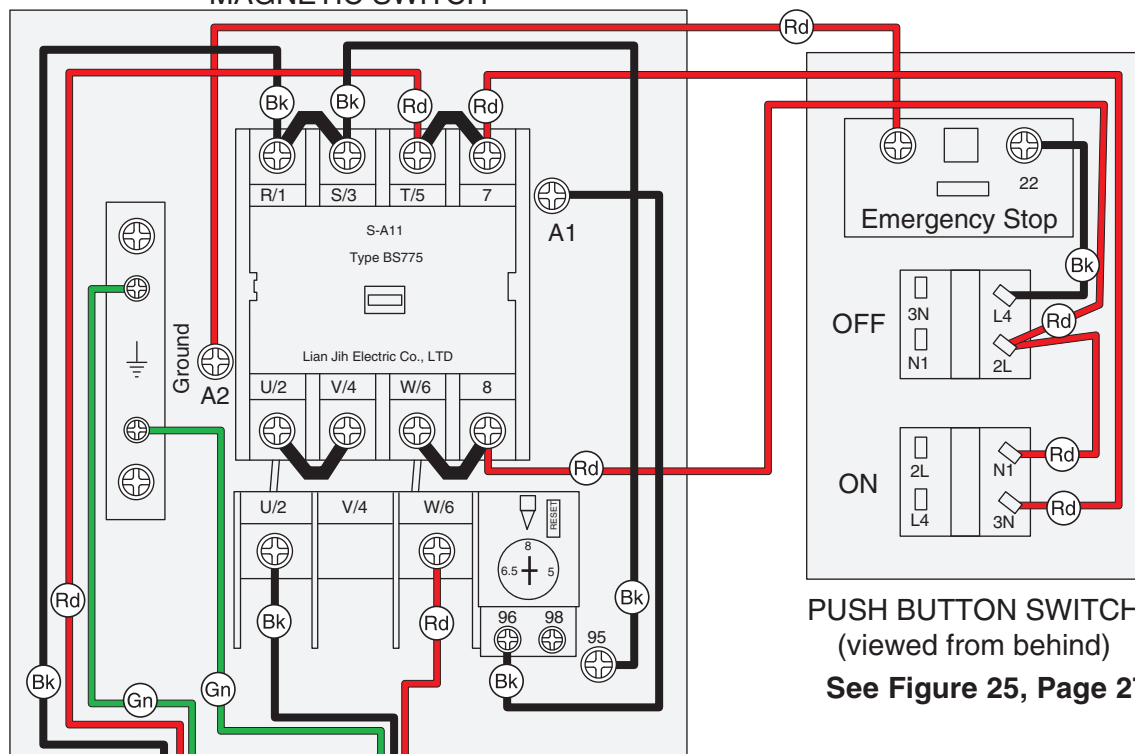


View this page in color at
www.grizzly.com.

NOTICE

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

See Figure 25, Page 27
MAGNETIC SWITCH



COLOR KEY

BLACK — Bk —
GREEN — Gn —
RED — Rd —



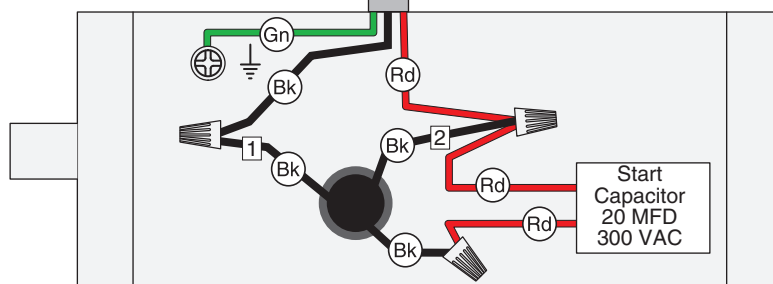
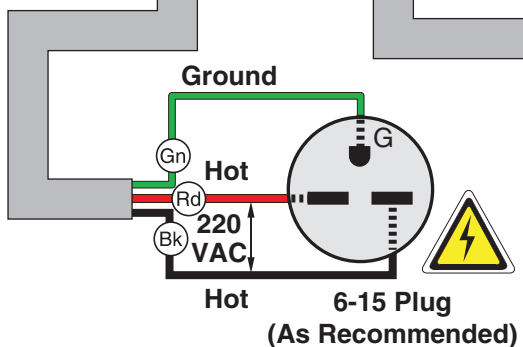
WARNING!

SHOCK HAZARD!
Disconnect power
before working on
wiring.



PUSH BUTTON SWITCH
(viewed from behind)

See Figure 25, Page 27



220V 1-PH MOTOR

See Figure 26, Page 27



G3623 Electrical Components

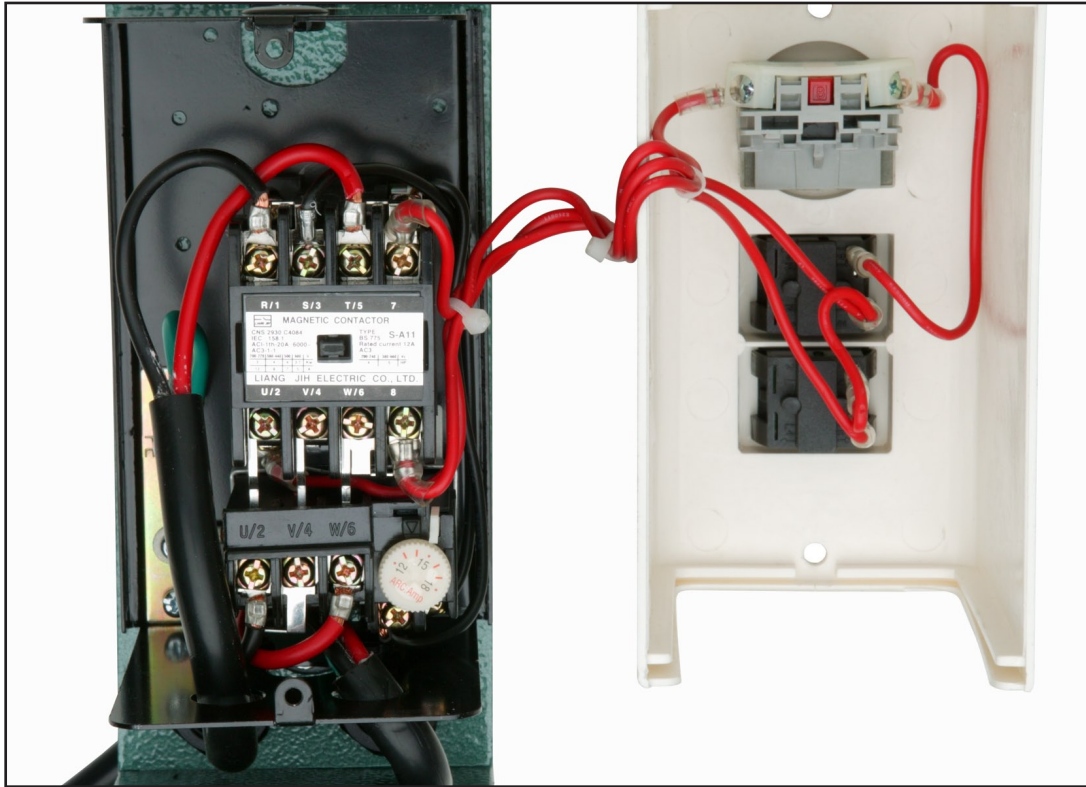


Figure 27. G3623 magnetic switch and controls.

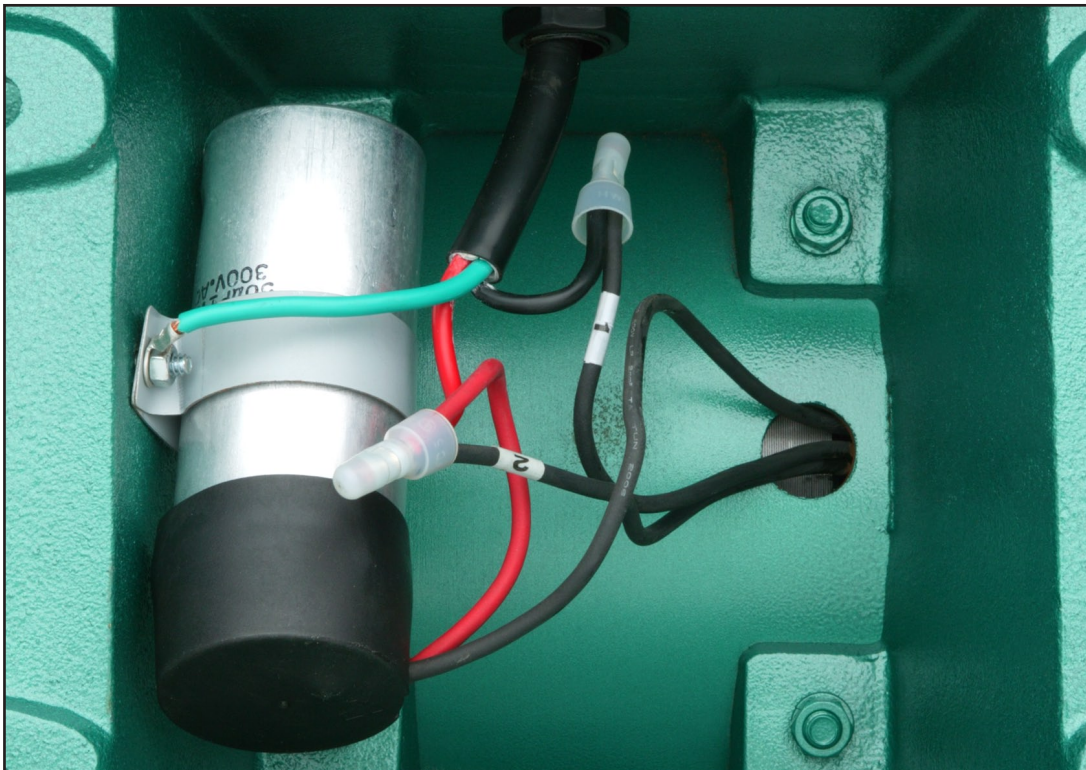


Figure 28. G3623 motor wiring.



