READ THIS FIRST

Model G0603X

IMPORTANT UPDATE

For Machines Mfd. Since 11/24
and Owner's Manual Revised 10/19

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

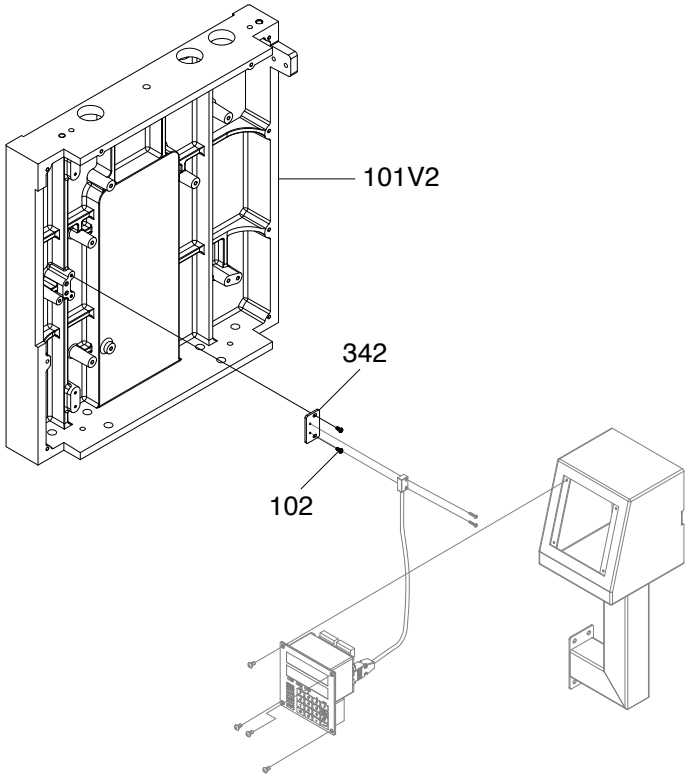
The following changes were recently made since the owner's manual was printed:

- Parts have changed.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Revised Parts



REF	PART #	DESCRIPTION
101V2	P0603X101V2	COLUMN, RIGHT V2.11.24
102	P0603X102	BUTTON HD CAP SCR M4-.7 X 10

REF	PART #	DESCRIPTION
342	P0603X342	ADJUSTMENT PLATE

#JA23328 PRINTED IN TAIWAN

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Model G0603X

IMPORTANT UPDATE

For Machines Mfd. Since 06/23
and Owner's Manual Revised 10/19

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

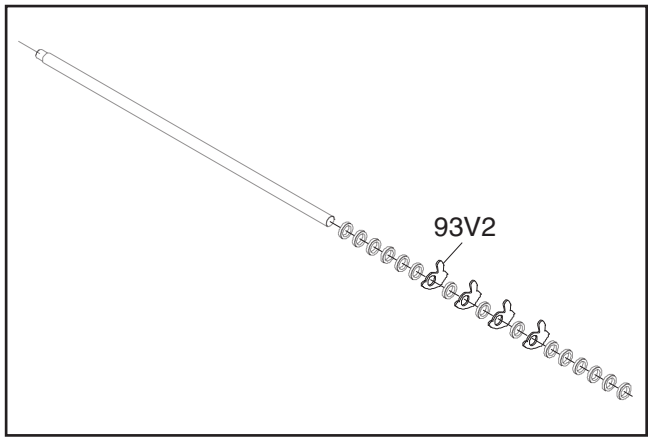
The following change was recently made since the owner's manual was printed:

- Anti-kickback pawl has changed.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Revised Parts



REF	PART #	DESCRIPTION
93V2	P0603X093V2	ANTI-KICKBACK PAWL V2.06.23

#JM22693 PRINTED IN TAIWAN

READ THIS FIRST

Model G0603X

IMPORTANT UPDATE

For Machines Mfd. Since 07/21
and Owner's Manual Revised 10/19

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

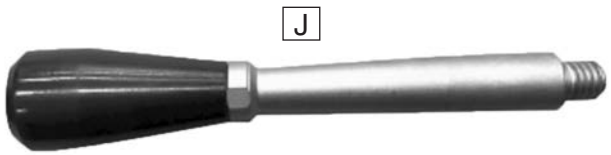
The following changes were recently made to this machine since the owner's manual was printed:

- Revised inventory.
- Changed V-belts.
- Changed right cover and cover limit switch.
- Updated electrical component photos of main electrical box and table motor junction box.
- Updated all electrical diagrams.

Aside from this information, all other content in the owner's manual applies and MUST be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.**

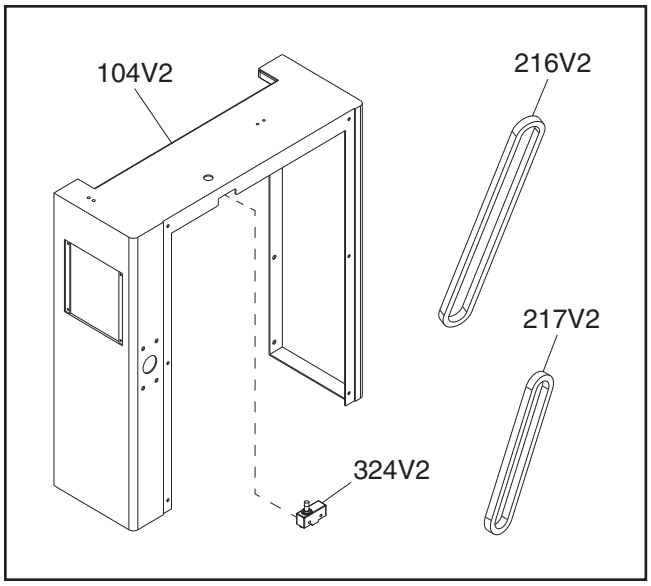
For questions or help, contact our Tech Support at (570) 546-9663 or techsupport@grizzly.com.

Revised Inventory



Inventory (Figure 8): **Qty**
J. Table Roller Height Handle ⅜"-16 1

Revised Parts



REF	PART #	DESCRIPTION
104V2	P0603X104V2	COVER RIGHT V2.07.21
216V2	P0603X216V2	V-BELT A81 V2.08.07
217V2	P0603X217V2	V-BELT A52 V2.08.07
324V2	P0603X324V2	LIMIT SWITCH MJ2-1307 V2.07.21

#BL18904 PRINTED IN TAIWAN V3.07.21

Electrical Components

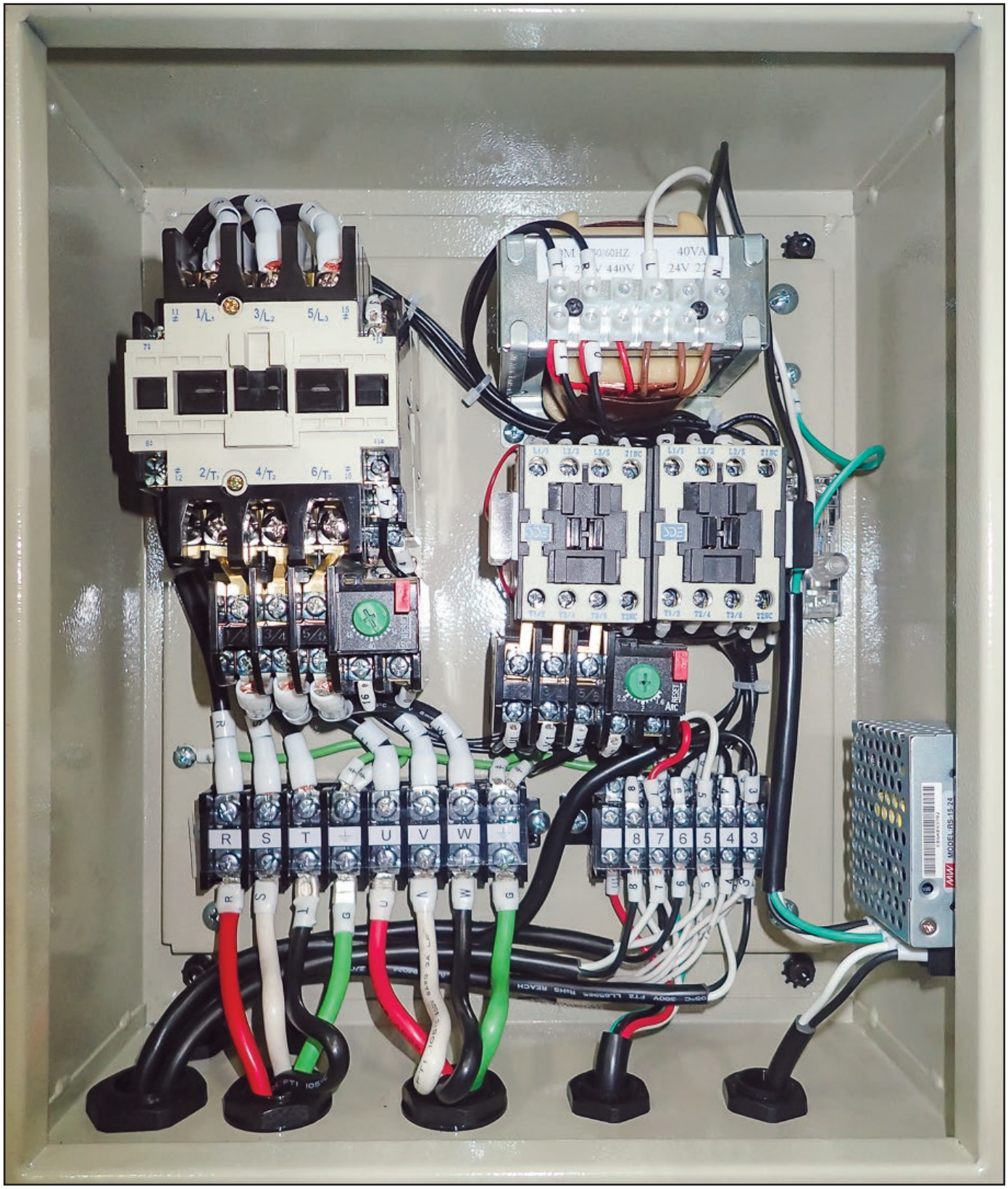


Figure 50. Main electrical box
(top right access panel removed).

Figure 51. Digital control (viewed from back).

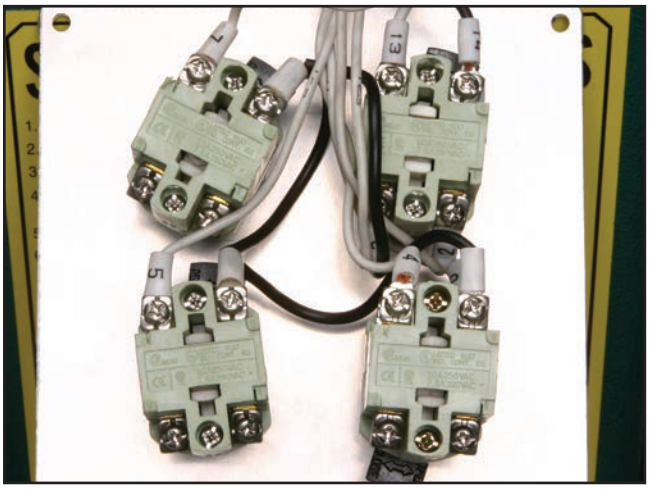


Figure 54. Power/table control (viewed from back).

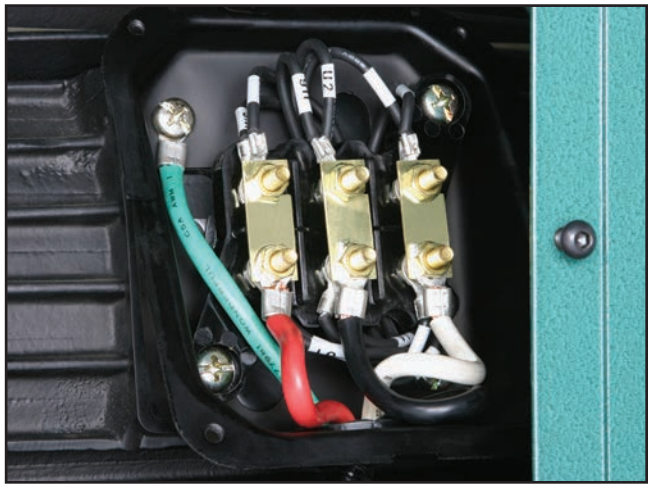


Figure 52. Cutterhead/feed motor junction box.

Figure 55. Table motor junction box wiring.

Figure 53. Headstock cover limit switch (top right access panel removed).

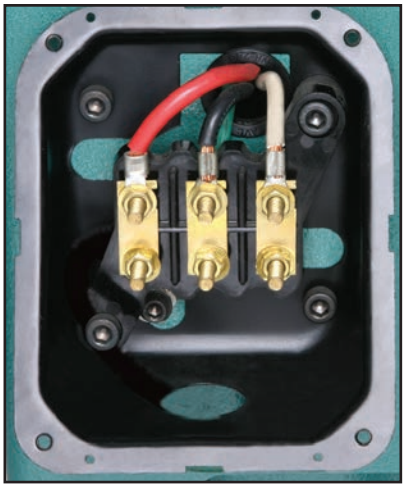


Figure 56. Power feed junction box.

