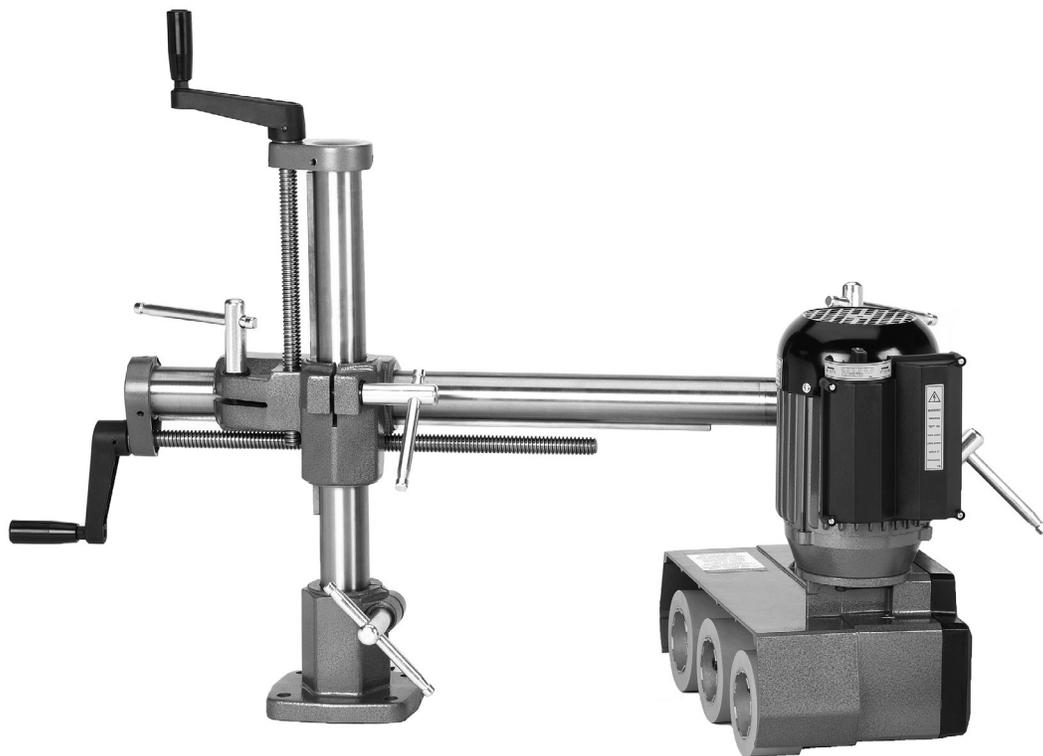


Grizzly *Industrial, Inc.*®

MODEL G4179 1/2 HP POWER FEEDER OWNER'S MANUAL



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

#CR10816 PRINTED IN TAIWAN

 **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 G4179 ½ HP 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 G4179 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.

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 an array of heights and angles within the range of the stand.

The power feeder stand is typically mounted to the desired machine by clamping it to the machine's table, or mounting it 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 G4179 1/2 HP POWER FEEDER

Product Dimensions:

Weight..... 104 lbs.
Length/Width/Height..... 45 x 18 x 28-1/2 in.
Foot Print (Length/Width)..... N/A x N/A

Shipping Dimensions:

Carton #1

Type..... Cardboard
Content..... Machine
Weight..... 59 lbs.
Length/Width/Height..... 20 x 11 x 19 in.

Carton #2

Type..... Cardboard
Content..... Stand
Weight..... 59 lbs.
Length/Width/Height..... 30 x 11 x 9 in.

Electrical:

Switch..... Forward/Reverse Barrel
Switch Voltage..... 220V
Cord Length..... 9 ft.
Cord Gauge..... 18 gauge
Recommended Breaker Size..... 15 amp
Plug..... No

Motors:

Main

Type..... TEFC Capacitor Start Induction
Horsepower..... 1/2 HP
Voltage..... 220V
Prewired..... 220V
Phase..... Single
Amps..... 2.9A
Speed..... 1700 RPM
Cycle..... 60 Hz
Number Of Speeds..... 1
Power Transfer Gear Box
Bearings..... Lubricated for Life

Main Specifications:

Workpiece Capacities

Min. WorkPiece Len..... 6 in.



Operation Info

No. Of Feed Speeds..... 4
 Feed Speeds..... 9.5, 15, 25, 38 FPM
 Swing..... 360 deg.
 Vertical Movement.....10-1/4 in.
 Horizontal Movement.....16-3/8 in.
 Rotation..... Forward, Reverse

Roller Info

No. Of Rollers.....3
 Roller Width.....2 in.
 Roller Diameter..... 4 in.
 Roller Suspension..... 15/16 in.
 Max Height Rollers Parallel Table Surface..... 7-7/8 in.
 Centers Between Rollers..... 4-3/4 in.

Other

Column Diameter..... 2 in.

Construction Info

Roller Construction..... Synthetic Rubber
 Housing Construction..... Cast Aluminum
 Supports Construction..... Cast Iron
 Column Construction..... Steel
 Paint..... Epoxy

Other Specifications:

ISO Factory ISO 9001
 Country Of Origin Taiwan
 Warranty 1 Year
 Serial Number Location "Checked" Sticker, On In-feed Portion Of Housing's Roller Cover Side
 Assembly Time 45 minutes

Features:

Rollers are Spring Tensioned
 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 easier.

