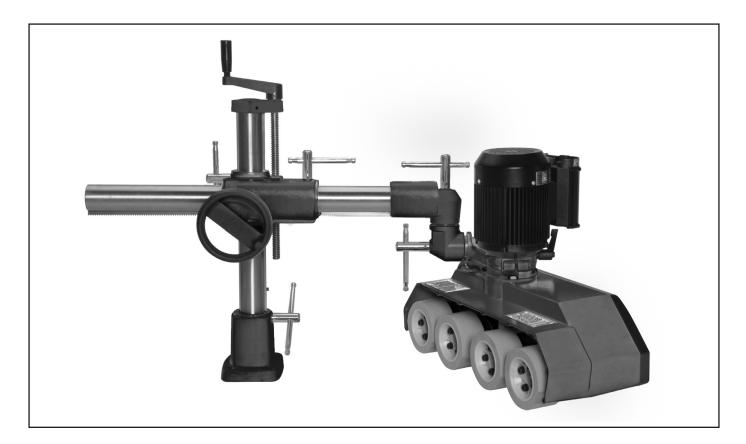


MODEL G1095/G1096 1-HP POWER FEEDER with 4-ROLLER & 4-SPEED OWNER'S MANUAL



COPYRIGHT © MAY, 2008 BY GRIZZLY INDUSTRIAL, INC. WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC. #CR10667 PRINTED IN TAIWAN

Download from Www.Somanuals.com. All Manuals Search And Download.

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.

Table of Contents

| INTRODUCTION Foreword Contact Info Functional Overview Identification | 2 2 2 |
|---|---------------------|
| SECTION 1: SAFETY Safety Instructions for Machinery Additional Safety for Power Feeders | 8 |
| SECTION 2: CIRCUIT REQUIREMENTS 1 220V Single-Phase Operation (G1095) 1 220V Three-Phase Operation (G1096) 1 | 1 |
| SECTION 3: SETUP 1 Setup Safety 1 Items Needed for Setup 1 Unpacking 1 Inventory 1 Clean Up 1 Assembly 1 Base Mounting 1 Test Run 1 | 3 3 4 5 |

| SECTION 4: OPERATIONS Operation Safety Basic Use and Care Changing Speeds | 19 19 |
|--|----------|
| SECTION 5: MAINTENANCE Schedule Cleaning Lubrication | 21 21 |
| SECTION 6: SERVICE Troubleshooting Wheel Replacement | 22 |
| SECTION 7: WIRING Electrical Safety Instructions Electrical | 24 |
| SECTION 8: PARTS Main Power Feeder Assembly Stand and Support Assembly | 27 |
| WARRANTY AND RETURNS | 32 |



Foreword

We are proud to offer the Model G1095/G1096 1HP Power Feeder. This machine is part of a growing Grizzly family of fine woodworking 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 Model G1095/G1096 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

This power feeder greatly simplifies repetitive operations on table saws, jointers, and shapers by automating how workpieces are fed into the cut. This is extremely important to woodshops that cut thousands of board feed on a regular basis.

Since the power feeder is typically positioned between the blade and the operator during operations, the operator's hands do not need to get near the blade when feeding the workpiece, so the danger of an accidental cutting injury is greatly reduced.

Additionally, the power feeder provides more consistent results than hand fed operations, because it moves the workpiece at an even speed and maintains consistent workpiece pressure against the table and fence throughout the cut.

The power feeder works by simply attaching rubber rollers to a motor through a series of gears designed to control the roller speed.

Since the rubber rollers must be positioned correctly to maintain even workpiece pressure against the table and fence, the power feeder is mounted on a stand that allows it to be moved and locked at infinite heights, angles, or rotations within range of the stand.

The power feeder stand is typically mounted to the desired machine by either clamping to the machine's table, or mounting directly into the machine's table via drilled and tapped holes.