G3623 Wiring Diagram 220V, 1-Ph



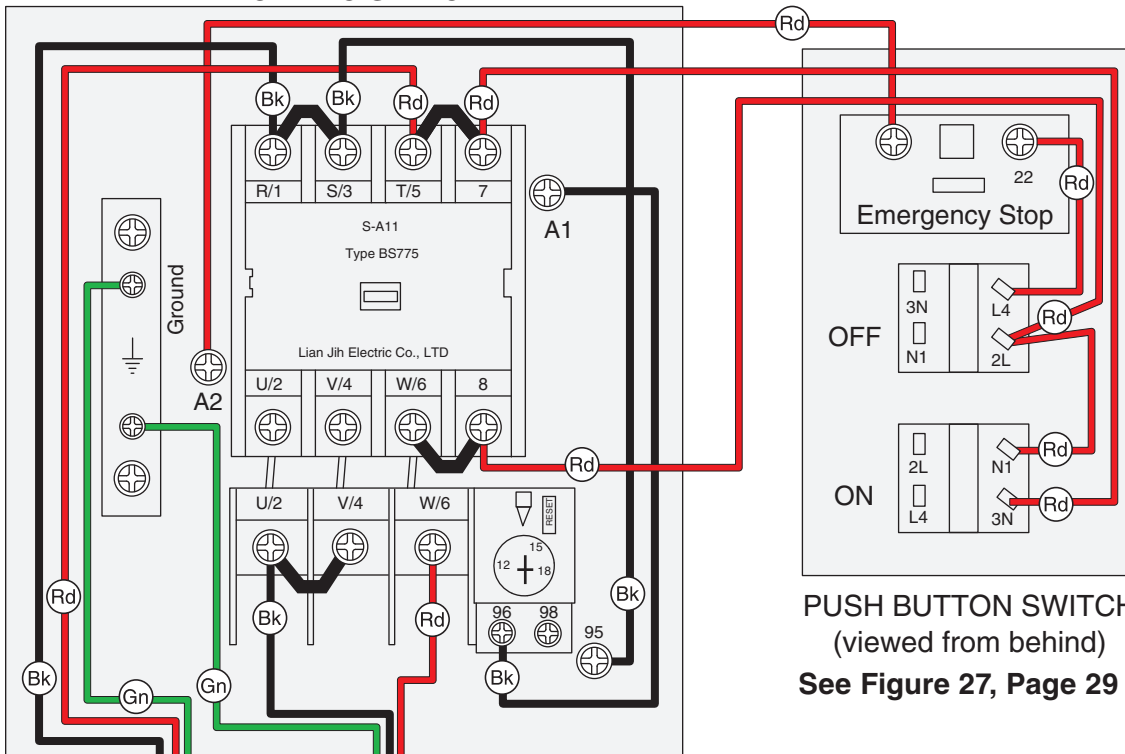
View this page in color at www.grizzly.com.

NOTICE

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

See Figure 27, Page 29

MAGNETIC SWITCH



COLOR KEY

BLACK — Bk
GREEN — Gn
RED — Rd



WARNING!

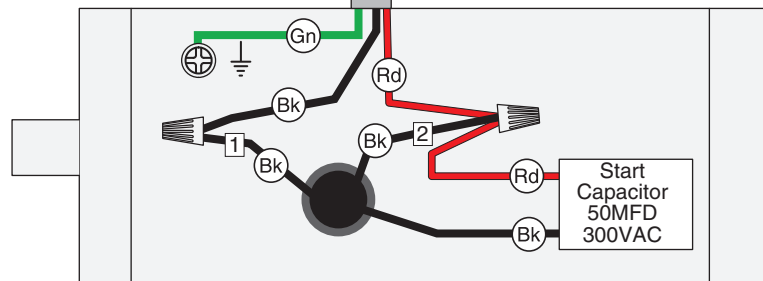
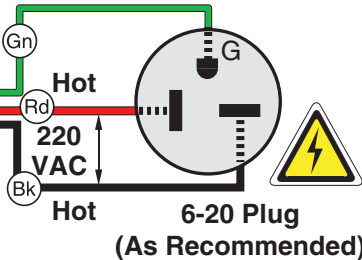
SHOCK HAZARD!
Disconnect power before working on wiring.



PUSH BUTTON SWITCH
(viewed from behind)

See Figure 27, Page 29

Ground



220V1-PH MOTOR

See Figure 28, Page 29



G3708 Electrical Components

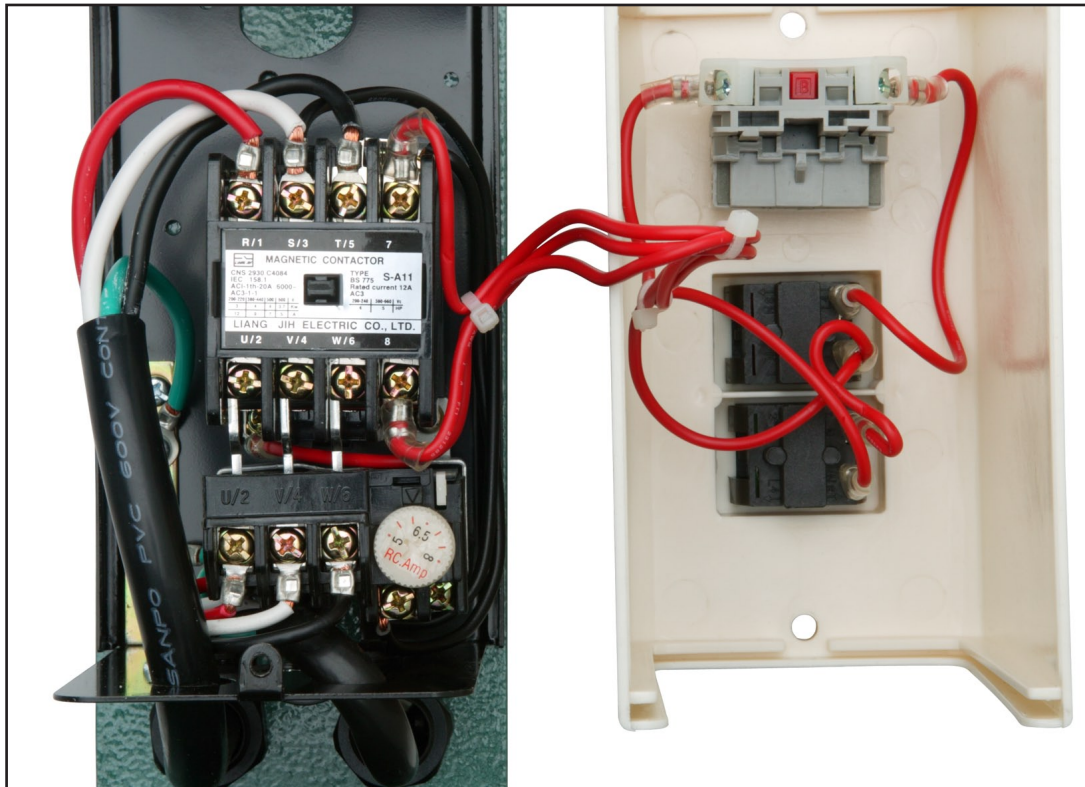


Figure 29. G3708 magnetic switch and controls.