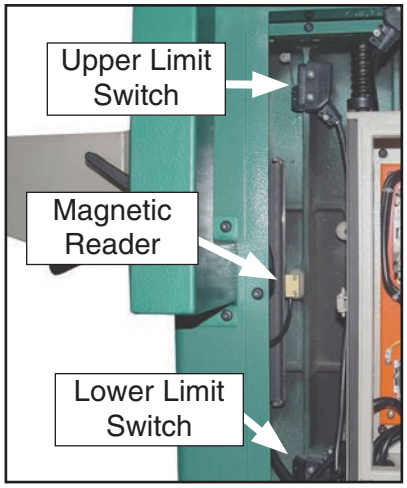
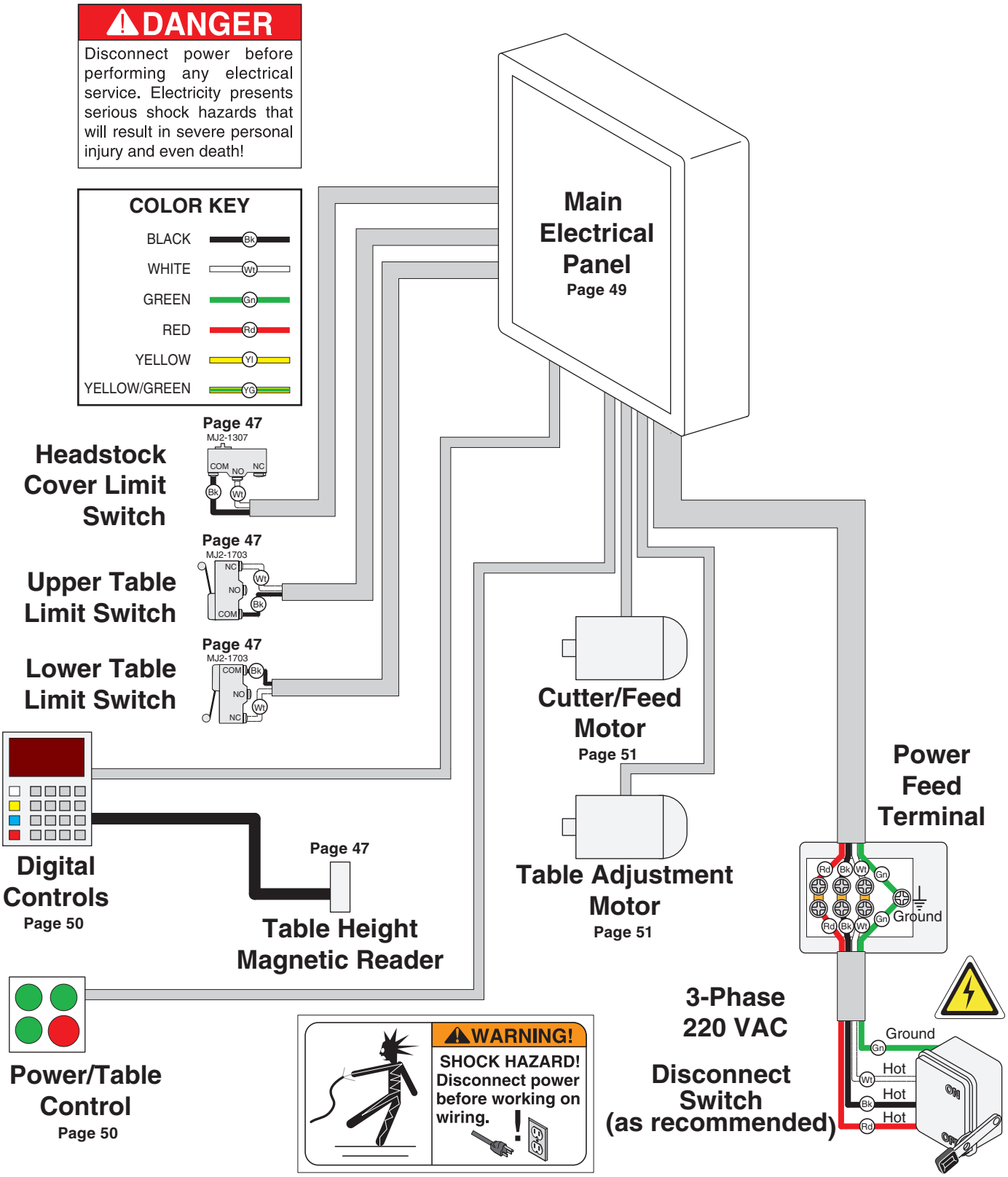


Figure 57. Upper and lower table limit switches, and table height magnetic reader (top right access panel removed).

Overview Wiring Diagram



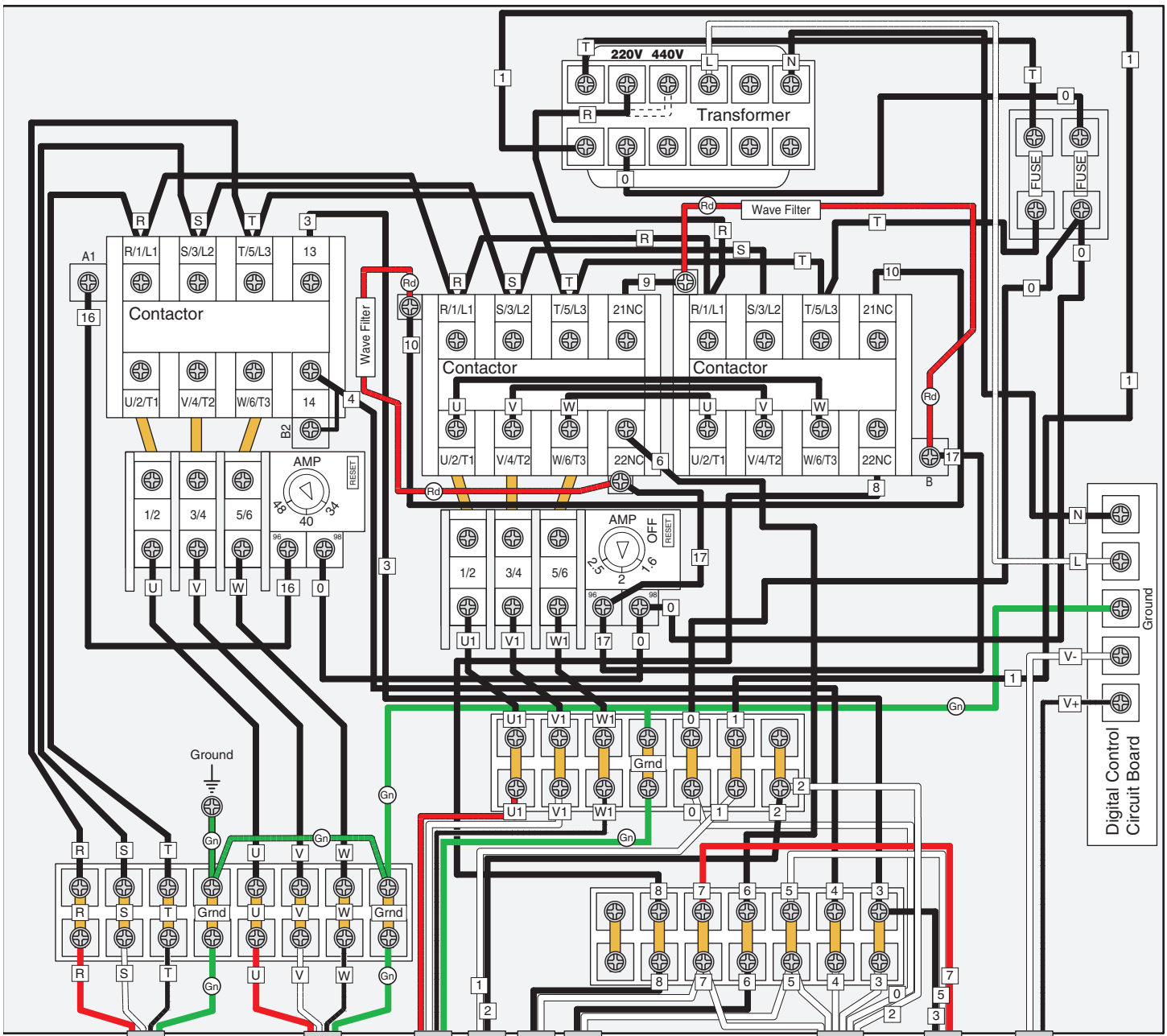
Main Electrical Box
220V Wiring Diagram

⚠ DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk	RED	Rd
WHITE	Wt	GREEN	Gn



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Controls Wiring Diagram

DANGER

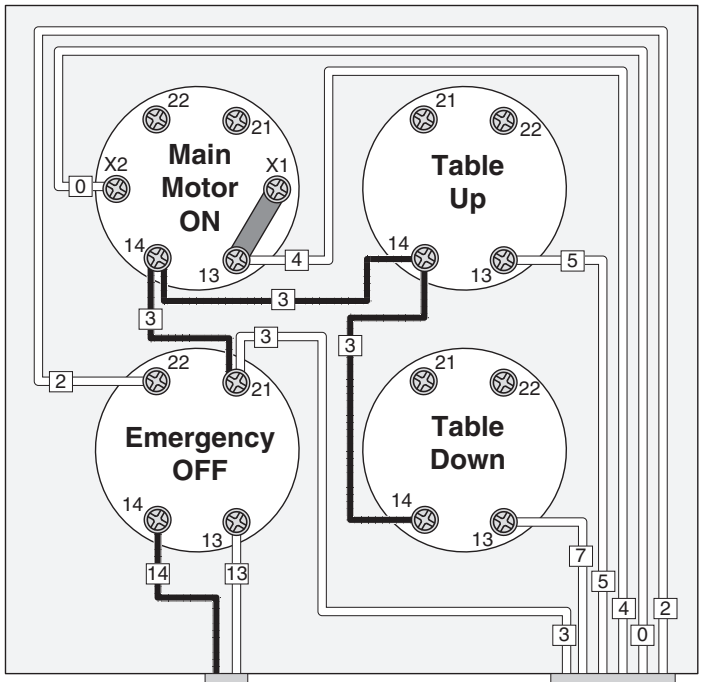
Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

- BLACK (Bk)
- WHITE (Wt)
- GREEN (Gn)
- RED (Rd)
- YELLOW (Yl)
- YELLOW/GREEN (YG)

POWER/TABLE CONTROLS

As Viewed From the Back



To Main Electrical Box

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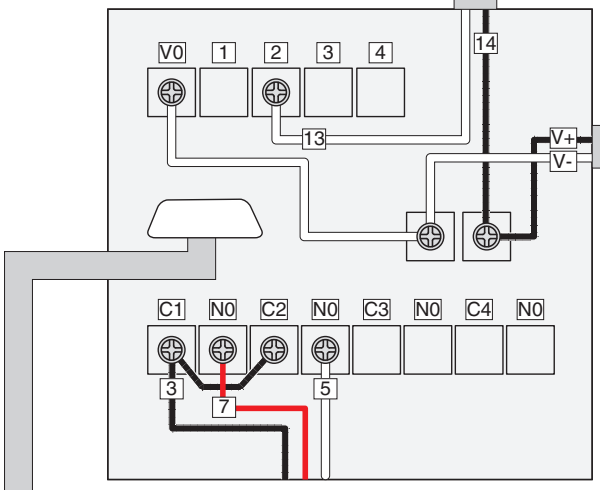
DIGITAL CONTROLS

As Viewed From the Back



To Main Electrical Box

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9-Conductor Serial Cable to Table Height Magnetic Reader

Page 48

Motor Wiring Diagram

DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk
WHITE	Wt
GREEN	Gn
RED	Rd
YELLOW	Yl
YELLOW/GREEN	YG

Main Electrical Panel
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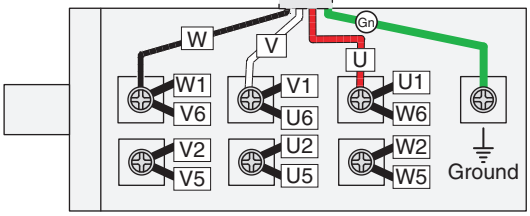
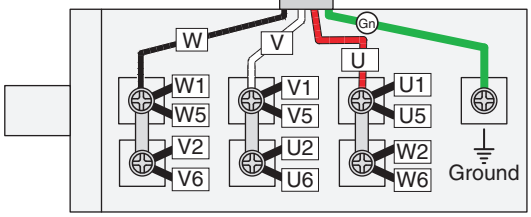
CUTTERHEAD/FEED MOTOR

(must also replace overload relays for 440V)

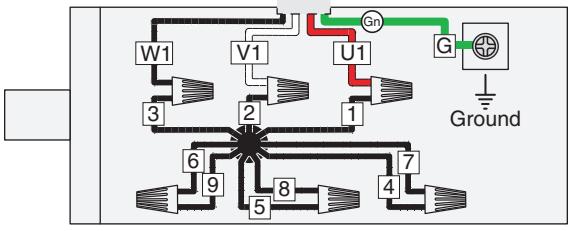


440VAC (Optional)

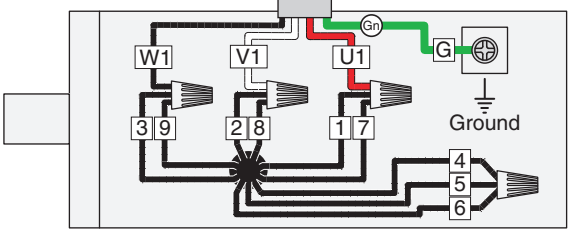


220VAC (Prewired)

TABLE MOTOR



440VAC (Optional)



220VAC (Prewired)

MODEL G0603X
25" EXTREME SERIES PLANER
OWNER'S MANUAL
(For models manufactured since 6/19)

#TS8592 PRINTED IN TAIWAN

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

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

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

INTRODUCTION

Foreword

We are proud to offer the Model G0603X 25" Extreme Series Planer. 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.