MACHINE DATA SHEET

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

MODEL G1095 POWER FEEDER 4 ROLLER / 4 SPEED, SINGLE-PHASE

| Weight | Product Dimensions: | |
|--|---------------------------|--------------------------------|
| Length/Width/Height | Weight | |
| Shipping Dimensions: Carton #1 Type. Cardboard Weight. 71 lbs. Length/Width/Height. 30 x 12 x 22 in. Carton #2 Cardboard Type. Cardboard Content. Stand Weight. 79 lbs. Length/Width/Height. 30 x 12 x 22 in. Stand Stand Weight. 79 lbs. Length/Width/Height. 30 x 13 x 11 in. Electrical: Switch Switch Voltage. 220V Cord Gauge. 16 gauge Recommended Breaker Size. 10 amp Plug. No Motors: Main Type. TEFC Capacitor Start Induction Horsepower. 1 HP Vottage. 220V Prewired. 220V Prewired. 220V Phase. Single Amps. 6 2/2 7A Speed. 3450/1725 RPM Cycle. 60 Hz Number Of Speeds. 2 | | |
| Carton #1 Type | Foot Print (Length/Width) | N/A x N/A |
| Type | Shipping Dimensions: | |
| Content. Machine Weight 71 lbs. Length/Width/Height 30 x 12 x 22 in. Type Cardboard Content. Stand Weight 79 lbs. Length/Width/Height 30 x 13 x 11 in. Electrical: Switch Switch Forward/Reverse Switch 9 ft. Cord Gauge 16 gauge Recommended Breaker Size 10 amp Plug. No Motors: Main Type TEFC Capacitor Start Induction Horsepower 220V Prewired 220V Prewired 220V Prewired 220V Main TEFC Capacitor Start Induction Horsepower 220V Prewired 220V Phase Single | Carton #1 | |
| Weight 71 lbs. Length/Width/Height 30 x 12 x 22 in. Carton #2 | Туре | Cardboard |
| Length/Width/Height | Content | |
| Carton #2 Type | Weight | |
| Type. Cardboard Content. Stand Weight. 79 lbs. Length/Width/Height. 30 x 13 x 11 in. Electrical: Switch Forward/Reverse Switch Cord Gauge. 220V Cord Gauge. 9 ft. Cord Gauge Recommended Breaker Size. 16 gauge Plug. No Motors: No Main TEFC Capacitor Start Induction Horsepower. 1 HP Voltage. 220V Prewired. 220V Phase. Single Amps. 62/2.7A Speed. .3450/1725 RPM Cycle. 60 Hz Number Of Speeds. 2 | Length/Width/Height | |
| Content. Stand Weight. 79 lbs. Length/Width/Height. 30 x 13 x 11 in. Electrical: Switch Switch Forward/Reverse Switch Voltage. 220V Cord Length. 9 ft. Cord Gauge. 16 gauge Recommended Breaker Size. 16 gauge Plug. No Motors: No Main TEFC Capacitor Start Induction Horsepower. 1 HP Voltage. 220V Prewired. 220V Prewired. 220V Speed. Single Amps. 6.2/2.7A Speed. 3450/1725 RPM Cycle. 60 Hz Number Of Speeds. 2 | Carton #2 | |
| Weight | Туре | Cardboard |
| Length/Width/Height | Content | Stand |
| Electrical: Switch | Weight | |
| Switch | Length/Width/Height | |
| Switch Voltage 220V Cord Length 9 ft. Cord Gauge 16 gauge Recommended Breaker Size 10 amp Plug No Motors: No Main Type. Type. TEFC Capacitor Start Induction Horsepower 1 HP Voltage 220V Prewired 220V Phase Single Amps 6.2/2.7A Speed .3450/1725 RPM Cycle .60 Hz Number Of Speeds .2 | Electrical: | |
| Cord Length | Switch | |
| Cord Gauge 16 gauge 16 gauge 10 amp Plug. No Motors: Main Type | Switch Voltage | |
| Recommended Breaker Size | Cord Length | |
| Plug | Cord Gauge | 16 gauge |
| Motors: Main TypeTEFC Capacitor Start Induction Horsepower | Recommended Breaker Size | |
| MainType | Plug | |
| TypeTEFC Capacitor Start Induction Horsepower | Motors: | |
| Horsepower | Main | |
| Horsepower | Туре | TEFC Capacitor Start Induction |
| Prewired. .220V Phase. .Single Amps. .6.2/2.7A Speed. .3450/1725 RPM Cycle. .60 Hz Number Of Speeds. .2 | | |
| Phase. Single Amps. 6.2/2.7A Speed. 3450/1725 RPM Cycle. 60 Hz Number Of Speeds. 2 | Voltage | |
| Amps | Prewired | |
| Speed | Phase | Single |
| Cycle | Amps | |
| Number Of Speeds 2 | Speed | |
| | Cycle | 60 Hz |
| | • | |
| Power Transfer | Power Transfer | |

Main Specifications:

Workpiece Capacities

Bearings......Lubricated for Life

Operation Info

| No. Of Feed Speeds | |
|---------------------|--|
| Feed Speeds. | |
| Swing. | |
| Vertical Movement | |
| Horizontal Movement | |
| Rotation | |

Roller Info

| No. Of Rollers | 4 |
|---|-----------|
| Roller Width | |
| Roller Diameter | 4-3/4 in. |
| Roller Suspension | |
| Max Hght Rollers Parallel Table Surface | 8-1/2 in. |
| Centers Between Rollers | 5 in. |

Other

| Column Diameter |
|-----------------|
|-----------------|

Construction Info

| Roller Construction | Synthetic Rubber |
|-----------------------|------------------|
| Housing Construction | Cast Aluminum |
| Supports Construction | |
| Column Construction | |
| Paint | Ероху |

Other Specifications:

| ISO Factory | ISO 9001 |
|---------------|--|
| | Taiwan |
| Warranty | |
| | "Checked" Sticker, On In-feed Portion Of Housing's Roller Cover Side |
| Assembly Time | |

Features:

Rollers are Spring Tensioned with 3/4" Travel Heavy-Duty Gear Reduction with Hardened Gears Universal Positioning with Handle Locks





MACHINE DATA SHEET

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

MODEL G1096 POWER FEEDER 4 ROLLER / 4 SPEED, 3-PHASE

| Product Dimensions: | |
|---------------------------|--------------------------------|
| Weight | 144 lbs |
| Length/Width/Height | |
| Foot Print (Length/Width) | |
| Shipping Dimensions: | |
| Carton #1 | |
| Туре | |
| Content | Machine |
| Weight | |
| Length/Width/Height | |
| Carton #2 | |
| Туре | Cardboard |
| Content | Stand |
| Weight | |
| Length/Width/Height | |
| Electrical: | |
| Switch | |
| Switch Voltage | |
| Cord Length | |
| Cord Gauge | 16 gauge |
| Recommended Breaker Size | |
| Plug | |
| Phase Converter | G5841 |
| Motors: | |
| Main | |
| Туре | TEFC Capacitor Start Induction |
| Horsepower | 1 HP |
| Voltage | |
| Prewired | |
| Phase | |
| Amps | |
| Speed | |
| Cycle | |
| Number Of Speeds | |
| Power Transfer | |
| Bearings | Lubricated for Life |
| Main Specifications: | |
| Workpiece Capacities | |
| · · | |

Min. WorkPiece Length......6.in.

Operation Info

| No. Of Feed Speeds | |
|---------------------|--|
| Feed Speeds. | |
| Swing | |
| Vertical Movement | |
| Horizontal Movement | |
| Rotation | |
| | |

Roller Info

| No. Of Rollers | 4 |
|---|-------|
| Roller Width | |
| Roller Diameter | |
| Roller Suspension | |
| Max Hght Rollers Parallel Table Surface | |
| Centers Between Rollers | 5 in. |

Other

| Column Diameter | n. |
|-----------------|----|
|-----------------|----|

Construction Info

| Roller Construction | Synthetic Rubber |
|-----------------------|------------------|
| Housing Construction | Čast Aluminum |
| Supports Construction | Cast Iron |
| Column Construction | Steel |
| Paint | Ероху |

Other Specifications:

| ISO Factory | ISO 9001 |
|-------------------|--|
| Country Of Origin | Taiwan |
| | |
| | "Checked" Sticker, On In-feed Portion Of Housing's Roller Cover Side |
| Assembly Time | |

Features:

Rollers are Spring Tensioned with 3/4" Travel Heavy-Duty Gear Reduction with Hardened Gears Universal Positioning with Handle Locks



Identification

Refer to **Figure 1** and your power feeder to familiarize yourself with the controls, features, and terminology used in this manual. Doing so will make setup, use, and any future maintenance easy.