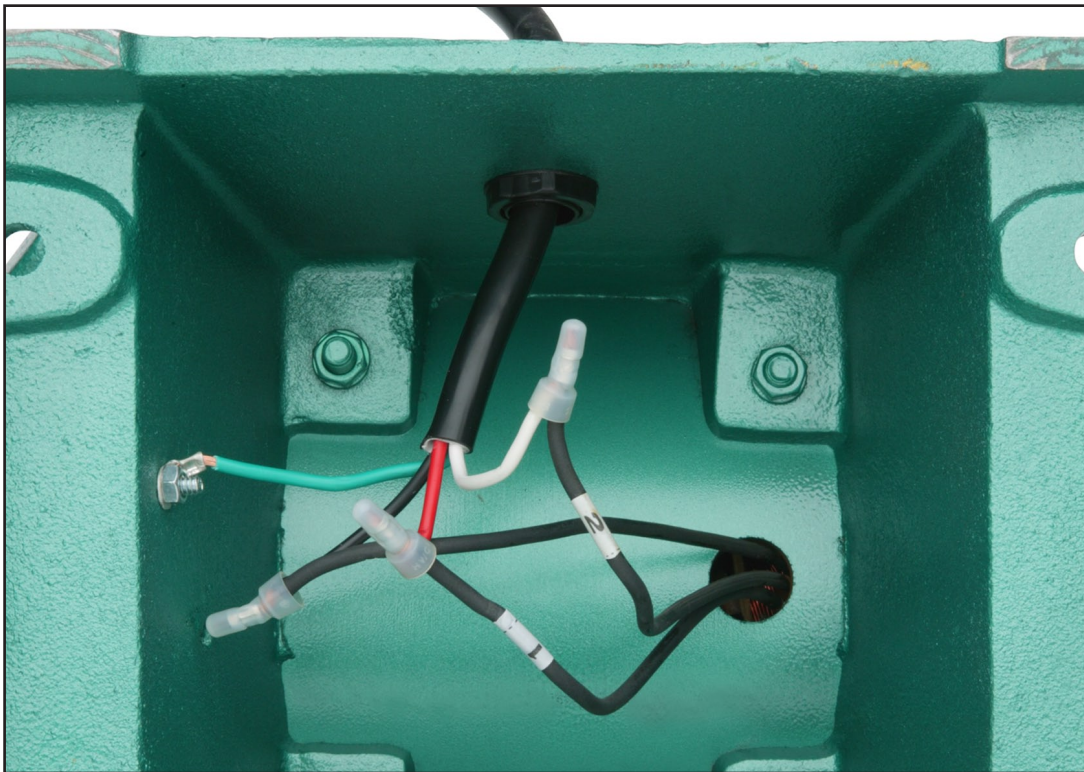


Figure 30. G3708 motor wiring.



G3708 Wiring Diagram 220V, 3-Ph



NOTICE

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

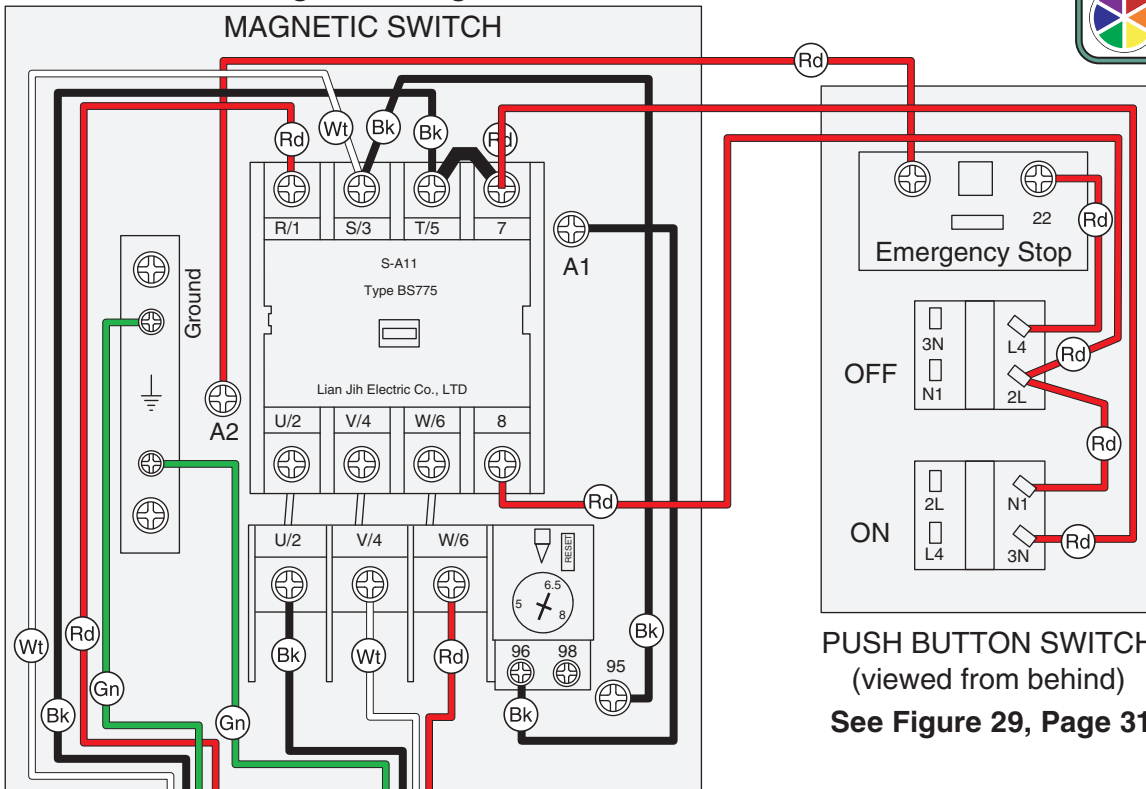
MOTOR DIRECTION

NOTICE

If motor rotates in opposite direction, swap any two power source wires at the incoming terminals.

See Figure 29, Page 31

MAGNETIC SWITCH



View this page in color at www.grizzly.com.

COLOR KEY

BLACK	
WHITE	
GREEN	
RED	



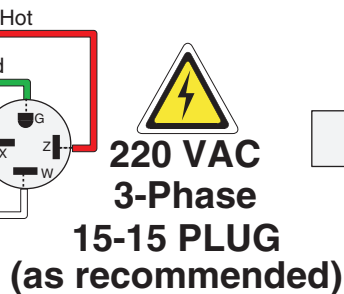
WARNING!

SHOCK HAZARD!
Disconnect power before working on wiring.



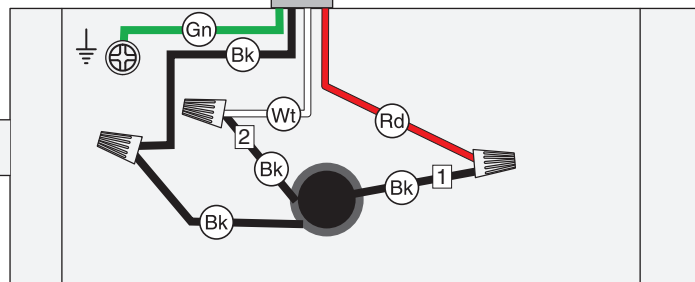
PUSH BUTTON SWITCH
(viewed from behind)

See Figure 29, Page 31



**220 VAC
3-Phase
15-15 PLUG**

(as recommended)



220V 3-PH MOTOR

See Figure 30, Page 31



G4787 Electrical Components

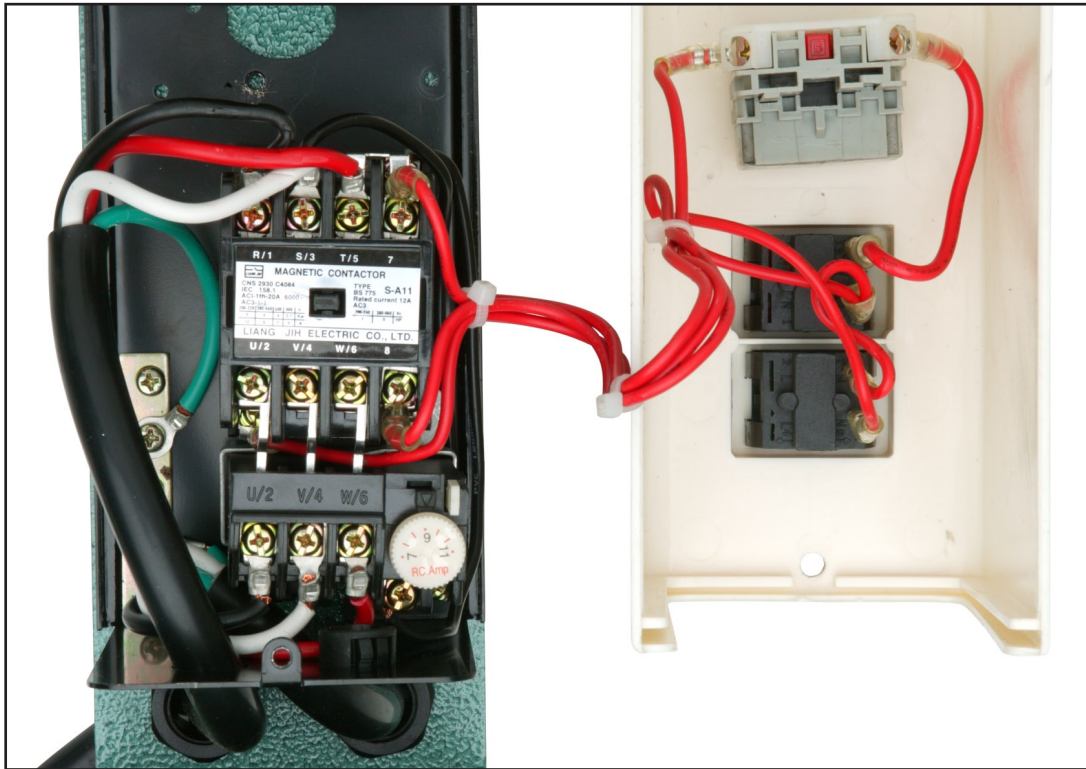


Figure 31. G4787 magnetic switch and controls.