We are pleased to provide this manual with the Model G0603X. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0603X as supplied 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

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
E-Mail: manuals@grizzly.com

We stand behind our machines. If you have any service questions or parts requests, 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
Web Site: http://www.grizzly.com

MACHINE DATA SHEET

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

MODEL G0603X 25" 15 HP 3-PHASE EXTREME DUTY PLANER W/ HELICAL CUTTERHEAD

Product Dimensions:

Weight..... 1906 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 57-3/8 x 54-3/8 x 60-1/4 in.
Footprint (Length x Width)..... 47-1/4 x 22 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 2054 lbs.
Length x Width x Height..... 38 x 59 x 60 in.
Must Ship Upright..... Yes

Electrical:

Power Requirement..... 220V or 440V, 3-Phase, 60 Hz
Prewired Voltage..... 220V
Full-Load Current Rating..... 37A at 220V, 18.5 at 440V
Minimum Circuit Size..... 50A @ 220V, 30A @ 440V
Connection Type..... Permanent (Hardwire to Shutoff Switch)
Switch Type..... Button Controls w/Magnetic Switch Protection
Voltage Conversion Kit..... P0603X335 for 440V
Recommended Phase Converter..... H3741

Motors:

Main

Horsepower..... 15 HP
Phase..... 3-Phase
Amps..... 37A/18.5A
Speed..... 3420 RPM
Type..... TEFC Induction
Power Transfer ..... Triple V-Belt Drive
Bearings..... Shielded & Permanently Lubricated
Centrifugal Switch/Contacts Type..... N/A

Table Elevation

Horsepower..... 1/2 HP
Phase..... 3-Phase
Amps..... 2.4A/1.2A
Speed..... 1750 RPM
Type..... TEFC Induction
Power Transfer ..... Chain Drive
Bearings..... Sealed & Permanently Lubricated
Centrifugal Switch/Contacts Type..... N/A

Main Specifications:

Main Specifications

Planer Size	25 in.
Max. Cut Width	25 in.
Max. Cut Height	9 in.
Min. Stock Length	10 in.
Min. Stock Thickness	1/4 in.
Max. Stock Thickness	9 in.
Number of Cuts Per Inch	122, 98, 82
Number of Cuts Per Minute	1470, 1176, 980
Cutterhead Speed	4900 RPM
Planing Feed Rate	20, 25, 30 FPM
Max. Cut Depth Planing Full Width	1/8 in.
Max. Cut Depth Planing 6-Inch Wide Board	1/4 in.

Cutterhead Info

Cutterhead Type	Helical
Cutterhead Diameter	3-1/2 in.
Number of Cutter Rows	6
Number of Indexable Cutters	174
Cutter Insert Type	30 deg. Indexable Carbide
Cutter Insert Size Length	15 mm
Cutter Insert Size Width	15 mm
Cutter Insert Size Thickness	2-1/2 mm

Table Info

Table/Headstock Movement	9 in.
Table Bed Size Length	57 in.
Table Bed Size Width	25 in.
Table Bed Size Thickness	2 in.
Number of Bed Rollers	2

Construction

Table	Precision-Ground Cast Iron
Body	Cast Iron
Stand	Steel
Cutterhead Assembly	Steel
Infeed Roller	Serrated Steel
Outfeed Roller	Smooth Steel
Paint Type/Finish	Powder Coated

Other

Measurement Scale	Inch & Metric
Number of Dust Ports	1
Dust Port Size	5 in.
Gear Box	3 Speed

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	1 Hour
Serial Number Location	ID Label on Top Cover
ISO 9001 Factory	Yes
Certified by a Nationally Recognized Testing Laboratory (NRTL)	No

Identification of Planer Features

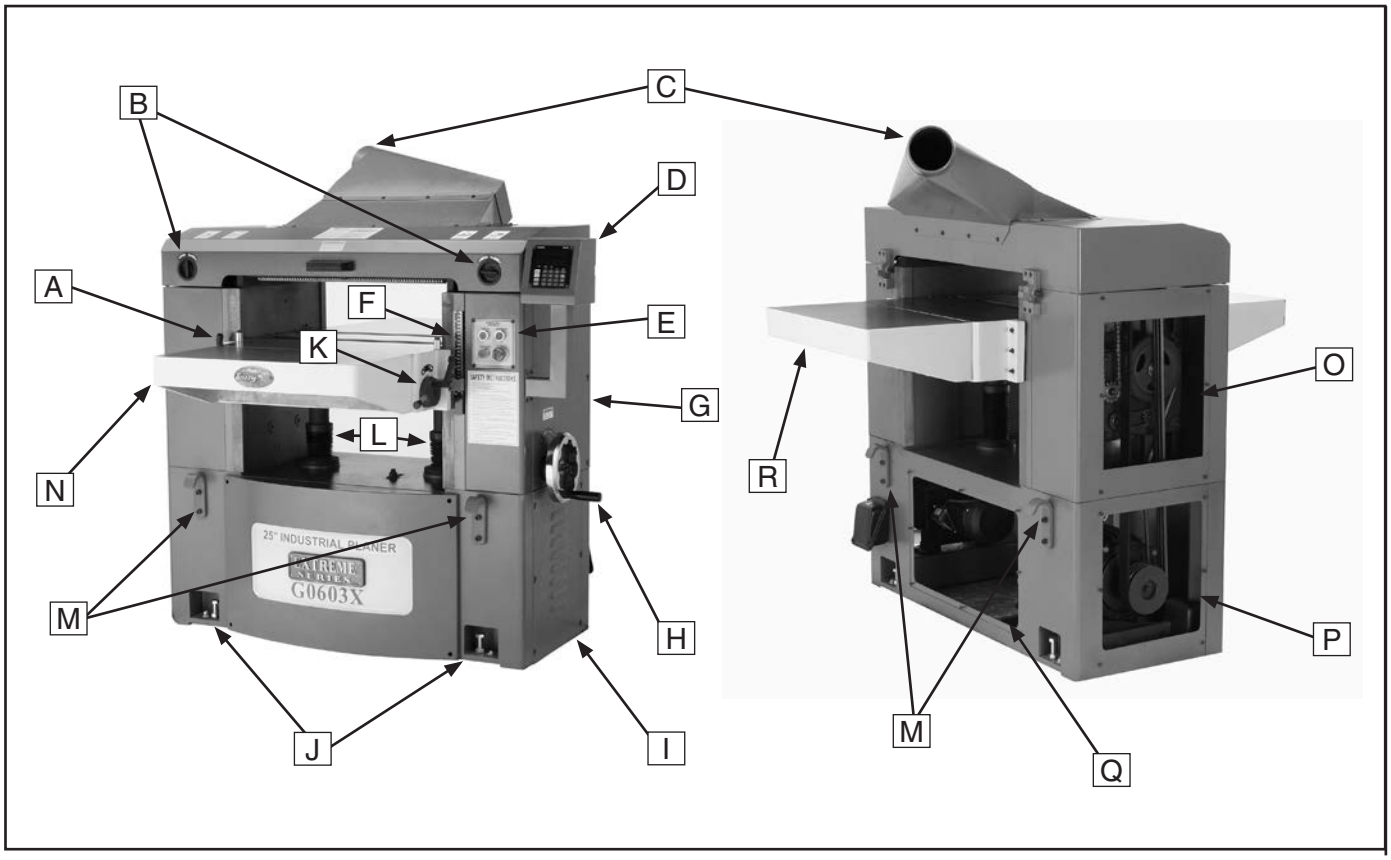


Figure 1. Model G0603X feature identification.

A. Feed Rate Control
B. Headstock Cover Latches
C. Dust Hood and Port
D. Digital Control
E. Power/Table Control
F. Table Elevation Scale
G. Electrical Box Access Panel (top right side)
H. Table Elevation Handwheel
I. Table Gearbox Access Panel (bottom right side)
J. Floor Mounting Points
K. Table Roller Height Control
L. Table Elevation Screws
M. Lifting Hooks
N. Infeed Table Extension Wing
O. Cutterhead/Feed Gearbox Access (top left side)
P. V-Belt Access (bottom left side)
Q. Motor Access (bottom rear)
R. Outfeed Table Extension Wing

Identification of Controls

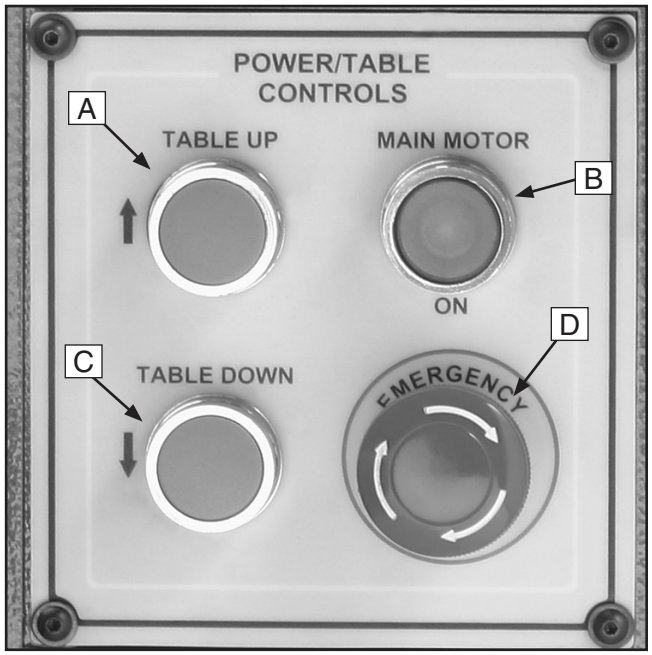


Figure 2. Model G0603X power/table control.

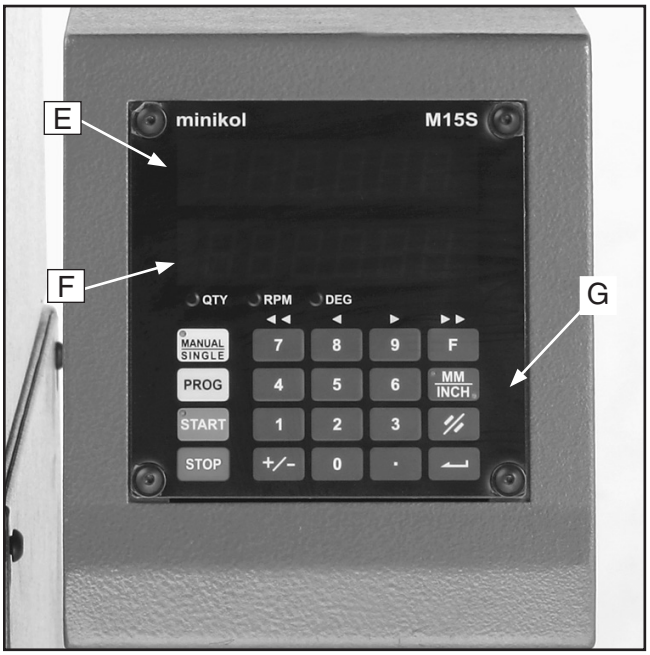


Figure 3. Model G0603X digital control.

A. Table Up Button: Raises the planer table when pressed. When used in conjunction with the digital control, it raises the table to a preset elevation.

B. Main Motor Button: Turns the cutterhead/feed motor ***ON***, and illuminates when the power is ON.

C. Table Down Button: Lowers the planer table when pressed. When used in conjunction with the digital control, it lowers the table to a preset elevation.

D. Emergency Stop Button: Immediately turns the cutterhead/feed motor ***OFF*** and stops all components of the planer.

E. Target LED Window: Shows the target table position value entered on the keypad.

F. Actual LED Window: Shows the current actual table position value.

G. Numeric Keypad: Used to enter table presets elevations and digital commands.

Identification of Planing Components

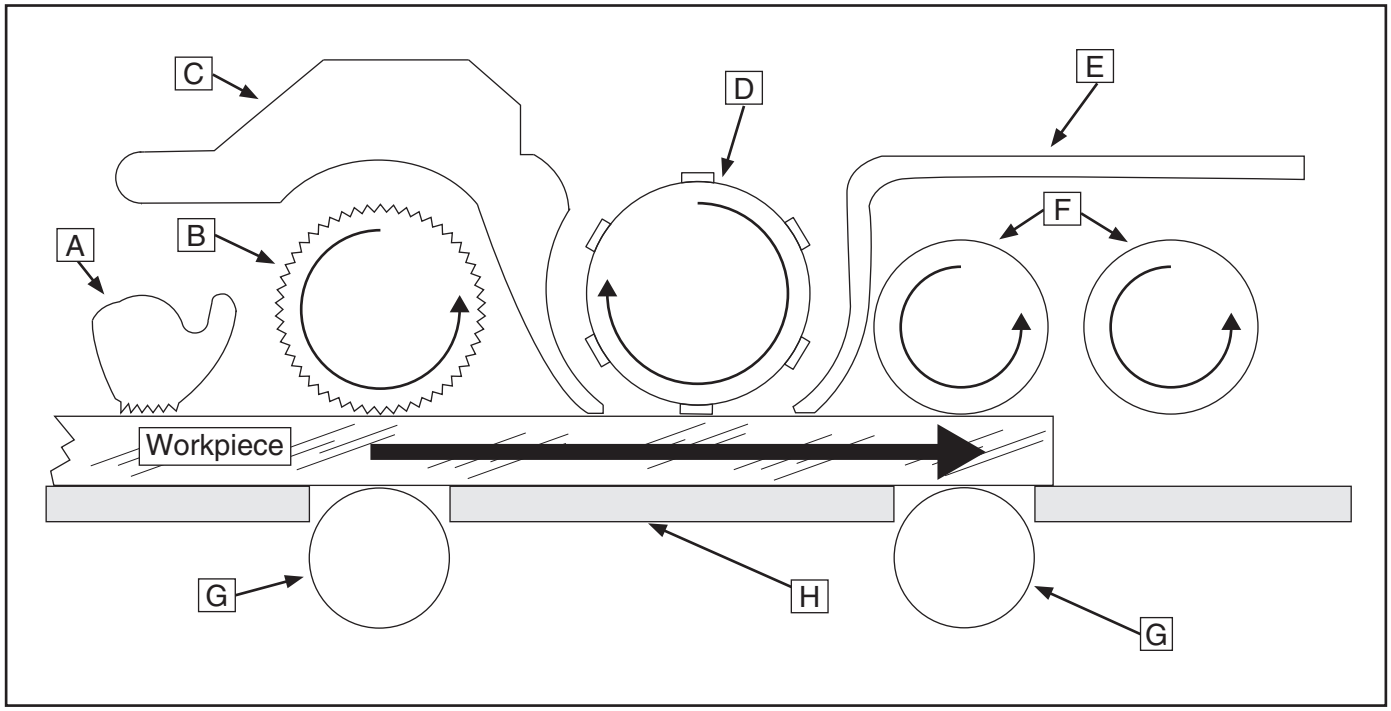


Figure 4. Model G0603X workpiece path and major planing components (side cutaway view).