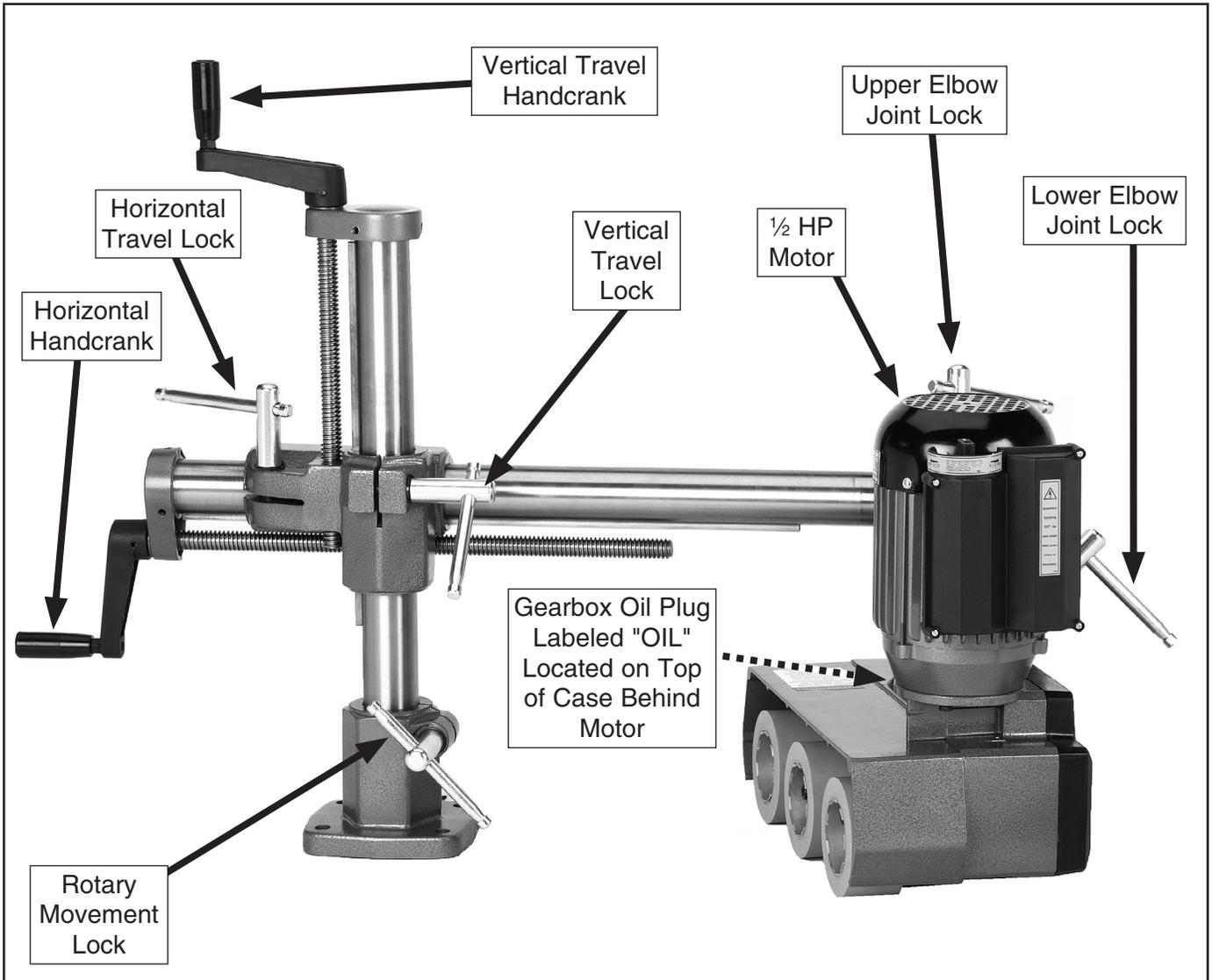


Figure 1. Controls and features.



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 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 to work with 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 between 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.
- 8. 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.

WARNING

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.

CAUTION

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



SECTION 2: CIRCUIT REQUIREMENTS

220V Single-Phase

!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

This machine draws the following amps under maximum load:

Amp Draw.....2.9 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..... 15 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 shown in **Figure 2**.

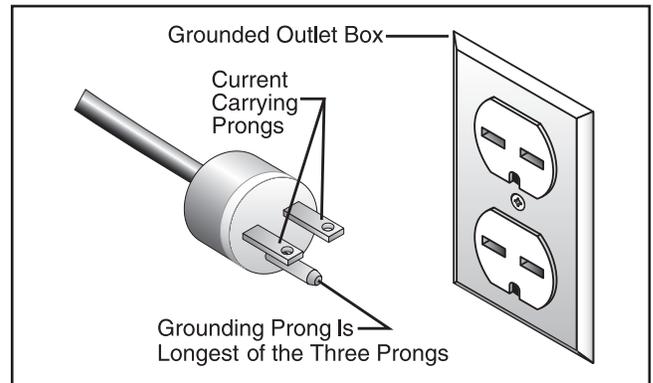


Figure 2. NEMA 6-15 plug and receptacle.

Extension Cords

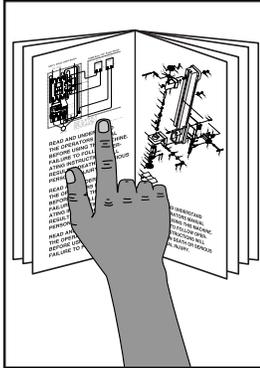
Using extension cords may reduce the life of the motor. Instead, place the machine near a power source. If you must use an extension cord:

- Use at least a 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.

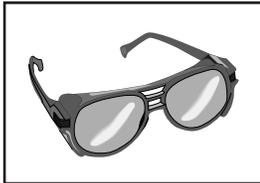


SECTION 3: SETUP

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!

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	1
• Light Machine Oil	As Required
• Mineral Spirits.....	As Required
• Medium-Grade Thread Locking Liquid.....	1
• Clean Rags.....	As Required

Unpacking

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

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

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



Inventory

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

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

Box Inventory (Figures 3 & 4)	Qty
A. Power Feeder Assembly	1
B. Extra 26/34-Tooth Gears (Behind Cover).....	1 Ea
C. Elbow Joint Assembly	1
D. Base and Column Assembly	1
E. Crank and Leadscrew Assembly.....	1
F. Base Bolt Pattern Template.....	1
G. Pointed Set Screws M8-1.25 x 12	3
H. Hex Wrench 4mm.....	1
I. Handcrank Handles.....	2
J. Flat Washer 13mm	1
K. T-Handle	1
L. Horizontal Column Assembly	1



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

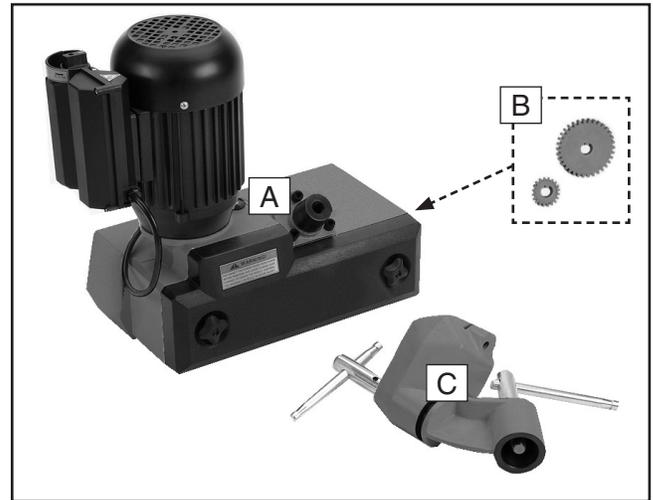


Figure 3. Power feeder inventory.

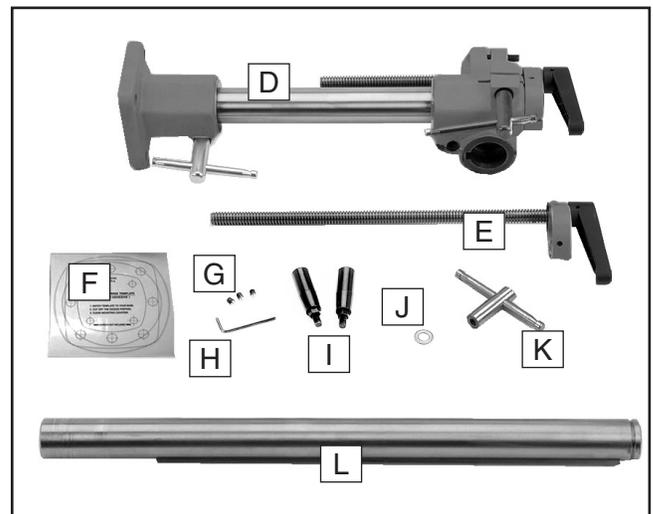


Figure 4. Base inventory.

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.