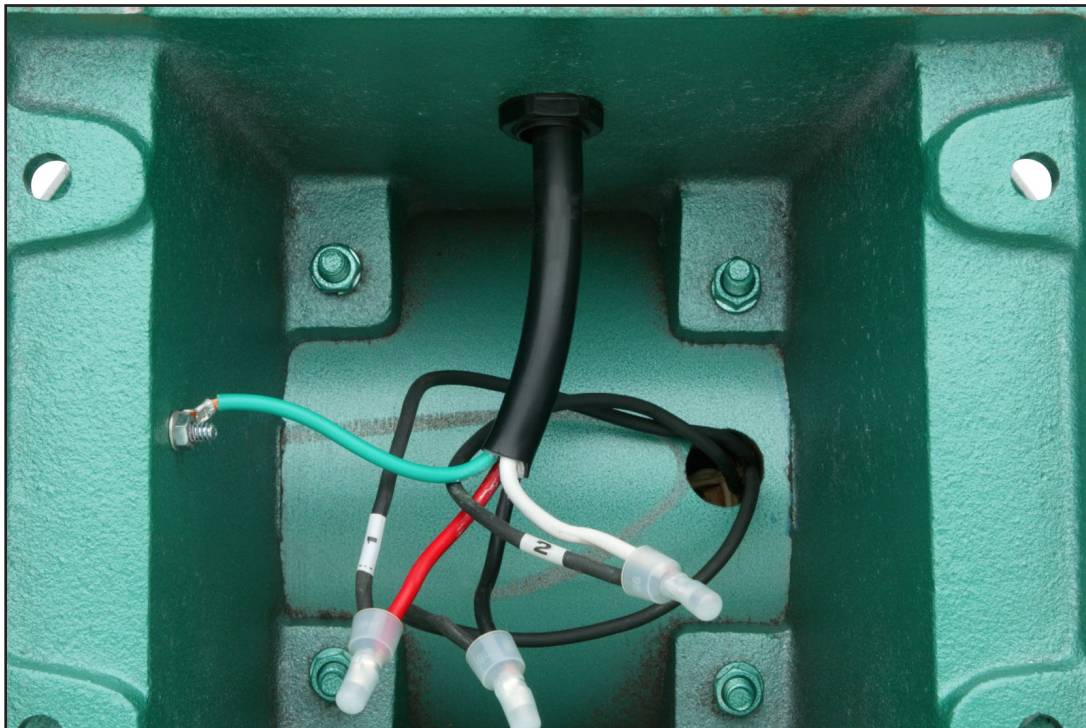


Figure 32. G4787 motor wiring.



G4787 Wiring Diagram 220V, 3-Ph



NOTICE

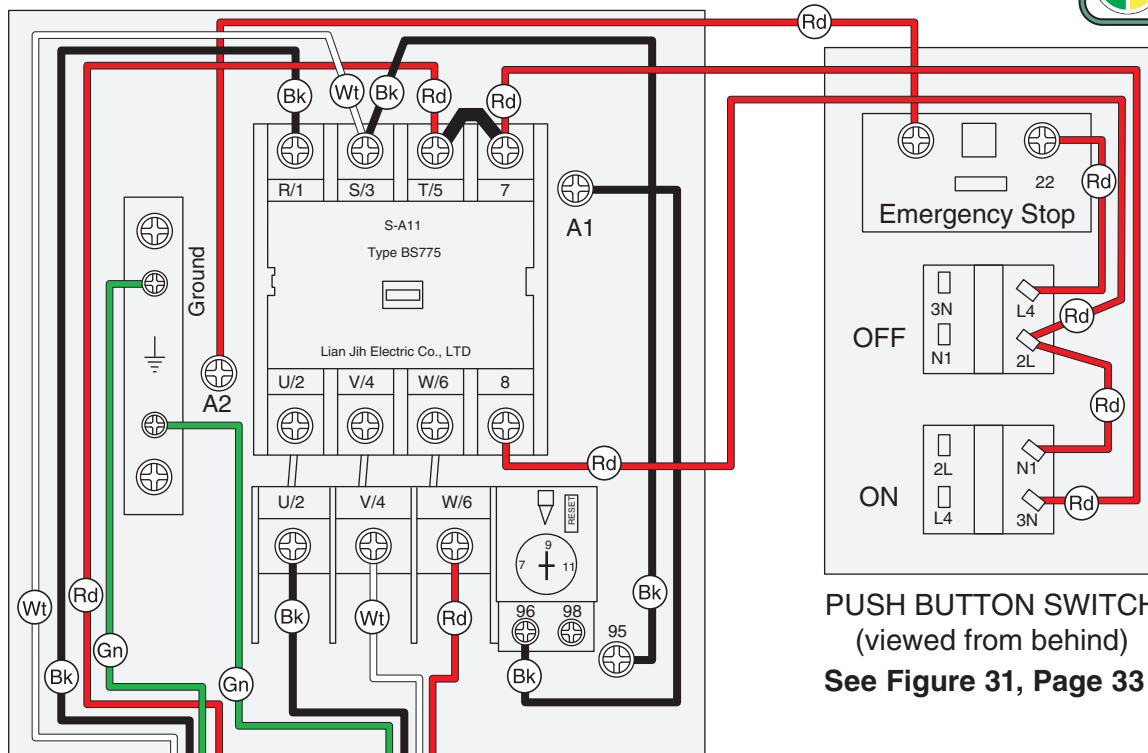
The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

MOTOR DIRECTION

NOTICE

If motor rotates in opposite direction, swap any two power source wires at the incoming terminals.

See Figure 31, Page 33
MAGNETIC SWITCH



COLOR KEY

BLACK	
WHITE	
GREEN	
RED	

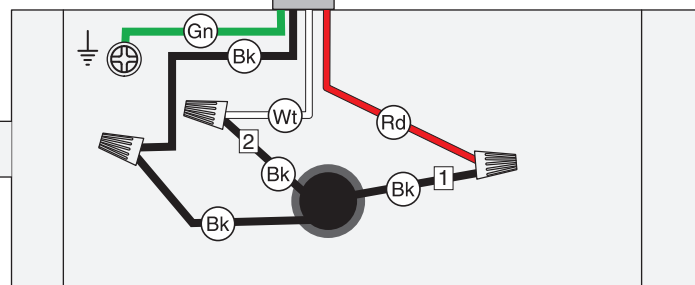
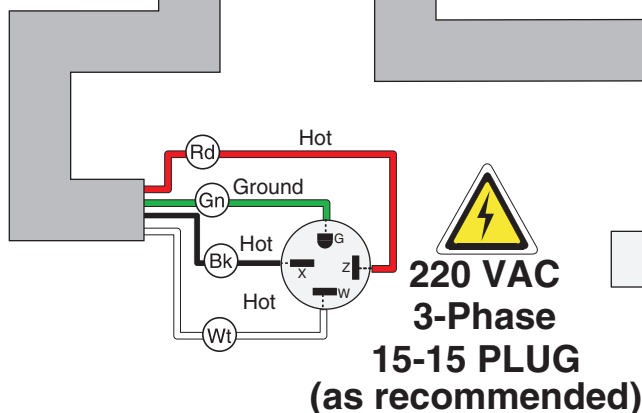


WARNING!

SHOCK HAZARD!
Disconnect power before working on wiring.