A. Anti-Kickback Fingers: Provide additional safety for the operator.

B. Serrated Infeed Roller: Pushes workpiece toward the cutterhead.

C. Chipbreaker: Breaks off chips created by the cutterhead to prevent tearout and diverts the chips to the dust port.

D. Helical Cutterhead: Holds carbide inserts that plane the workpiece.

E. Pressure Bar: Stabilizes the workpiece as it leaves the cutterhead and assists in deflecting wood particles toward the dust hood.

F. Outfeed Rollers: Pulls the workpiece toward the outfeed table.

G. Table Rollers: Provide upward pressure on the workpiece enabling the feed rollers to pull the workpiece along.

H. Planer Table: Provides a smooth and level path for the workpiece as it moves through the planer.

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.

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

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

⚠CAUTION **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

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery. to reduce the risk of eye injury or blindness from flying particles Everyday eyeglasses are not approved safety glasses.

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

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observiing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

⚠WARNING
Safety Instructions for Machinery

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

INTENDED USE. Only use the machine for its intended purpose and only use recommended accessories. Never stand on machine, modify it for an alternative use, or outfit it with non-approved accessories.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

REMOVING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

DANGEROUS ENVIRONMENTS. Do not use machinery in wet locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well lighted to minimize risk of injury.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine ***OFF*** and ensure all moving parts completely stop before walking away.

MAINTENANCE & INSPECTION. A machine that is not properly maintained may operate unpredictably. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. Regularly inspect machine for loose bolts, alignment of critical parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or misadjusted parts before operating machine.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.

⚠WARNING
Additional Safety Instructions for Planers

1. **REACHING INSIDE PLANER.** Never reach inside planer or remove covers when the planer is connected to power.

2. **INFEED CLEARANCE SAFETY.** The infeed roller is designed to pull material into the cutterhead. Always keep hands, clothing, and long hair away from the infeed roller during operation to prevent serious injury.

3. **BODY POSITION WHILE OPERATING.** The workpiece may kick out during operation. To avoid getting hit, stand to the side of the planer during the entire operation.

4. **PLANING CORRECT MATERIAL.** Only plane natural wood stock with this planer. DO NOT plane MDF, plywood, laminates, or other synthetic products.

5. **GRAIN DIRECTION.** Planing across the grain is hard on the planer and may cause the workpiece to kick out. Always plane in the same direction or at a slight angle with the wood grain.

6. **LOOKING INSIDE PLANER.** Wood chips fly around inside the planer at a high rate of speed. DO NOT look inside the planer or remove guards/covers during operation.

7. **WORKPIECE CLEARANCE.** Always verify workpiece has enough room to exit the planer before starting.

8. **CUTTING LIMITATIONS.** The planer may kick out a workpiece at the operator or be damaged if pushed beyond these limits.
   - Maximum Depth of Cut: 1⁄8"
   - Minimum Board Length: 10"
   - Minimum Board Thickness: 1⁄2"
   - Maximum Number of Boards: 1 at a time

9. **CLEAN STOCK.** Planing stock with nails, staples, or loose knots MAY cause debris to kick out at the operator and WILL damage your cutters when they contact the cutterhead. Always thoroughly inspect and prepare stock to avoid these hazards.

10. **REMOVING JAMMED WORKPIECES.** To avoid serious injury, always stop the planer and disconnect power before removing jammed workpieces.

11. **DULL/DAMAGED CUTTERS.** The planer may kick out a workpiece at the operator or give poor finish results if it is operated with dull or damaged cutters.

12. **UNPLUGGING DURING ADJUSTMENTS.** When connected to power, the planer can be accidentally turned ***ON***. Always disconnect power when servicing or adjusting the components of the planer.

⚠WARNING

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

⚠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

220/440V 3-Phase

⚠WARNING

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

Amperage Draw

The Model G0603X features a 220/440V motor that is prewired for 220V and draws the following amps under maximum load:

Motor Draw at 220V.....39.4 Amps
Motor Draw at 440V ..... 19.7 Amps

Circuit Requirements

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

220V Circuit.....50 Amps
440V Circuit.....30 Amps

Connection to Power

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

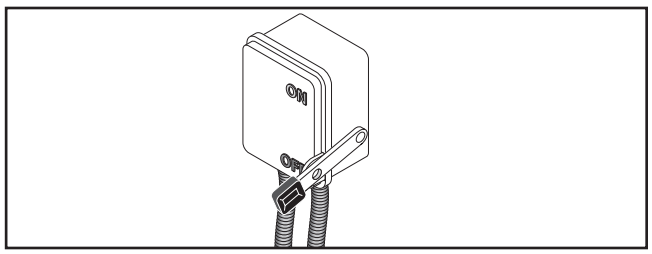
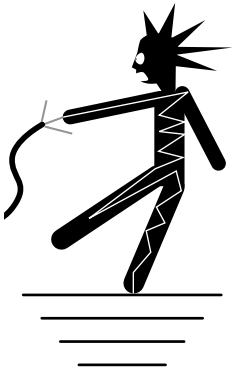


Figure 5. Example of locking shut-off switch.

Grounding

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

Improper connections of the electrical-grounding conductor increases the risk of electric shock. Check with a qualified electrician or one of our service personnel if you do not understand the grounding instructions, or if you doubt the machine is properly grounded.



⚠WARNING

Electrocution or fire could result if this machine is not installed correctly or the electrical installation does not comply with local and state codes. Ensure compliance by using a qualified electrician for the electrical installation!

Phase Converter

When using a phase converter, the power from the manufactured power leg (sometimes called the wild wire) can fluctuate. Connect the manufactured power leg to the S terminal to prevent damage to the transformer. The wire from the S terminal can handle some fluctuation because it goes directly to the motor. The power going to the R and T terminals goes to the transformer and must be consistent to prevent damage.

Rewiring to 440V

This procedure must be done by a qualified electrician before the planer is connected to the power source. Refer to the **Wiring Diagrams** included with this manual, starting on **Page 48**.

Contact Grizzly at (800) 523-4777 to order the necessary 440V Conversion Kit (Part No. P0603X335).

To rewire the Model G0603X for 440V operation:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!

2. Open the main electrical box on the right side of the planer and locate the voltage transformer shown in **Figure 6**.

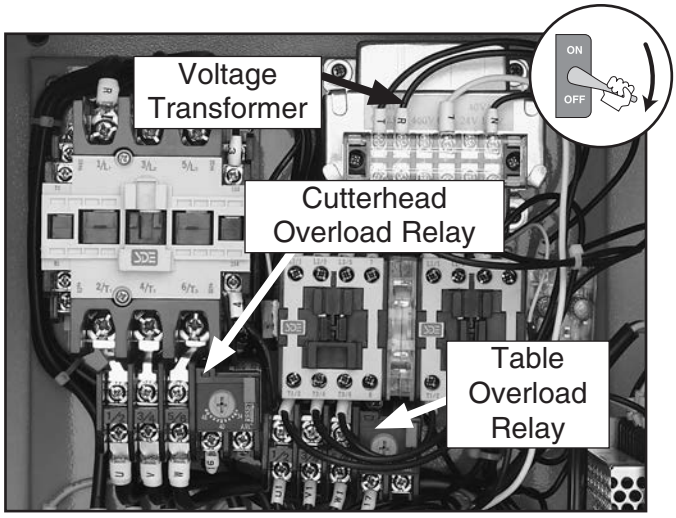


Figure 6. Location of voltage transformer and overload relays.

3. At the voltage transformer, remove the "R" wire connected to the “220” terminal and connect that wire to the “440” terminal (see **Figure 7**).

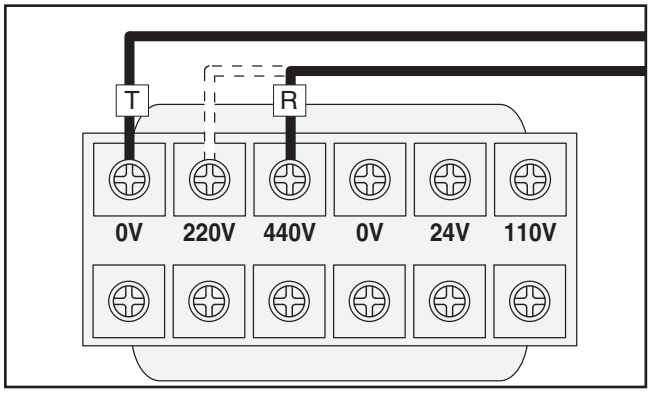


Figure 7. Transformer connection change for 440V.

4. Replace the cutterhead overload relay (see **Figure 6**) with the included 440V overload relay that has an amperage dial range of 18–26A.

5. Set the 440V cutterhead overload relay dial to 18.5A.

6. Replace the table overload relay (see **Figure 6**) with the included 440V overload relay that has an amperage dial range of 0.9–1.5A.

6. Set the 440V table overload relay dial to 1.2A.

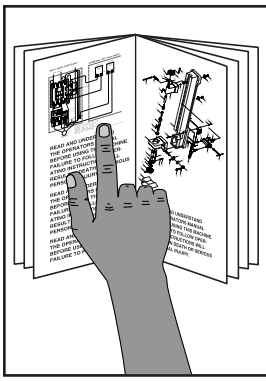
7. Open the rear motor access panel and remove the motor wiring covers from the cutterhead/feed motor and the table motor.

8. Rewire the motors for 440V as shown on the diagrams inside of the motor wiring covers.

Note: *See the wiring diagrams beginning on **Page 48** as an additional reference.*

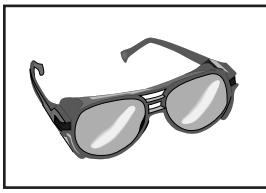
SECTION 3: SETUP

Setup Safety



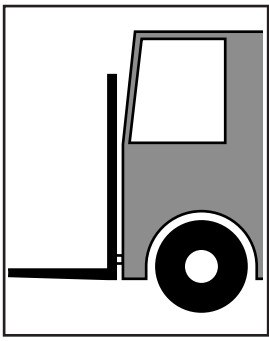
⚠WARNING

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!



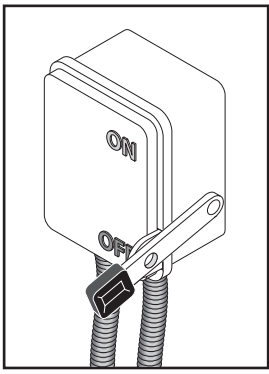
⚠WARNING

Wear safety glasses during the entire set up process!



⚠WARNING

This planer is a heavy machine (2217 lbs. shipping weight). DO NOT over-exert yourself while unpacking or moving your machine—use power lifting equipment.



⚠WARNING

Turn *OFF* the power at the power disconnect and do NOT turn *ON* until instructed to do so. Failure to heed this warning could result in serious personal injury or death.

Items Needed for Setup

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

Description	Qty
• Straightedge 4' (or longer)	1
• Safety Glasses (for each person)	1
• Dust Collection System	1
• Dust Hose 5" (length as needed)	1
• Hose Clamp 5"	1
• Rotacator (see **Page 29**)	1
• Mounting Hardware (see **Page 17**)	4
• Forklift	1
• Lifting Straps	2
• Assistance for Lifting Help	1

General Inspection

The Model G0603X was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, *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, you should inventory the contents.

Inventory

After all the parts have been removed from the two boxes, you should have the following items:

Inventory: (Figure 8) **Qty**

- **A**. Model G0603X Planer (not shown) 1
- **B**. Infeed and Outfeed Extension Wings (not shown) 2
- **C.** Dust Hood (not shown) 1
- **D.** Insert Hardware Set 1
  - —Carbide Insert M15 x 15 x 2.5 10
  - —Flat Head Screws #10-32 x 1⁄2" 10
- **E.** Hex Wrenches 3, 4, 5, 8mm ..... 1 ea
- **F.** Open End Wrenches: 12 x 14, 17 x 19, 22 x 24mm ..... 1 ea
- **G.** Standard Screwdriver 1
- **H**. Hardware Bag (not shown) 1
  - For Dust Port:
  - —Button Head Cap Screws M6-1 x 12 8
  - —Lock Washers 6mm 8
  - —Flat Washers 6mm 8
  - For Table Extension Wings:
  - —Hex Bolts M12-1.75 x 50 6
  - —Flat Washers 12mm 6
  - —Set Screws M10-1.5 x 20 6
  - T-Handle T-25 Torx Driver 2
- **I.** Machine Mounting Feet (not shown) 4

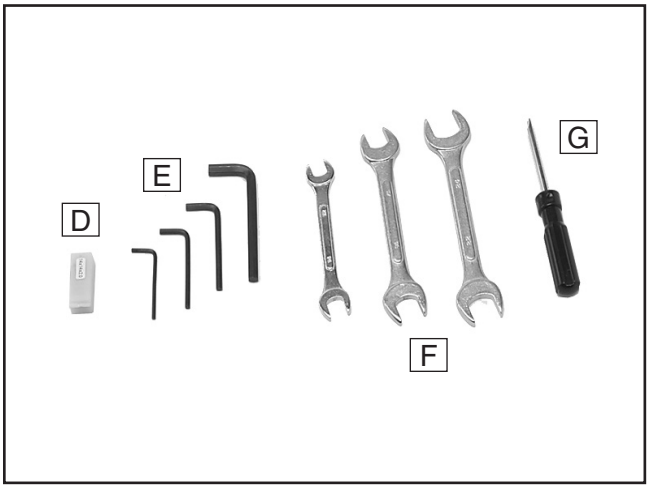


Figure 8. Model G0603X small parts inventory.