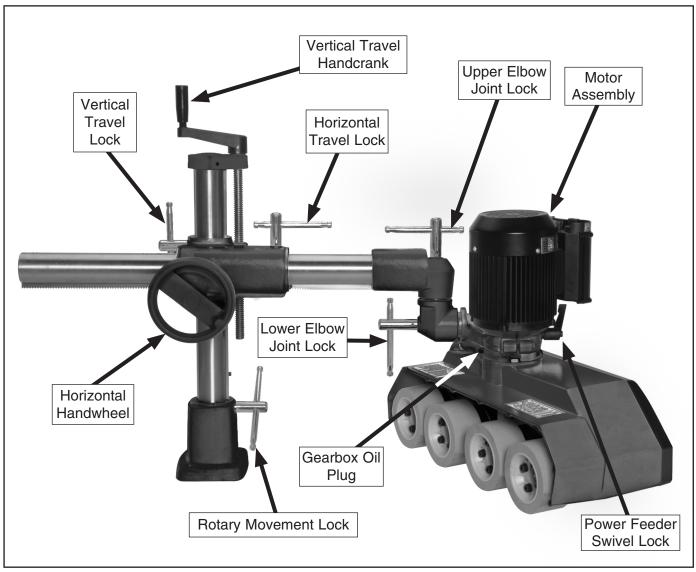


Figure 1. Controls and features.



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.

AWARNING 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.

AWARNING 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.



AWARNING Safety Instructions for Machinery

- 7. ONLY ALLOW TRAINED AND PROP-ERLY 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.



Additional Safety for Power Feeders

- 1. SAFETY ACCESSORIES. Always use appropriate machine guards.
- 2. TOOL SPEED. Make sure all cutting tools are rotating at the operating speed before feeding the workpiece.
- 3. FEEDING SPEED. DO NOT overload the cutting tool by feeding too quickly. The cutting tool will perform better and be safer working at the rate for which it was designed.
- 4. HAND SAFETY. Keep hands away from rotating parts on the feeder and the cutting tool. Do not allow hands or clothing to be pinched beween the rollers and workpiece.

- 5. WORKPIECE SUPPORT. DO NOT feed long workpieces without providing adequate support at the outfeed end of the table.
- 6. **STOPPING FEEDER.** Always stop the feeder before stopping the cutting tool.
- **7. ADJUSTMENTS.** Disconnect the feeder from its power source before cleaning, repairing, or making adjustments.
- EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact Tech Support at (570) 546-9663.

Like all machines there is danger associated with 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.

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



SECTION 2: CIRCUIT REQUIREMENTS

220V Single-Phase Operation (G1095)

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.



AWARNING

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

This machine draws the following amps under maximum load:

Amp Draw.....6.2 Amps

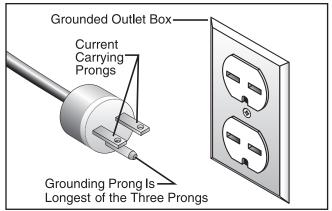
Power Supply Circuit Requirements

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..... 15 Amps

Power Connection Device

The type of receptacle 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 and receptacle shown in **Figure 2**.





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.



220V Three-Phase Operation (G1096)

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.



AWARNING

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

Amp Draw at 220V 3.2 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..... 10 Amps

Power Connection Device

The type of plug and receptacle required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the configuration shown in **Figure 3**.

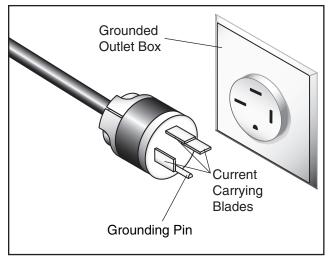


Figure 3. NEMA 15-15 plug and receptacle.

Extension Cords

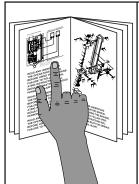
Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 16 gauge cord that does not exceed 50 feet in length.
- Ensure that the extension cord contains a ground wire and plug pin.



SECTION 3: SETUP

Setup Safety



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!



Wear safety glasses during the entire setup process!



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

- Straightedge 4' 1
- Safety Glasses1
- Dust Collection System1
- 4" Dust Hose 1

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.



Qty

Inventory

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

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

| Box | k Inventory (Figures 4 & 5) | Qty |
|-----|-----------------------------|-----|
| Α. | Power Feeder Assembly | 1 |
| В. | Lubricator | 1 |
| С. | Base and Column Assembly | 1 |
| D. | Elbow Joint Assembly | 1 |
| Ε. | Base Bolt Pattern Template | 1 |
| F. | Handwheel Handle | 1 |
| G. | Horizontal Column Assembly | 1 |



SUFFOCATION HAZARD! Immediately discard all plastic bags and packing materials to eliminate choking/suffocation hazards for children and animals.

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.

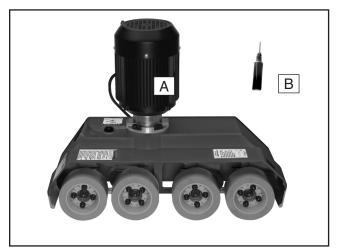


Figure 4. Power feeder inventory.