PUSH BUTTON SWITCH
(viewed from behind)
See Figure 31, Page 33



220V 3-PH MOTOR
See Figure 32, Page 33



G4788 Electrical Components

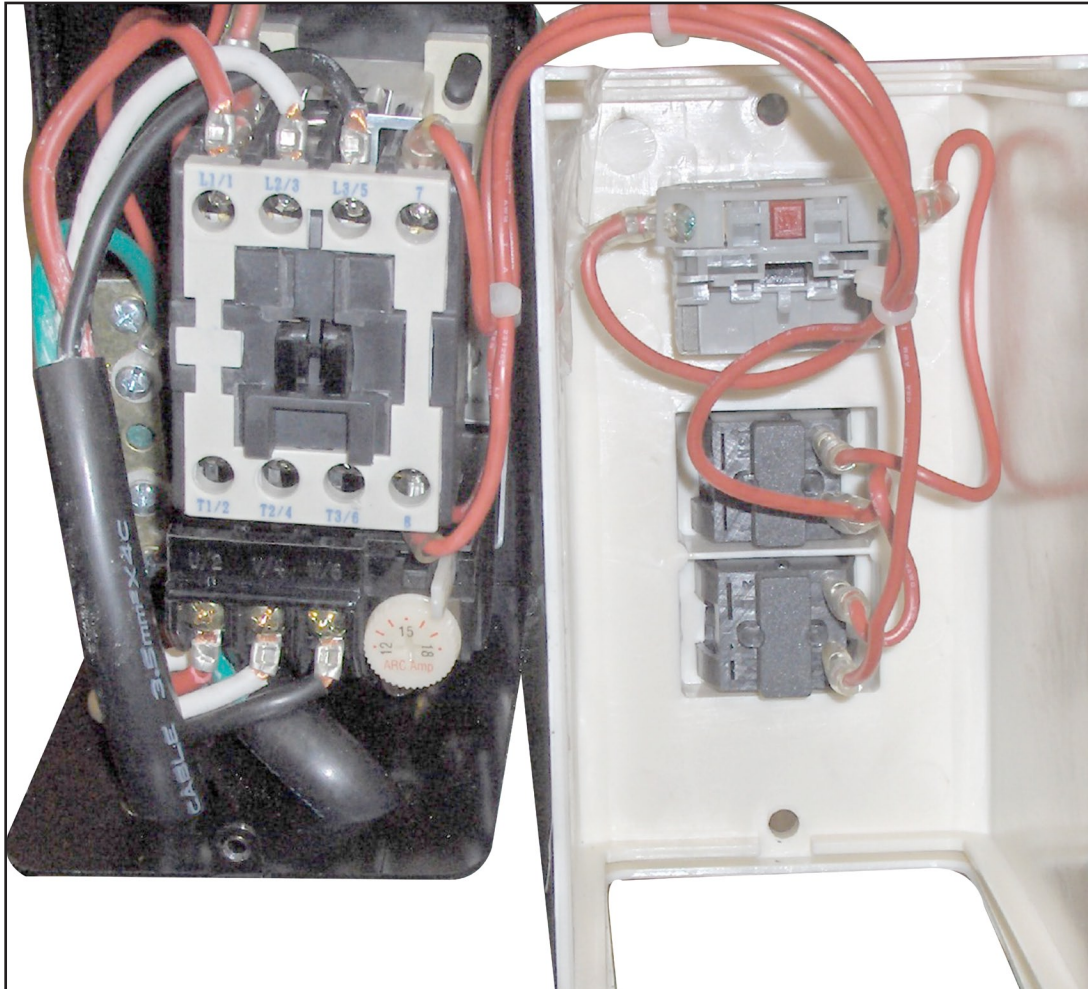


Figure 33. G4788 magnetic switch and controls.

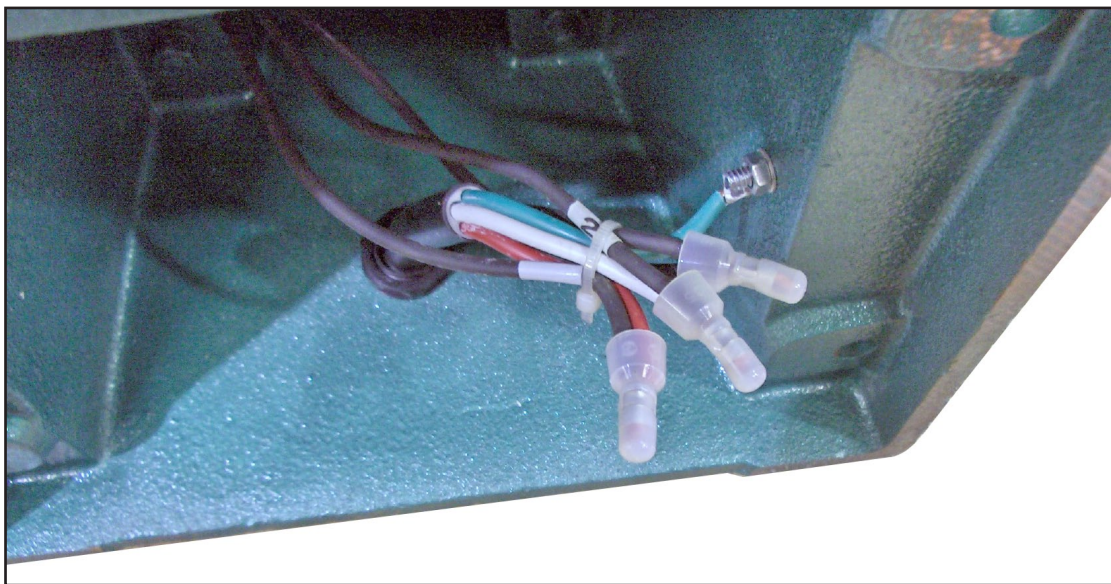


Figure 34. G4788 motor wiring.



G4788 Wiring Diagram 220V, 3-Ph



NOTICE

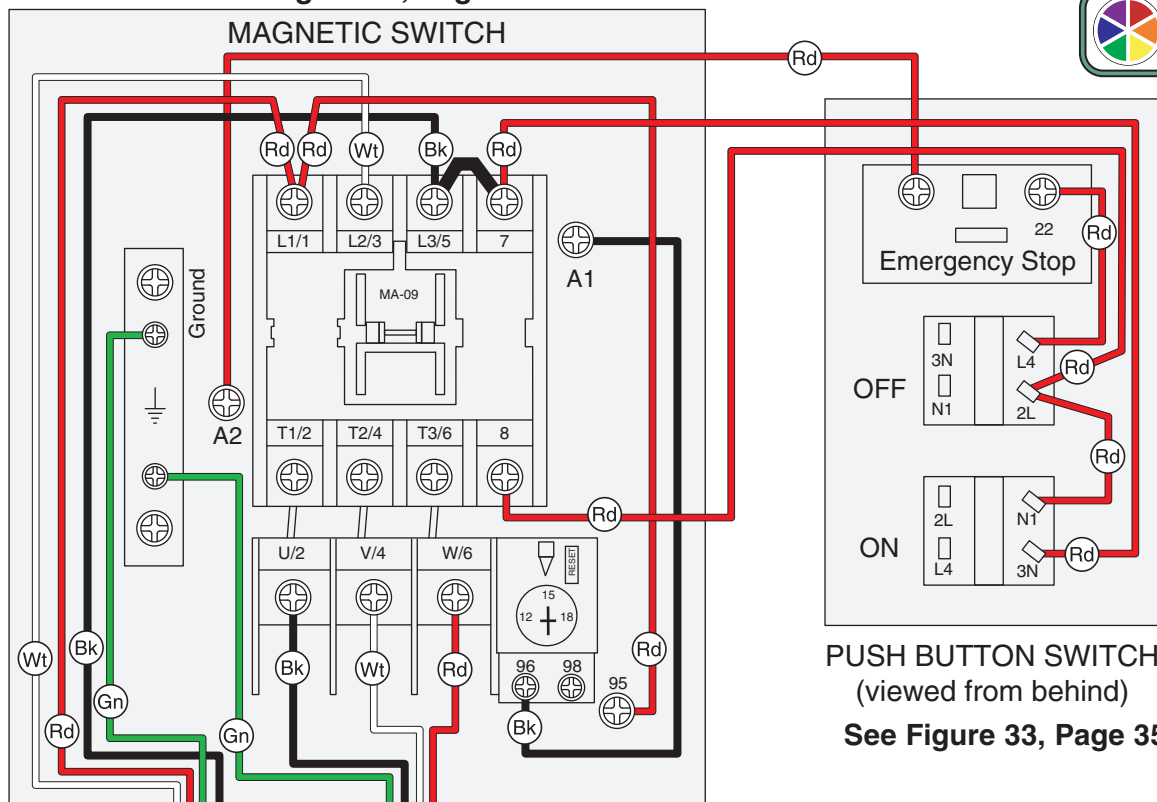
The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

MOTOR DIRECTION

NOTICE

If motor rotates in opposite direction, swap any two power source wires at the incoming terminals.

See Figure 33, Page 35



View this page in color at www.grizzly.com.

COLOR KEY

BLACK — Bk
WHITE — Wt
GREEN — Gn
RED — Rd



WARNING!

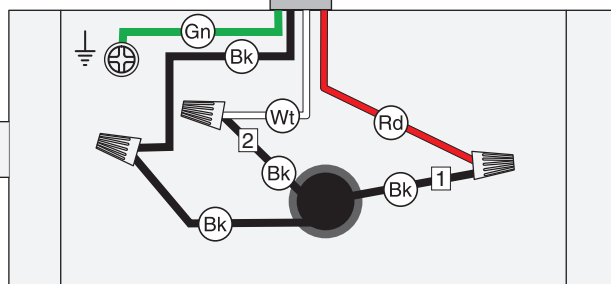
SHOCK HAZARD!
Disconnect power before working on wiring.