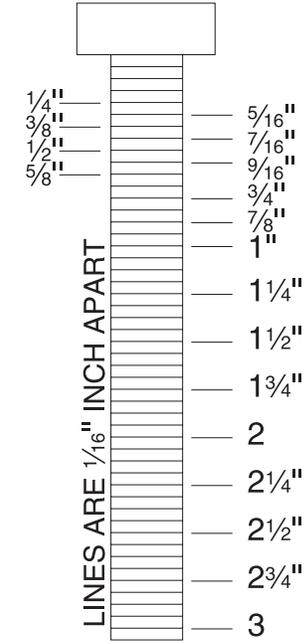
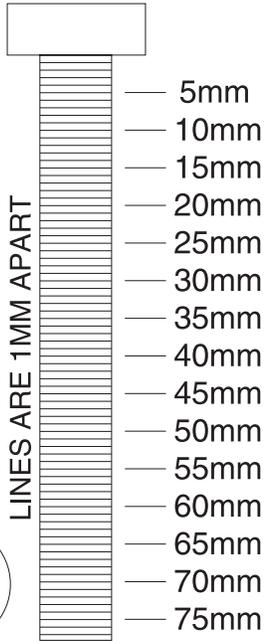
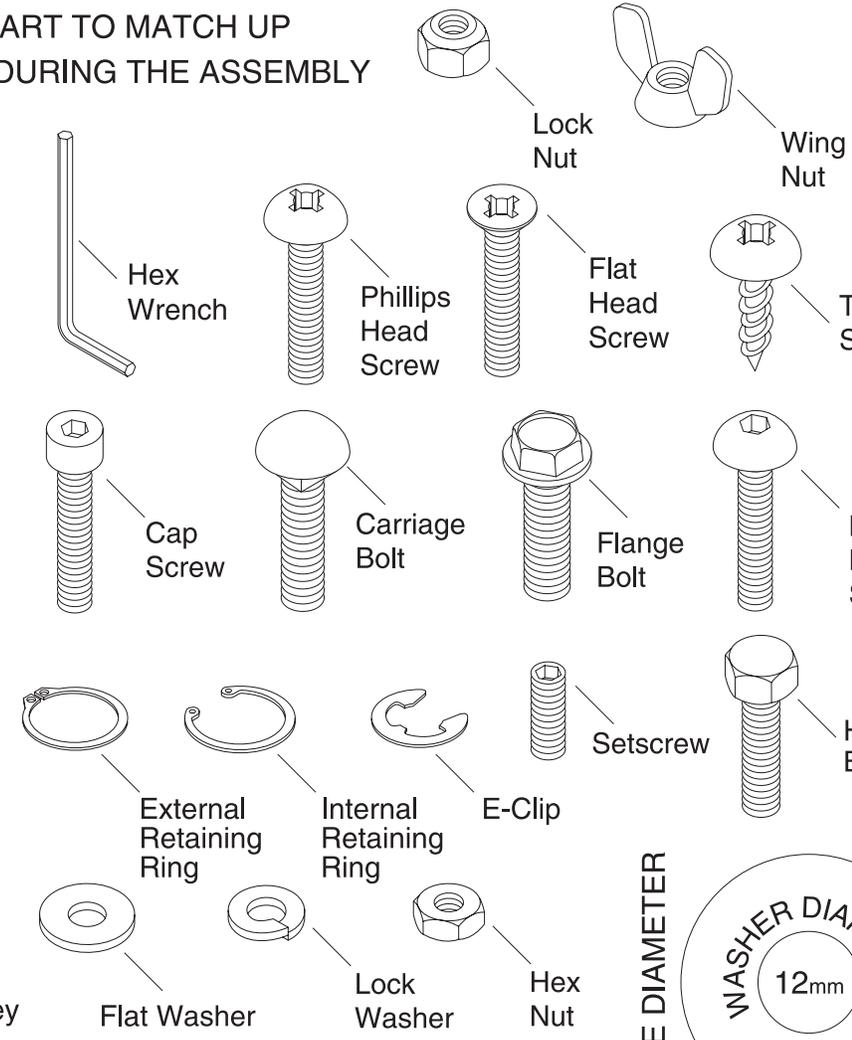
Hardware Recognition Chart

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

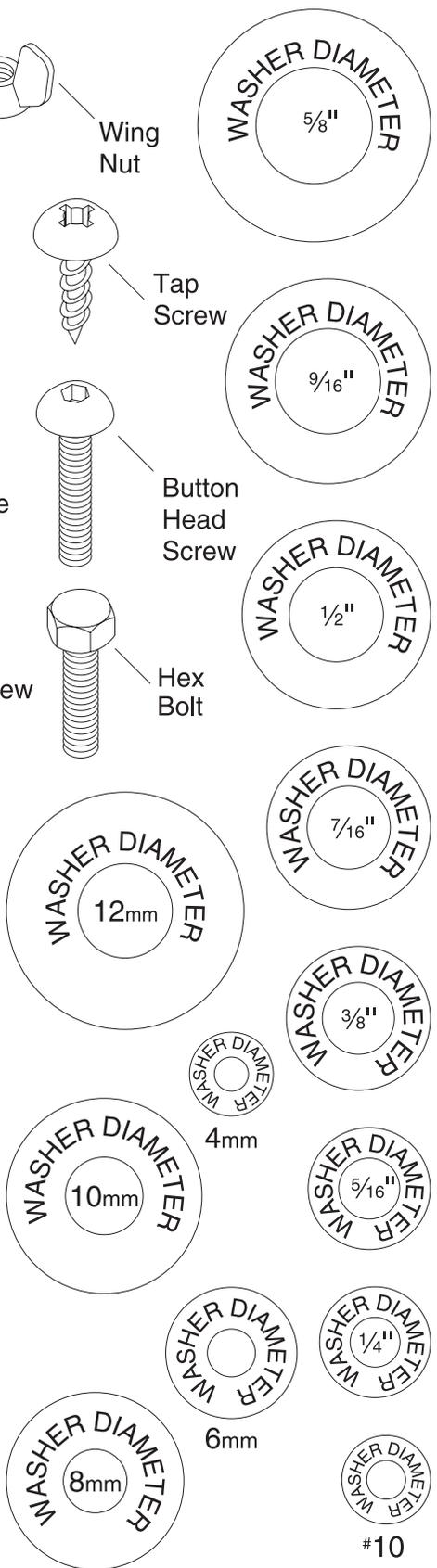
MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"

- 4mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm

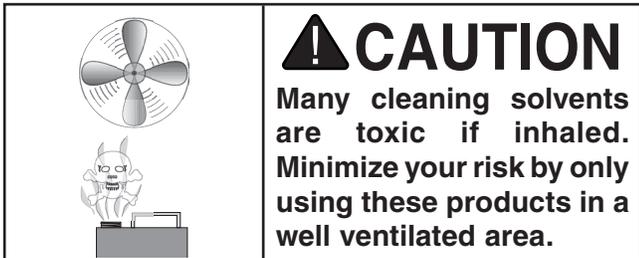
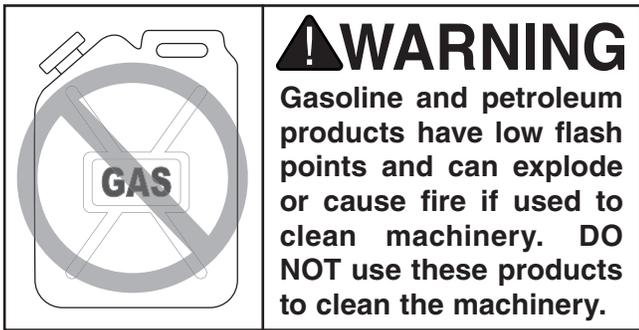


WASHERS ARE MEASURED BY THE INSIDE DIAMETER



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, such as shown in **Figure 5**. 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.



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



Figure 5. Cleaner/degreaser available from Grizzly.

Assembly

! WARNING

You MUST assemble all guards, fences, and holdowns before starting your machine or power feeder. Failure to heed this warning could result in serious personal injury.