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any items from the inventory list are missing.

Clean Up

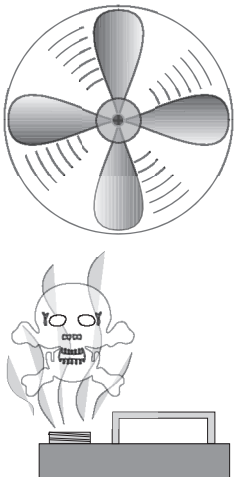
The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. To clean thoroughly, some parts may need to be removed. **For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner, as they may damage painted surfaces should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

These Items are coated and must be cleaned:

1. Cutterhead
2. Feed Rollers
3. Table
4. Table Ways
5. Infeed and Outfeed Extension Wings and Wing Mounting Surfaces

⚠WARNING

Gasoline and petroleum products have low flash points and could cause an explosion or fire if used to clean machinery. DO NOT use gasoline or petroleum products to clean the machinery.



⚠CAUTION

Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Lack of ventilation while using these solvents could cause serious personal health risks or fire. Take precautions from this hazard by only using cleaning solvents in a well ventilated area.

Site Considerations

Floor Load

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

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 9** for the minimum working clearances.

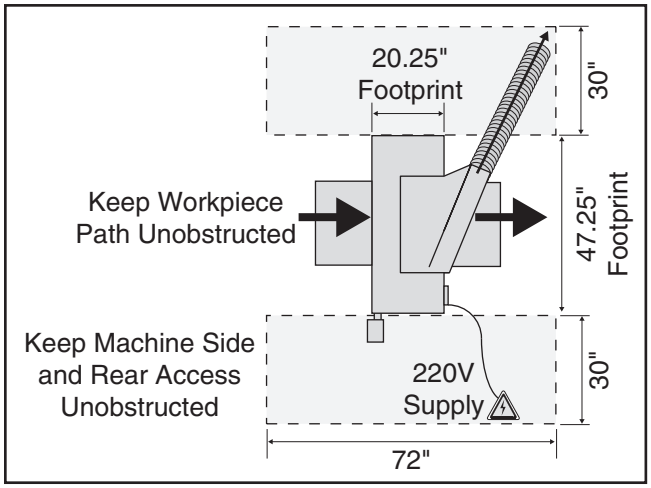
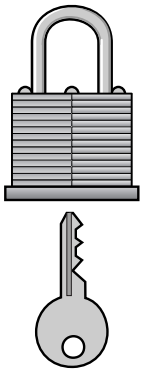


Figure 9. Minimum working clearances.



⚠CAUTION

Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and DO NOT allow unsupervised children or visitors in your shop at any time!

Lifting and Moving

⚠WARNING

The Model G0603X weighs 2217 lbs. (shipping weight). You will need power lifting equipment and assistance to remove this machine from the pallet and position it. Inspect all lifting equipment and make sure that all is in perfect working order and is rated for the load before attempting to lift and move this planer. Ignoring this warning may lead to serious personal injury or death.

Read this entire **SETUP** section before attempting to lift and move the planer. Pay special attention to **Site Considerations** on **Page 15** and **Mounting to Shop Floor** on **Page 17**.

To lift and move the planer:

1. Remove sides and top of the shipping crate.

2. Place the lifting straps on the lifting hooks as illustrated in **Figure 10**. Make sure the straps are not in contact with any controls, wires, or handles.

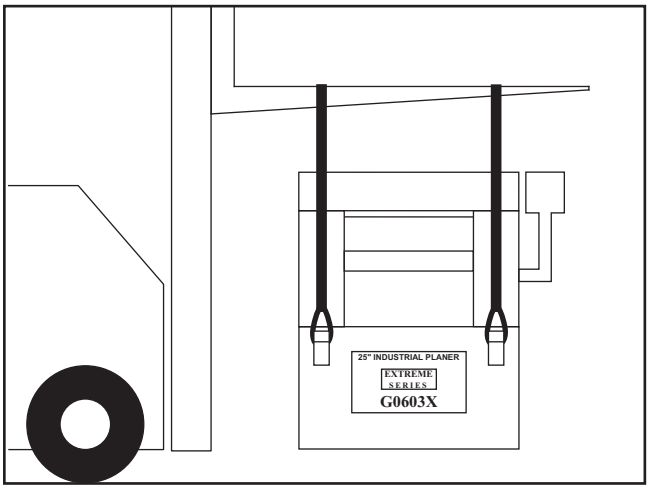


Figure 10. Location of lifting straps.

3. Position the lifting straps, your lifting device, and your assistant to support the planer in a vertical and stable position.

4. Unbolt the planer from the pallet.

5. Slowly raise the planer from the pallet, then carefully move the planer to your prepared location.

6. Follow the **Mounting To Shop Floor** procedures.

Mounting to Shop Floor

The Model G0603X should be mounted to the floor. Because floor materials may vary, floor mounting hardware is not included.

Bolting to Concrete Floors

Lag shield anchors with lag bolts (see **Figure 11**) and anchor studs (see **Figure 12**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

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

Figure 11. Typical lag shield anchor and lag bolt.

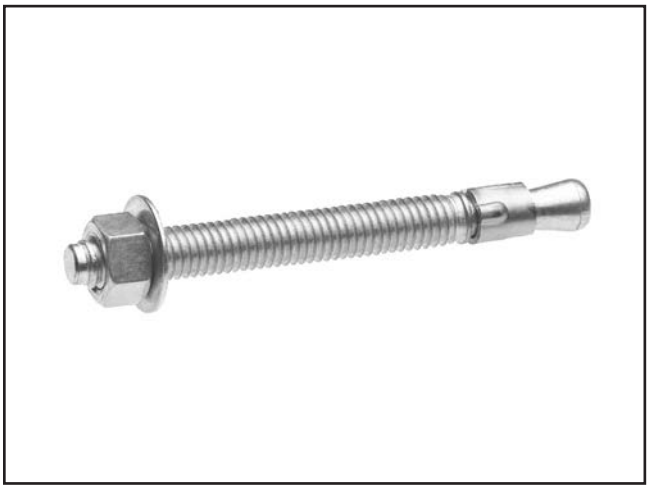


Figure 12. Typical anchor stud.

To mount the planer to the floor:

1. With the planer securely resting on the floor, shim between the floor and planer base as required to level the planer table.

2. Secure the planer to the floor, but DO NOT overtighten the fasteners.

NOTICE

Shims may be required when mounting the planer to the floor. If the floor is uneven and you tighten the mounting bolts without shims, you can crack the cast iron base. Shim any gaps between the base and the floor before fully tightening the mounting bolts.

3. Recheck the table to make sure that it is still level, and re-shim as required.

4. When the planer is level and all gaps are shimmed, securely tighten the mounting bolts.

Table Extension Wings

Components and Hardware Needed: **Qty**
Table Extension Wings 2
Open End Wrench 17 x 19mm 1
Hex Wrench 5mm 1
Straightedge 4' (or longer) 1
Hex Bolts M12-1.75 x 50 6
Flat Washers 12mm 6
Set Screws M10-1.5 x 20 6

⚠CAUTION

Table extension wings are heavy and could cause personal injury if dropped during installation. Have an assistant hold the table extension wings while you fasten them to the planer.

To attach the table extension wings:

1. With the help of an assistant, attach the table extension wings to the planer table (see **Figure 13**) with the hex bolts and the flat washers. Hand tighten the bolts for now.

2. Install the set screws (see **Figure 13**) in the holes in the bottom of the wings.

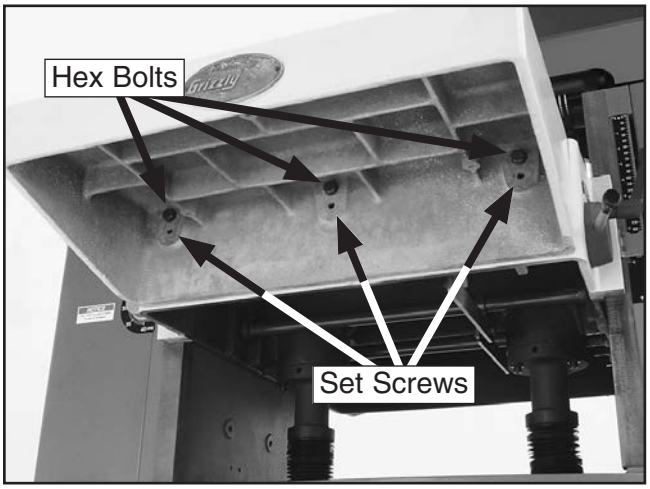


Figure 13. Table extension wing fasteners and leveling set screws.

3. Using the straightedge as a guide (see **Figure 14**) and the set screws for leveling control, position the extension wings even and level with the table, then fully tighten the hex bolts.

Figure 14. Leveling extension wings and table.

Dust Hood

Components and Hardware Needed: **Qty**
Dust Hood 1
Hex Wrench 4mm..... 1
Button Head Cap Screws M6-1 x 12..... 8
Lock Washers 6mm..... 8
Flat Washers 6mm 8

To install the dust hood:

1. Attach the dust hood with the button head cap screws, lock washers, and flat washers (see **Figure 15**).

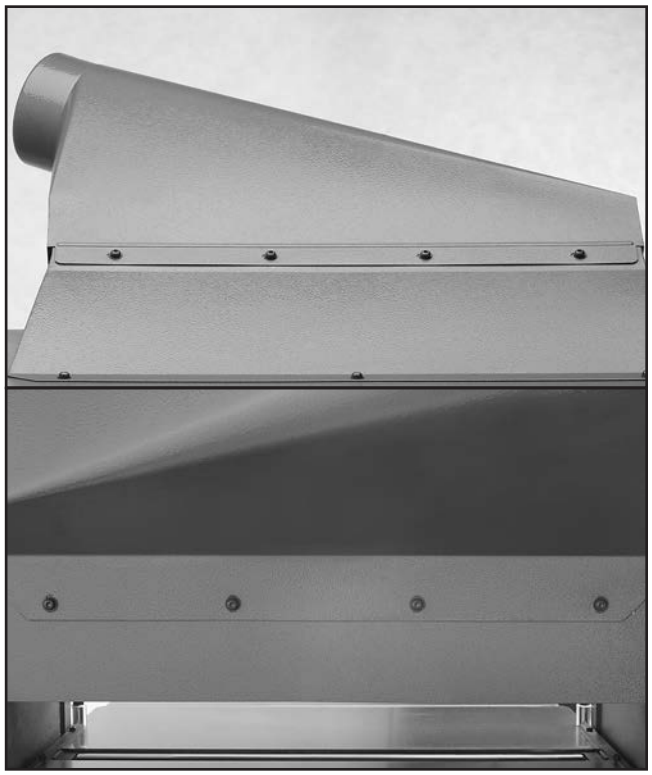


Figure 15. Top and bottom dust hood fasteners in place.

Dust Collection

⚠CAUTION

DO NOT operate the Model G0603X without an adequate dust collection system. This planer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 650 CFM
Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or wyes, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose:

1. Fit a 5" dust hose over the dust port, as shown in **Figure 16**, and secure in place with a 5" hose clamp.

2. Tug the hose to make sure it does not come off. **Note:** *A tight fit is necessary for proper performance.*

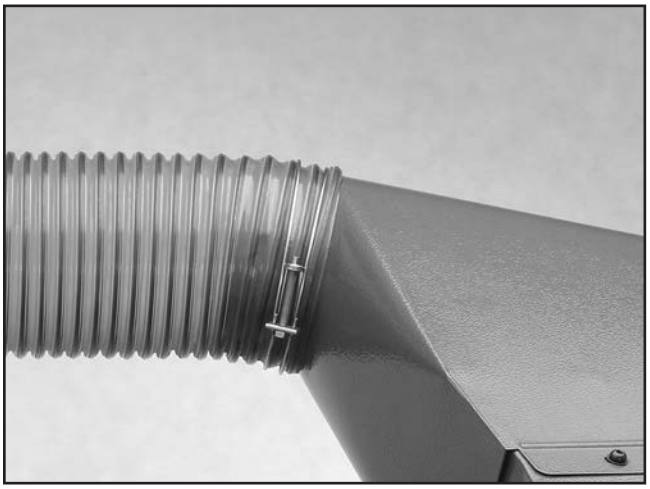


Figure 16. Dust hose attached to dust port.

Cutterhead/Feed and Table Gearbox Oil Levels

Components and Hardware Needed: **Qty**
Hex Wrench 4mm 1
Hex Wrench 6mm 1
Wrench 14mm 1
Gear Oil 60W-90W ..... as needed

Before starting your machine for the first time, make sure the cutterhead/feed and table gearboxes have adequate levels of oil. The proper oil level is just slightly below the bottom of the fill plug hole. Both gearboxes use 60W-90W gear oil.

The access panel for the cutterhead/feed gearbox is on the upper left side of the planer, and the access panel for the table gearbox is on the lower right side.

To check the gearbox oil levels:

1. DISCONNECT THE PLANER FROM POWER!

2. Remove the access panel and set aside.

3. Remove the fill oil plug (see **Figure 17 & 18**).

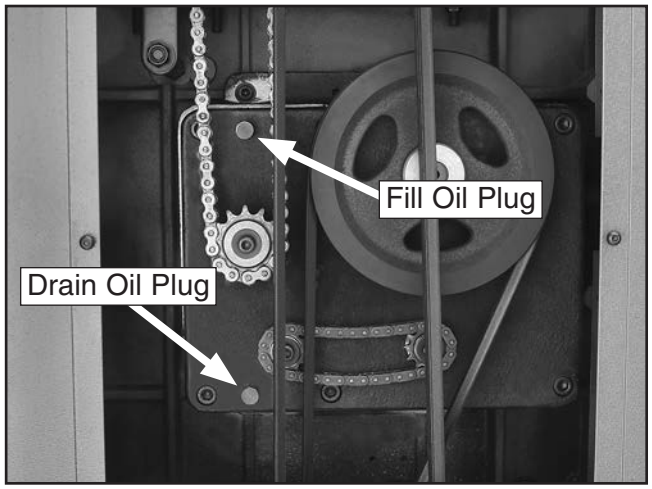


Figure 17. Cutterhead/feed gearbox fill and drain oil plugs (upper left access panel removed).