PUSH BUTTON SWITCH
(viewed from behind)

See Figure 33, Page 35

**220 VAC
3-Phase
15-15 PLUG
(as recommended)**

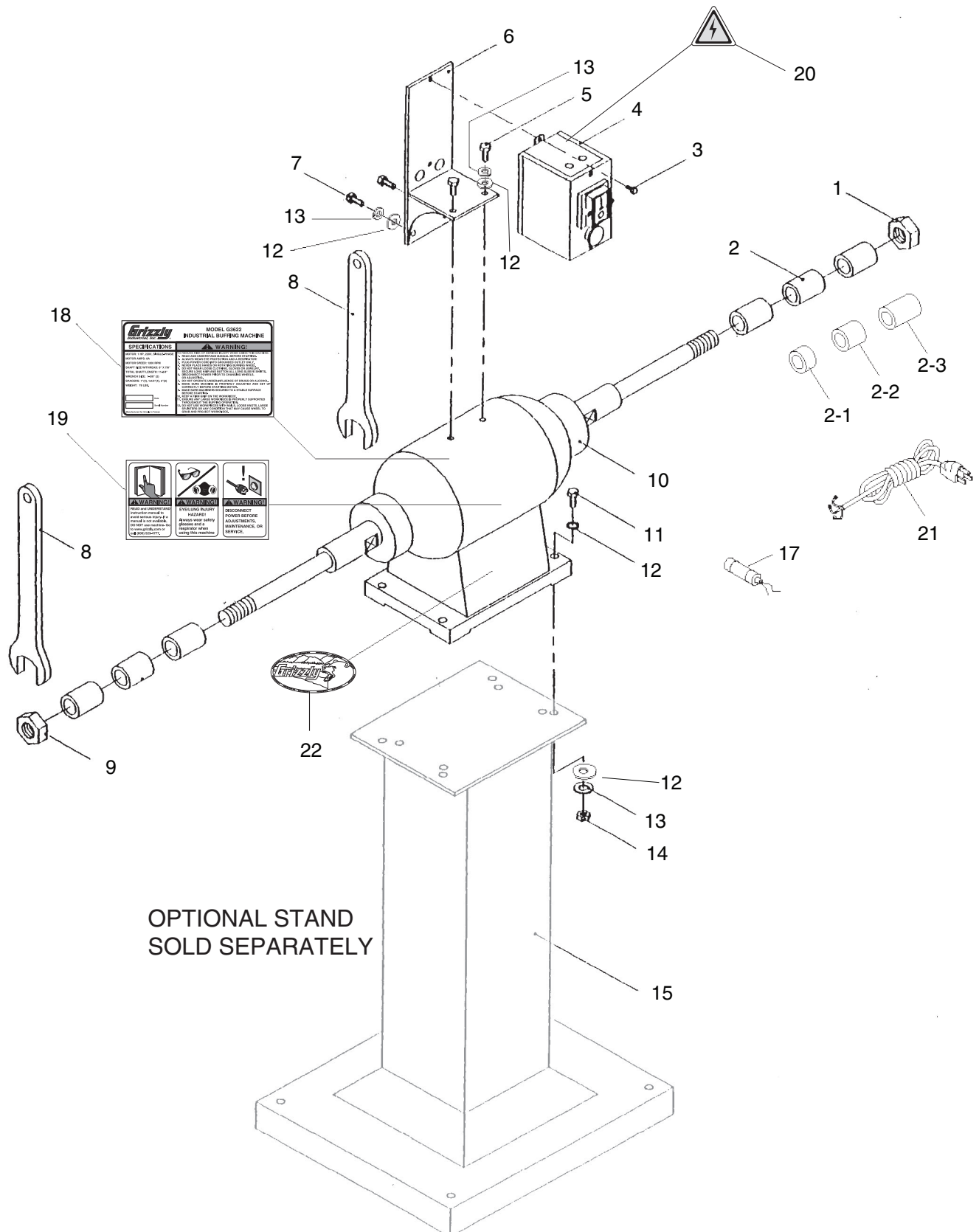


220V 3-PH MOTOR
See Figure 34, Page 35



SECTION 9: PARTS

G3622 Breakdown



G3622 Parts List

REF	PART #	DESCRIPTION
1	PN38	HEX NUT 7/8"-9
2	P3622002	COMPLETE SPACER SET
2-1	P3622002-1	SPACER 7/8" x 1"
2-2	P3622002-2	SPACER 7/8" X 1-1/2"
2-3	P3622002-3	SPACER 7/8" X 2"
3	PS06	PHLP HD SCR 10-24 X 3/8
4	P3622004	SWITCH 1HP 220V 1PH 60HZ
5	PB09	HEX BOLT 5/16-18 X 1/2
6	P3622006	SWITCH SUPPORT
7	PB09	HEX BOLT 5/16-18 X 1/2
8	P3622008	WRENCH 1-3/8
9	PN39	HEX NUT 7/8"-9 LH

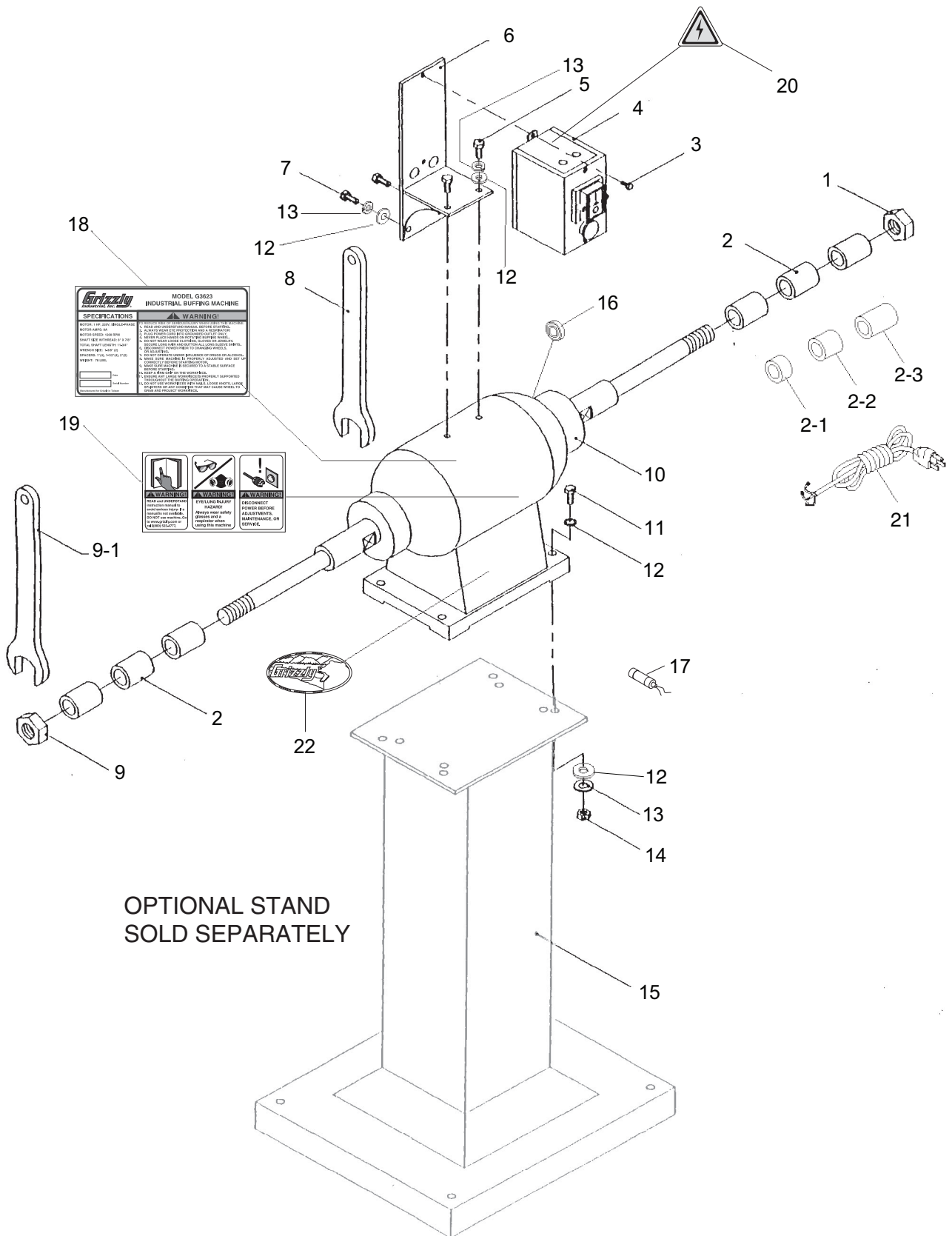
REF	PART #	DESCRIPTION
10	P3622010	MOTOR 1HP, 200V, 1-PH
11	PB22	HEX BOLT 5/16-18 X 1-3/4
12	PW07	FLAT WASHER 5/16
13	PLW01	LOCK WASHER 5/16
14	PN02	HEX NUT 5/16"-18
15	G4789	STAND (OPTIONAL)
17	P3622017	S CAPACITOR 20M 300V 1-3/4 x 3-3/4
18	P3622018	MACHINE ID LABEL
19	P3622019	SAFETY WARNING LABELS
20	P3622020	ELECTRICITY LABEL 0.7W X 0.6H
21	P3622021	POWER CORD 12AWG x 3C
22	G9987	SMALL GRIZZLY NAMEPLATE

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



G3623 Breakdown



G3623 Parts List

REF	PART #	DESCRIPTION
1	PN36	HEX NUT 1-1/4"-7
2	P3623002	COMPLETE SPACER SET
2-1	P3623002-1	SPACER 1-1/4" X 1"
2-2	P3623002-2	SPACER 1-1/4" X 1-1/2"
2-3	P3623002-3	SPACER 1-1/4" X 2"
3	PS06	PHLP HD SCR 10-24 X 3/8
4	P3623004	SWITCH MS-11-3PV (2HP-1PH)
5	PB07	HEX BOLT 5/16-18 X 3/4
6	P3623006	SWITCH SUPPORT
7	PB07	HEX BOLT 5/16-18 X 3/4
8	P3623008	WRENCH 1-1/2"
9	PN37	HEX NUT 1-1/4"-7 LH
9-1	PWR2	WRENCH 2"