To correctly position this power feeder on your table top, completely assemble the power feeder first in the order of **A**, **B** and **C** as shown in **Figures 6** and **7**. Next, refer to **Base Mounting** on **Page 14**. With the power feeder unit completely assembled, it will be easier to locate where on the table top you will need to drill your base mounting holes, so you can take advantage of the full range of power feeder swing and adjustments.

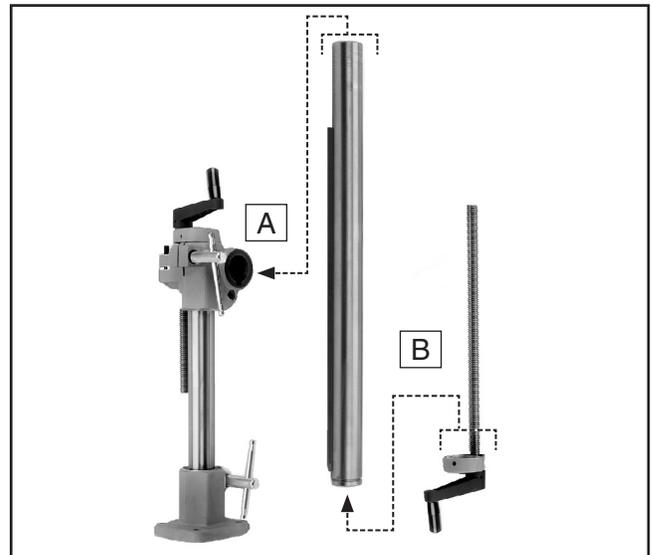


Figure 6. Stand assembly.

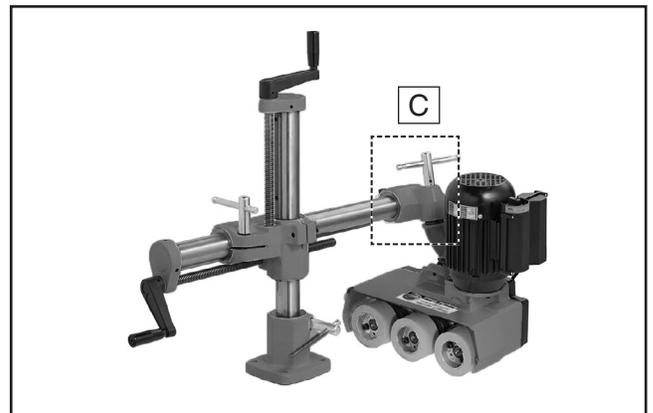


Figure 7. Assembled unit.



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 15**). Choose an option that suits your requirements.

Whichever way you mount your power feeder, you must be able to use the handcranks 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 8**). 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.

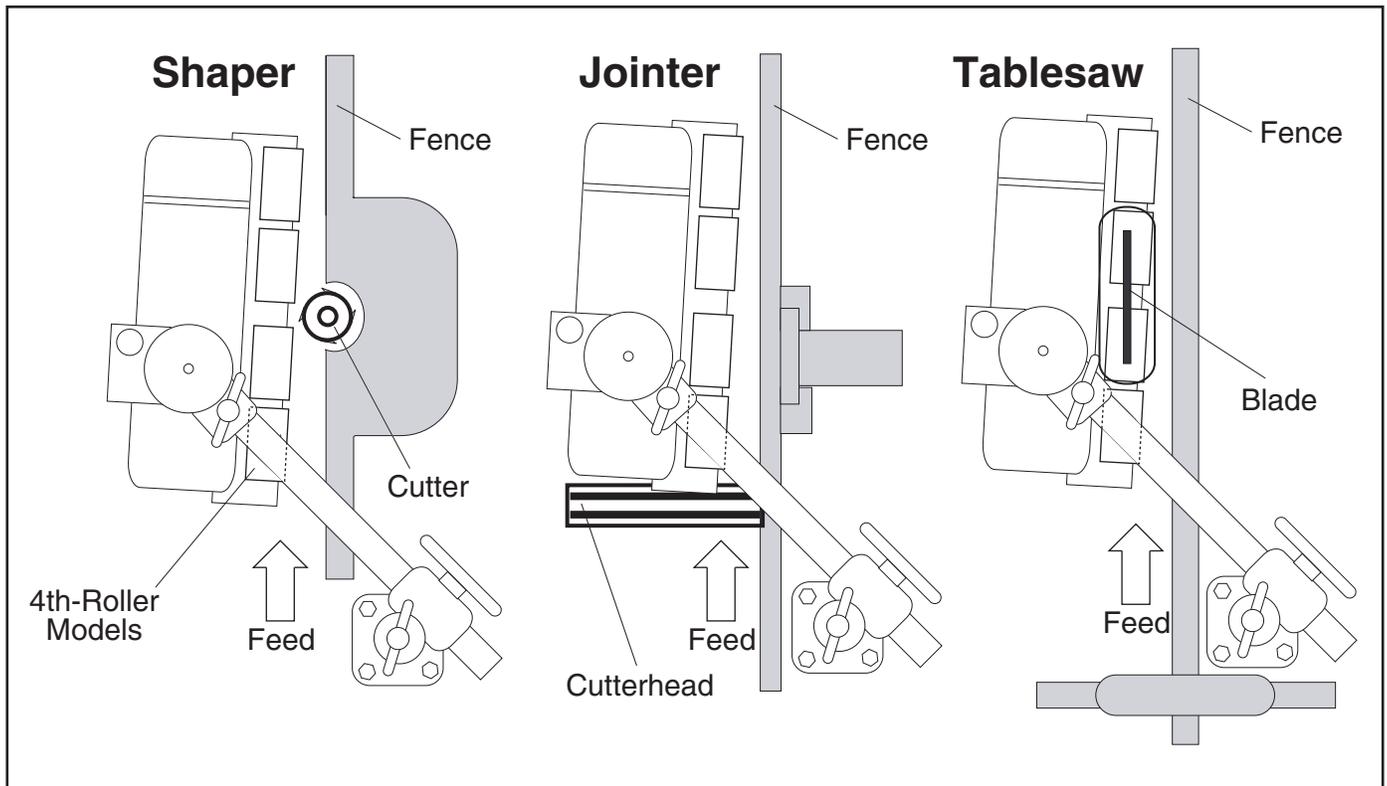


Figure 8. Typical power feed mounting on a shaper, jointer, and tablesaw.



Mounting Options

To correctly position this power feeder on your table top, completely assemble the power feeder first, then refer to this section and mount your base to the table using one of the two methods below. The reason for this order is that with the power feeder unit completely assembled, it will be easier to locate where on the table top you will need to drill your base mounting holes, so you can take advantage of the full range of power feeder swing and adjustments.

Through-Bolt Mounting

We recommend that you mount your new power feeder to the machine table with through bolts, nuts, and washers (**Figure 9**). 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**.

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 10**). If the table is thinner than $\frac{3}{8}$ " 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.