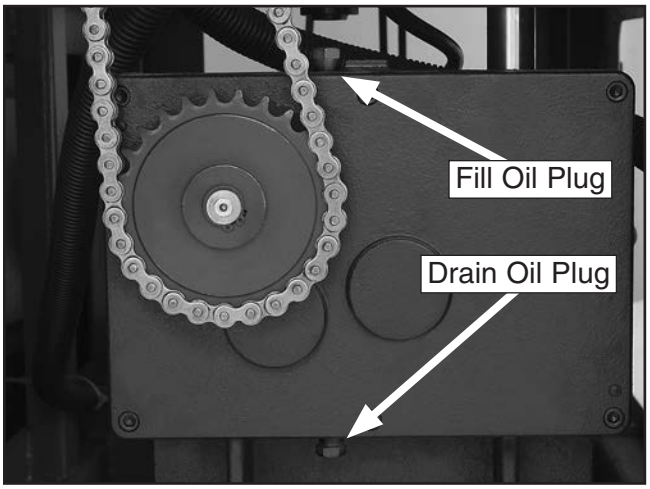


Figure 18. Table gearbox fill and drain oil plugs (lower right access panel removed).

4. Take a clean 6mm hex wrench, dip the short end inside the fill hole, and then remove it.

   —If the end of the hex wrench is coated with oil, the gearbox oil level is okay. Replace the fill oil plug and continue with the setup.

   —If the end of the hex wrench is not coated with oil, then you need to add more oil. Fill until oil reaches the top or slightly under the filler oil plug port for correct oil level.

   Note: *Replace gearbox oil after the first 20 hours of operation. This is a normal break-in procedure.*

5. Replace and secure fill oil plug and access panels.

Connecting to Power

Now is the time to connect your planer to the power source. Make sure you have read **CIRCUIT REQUIREMENTS** on **Page 11** before doing so.

Test Run

Once assembly is complete, test run your machine 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 machine immediately, then review **Troubleshooting** on **Page 33**.

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

To test run the machine:

1. Make sure you have read the safety instructions beginning on **Page 8** and check to ensure that your machine is set up properly.

2. Make sure all tools and objects used during set up are cleared away from the machine.

3. Make sure the headstock cover is closed and secured and that all access panels are securely attached.

4. Put on safety glasses and respirator; secure loose clothing and long hair.

5. Press the green MAIN MOTOR button on the power/table control to turn the cutterhead/feed motor ***ON***.

6. The planer should run smoothly with little or no vibration. Listen for any abnormal noises and watch for any unusual actions.

   —If you suspect any problems, immediately stop the planer by pressing the red EMERGENCY STOP button on the power/table control. Refer to **Troubleshooting** on **Page 33** and fix any problems before starting the planer again.

   —If you need any help with your planer call our Tech Support at (570) 546-9663.

7. Use the green TABLE UP and TABLE DOWN buttons on the power/table control to raise and lower the table, and repeat **Step 6** for each direction.

Safety Feature Tests

After completing the **Test Run** to your satisfaction, perform the following procedures to verify that all of the safety features of this planer are operational.

⚠WARNING

Perform safety feature tests carefully and pay close attention to each of the steps. If any of the following tests fail, shut the power *OFF* at the CIRCUIT BREAKER immediately and call our Tech Support at (570) 546-9663. DO NOT turn the power ON for any reason unless instructed to do so by our Tech Support. Failure to follow this warning and procedure could result in serious personal injury or death!

To test the Emergency Stop lockout feature:

1. Start the planer by pressing the MAIN MOTOR button on the power/table control.

2. Now press the EMERGENCY STOP button and let the planer come to a complete stop. Leave the EMERGENCY STOP button pushed in.

3. Press the TABLE UP and TABLE DOWN buttons. There should be NO table movement or action from the planer of any kind.

Continued on next page ⟶

4. Press the MAIN MOTOR button. There should be NO movement or action of any kind from the planer.

5. Attempt to move the table by using the digital controls. There should be NO table movement or action from the planer of any kind.

To test the headstock cover limit switch:

1. Release the EMERGENCY STOP button by twisting the knurled backside of the button clockwise until the whole assembly pops out.

2. Start the planer by pushing the MAIN MOTOR button.

3. Twist the headstock cover latches to the left to release the catches (see **Figure 19**) and, slowly and with great care, lift the cover only about 1/2". When you do this the planer should shut down immediately.

Figure 19. Headstock cover latch in closed position.

4. Lower the cover, then secure it by twisting the latches to the right.

To test the table height limit switches:

1. Using the TABLE UP button on the power/table control, carefully raise the table all the way. The table should stop by itself just before making contact with the headstock.

2. Using the TABLE DOWN button, lower the table all the way. The table should stop by itself at the lowest limit for the table.

Tighten V-Belts

The final step in the set up process must be done after approximately 16 hours of operation. During the first 16 hours, the V-belts will stretch and seat into the pulley grooves. After 16 hours, the V-belts must be tensioned or they will slip and burn out. Refer to **Replace/Adjust V-Belts** on **Page 30** when you are ready to perform this important adjustment.

Note: *Pulleys and belts run very hot. This is a normal. Allow them to cool before making adjustments.*

Recommended Adjustments

For your convenience, the maintenance and adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

However, because of the many variables involved with shipping, some of these procedures may need to be repeated to ensure optimum cutting results. Keep this in mind as you start to use your new planer.

Step-by-step instructions for these procedures can be found on the referenced pages.

1. Adjust Height of Table Rollers (**Page 28**).
2. Adjust V-Belts (**Page 30**).
3. Lubrication (**Page 32**).
4. Adjust Table Chain Tension (**Page 36**).
5. Adjust Table Parallelism (**Page 36**).
6. Adjust Height of Infeed/Outfeed Rollers and Pressure Bar (**Page 38**).
7. Adjust Height of Chipbreaker (**Page 40**).
8. Adjust V-Belt Pulley Alignment (**Page 42**).
9. Adjust Infeed Roller Tension (**Page 43**).
10. Adjust Outfeed Roller Tension (**Page 44**).
11. Adjust Pressure Bar Tension (**Page 44**).

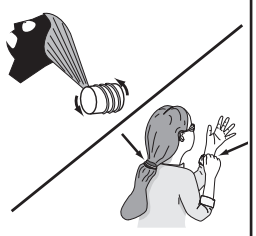
SECTION 4: OPERATIONS

Operation Safety

⚠WARNING

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





⚠WARNING

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.

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.

Table Handwheel

The Model G0603X table elevation can be adjusted manually with the handwheel or with the power controls.

Table elevation can be measured with the vertical scale on the right side of the table, or with the power controls. (See **Power Controls** on **Page 25** for further explanation of the digital control features.)

To adjust the table elevation using the handwheel:

1. Push inward on the handwheel and rotate it slowly until it engages with the indented shaft behind it.

2. Continue to rotate the handwheel until the table has reached the desired elevation as indicated on the scale to the right of the table.

   Note: *One rotation of the handwheel adjusts the table 1/32".*

3. Pull out on the handwheel to disengage it from the adjusting mechanism.

Note: *Any time you switch directions with the handwheel, there will be a small amount of backlash—so the first crank of the handwheel after switching directions will be slightly less than 1/32". However, as long as you move the handwheel in the same direction during operation, backlash will not be a factor.*

⚠CAUTION

The handwheel should be disengaged when using the power mode of adjusting the table elevation. Otherwise, the rapid rotation of the handwheel could present a safety hazard!

Power Controls

Table adjustments can be made with the power/table controls, or in conjunction with the digital control.

The digital control adds these convenient features:

- Move the table to a one-time preset position.
- Add or subtract distance from the current table position.
- Move the table to one of ten preset locations stored in digital memory.

There are two LED readouts on the digital control. The top LED shows the target position value intended for the table, if one is entered, and the bottom LED shows the actual position of the table.

The readout values can be expressed either in millimeters or inches with the use of the MM/INCH key [MM INCH]. The corresponding LED light on this key will show which measurement is active.

To move the table with the power/table controls only:

1. Press the TABLE UP or TABLE DOWN button on the power/table control.
2. Table movement will stop when the button is released.

The digital control has two modes of operation—manual and single.

In MANUAL mode, the table can be moved either with the power/table control buttons or the digital control keypad.

To use the digital control keypad in manual mode to move the table:

1. Press the MANUAL/SINGLE key [MANUAL SINGLE] to select MANUAL mode—the light on this key will blink.
   - Press the "9" key [9] on the digital keypad to move the table up.
   - Press the "8" key [8] on the digital keypad to move the table down.
2. Release the key to stop table movement.

The SINGLE mode of the digital control provides precise movement of the table to a preset position.

To move the table to a one-time preset position:

1. On the digital keypad, press the MANUAL/SINGLE key [MANUAL SINGLE] to select SINGLE mode—the light on this key will be off.
2. Press the PROGRAM key [PROG] —an LED will blink in the top target window.
3. Using the numerical keypad, enter the target value for the table position.
4. Press the ENTER key [ENTER] —the light on the START key [START] will blink.
5. Press the START key [START] to send the table to the target position.

Note: *To cancel the table movement before it has reached the target value, press the STOP key [STOP]. To restart the procedure, you will have to re-enter the target value again.*

To add or subtract distance from the current position of the table:

1. On the digital keypad, press the MANUAL/ SINGLE key [MANUAL SINGLE] to select SINGLE mode—the light on the key will be off.

2. Press the +/- key [+/-] —an LED in the top target window will blink.

   Note: *When the +/- key [+/-] is pressed once, the default is to add the value in the top LED target window. To toggle this value to be subtracted, press the +/- key [+/-] again—a minus sign will appear at the left edge of the top LED target window.*

3. Using the numerical keypad, enter the value to be added to or subtracted from the table position shown in the bottom LED window.

4. Press the ENTER key a [⏎] to accept this value—the light on the START key [START] will blink.

5. Press the START key [START] to move the table to the desired location.

   Note: *Pressing the STOP key [STOP] will halt the table movement and cancel the programming.*

The digital control provides ten preset values to be stored in permanent memory for use with frequently used table positions. These values are associated with the "0" through "9" keys on the digital keypad.

To enter a preset target value into memory:

1. On the digital keypad, press the MANUAL/ SINGLE key [MANUAL SINGLE] to select SINGLE mode—the light on the key will be off.

2. Press the following keys one at a time:

   a. The "F" key [F].

   b. The "5" key [5].

   c. The "5" key [5] again.

   d. The ENTER key [⏎].

   Note: *If this procedure is successful, an LED in both the top target window and the bottom actual window will blink, and "ProG" will appear in the top target window.*

3. Press a key from "0" to "9" to store the target value—the number of the key pressed will appear to the right of "ProG" in the top target window.

4. Using the numeric keypad, enter the table position to be stored and press the ENTER key [⏎].

5. Repeat **Steps 3–4** to store additional values.

6. When finished, press the EXIT key [⌫] —the readout windows will return to normal.

Note: *You may cancel and exit this procedure at any time by pressing the EXIT key [⌫].*

To move the table to a stored preset position:

1. On the digital keypad, press the MANUAL/ SINGLE key [MANUAL SINGLE] to select SINGLE mode—the light on the key will be off.

2. Press the key on the numeric keypad that stores the table position value you wish to use—that value will appear in the top target window and the light on the START key [START] will blink.

3. Press the START key [START] to move the table to the preset position.

Note: *You may press the STOP key [STOP] anytime the START key [START] light is blinking to cancel the process and return the digital control to normal.*

Basic Operation

1. Put on safety glasses and a respirator, and secure loose clothing and long hair.

2. Unless your workpiece is very flat, surface plane the workpiece on a jointer until it is flat—having the face flat will ensure that it sits flat on the planer table during operation.

3. Adjust the table elevation to slightly lower than your workpiece height (approximately 1/32"–1/16"). Planing at this depth will usually take off the high spots.

4. Start the planer by pressing the MAIN MOTOR button on the power/table control.

5. Place the flat side of the workpiece down on the table, and feed the workpiece through the planer, making sure not to stand directly in front or behind the workpiece to avoid kickback injury.

   —If the cut is too heavy and bogs down the planer:

   a. Turn the planer ***OFF*** immediately by pressing the red EMERGENCY STOP button on the power/table control.

   b. Allow the planer to come to a complete stop.

   c. Lower the table and remove the workpiece and repeat **Steps 3–5**.

6. Measure your workpiece thickness and adjust the table elevation as necessary to take a lighter or heavier pass, depending on your needs. For most wood types, 1/8" per pass is a good cutting depth.

Operation Tips

- Inspect lumber for defects, warping, cupping, twisting, and for foreign objects (nails, staples, imbedded gravel, etc,). If you have any question about the quality of your lumber, do not use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.

- Use the full width of the planer. When feeding lumber into the planer, alternate between the left, the right, and the middle. Your cutters will remain sharp much longer.

- Scrape all glue from workpiece before planing.

- Plane ONLY natural wood fiber. DO NOT plane MDF, plywood, laminates, or other synthetic products.

- Plane WITH the grain. Never feed end-cut or end-grained lumber into your planer.

- Do not plane boards with loose or large knots, splits, cross grain or other obvious blemishes or defects. These can damage the machine and pose a safety risk to the operator.

- Keep your work area clear.

- When planing long stock, get assistance to receive the workpiece from the outfeed table.

- Avoid planing wood with a high water content. Wood with more than 20% moisture content or wood exposed to excessive moisture (such as rain or snow), will plane poorly and cause excessive wear to the cutters and motor. Excess moisture can also hasten rust and corrosion of the planer and/or individual components.

Power Feed Rate

The infeed and outfeed rollers power the stock through the planer while keeping boards flat and providing a consistent rate of movement.