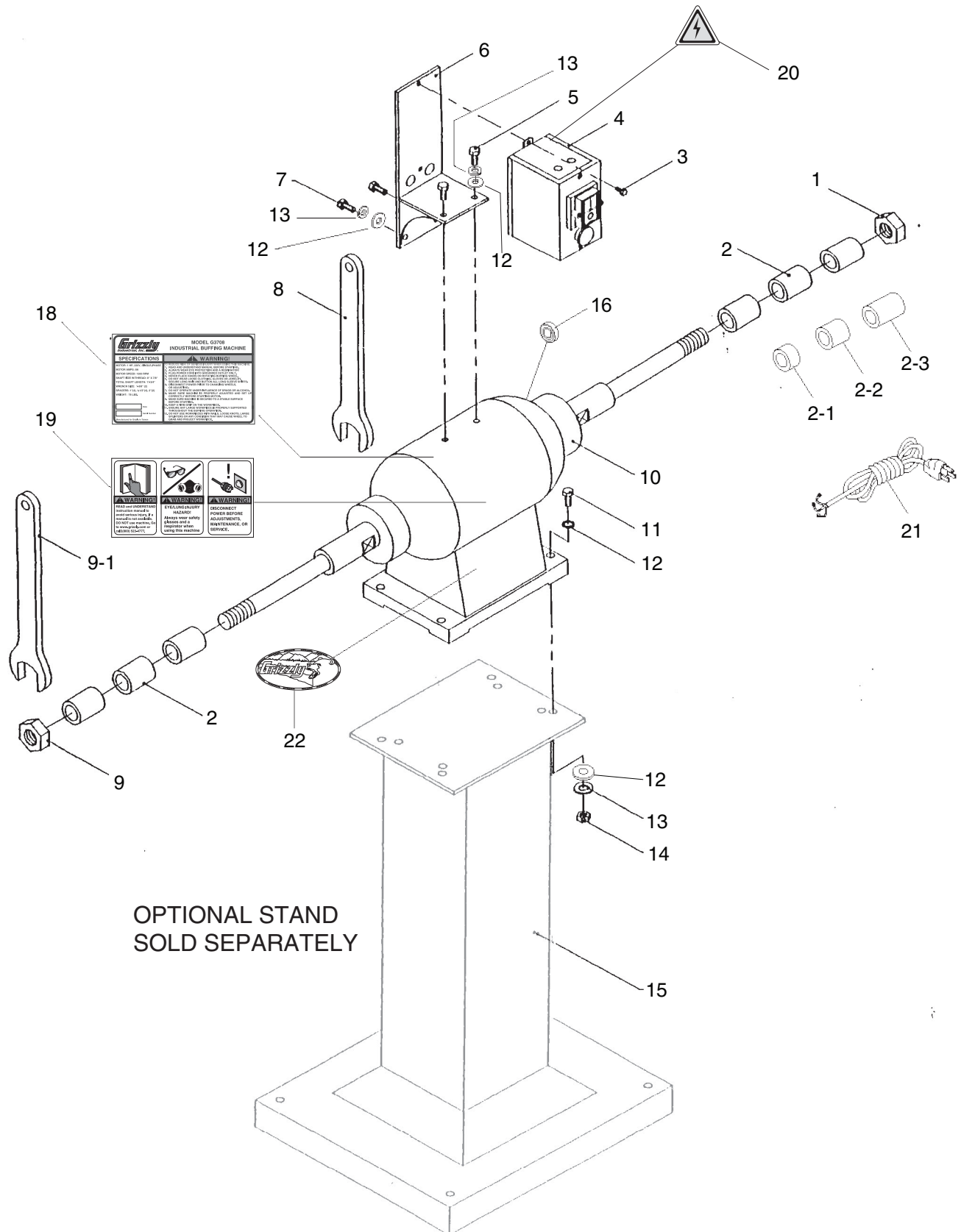
REF	PART #	DESCRIPTION
10	P3623010	MOTOR 2HP, 220V, 1-PH
11	PB06	HEX BOLT 5/16-18 X 2
12	PW07	FLAT WASHER 5/16
13	PLW01	LOCK WASHER 5/16
14	PN02	HEX NUT 5/16"-18
15	G4789	STAND (OPTIONAL)
16	P6209	BALL BEARING 6209ZZ
17	P3623017	S CAPACITOR 50M 300V 1-3/4 X 3-3/4
18	P3623018	MACHINE ID LABEL
19	P3622019	SAFETY WARNING LABELS
20	P3622020	ELECTRICITY LABEL 0.7W X 0.6H
21	P3623021	POWER CORD 12AWG x 3C
22	G9987	SMALL GRIZZLY NAMEPLATE

WARNING

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G3708 Breakdown



G3708 Parts List

REF	PART #	DESCRIPTION
1	PN36	HEX NUT 1-1/4"-7
2	P3623002	COMPLETE SPACER SET
2-1	P3623002-1	SPACER 1-1/4" X 1"
2-2	P3623002-2	SPACER 1-1/4" X 1-1/2"
2-3	P3623002-3	SPACER 1-1/4" X 2"
3	PS06	PHLP HD SCR 10-24 X 3/8
4	P3708004	SWITCH MS-11-3PV (2HP-3HP)
5	PB07	HEX BOLT 5/16-18 X 3/4
6	P3708006	SWITCH SUPPORT
7	PB07	HEX BOLT 5/16-18 X 3/4
8	P3623008	WRENCH 1-1/2"
9	PN37	HEX NUT 1-1/4"-7 LH
9-1	PWR2	WRENCH 2"

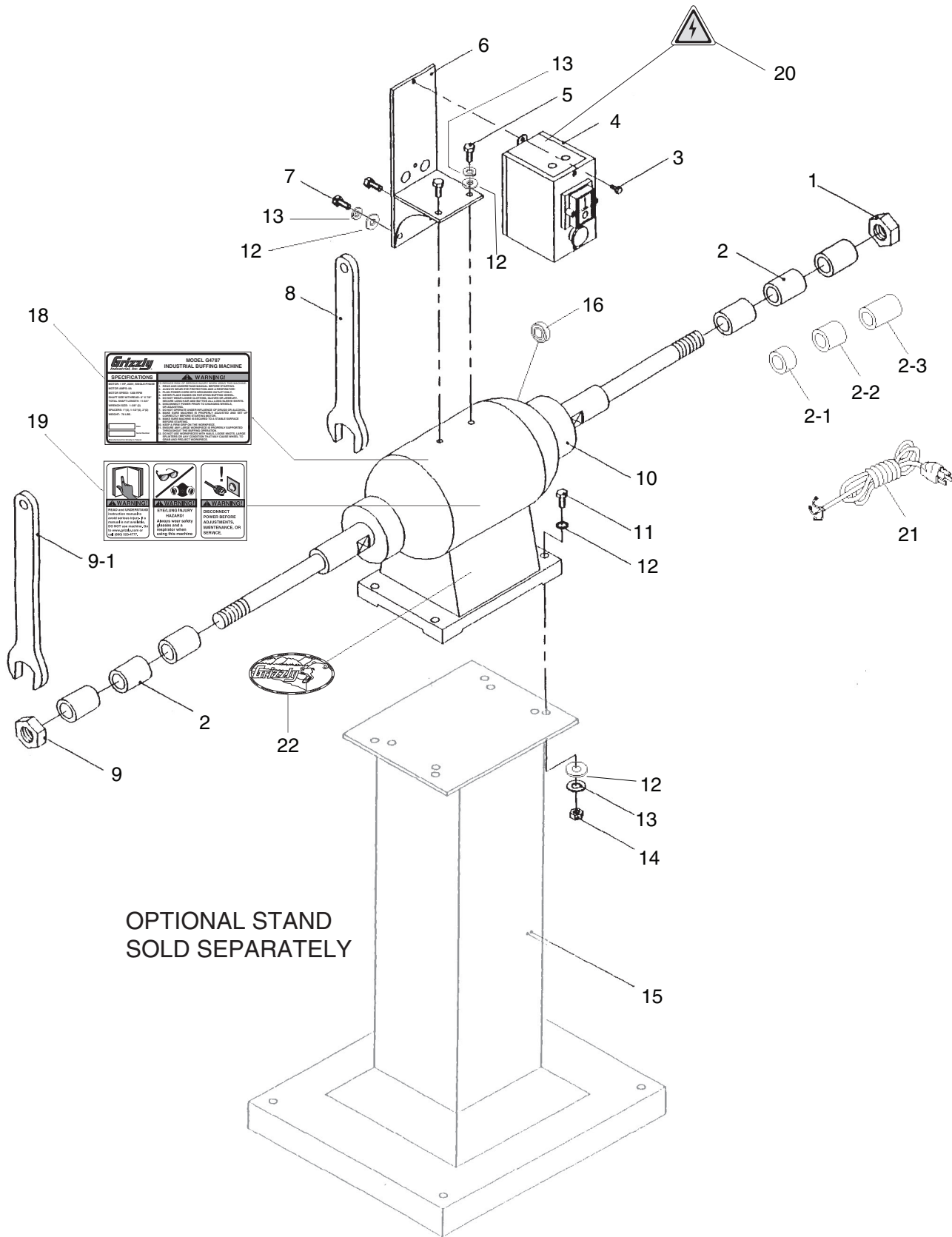
REF	PART #	DESCRIPTION
10	P3708010	MOTOR 2HP, 220V, 3-PH
11	PB06	HEX BOLT 5/16-18 X 2
12	PW07	FLAT WASHER 5/16
13	PLW01	LOCK WASHER 5/16
14	PN02	HEX NUT 5/16"-18
15	G4789	STAND
16	P6209	BALL BEARING 6209ZZ
18	P3708018	MACHINE ID LABEL
19	P3622019	SAFETY WARNING LABELS
20	P3622020	ELECTRICITY LABEL 0.7W X 0.6H
21	P3708021	POWER CORD 12AWG x 4C
22	G9987	SMALL GRIZZLY NAMEPLATE