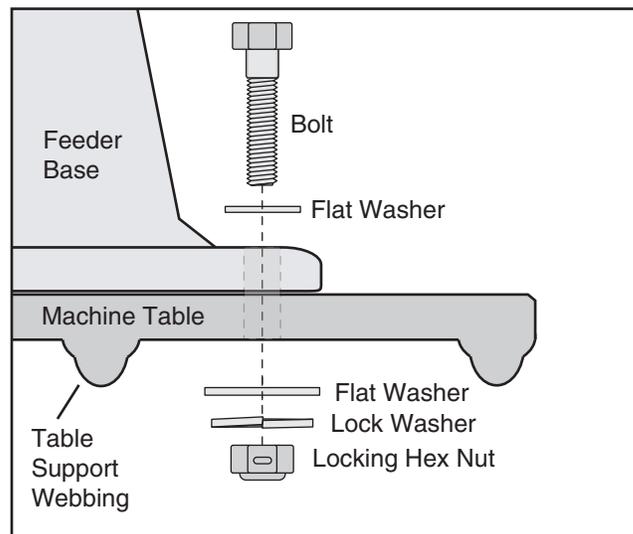


Figure 9. Through-bolt mounting.

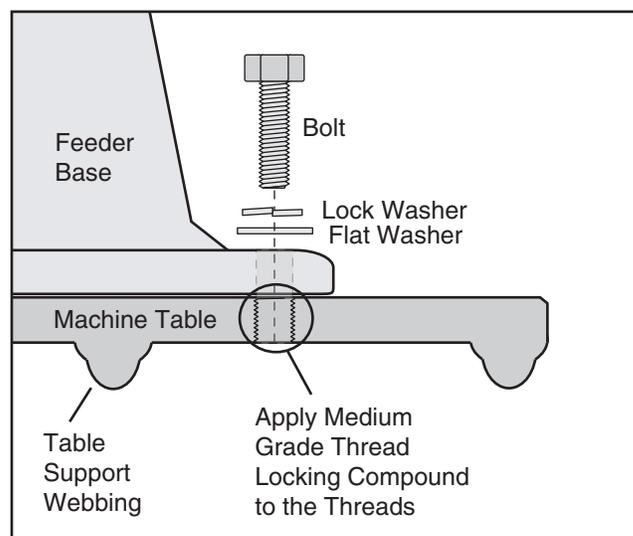


Figure 10. Direct mounting.

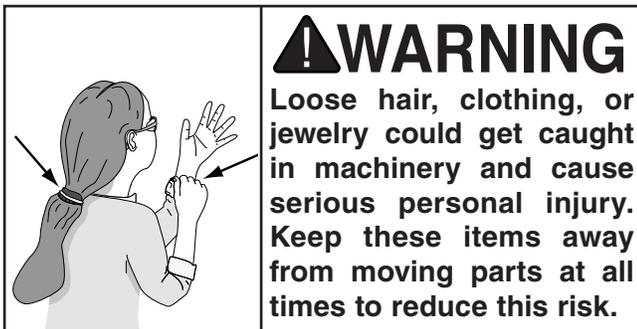


Test Run

Once power feeder assembly is complete and mounted on the table, you must test run your power feeder to make sure it runs properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the power feeder immediately, then review the **Troubleshooting** table on **Page 21**.

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



To test run the power feed:

1. Read the entire instruction manual first!
2. Make sure all tools and foreign objects have been removed from the tabletop area.
3. Make sure that the power feeder gearbox oil level is full, the oil level should be 1" below the oil fill port. See **Figure 1** on **Page 5** for oil fill port location.
4. Ensure that all tools and objects used during set up are cleared away from the machine.
5. Adjust and lock the power feeder so the wheels are held approximately one inch above the table and nothing will interfere with wheel rotation.

6. Connect the power feeder to the power supply and use the feed direction switch (**Figure 11**) to test operation in both directions.

— 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.

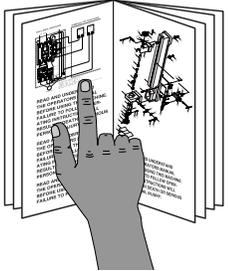


Figure 11. Feed direction switch.



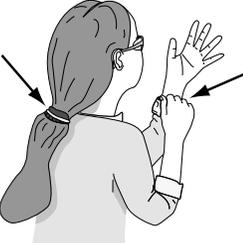
SECTION 4: OPERATIONS

Operation Safety



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

!WARNING
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 RECOMMEND 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 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 universal joints 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 8**).

Next, adjust the power feeder so the rubber wheels are parallel with the table surface, and are 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 1/8" lower than the workpiece before you begin feeding operations. Otherwise, the workpiece may slip and kickback.



Changing Feed Speed

Your power feeder has the option to feed a workpiece at four different feed rates: 9.5, 15, 25, and 38 feet per minute. These rates are achieved by changing the combination of change gears in the power feeder gear box.



To change the feed rate of your power feeder:

1. Turn the speed dial to the OFF position.
2. DISCONNECT THE POWER FEEDER FROM POWER!
3. Refer to the change gear chart below to find the gear combination required for your chosen feed rate.

Installed Change Gears:

A, 20 Tooth + **B**, 40 Tooth = 9.5 Ft (2.9 M)/Per Min

A, 40 Tooth + **B**, 20 Tooth = 15 Ft (4.6 M)/Per Min

Included Accessory Change Gears:

A, 26 Tooth + **B**, 34 Tooth = 25 Ft (7.6 M)/Per Min

A, 34 Tooth + **B**, 26 Tooth = 38 Ft (11.6 M)/Per Min

4. Remove the chain cover and the two 14mm hex nuts securing the position **A** & **B** change gears to the shafts.
5. Swap the required gears in positions **A** & **B** shown in **Figure 12**.

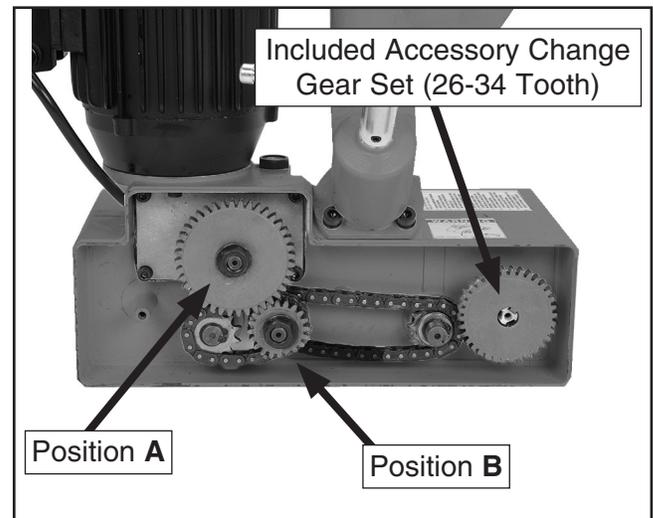


Figure 12. Change gear locations.

6. Reinstall the hex nuts and the chain cover.



SECTION 5: MAINTENANCE



Schedule

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

Daily Check:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged wheel rubber.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

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 life span. 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 lead screw threads with a light machine oil.

- After the first 200 hours of use, or after the first month, change the gearbox oil with 4.5 fluid ounces of a good automotive grade 80-90W gear oil. For the remaining life of the power feeder, change the oil every 1000 hours, or every 6 months. **Note:** To drain the unit, remove the fill plug labeled "OIL" and invert the power feeder.
- Every 40 hours of use, or once every two weeks, wipe clean and lubricate the wheel grease fittings (**Figure 13**) with one pump from a grease gun filled with automotive grade GL-2 grease.



Figure 13. Wheel lubrication.

- As required to prevent rust, binding, and dry spots, brush the sprockets, chain, and change gears (**Figure 14**) with a light film of an automotive grade GL-2 grease.