The Model G0603X power feed features three feed rates—20, 25, and 30 FPM. Use the different feed rates as recommended below:

20 or 25 FPM..... Dimensioning Pass
25 or 30 FPM.....Finishing Pass

The feed rate control on the left side of the table (see **Figure 20**) is used to adjust the speed of the infeed and outfeed rollers. The speed should ONLY be changed when the machine is running.

NOTICE

ONLY change the speeds when the planer is running, but DO NOT attempt to change speeds during a cutting operation or damage to the gearbox will result.

Figure 20. Feed rate control.

Table Rollers

Adjustment Height Range ..... 0.002"–0.050"

The height of the table rollers will vary, depending on the condition of the wood you intend to plane. When planing rough cut stock, set the rollers high to keep the lumber from dragging along the bed. When planing milled lumber, set the rollers low to help minimize snipe (gouging at the ends of the workpiece).

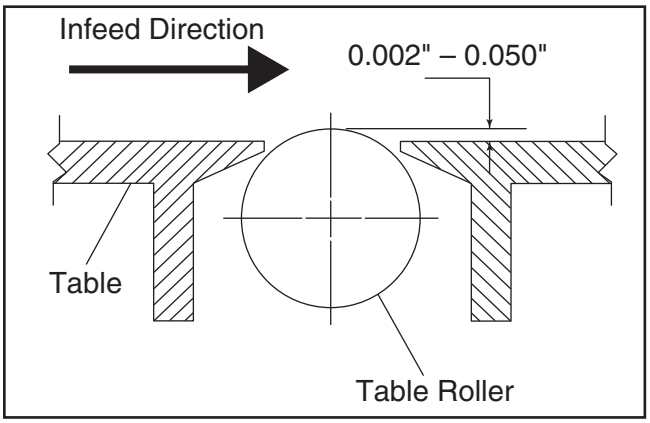


Figure 21. Table roller height range.

To adjust the table rollers:

1. Rotate the locking handle counterclockwise to loosen the table roller lever (see **Figure 22**).

2. Move the table roller lever to the desired height on the scale.

3. Retighten the locking handle.

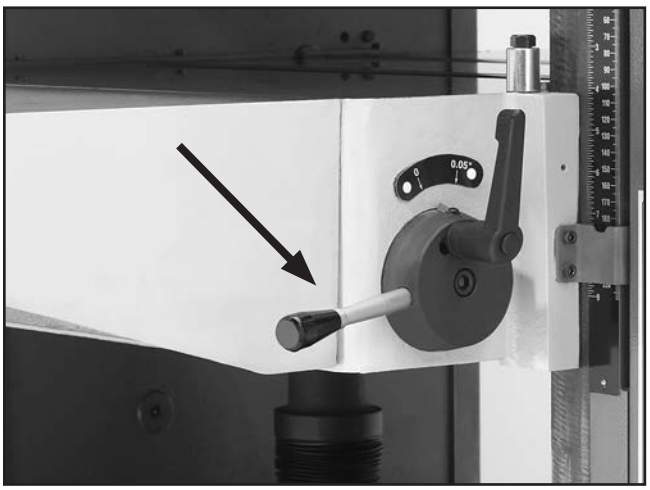


Figure 22. Table roller height control.

SECTION 5: ACCESSORIES

G1738—Rotacator™ Precision Planer Tool
The Rotacator is a dial indicator on a magnetic base and is designed for quickly and accurately setting the critical tolerances needed when adjusting any planer, so that nasty surprises such as non-parallel and chattered cuts can be eliminated. Helps adjust infeed/outfeed rollers, pressure bars, chip breakers, and bed rollers. Also a great setup tool for other machines! Accurate to 0.001". Indicator rotates 360˚.

Figure 23. Rotacator™ Precision Planer Tool.

G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 12 oz. Spray
G2871—Boeshield® T-9 12 oz. Spray
G2870—Boeshield® T-9 4 oz. Spray
H3788—G96® Gun Treatment 12 oz. Spray
H3789—G96® Gun Treatment 4.5 oz. Spray

Figure 24. Recommended products for protecting unpainted cast iron/steel parts on machinery.

T20501—Face Shield Crown Protector 4"
T20502—Face Shield Crown Protector 7"
T20503—Face Shield Window
T20452—"Kirova" Anti-Reflective S. Glasses
T20451—"Kirova" Clear Safety Glasses
H0736—Shop Fox® Safety Glasses
H7194—Bifocal Safety Glasses 1.5
H7195—Bifocal Safety Glasses 2.0
H7196—Bifocal Safety Glasses 2.5

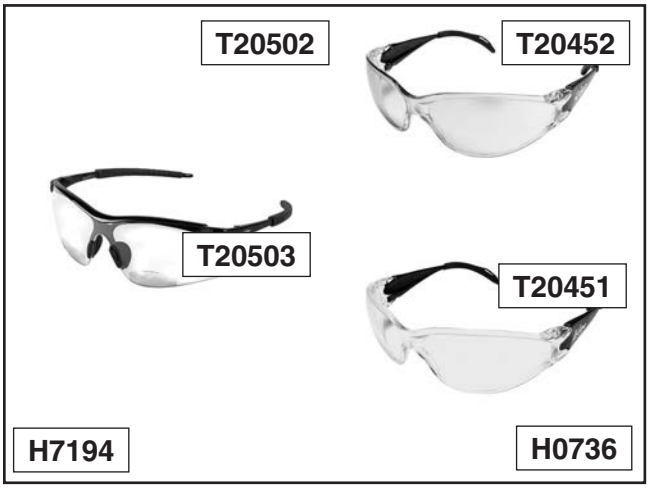


Figure 25. Eye protection assortment.

H9893—Carbide Insert for G0603X Helical Cutterhead
This indexable carbide insert can be rotated to provide four factory sharp edges before replacement.

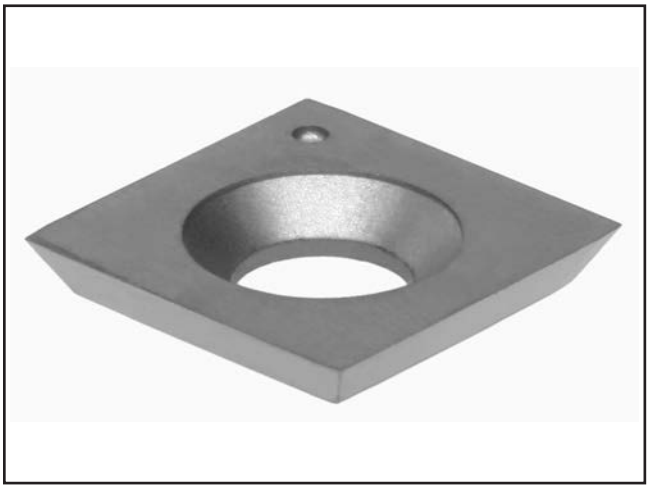
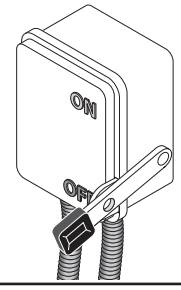


Figure 26. H9893 Carbide Insert.

SECTION 6: MAINTENANCE



⚠WARNING
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:
- Clean unpainted cast iron parts.
- Clean dust buildup from cutterhead and feed rollers.

Weekly Maintenance:
- Inspect/replace cutterhead carbide inserts (**Page 35**).
- Inspect and lubricate two table elevation screws (**Page 32**).
- Inspect and lubricate table ways (**Page 32**).
- Inspect and clean feed rollers.
- Perform **Safety Features Test** (**Page 21**).

Monthly Check:
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Inspect/adjust/replace V-Belts (**this page**).
- Lubricate all chains (**Page 32**).

Yearly:
- Change cutterhead/feed and table gearbox oil (**Page 32**).

Cleaning

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. This will prevent the moisture from wood dust from remaining on bare metal surfaces. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning. We recommend products like SLIPIT®, G96® Gun Treatment, or Boeshield® T-9 (see **Page 29** for more details).

Replace/Adjust V-Belts

Correct V-Belt Deflection .....1/4"

Tools Needed:	**Qty**
Hex Wrench 4mm	1
Hex Wrench 8mm	1
Wrench 19mm	1
Assistance	1 person

V-belt removal and replacement is simply a matter of loosening the V-belts, rolling them off the pulleys, replacing them with new belts, then retensioning them.

The Model G0603X planer uses three V-belts to drive the cutterhead, and one V-belt to drive the feed rollers.

Always replace the three cutterhead V-belts with a matched set of three belts. Otherwise uneven belt tension may cause premature belt failure.

Continued on next page ⟶

To replace the V-belts:

1. DISCONNECT THE PLANER FROM POWER!

2. Loosen the button head cap screws and remove the following access panels:

   - Top left side access panel.
   - Bottom left side access panel.
   - Rear bottom access panel.

3. Loosen the top fasteners on the cutterhead/feed motor tension rods shown in **Figure 27**.

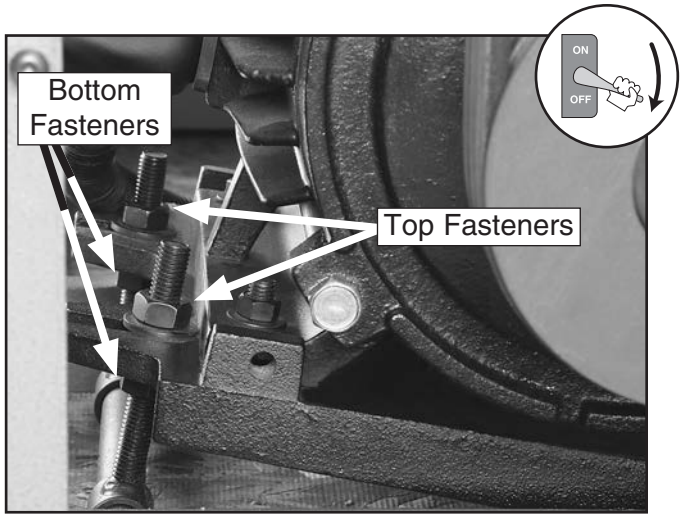


Figure 27. Cutterhead/feed motor tension rod fasteners (bottom left access panel removed).

4. With assistance, lift the motor up and slide all four V-belts off the pulleys.

5. Slide the new belts onto the pulleys and lower the motor.

   Note: *Make sure to remount the smaller feed belt on the outside of the feed tension pulley as shown in* ***Figure 28****.*

6. Adjust the tension of all four V-belts as described in the next set of procedures.

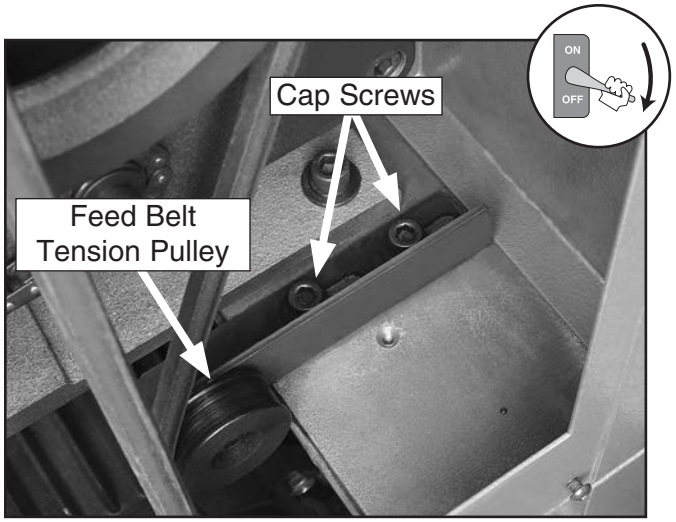


Figure 28. Feed belt mounted on feed belt tension pulley (top left access panel removed).

To adjust V-belt tension:

1. Loosen the top tension rod fasteners shown in **Figure 27**, then lower the bottom fasteners at least one inch.

2. With assistance, position the motor so that there is about ¼" deflection for each of the three cutterhead V-belts when moderate pressure is applied midway between the pulleys.

3. As you maintain the position of the motor, tighten the bottom fasteners snug to the bottom side of the motor mount.

4. Tighten the top fasteners to hold the motor firmly in place.

5. Reach through the top left access opening and loosen the two cap screws on the feed belt tension assembly (see **Figure 28**).

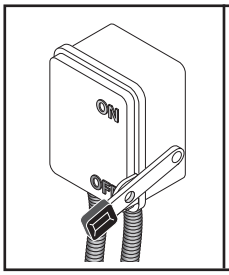
6. Position the feed belt tension pulley so that there is about ¼" deflection on the feed belt when moderate pressure is applied midway between the pulleys.

7. While maintaining the above position of the tension assembly, retighten the two cap screws.

Lubrication

The Model G0603X features factory-sealed bearings. A sealed bearing requires no lubrication during its lifetime. Should a bearing fail, your planer will probably develop a noticeable rumble/vibration, which will increase when the machine is put under load. The bearings are standard sizes and can be replaced through Grizzly.

Proper lubrication of other planer components is essential for long life and trouble-free operation. Below is a list of components that require periodic lubrication. Schedules are based on daily use. Adjust accordingly for your level of use.



⚠WARNING

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

Table Elevation Screws

Use a light grease to lubricate the two elevation screws.

To access and lubricate the table elevation screws:

1. Raise the table all the way up.
2. DISCONNECT THE PLANER FROM POWER!
3. Remove the two screws securing the top of the rubber dust covers (see **Figure 29**).
4. Pull the covers down and apply a small amount of light grease to the elevation screws.
5. Secure the dust covers with the screws removed in **Step 3**.

Gearboxes

Change the oil for the cutterhead/feed gearbox and the table gearbox after the first 20 hours of operation. Thereafter, change the oil every 24 months.