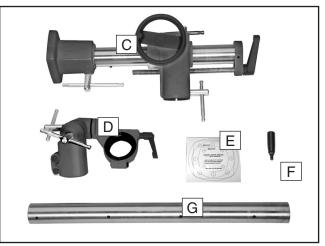
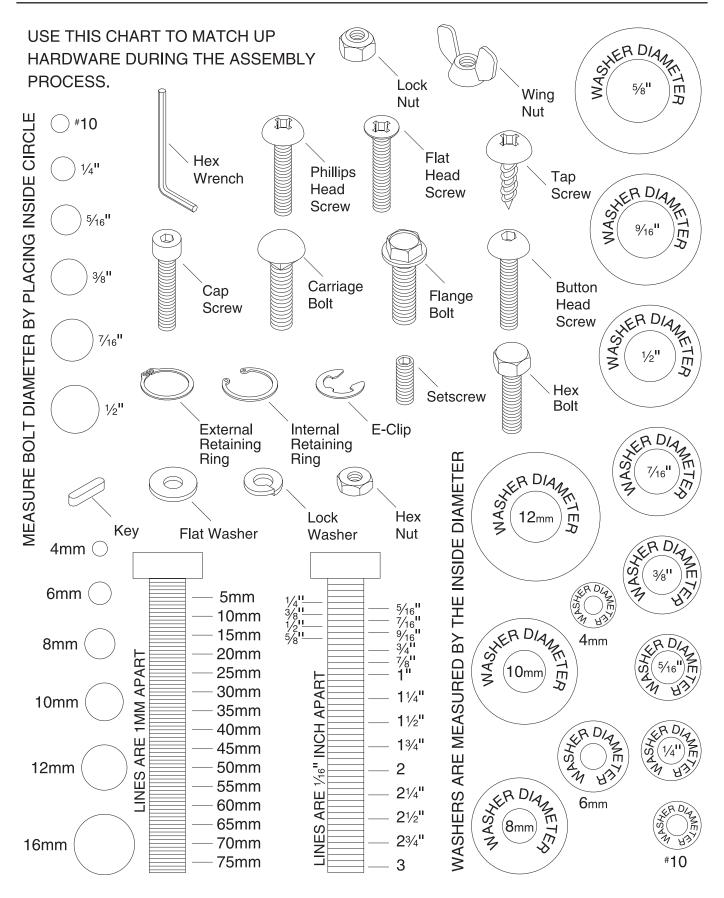


Figure 5. Support and base inventory.



Hardware Recognition Chart



Model G1095/G1096 1-HP Power Feeder



Download from Www.Somanuals.com All Manuals Search And Download.

Clean Up

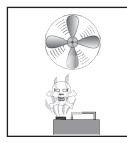
Assembly

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser, such as shown in **Figure 6**. For thorough cleaning, some parts must be removed. **For optimum performance, 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.



Gasoline and petroleum

products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



A CAUTION Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

G2544—Solvent Cleaner & Degreaser

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



Figure 6. Cleaner/degreaser available from Grizzly.

To correctly position this power feeder on your table top, assemble the power feeder base assembly in the order shown in **Figure 7** (refer to the parts diagram for any intricate details).

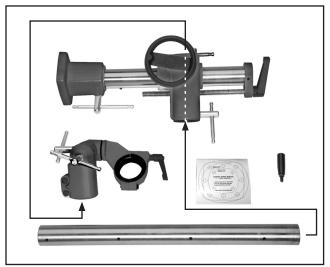


Figure 7. Item installation order.

Next, connect the stand to the power feeder, as shown in **Figure 8**. With your power feeder unit completely assembled, it will be easier for you to determine where on the table top to drill your base mounting holes, so you can take advantage of the full range of power feeder swing and adjustments. Refer to **Base Mounting** on **Page 17**.

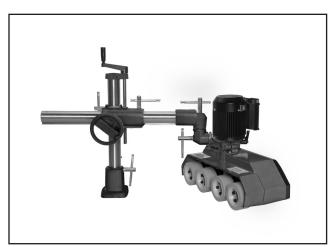


Figure 8. Assembled power feeder.

Base Mounting

Position the power feeder on the table top to determine where to drill your base mounting holes, so you can maximize power feeder swing and adjustment options.

There are two mounting options available: Through Bolt Mounting and Direct Mounting (discussed on Page 18). Choose an option that suits your requirements.

Whichever way you mount your power feeder, you must be able to use the handwheels and lock levers to position the rubber wheels parallel with the table surface and $\frac{1}{8}$ " lower than the thickness of your workpiece.

Also, you must be able to point the power feeder slightly towards the machine fence (Figure 9). In other words, the tracking of the power feeder must be toed-in approximately 1° to 1.5° degrees toward the machine fence, so the rubber wheels slightly push the workpiece against the fence during cutting operations.

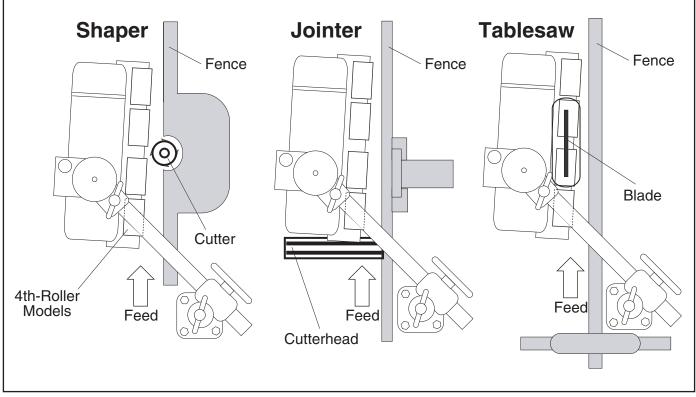


Figure 9. Typical power feed mounting on a shaper, jointer, and tablesaw.



Through-Bolt Mounting

We recommend that you mount your new power feeder to the machine table with through bolts, nuts, and washers (**Figure 10**). This option will give the most rigidity and clamping strength to prevent the feeder base from twisting out of alignment during use. However, if under-table support webs interfere with washer or nut locations under the table, you must use an optional clamping kit, or drill and thread holes directly into the table as described in *Direct Mounting*.

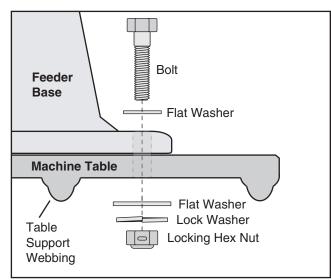


Figure 10. Through-bolt mounting.

Direct Mounting

Use the included mounting template to drill and tap your table, so the power feeder base can be directly mounted to the table surface (**Figure 11**). If the table is thinner than ³⁄₈" thick where the threaded holes would be drilled and tapped, or if support webbing is in the way, the threads may strip or loosen as the power feeder is used. Thread locking compound will not cure this situation. Revert to the **Through-Bolt Mounting** option. In any case, make sure to use a medium-grade liquid thread locking compound on all threads.