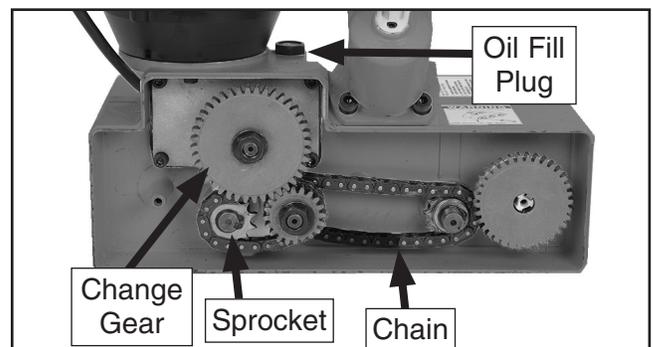


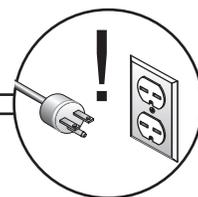
Figure 14. Sprockets, chain, and gears.



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

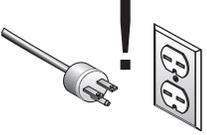


Motor & Electrical

Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none"> 1. Low voltage. 2. Open circuit in motor or loose connections. 3. Blown fuse tripped circuit breaker. 4. Capacitor at fault. 5. Motor switch or motor is at fault. 	<ol style="list-style-type: none"> 1. Check power supply for proper voltage. 2. Inspect all lead connections on motor and circuit board for loose or open connections. 3. Repair for cause of overload and replace fuse or reset circuit breaker. 4. Replace capacitor. 5. Replace switch, or motor.
Fuses or circuit breakers trip.	<ol style="list-style-type: none"> 1. Short circuit in line cord or plug. 2. Short circuit in motor or loose connections. 3. Power feeder rollers are jammed. 	<ol style="list-style-type: none"> 1. Inspect cord or plug for damaged insulation and shorted wires and replace extension cord. 2. Inspect all connections on motor for loose or shorted terminals or worn insulation. 3. Disconnect all machinery from power and correct for cause of jamming.
Motor overheats.	<ol style="list-style-type: none"> 1. Motor overloaded. 2. Air circulation through the motor restricted. 	<ol style="list-style-type: none"> 1. Reduce power feeder feed rate. 2. Clean out motor fan cover to provide normal air circulation.
Workpiece jams when feeding under rollers.	<ol style="list-style-type: none"> 1. Rollers set too low. 2. Feeder at wrong angle. 	<ol style="list-style-type: none"> 1. Raise feeder. 2. Adjust angle.
Workpiece slips while passing beneath rollers.	<ol style="list-style-type: none"> 1. Rollers positioned too high, no traction. 2. Feeding too fast. 3. Rollers are dirty or oily. 4. Worn roller(s). 	<ol style="list-style-type: none"> 1. Lower feeder. 2. Slow feed speed. 3. Clean roller surface with a mild solvent. 4. Replace roller(s) (Page 21).
Workpiece cut is burnt.	<ol style="list-style-type: none"> 1. Wrong feed speed. 2. Cutter is at fault. 	<ol style="list-style-type: none"> 1. Adjust feed speed. 2. Sharpen or replace dull blade or cutter.
Rough finish or chipped grain on workpiece.	<ol style="list-style-type: none"> 1. Feed speed too fast. 2. Dull cutter or blade. 3. Power feeder angle is not toed in to keep workpiece against the fence. 	<ol style="list-style-type: none"> 1. Slow speed. 2. Replace with sharp cutter or blade. 3. Adjust power feeder so it is toed-in 1° to 1.5° toward the fence.
Fuzzy grain occurs when planing or moulding.	<ol style="list-style-type: none"> 1. Lumber has high moisture content. 2. Dull knives/cutter. 	<ol style="list-style-type: none"> 1. If moisture content is higher than 20%, sticker and allow to dry. 2. Sharpen or replace knives.
Workpiece hangs and does not enter the machine.	<ol style="list-style-type: none"> 1. Power feeder roller height is set incorrectly. 	<ol style="list-style-type: none"> 1. Lower the power feeder roller 1/8" lower than the height of the workpiece.



Wheel Replacement

	<p>! WARNING Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.</p>
---	---

If you damage one or more wheels or they are worn out, you can easily replace the wheels.

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

To replace a wheel:

1. DISCONNECT THE POWER FEEDER FROM POWER!

2. Using a 5mm hex wrench, remove the two wheel retaining cap screws (**Figure 15**).

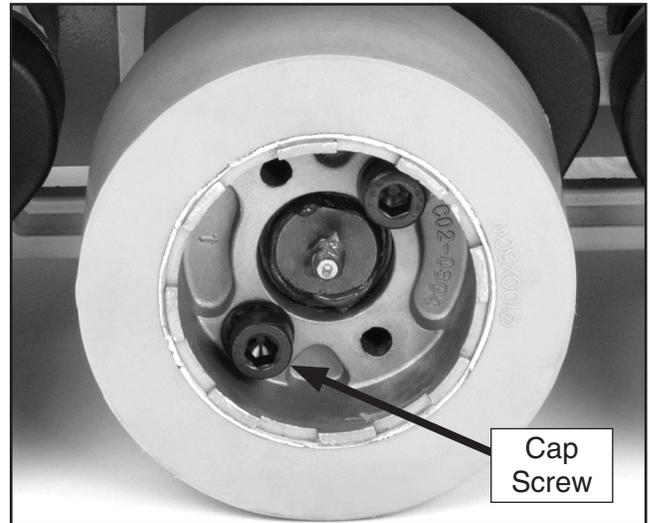


Figure 15. Wheel replacement.

3. Swap the old wheel with the new.
4. Reinstall the two cap screws, and tighten in an alternating pattern until the wheel is secure.



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.

WARNING

Electrical Safety Instructions

- 1. CIRCUIT REQUIREMENTS.** You MUST follow the **CIRCUIT REQUIREMENTS** given on **Page 9**. **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.**
- 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. 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.
- 4. 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.



Wiring Diagram



Model G4179 Power Feeder Wiring Diagram

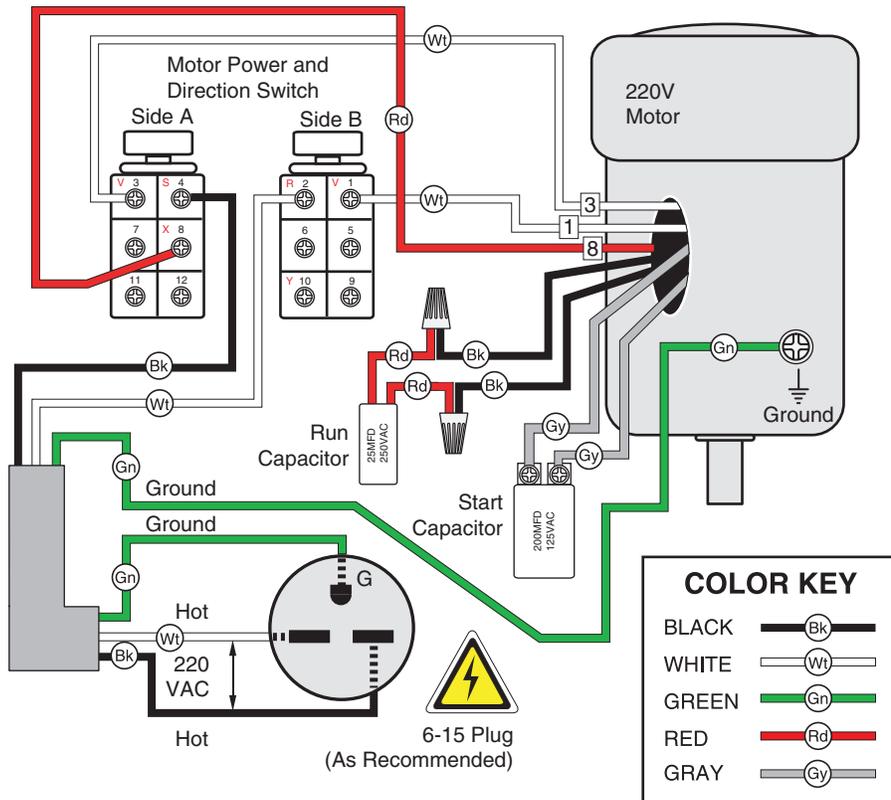


Figure 16. Motor power and direction switch.