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



G4787 Breakdown



G4787 Parts List

REF	PART #	DESCRIPTION
1	PN36	HEX NUT 1-1/4"-7
2	P4787002	COMPLETE SPACER SET
2-1	P3623002-1	SPACER 1-1/4" X 1"
2-2	P3623002-2	SPACER 1-1/4" X 1-1/2"
2-3	P3623002-3	SPACER 1-1/4" X 2"
3	PS06	PHLP HD SCR 10-24 X 3/8
4	P4787004	SWITCH MS-11-3PV (3HP-3PH)
5	PB07	HEX BOLT 5/16-18 X 3/4
6	P4787006	SWITCH SUPPORT
7	PB07	HEX BOLT 5/16-18 X 3/4
8	P3623008	WRENCH 1-1/2"
9	PN37	HEX NUT 1-1/4"-7 LH
9-1	PWR2	WRENCH 2"

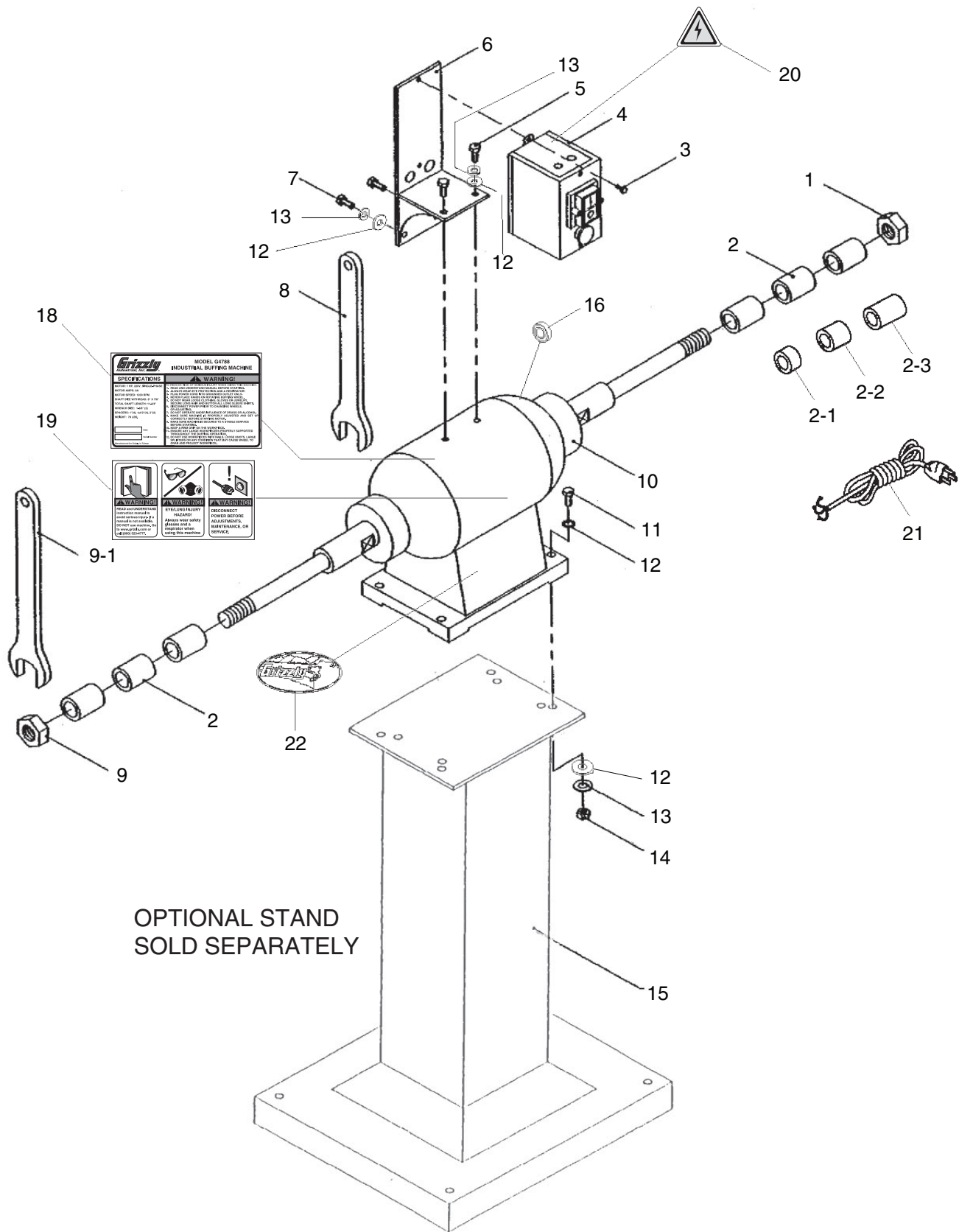
REF	PART #	DESCRIPTION
10	P4787010	MOTOR 3HP, 220V, 3-PH
11	PB06	HEX BOLT 5/16-18 X 2
12	PW07	FLAT WASHER 5/16
13	PLW01	LOCK WASHER 5/16
14	PN02	HEX NUT 5/16"-18
15	G4789	STAND (OPTIONAL)
16	P6209	BALL BEARING 6209ZZ
18	P4787018	MACHINE ID LABEL
19	P3622019	SAFETY WARNING LABELS
20	P3622020	ELECTRICITY LABEL 0.7W X 0.6H
21	P3708021	POWER CORD 12AWG x 4C
22	G9987	SMALL GRIZZLY NAMEPLATE

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



G4788 Breakdown



G4788 Parts List

REF	PART #	DESCRIPTION
1	PN36	HEX NUT 1-1/4"-7
2	P4787002	COMPLETE SPACER SET
2-1	P3623002-1	SPACER 1-1/4" X 1"
2-2	P3623002-2	SPACER 1-1/4" X 1-1/2"
2-3	P3623002-3	SPACER 1-1/4" X 2"
3	PS06	PHLP HD SCR 10-24 X 3/8
4	P4788004	SWITCH MS-11-3PV (5HP-3PH)
5	PB07	HEX BOLT 5/16-18 X 3/4
6	P4788006	SWITCH SUPPORT
7	PB07	HEX BOLT 5/16-18 X 3/4
8	P3623008	WRENCH 1-1/2"
9	PN37	HEX NUT 1-1/4"-7 LH
9-1	PWR2	WRENCH 2"

REF	PART #	DESCRIPTION
10	P4788010	MOTOR 5HP, 220V, 3-PH
11	PB06	HEX BOLT 5/16-18 X 2
12	PW07	FLAT WASHER 5/16
13	PLW01	LOCK WASHER 5/16
14	PN02	HEX NUT 5/16"-18
15	G4789	STAND
16	P6209	BALL BEARING 6209ZZ
18	P4788018	MACHINE ID LABEL
19	P3622019	SAFETY WARNING LABELS
20	P3622020	ELECTRICITY LABEL 0.7W X 0.6H
21	P3708021	POWER CORD 12AWG x 4C
22	G9987	SMALL GRIZZLY NAMEPLATE

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.





WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

_____ Advertisement

_____ Friend

_____ Catalog

_____ Card Deck

_____ Website

_____ Other:

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

_____ Cabinet Maker

_____ Popular Mechanics

_____ Today's Homeowner

_____ Family Handyman

_____ Popular Science

_____ Wood

_____ Hand Loader

_____ Popular Woodworking

_____ Wooden Boat

_____ Handy

_____ Practical Homeowner

_____ Woodshop News

_____ Home Shop Machinist

_____ Precision Shooter

_____ Woodsmith

_____ Journal of Light Cont.

_____ Projects in Metal

_____ Woodwork

_____ Live Steam

_____ RC Modeler

_____ Woodworker West

_____ Model Airplane News

_____ Rifle

_____ Woodworker's Journal

_____ Modeltec

_____ Shop Notes

_____ Other:

_____ Old House Journal

_____ Shotgun News

3. What is your annual household income?

_____ \$20,000-\$29,000

_____ \$30,000-\$39,000

_____ \$40,000-\$49,000

_____ \$50,000-\$59,000

_____ \$60,000-\$69,000

_____ \$70,000+

4. What is your age group?

_____ 20-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60-69

_____ 70+

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

_____ 0-2 Years

_____ 2-8 Years

_____ 8-20 Years

_____ 20+ Years

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

_____ 0-2

_____ 3-5

_____ 6-9

_____ 10+

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

_____ Yes

_____ No

8. Would you recommend Grizzly Industrial to a friend?

_____ Yes

_____ No

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

Note: We never use names more than 3 times.

_____ Yes

_____ No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name	_____
Street	_____
City	_____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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

grizzly.com

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