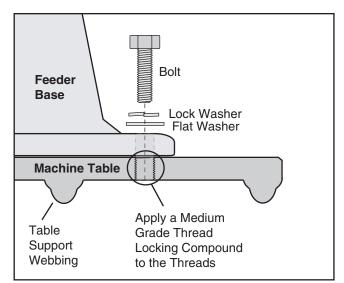
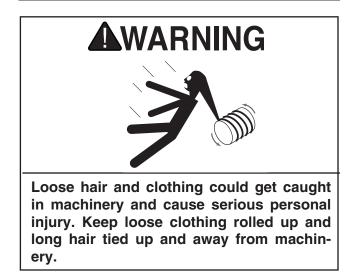


Figure 11. Direct mounting.



Test Run



Once the assembly is complete, test run your power feeder to make sure it runs properly and is ready for regular operation. The test run consists of verifying that the motor powers up and runs correctly, and that the rollers operate.

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 23**.

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

To test run the power feeder:

- 1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the power feeder is adjusted and is setup properly.
- Make sure that the power feeder gearbox oil level is full. The oil level should be 1" below the oil fill port. Refer to Lubrication on Page 22 for details.

Note: See Figure 16 on Page 22 for oil fill port location.

3. Ensure that all tools and objects used during set up are cleared away from the machine.

4. Adjust and lock the power feeder so the wheels are held approximately one inch above the table and nothing will interfere with wheel rotation.

You MUST assemble all guards, fences, and hold-downs before starting your machine or power feeder. Failure to heed this warning could result in amputation or death!

Connect the power feeder to the power supply and use the feed direction and speed dial (Figure 12) to test operation in both feed directions.



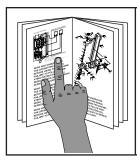
Figure 12. Feed direction and speed dial.

- Listen and watch for abnormal noises or vibrations. The power feeder should run smoothly.
- —Correct for any unusual noises or vibrations before operating the power feeder any further. Always disconnect the power feeder from power when investigating or correcting potential problems.
- 6. Turn the feed direction switch to "0" (the *OFF* position, **Figure 12**).



SECTION 4: OPERATIONS

Operation Safety



To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

Damage to your eyes and lungs could result from using woodworking machinery without proper protective gear. Always wear safety glasses and a respirator when operating this machine.





WARNING

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY REC-OMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Basic Use and Care

WARNING

You MUST assemble all guards, fences, and hold-downs before starting your machine or power feeder. Failure to heed this warning could result in amputation or death!

Power feeders reduce kickback hazards and improve cutting results by feeding in a consistent and stable manner. Remember, do not to stand in the path of potential kickback. When not in use, support the power feeder with a wooden block so the rubber wheels are raised above the table and do not compress from the weight of the power feeder.

The lock levers and handcranks on this power feeder allow you to adjust the power feeder tracking and height to accommodate many workpiece sizes. Before loosening any lock lever, always support the power feeder with a block of wood, so the power feeder does not drop and cause damage.

Adjust the power feeder so it is toed-in approximately 1° to 1.5° degrees towards the machine fence. This adjustment will ensure that the power feeder wheels slightly push the workpiece against the fence during cutting operations (**Figure 9**).

Next, adjust the power feeder so the rubber wheels are parallel with the table surface, and are $\frac{1}{8}$ lower than the thickness of your workpiece. This adjustment ensures that the workpiece will not slip or hang in the middle of a cut. Always double check that the power feeder wheels are slightly lower than the workpiece before you begin feeding operations. Otherwise, the workpiece may slip and kickback.

Changing Speeds



Always disconnect power to the machine before performing installation or maintenance. Failure to do this may result in serious personal injury.

Your power feeder has the option to feed a workpiece at 13, 26, 33, and 66 feet per minute.

These rates are achieved by changing the combination of change gears, and by turning the motor switch to high or low range operation.

To change the feed rate of your power feeder:

- 1. DISCONNECT THE POWER FEEDER FROM POWER!
- Make sure the speed dial is pointing to "0" (the OFF position, Figure 13).



Figure 13. Feed direction and speed dial.

3. Refer to the feed rate list below to find the gear combination required for your chosen feed rate.



13 Ft Per Min: A, 25 Tooth + **B**, 40 Tooth.

26 Ft Per Min: A, 40 Tooth + **B**, 25 Tooth.



33 Ft Per Min: A, 25 Tooth + **B**, 40 Tooth.

· N

66 Ft Per Min: A, 40 Tooth + **B**, 25 Tooth.



Motor OFF.

 Remove the chain cover and the two hex nuts securing the A & B change gears to the shafts shown in Figure 14.

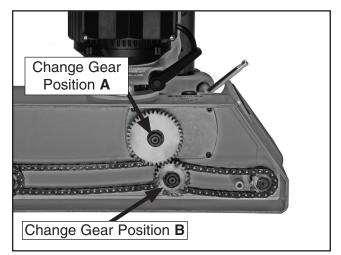


Figure 14. Change gear locations.

- Swap the required change gears so the gear hubs are facing in toward the power feeder (shown in positions A & B in Figure 14).
- 6. Reinstall the hex nuts and chain cover.
- 7. Connect the power feeder to power and move the feed direction and speed dial to the high or low range.

SECTION 5: MAINTENANCE



Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

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 wheels.
- Worn or damaged, switch, cord, and plug.
- Any other condition that could hamper the safe operation of this power feeder.

Cleaning

Cleaning the Model G1095/G1096 is relatively easy. Frequently blow-off sawdust with compressed air. This is especially important for the internal working parts and motor. Dust build-up around the motor is a sure way to decrease its lifespan. If the wheels become loaded up with pitch, oil, or other residues, wipe them clean using a clean rag and a mild solvent. Avoid touching the plastic or paint with mineral spirits or you may damage the surfaces.

Lubrication

• To prevent surface rust and binding, periodically clean and oil all lock lever and leadscrew threads with a light machine oil.

• Every 40 hours of use, or once every two weeks, wipe clean and lubricate the wheel grease fittings (**Figure 15**) with one pump of an automotive grade multipurpose grease. Do not get any grease on the rubber wheels.

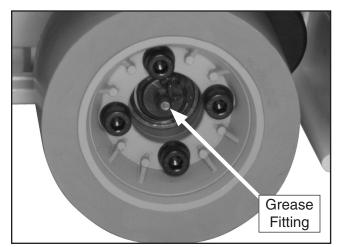


Figure 15. Wheel lubrication.