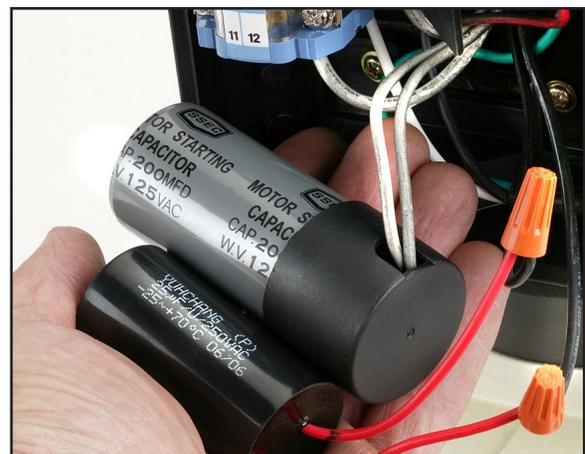
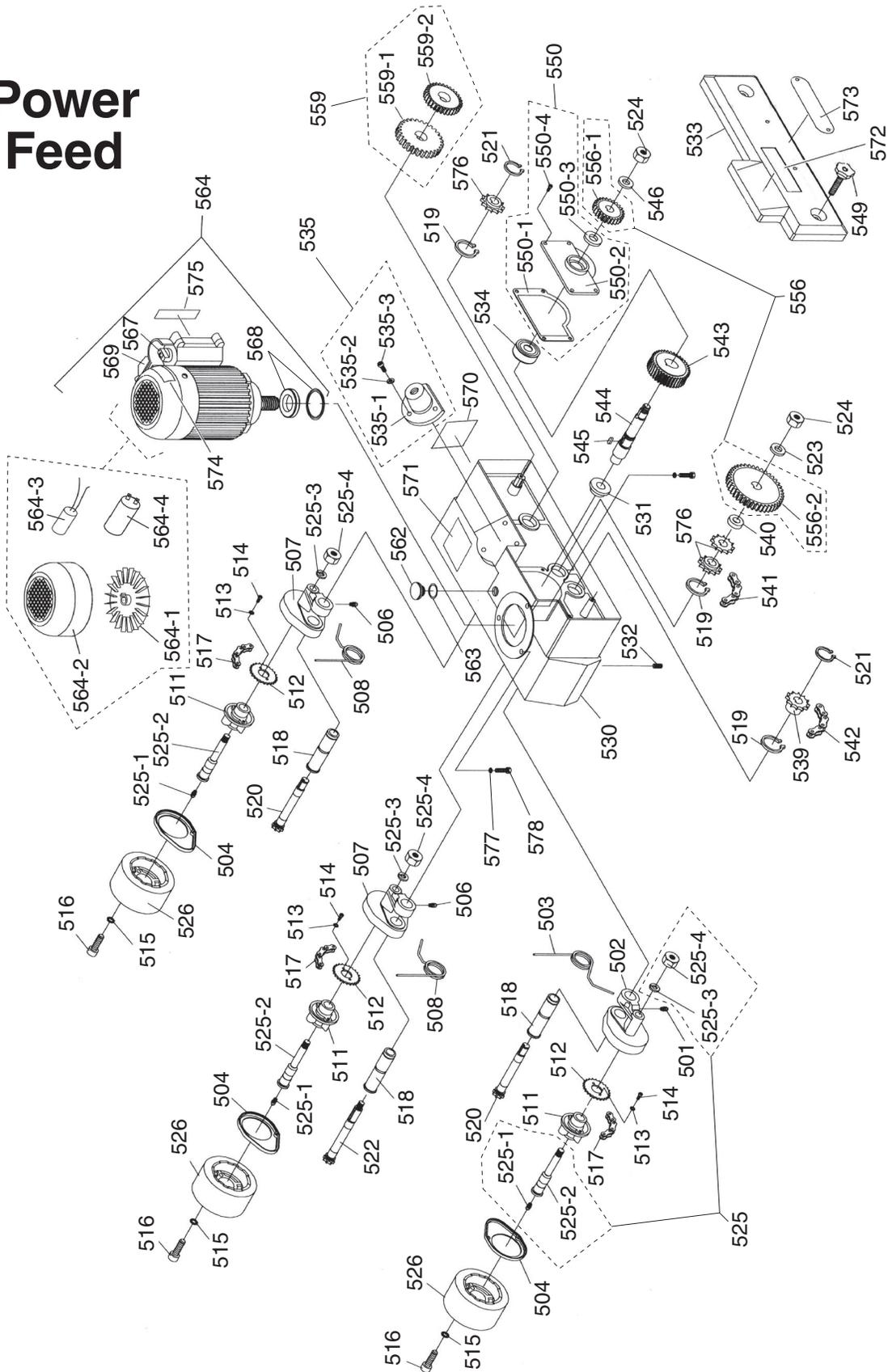


Figure 17. Motor capacitors.



SECTION 8: PARTS

Power Feed



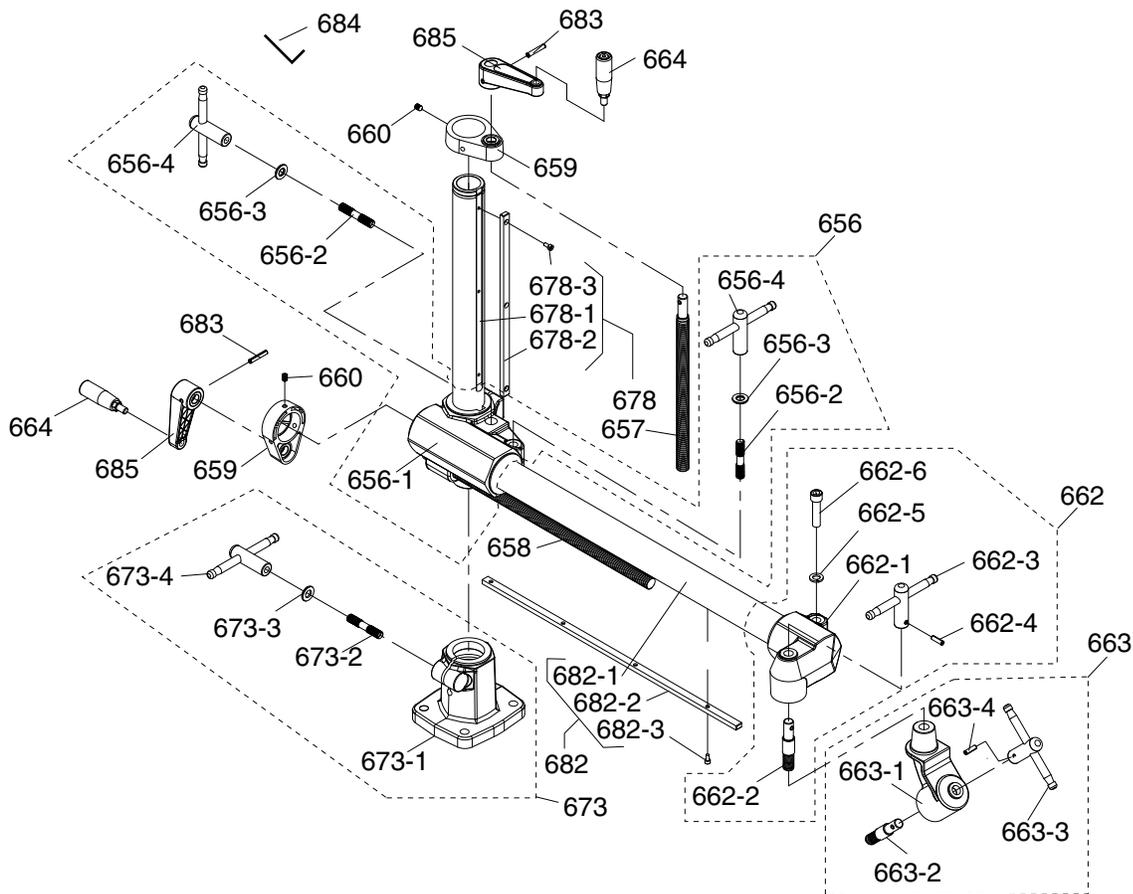
Power Feed Parts List

REF	PART #	DESCRIPTION
501	P4179501	GREASE NIPPLE
502	P4179502	SPROCKET CASE
503	P4179503	TORSION SPRING (A) 3.5 x 100
504	P4179504	CASE COVER
506	P4179506	GREASE NIPPLE
507	P4179507	CASE SPROCKET
508	P4179508	TORSION SPRING (B) 3.5 X 100
511	P4179511	ROLLER BASE
512	P4179512	SPROCKET
513	PLW01M	LOCK WASHER 5MM
514	PSB24M	CAP SCREW M5-.8 X 16
515	PLW04M	LOCK WASHER 8MM
516	PSB31M	CAP SCREW M8-1.25 X 25
517	P4179517	CHAIN-(22S)
518	P4179518	TUBE
519	PR58M	EXT RETAINING RING 24MM
520	P4179520	SPROCKET SHAFT
521	PR47M	EXT RETAINING RING 13MM
522	P4179522	SPROCKET SHAFT
523	PW06M	FLAT WASHER 12MM
524	PN09M	HEX NUT M12-1.75
525	P4179525	SPINDLE ASSEMBLY
525-1	P4179525-1	GREASE NIPPLE
525-2	P4179525-2	SPINDLE
525-3	PW06M	FLAT WASHER 12MM
525-4	PN09M	HEX NUT M12-1.75
526	G4180	ROLLER
530	P4179530	HOUSING
531	P4179531	BUSHING
532	PSS01M	SET SCREW M6-1 X 10
533	P4179533	GEAR COVER
534	P6203	BALL BEARING 6203ZZ
535	P4179535	SWIVEL CONE ASSEMBLY
535-1	P4179535-1	CONE
535-2	PLW04M	LOCK WASHER 8MM
535-3	PSB31M	CAP SCREW M8-1.25 X 25
539	P4179539	SPROCKET
576	P4179576	SPROCKET

REF	PART #	DESCRIPTION
540	P4179540	SPACING COLLAR
541	P4179541	CHAIN (36S)
542	P4179542	CHAIN (22S)
543	P4179543	WORM GEAR
544	P4179544	WORM GEAR SHAFT
545	PK81M	KEY 6 X 6 X 12
546	PW06M	FLAT WASHER 12MM
549	PSW03-1	KNOB
550	P4179550	GEARBOX ASSEMBLY
550-1	P4179550-1	GASKET
550-2	P4179550-2	COVER
550-3	P4179550-3	OIL SEAL
550-4	PSB01M	CAP SCREW M6-1 X 16
556	P4179556	GEAR SET 20T, 40T
556-1	P4179556-1	GEAR 20T
556-2	P4179556-2	GEAR 40T
559	P4179559	GEAR SET 26T, 34T
559-1	P4179559-1	GEAR 34T
559-2	P4179559-2	GEAR 26T
562	P4179562	OIL CAP
563	PORP016	O-RING 15.8 X 2.4 P16
564	P4179564	MOTOR 1/2HP 110V
564-1	P4179564-1	FAN
564-2	P4179564-2	FAN COVER
564-3	P4179564-3	R. CAPACITOR 25MFD 250VAC
564-4	P4179564-4	S. CAPACITOR 200MFD 125VAC
567	P4179567	COMPLETE SWITCH ASSEMBLY
568	P4179568	SPACER W/SEAL
569	P4179569	COMPLETE SWITCH BOX ASSEMBLY
570	P4179570	QC LABEL
571	P4179571	GENERAL WARNING LABEL
572	P4179572	COVER WARNING LABEL
573	P4179573	GRIZZLY LOGO PLATE
574	P4179574	SWITCH DIRECTION LABEL
575	PLABEL-14	ELECTRICITY LABEL
576	P4179576	SPROCKET
577	PLW03M	LOCK WASHER 6MM
578	PB29M	HEX BOLT M6-1 X 30



Base



Base Parts List

REF	PART #	DESCRIPTION
656	P4179656	ELEVATING BRACKET ASSEMBLY
656-1	P4179656-1	ELEVATING BRACKET
656-2	P4179656-2	STUD M12-1.75 X 70
656-3	PW01	FLAT WASHER 1/2
656-4	P4179656-4	HANDLE
657	P4179657	ELEVATION LEAD SCREW
658	P4179658	HORIZONTAL LEAD SCREW
659	P4179659	COLUMN CAP
660	PSS14M	SET SCREW M8-1.25 X 12
662	P4179662	OVER ARM CONE ASSEMBLY
662-1	P4179662-1	OVER ARM CONE
662-2	P4179662-2	LOCK STUD
662-3	P4179662-3	T-HANDLE
662-4	PRP71M	ROLL PIN 6 X 22
662-5	PW01	FLAT WASHER 1/2
662-6	PSB73M	CAP SCREW M12-1.75 X 50
663	P4179663	SWIVEL CONE ASSEMBLY
663-1	P4179663-1	SWIVEL CONE
663-2	P4179663-2	LOCK STUD

REF	PART #	DESCRIPTION
663-3	P4179663-3	T-HANDLE
663-4	PRP71M	ROLL PIN 6 X 22
664	P4179664	HANDLE
673	P4179673	BASE ASSEMBLY
673-1	P4179673-1	COLUMN BASE
673-2	P4179673-2	STUD M12-1.75 X 70
673-3	PW01	FLAT WASHER 1/2
673-4	P4179673-4	LEVER
678	P4179678	VERTICAL COLUMN ASSEMBLY
678-1	P4179678-1	COLUMN
678-2	P4179678-2	KEY 350MML X 8T
678-3	PSB50M	CAP SCREW M5-.8 X 10
682	P4179682	OVER ARM ASSEMBLY
682-1	P4179682-1	OVER ARM
682-2	P4179682-2	KEY 564MML X 8T
682-3	PSB03M	CAP SCREW M5-.8 X 8
683	PRP31M	ROLL PIN 6 x 36
684	PAW04M	HEX WRENCH 4MM
685	P4179685	CRANK ARM





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