- After the first month or 200 hours of use, change the gearbox oil with 5.1 fluid ounces of an automotive grade 80-90W gear oil. To drain the unit, remove the fill plug labeled "OIL" (Figure 16) and invert the power feeder. For the remaining life of the power feeder, change the oil every 6 months or 1000 hours of use.
- To prevent rust and binding, paint the sprockets, chain, and change gears (**Figure 16**) with a light film of an automotive grade multipurpose grease.

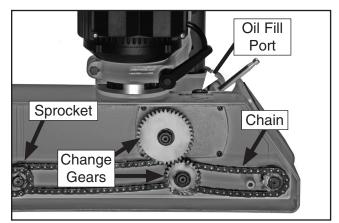


Figure 16. Lubrication locations.



SECTION 6: 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

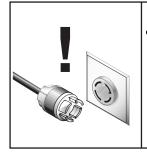


Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|---|---|--|
| Motor will not start. | Low voltage. Open circuit in motor or loose connections. Start capacitor is at fault. Motor switch or motor is at fault. | Check power supply for proper voltage. Inspect all lead connections on motor and magnetic switch for loose or open connections. Replace start capacitor. Replace switch, or motor. |
| Fuses or circuit breakers trip. | Short circuit in line cord or plug. Short circuit in motor or loose connections. Incorrect fuses or circuit breakers in power supply. | Inspect cord or plug for damaged insulation and shorted wires and replace extension cord. Inspect all connections on motor for loose or shorted terminals or worn insulation. Install correct fuses or circuit breakers. |
| Motor overheats. | Motor overloaded. Air circulation through the motor restricted. | Reduce power feeder feed rate. Clean out motor fan cover to provide normal air circulation. |
| Workpiece jams when feeding under rollers. | Rollers set too low. Feeder at wrong angle. | Raise feeder. Adjust angle. |
| Workpiece slips while passing beneath rollers. | Rollers positioned too high, no traction. Feeding too fast. Rollers are dirty or oily. Worn roller(s). | Lower feeder. Slow feed speed. Clean roller surface with a mild solvent. Replace roller(s). |
| Workpiece cut is burnt. | Wrong feed speed. Cutter is at fault. | Adjust feed speed. Sharpen or replace dull blade or cutter. |
| Rough finish or chipped grain on workpiece. | Feed speed too fast. Dull cutter or blade. Power feeder angle is not toed in to keep workpiece against the fence. | Slow speed. Replace with sharp cutter or blade. Adjust power feeder so it is toed-in 1° to 1.5° toward the fence. |
| Fuzzy grain occurs when planing or moulding. | Lumber has high moisture content. Dull knives. | If moisture content is higher than 20%, sticker and allow to dry. Sharpen or replace knives. |
| Workpiece hangs and does not enter the machine. | 1. Power feeder roller height is set incorrectly. | Lower the power feeder roller ¹/₈" lower than the height of the workpiece. |



Wheel Replacement



Always disconnect power to the machine before performing installation or maintenance. Failure to do this may result in serious personal injury.

To replace a worn out or damaged wheel:

- 1. DISCONNECT THE POWER FEEDER FROM POWER!
- 2. Using a 5mm hex wrench, remove the wheel retaining cap screws (**Figure 17**).

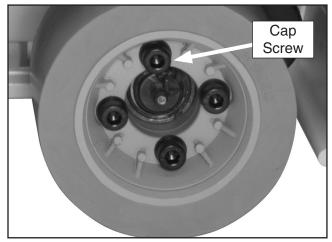


Figure 17. Wheel cap screws.

- 3. Swap the old wheel with the new one.
- 4. Reinstall the four cap screws, and tighten in an alternating pattern until the wheel is tight.



SECTION 7: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Technical Support at (570) 546-9663 for assistance.

AWARNING 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. CIRCUIT REQUIREMENTS. You MUST follow the circuit requirements given on Page 11 or 12. 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.
- 3. 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.
- 4. 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.
- 5. 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*.



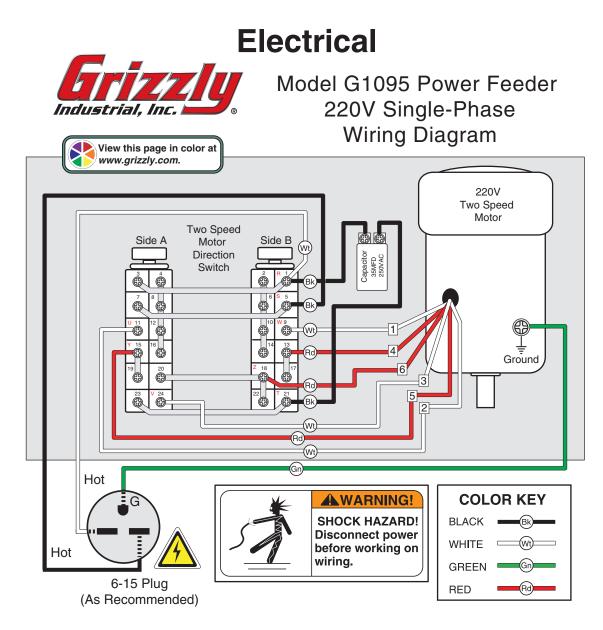




Figure 18. Motor switch (side view).

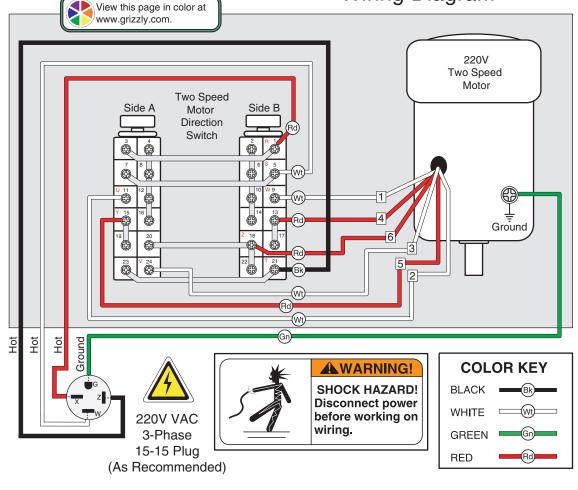


Figure 19. Motor switch and capacitor (front view).

Model G1095/G1096 1-HP Power Feeder



Model G1096 Power Feeder 220V Three-Phase Wiring Diagram



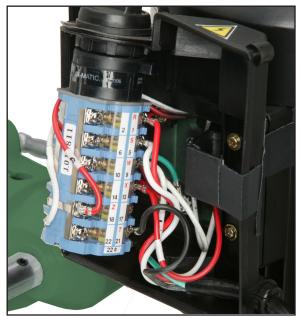


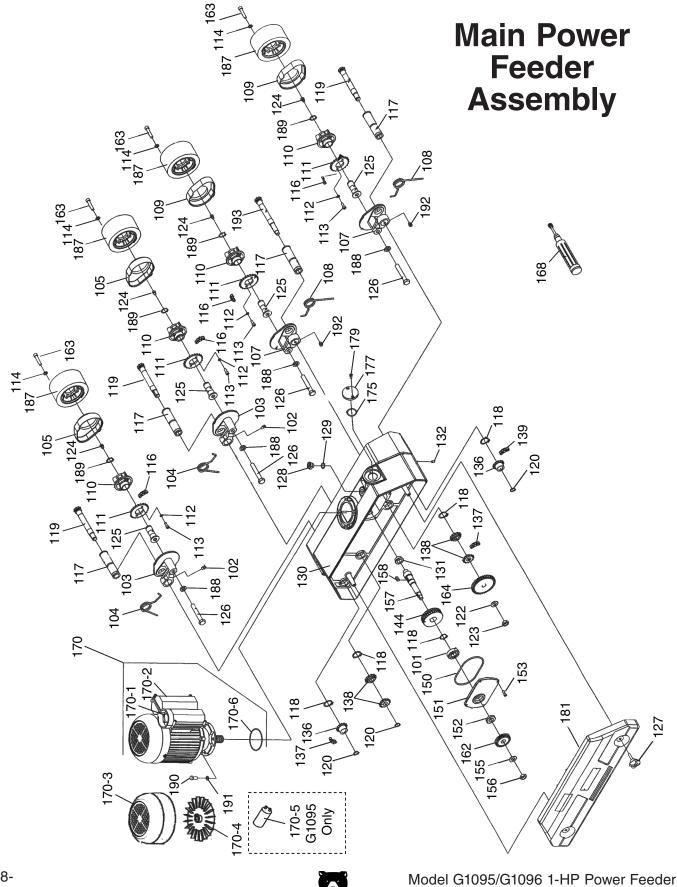
Figure 20. Motor switch (side view).



Figure 21. Motor switch (front view).



SECTION 8: PARTS



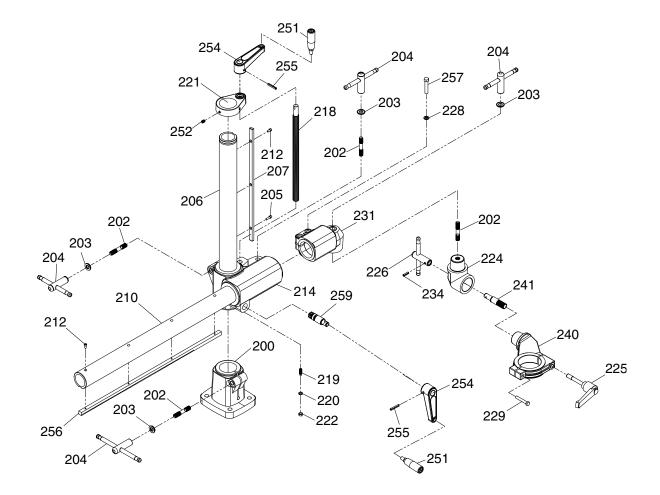
Download from Www.Somanuals.com All Manuals Search And Download.

| REF | PART # | DESCRIPTION | |
|-----|----------|---------------------------|--|
| 101 | P6203 | BALL BEARING 6203 | |
| 102 | P1096102 | GREASE FITTING | |
| 103 | P1096103 | SPROCKET CASE | |
| 104 | P1096104 | TORSION SPRING 3.8 X 102 | |
| 105 | P1096105 | CASE COVER | |
| 107 | P1096107 | SPROCKET CASE | |
| 108 | P1096108 | TORSION SPRING 3.8 X 102 | |
| 109 | P1096109 | CASE COVER | |
| 110 | P1096110 | ROLLER SUPPORT | |
| 111 | P1096111 | SPROCKET | |
| 112 | PLW03M | LOCK WASHER 6MM | |
| 113 | PSB01M | CAP SCREW M6-1 X 16 | |
| 114 | PLW04M | LOCK WASHER 8MM | |
| 116 | P1096116 | CHAIN | |
| 117 | P1096117 | TUBE | |
| 118 | PR58M | EXT RETAINING RING 24MM | |
| 119 | P1096119 | SPROCKET SHAFT | |
| 120 | PR47M | EXT RETAINING RING 13MM | |
| 122 | PW01 | FLAT WASHER 1/2 | |
| 123 | PN09M | HEX NUT M12-1.75 | |
| 124 | P1096124 | GREASE FITTING | |
| 125 | P1096125 | ROLLER SPINDLE | |
| 126 | P1096126 | SPECIAL HEX BOLT M12-1.75 | |
| 127 | P1096127 | KNOB | |
| 128 | P1096128 | OIL CAP | |
| 129 | PORP015 | O-RING 14.8 X 2.4 P15 | |
| 130 | P1096130 | CASTING | |
| 131 | P1096131 | BUSHING | |
| 132 | PSS01M | SET SCREW M6-1 X 10 | |
| 136 | P1096136 | SPROCKET | |
| 137 | P1096137 | CHAIN | |
| 138 | P1096138 | DOUBLE SPROCKET | |
| 139 | P1096139 | CHAIN | |

| REF | PART # | DESCRIPTION | |
|-------|------------|---------------------------------|--|
| 144 | P1096144 | WORM GEAR | |
| 150 | P1096150 | SPECIAL O-RING 101.19 X 3.53 | |
| 151 | P1096151 | WORM GEAR BOX COVER | |
| 152 | P1096152 | OIL SEAL | |
| 153 | PSB24M | CAP SCREW M58 X 16 | |
| 155 | PW01 | FLAT WASHER 1/2 | |
| 156 | PN09M | HEX NUT M12-1.75 | |
| 157 | P1096157 | WORM GEAR SHAFT | |
| 158 | P1096158 | SPECIAL KEY | |
| 162 | P1096162 | GEAR 25T | |
| 163 | PSB12M | CAP SCREW M8-1.25 X 40 | |
| 164 | P1096164 | GEAR 40T | |
| 168 | P1096168 | LUBRICATOR | |
| 170 | P1095170 | MOTOR 220V, 2-SPD, 1-PH (G1095) | |
| | P1096170 | MOTOR 220V, 2-SPD, 3-PH (G1096) | |
| 170-1 | P1096170-1 | SWITCH W/ELECTRICAL BOX | |
| 170-2 | P1096170-2 | BOX COVER | |
| 170-3 | P1096170-3 | FAN COVER | |
| 170-4 | P1095170-4 | MOTOR FAN (G1095) | |
| | P1096170-4 | MOTOR FAN (G1096) | |
| 170-5 | PC035A | CAPACITOR 35MFD 250VAC (G1095) | |
| 170-6 | P1096170-6 | SEALING RING | |
| 175 | PORS028 | O-RING 27.5 X 2.0 S28 | |
| 177 | P1096177 | САР | |
| 179 | PSB50M | CAP SCREW M58 X 10 | |
| 181 | P1096181 | BACK COVER | |
| 187 | G4182 | ROLLER | |
| 188 | PLW05M | LOCK WASHER 12MM | |
| 189 | PR09M | EXT RETAINING RING 20MM | |
| 190 | PB09M | HEX BOLT M8-1.25 X 20 | |
| 191 | PLW04M | LOCK WASHER 8MM | |
| 192 | P1096192 | GREASE FITTING | |
| 193 | P1096193 | SPROCKET SHAFT | |



Stand and Support Assembly



| REF | PART # | DESCRIPTION |
|-----|----------|------------------------|
| 200 | P1096200 | COLUMN BASE |
| 202 | P1096202 | STUD M12-1.75 X 70 |
| 203 | PW06M | FLAT WASHER 12MM |
| 204 | P1096204 | T-HANDLE |
| 205 | PSB24M | CAP SCREW M58 X 16 |
| 206 | P1096206 | VERTICAL COLUMN |
| 207 | P1096207 | GUIDE |
| 210 | P1096210 | HORIZONTAL TUBE |
| 212 | PSB50M | CAP SCREW M58 X 10 |
| 214 | P1096214 | ELEVATING BRACKET |
| 218 | P1096218 | VERTICAL LEAD SCREW |
| 219 | PSS09M | SET SCREW M8-1.25 X 20 |
| 220 | PLW04M | LOCK WASHER 8MM |
| 221 | P1096221 | COLUMN CAP |
| 222 | PN03M | HEX NUT M8-1.25 |
| 224 | P1096224 | ELBOW |

| REF | PART # | DESCRIPTION |
|-----|----------|--------------------------------|
| 225 | P1096225 | LOCK LEVER |
| 226 | P1096226 | T-HANDLE |
| 228 | PW04M | FLAT WASHER 10MM |
| 229 | PB22M | HEX BOLT M8-1.25 X 50 |
| 231 | P1096231 | HORIZONTAL TUBE CONE |
| 234 | PRP71M | ROLL PIN 6 X 22 |
| 240 | P1096240 | SWIVEL CLAMP CONE |
| 241 | P1096241 | LOCK STUD |
| 251 | P1096251 | HANDLE |
| 252 | P1096252 | POINTED SET SCREW M8-1.25 x 12 |
| 254 | P1096254 | CRANK ARM |
| 255 | PRP32M | ROLL PIN 6 X 40 |
| 256 | P1096256 | RACK |
| 257 | PB73M | HEX BOLT M10-1.5 X 50 |
| 259 | P1096259 | PINION |



WARRANTY CARD

| Nar | ne | | |
|------|---|---|---|
| | eet | | |
| City | | _ State | _ Zip |
| Pho | one # | _ Email | _ Invoice # |
| Мо | del # | _ Order # | _ Serial # |
| | | a voluntary basis. It will be used for mains a voluntary basis. It will be used for mains a strictly confident | |
| 1. | How did you learn about us? Advertisement Card Deck | Friend Website | Catalog Other: |
| 2. | Which of the following magaz | zines do you subscribe to? | |
| | Cabinet Maker Family Handyman Hand Loader Handy Home Shop Machinist Journal of Light Cont. Live Steam Model Airplane News Modeltec Old House Journal | Popular MechanicsPopular SciencePopular WoodworkingPractical HomeownerPrecision ShooterProjects in MetalRC ModelerRifleShop NotesShotgun News | Today's Homeowner Wood Wooden Boat Woodshop News Woodsmith Woodwork Woodworker West Woodworker's Journal Other: |
| 3. | What is your annual househo \$20,000-\$29,000 \$50,000-\$59,000 | ld income? \$30,000-\$39,000 \$60,000-\$69,000 | \$40,000-\$49,000 \$70,000+ |
| 4. | What is your age group? 20-29 50-59 | 30-39 60-69 | 40-49 70+ |
| 5. | How long have you been a w 0-2 Years | oodworker/metalworker? _ 2-8 Years 8-20 Year | rs20+ Years |
| 6. | How many of your machines | or tools are Grizzly? _ 3-56-9 | 10+ |
| 7. | Do you think your machine re | epresents a good value?Y | /esNo |
| 8. | Would you recommend Grizz | ly Industrial to a friend? | /esNo |
| 9. | Would you allow us to use yo Note: <i>We never use names i</i> | our name as a reference for Grizzly c more than 3 timesY | - |
| 10. | Comments: | | |
| | | | |

FOLD ALONG DOTTED LINE





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

Մեհեսենենեներինեներիներիներիների

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.



Buy Direct and Save with Grizzly[®] – Trusted, Proven and a Great Value!

Visit Our Website Today And Discover Why Grizzly[®] Is The Industry Leader!

- SECURE ORDERING
- ORDERS SHIPPED WITHIN 24 HOURS
- E-MAIL RESPONSE WITHIN ONE HOUR

-OR-



Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com