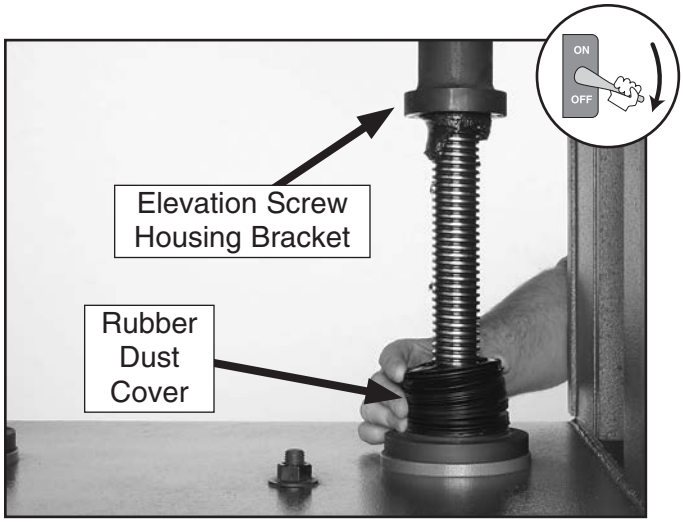


Figure 29. Table elevation screw covers pulled down for lubrication.

Note: *Refer to **Page 20** for detailed instructions for changing oil.*

Chains

Use a lightly oiled paint brush to wipe down the chain and gears. Chains are located in the following areas:

- One on both sides of the cutterhead (accessed under the headstock cover).
- One connecting the cutterhead/feed gearbox to the feed rollers (accessed through the left side panels).
- One found on the face of the cutterhead/feed gearbox (accessed through the top left side panel).
- One connecting the table adjusting handwheel to the table (accessed through the bottom right access panel).
- Two attaching the table motor with the two elevation screw bases (found underneath the table and accessed through the bottom rear panel).

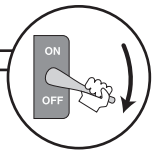
Table Ways

Wipe the table ways with an oily rag and kept free from dust buildup.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix 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.

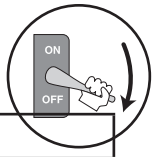
Troubleshooting



Motor & Machine Operation

Symptom	Possible Cause	Possible Solution
Motor will not start.	1. Planer headstock cover is not closed, or limit switch is at fault 2. Thermal overload relay inside magnetic switch has tripped. 3. Incorrect voltage. 4. Open circuit in motor or loose connections. 5. Emergency stop button depressed.	1. Close cover and/or replace/adjust limit switch. 1. Unplug machine, open magnetic switch cover, turn amperage dial on the thermal overload relay to a higher setting. 2. Check power supply for proper voltage. 3. Inspect all lead connections on motor for loose or open connections. 4. Rotate clockwise until it pops out/replace.
Fuses or circuit breakers blow.	1. Short circuit in line cord or plug.	1. Repair or replace cord or plug for damaged insulation and shorted wires.
Motor overheats or operates at limited RPM.	1. Motor overloaded during operation. 2. Motor is miswired.	1. Reduce cutting load; take lighter cuts. 2. Rewire/replace motor.
Motor stalls or shuts off during a cut.	1. Motor overloaded during operation. 2. Thermal overload protection is set too low. 3. Short circuit in motor or loose connections. 4. Circuit breaker tripped.	1. Reduce cutting load; take lighter cuts. 2. Unplug machine, open magnetic switch cover, turn amperage dial on the thermal overload relay to a higher setting. 3. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 4. Install correct or repair circuit breaker; reduce number of machines running on that circuit.
Cutterhead slows or squeals when cutting, especially on start-up.	1. V-belt loose. 2. V-belt worn out.	1. Tighten V-belt (**Page 30**). 2. Replace V-belt (**Page 30**).
Loud repetitious noise coming from machine.	1. Pulley set screws or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belts are damaged.	1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace V-belts (**Page 30**).
Vibration when running or cutting.	1. Loose or damaged cutterhead. 2. Damaged V-belt. 3. Worn cutterhead bearings.	1. Tighten or replace cutterhead. 2. Replace (**Page 30**). 3. Check/replace cutterhead bearings.

Cutting



Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut). **Note**: *A small amount of snipe is inevitable with all types of planers. The key is minimizing it as much as possible.*	1. One or both of the table rollers are set too high. 2. Outfeed extension slopes down or is not level with the main table. 3. Chipbreaker or pressure bar set too low. 4. Workpiece is not supported as it leaves the planer.	1. Lower the table rollers (**Page 28 & 41**). 2. Level the outfeed extension wing with the main table (**Page 18**). 3. Raise the height of the chipbreaker or pressure bar (**Page 40 & 38**). 4. Adjust and level the outfeed extension wing (**Page 18**).
Workpiece stops/slows in the middle of the cut.	1. Taking too heavy of a cut. 2. One or both of the bed rollers are set too low or too high. 3. Chipbreaker or pressure bar set too low. 4. Feed rollers set too low or too high. 5. Table not parallel with head casting. 6. Pitch and glue build up on planer components.	1. Take a lighter cut. 2. Lower/raise the bed rollers (**Page 28 & 41**). 3. Raise the height of the chipbreaker or pressure bar (**Page 40 & 38**). 4. Adjust the feed rollers to the correct height (**Page 38**) 5. Adjust the table so it is parallel to the head casting (**Page 36**). 6. Clean the internal cutterhead components with a pitch/resin dissolving solvent.
Chipping (consistent pattern).	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped carbide cutter. 3. Feeding workpiece too fast. 4. Taking too deep of a cut. 5. Misadjusted chipbreaker.	1. Inspect workpiece for knots and grain direction (**Page 27**). 2. Rotate or replace the affected carbide insert (**Page 35**). 3. Slow down the feed rate (**Page 28**). 4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.) 5. Adjust chipbreaker alignment and height (**Page 40**).
Fuzzy grain.	1. Wood may have high moisture content or surface wetness. 2. Dull cutters.	1. Check moisture content and allow to dry if moisture is too high. 2. Rotate/replace the cutters (**Page 35**).
Long lines or ridges that run along the length of the board	1. Nicked or chipped cutter(s).	1. Rotate/replace the cutters (**Page 35**).
Uneven knife marks, wavy surface, or chatter marks across the face of the board.	1. Feeding workpiece too fast. 2. Misadjusted chipbreaker and/or pressure bar. 3. Carbide cutters not installed evenly. 4. Worn cutterhead bearings.	1. Slow down the feed rate (**Page 28**). 2. Adjust chipbreaker and/or pressure bar alignment, height, and tension (**Page 38, 40, & 44**). 3. Make sure carbide cutters do not have debris under them; make sure cutters are torqued down evenly (**Page 35**). 4. Replace cutterhead bearings.
Glossy surface.	1. Cutters are dull. 2. Feed rate too slow. 3. Cutting depth too shallow.	1. Rotate/replace the cutters (**Page 35**). 2. Increase the feed rate (**Page 28**). 3. Increase the depth of cut.
Chip Marks (inconsistent pattern).	1. Chips aren't being properly expelled from the cutterhead.	1. Use a dust collection system rated for planer (**Page 19**).

Rotating/Changing Carbide Cutters

Torque Specifications for Torx® Screws
Inch/Pounds ..... Between 48 and 50

Tool Needed:	**Qty**
T-Handle T-25 Torx Driver	1

The cutterhead is equipped with 170 indexable carbide cutters. Each cutter can be rotated to reveal any one of its four cutting edges. Therefore, if one cutting edge becomes dull or damaged, simply rotate it 90˚ to reveal a fresh cutting edge (**Figure 30**).

In addition, each cutter has a reference dot on one corner. As the cutter is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. When the reference dot revolves back around to its starting position, the cutter should be replaced.

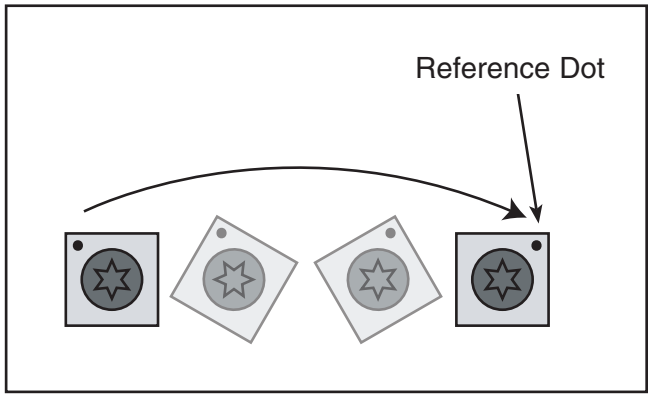


Figure 30. Cutter rotating sequence.

To rotate or change a carbide cutter:

1. DISCONNECT THE PLANER FROM POWER!

2. Raise the headstock cover to gain access to the cutterhead.

3. Remove any sawdust from the head of the carbide cutter Torx screw.

4. Remove the Torx screw and carbide cutter.

5. Clean all dust and dirt off the cutter and the cutterhead pocket from which the cutter was removed, and replace the cutter so a fresh, sharp edge is facing outward.

   Note: *Proper cleaning is critical to achieving a smooth finish. Dirt or dust trapped between the cutter and cutterhead will slightly raise the cutter, and make noticeable marks on your workpieces the next time you plane.*

6. Lubricate the Torx screw threads with a light machine oil, wipe the excess oil off the threads, and torque the Torx screw to 48-50 inch/pounds.

   Note: *Excess oil may squeeze between the cutter and cutterhead, thereby lifting the cutter slightly and affecting workpiece finishes.*

Table Chain Tension

Tools Needed: **Qty**
Hex Wrench 4mm 1
Wrench or Socket 24mm 1

The table chain transfers movement from the table gearbox to the table elevation screws. This chain can be adjusted to remove slack if the chain stretches over time.

To adjust the table chain tension:

1. DISCONNECT THE PLANER FROM POWER!

2. Remove the bottom rear access panel.

> ***NOTICE***
> **DO NOT let the chain fall off the sprockets during this procedure. Returning it to its proper location without changing the table adjustment can be very difficult.**

3. Loosen the hex nut holding the idler assembly (see **Figure 31**).

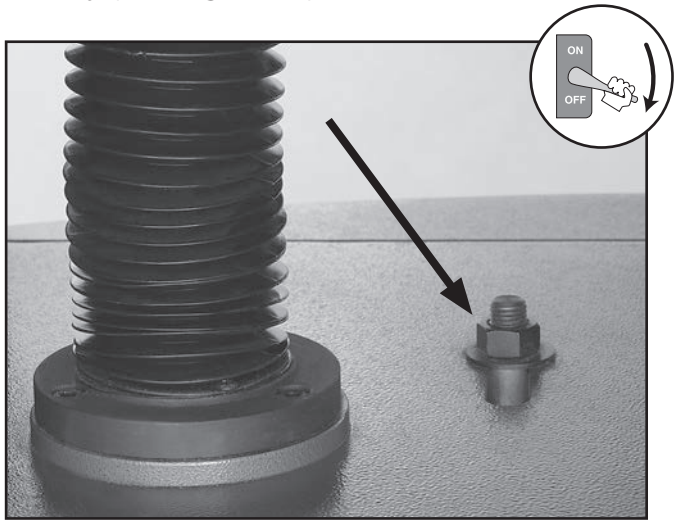


Figure 31. Table chain idler hex nut.

4. Move the idler sprocket against the chain to remove any slack.

5. Tighten idler assembly hex nut.

6. Install the bottom rear access panel.

Table Parallelism

Maximum Allowable Tolerance:
Cutterhead/Table Side-to-Side ..... 0.003"

Tools Needed: **Qty**
Rotacator 1
Hex Wrench 6mm 1
Hex Wrench 10mm 1

Table parallelism is critical to the operation of the planer. It is essential the table is parallel with the cutterhead within 0.003" from side-to-side, as illustrated in **Figure 32**.

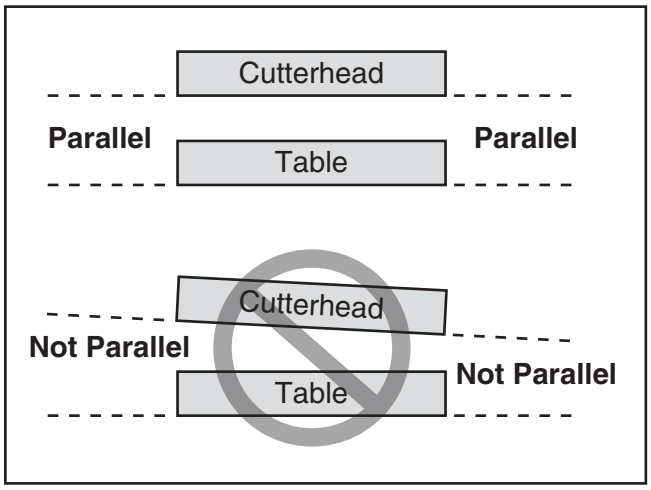


Figure 32. Side-to side parallelism of table and cutterhead.

Table Parallelism Inspection

The easiest way to determine if your table has a parallelism problem is to plane a workpiece and measure the thickness in multiple locations. If the workpiece is tapered from left to right, then your table and cutterhead may not be parallel.

Use your Rotacator (**Page 29**) to further inspect the table parallelism. If you do not have a Rotacator, a wood block and feeler gauges may be used, but extra care must be taken to ensure accuracy. If the table is not within the maximum allowable tolerance, it must be adjusted.

Table Parallelism Adjustments

The table is adjusted by turning the elevation screw housing brackets underneath the table.

To adjust the table parallelism:

1. Adjust the table height so that the Rotacator (or wood block and feeler gauges) can be used.

2. DISCONNECT THE PLANER FROM POWER!

3. Raise the headstock cover.

4. Using the cutterhead pulley, rotate the cutterhead so that the carbide insert on the left edge of the cutterhead is at bottom dead center (BDC) (see **Figure 33**)—this will also place the carbide insert on the right side of the cutterhead at BDC.

   —If you are using a Rotacator, find BDC of the carbide insert by slowly rocking the cutterhead pulley back and forth, and set the Rotacator dial to zero (see **Figure 34**).

   —If a Rotacator is not available, use a wood block and a feeler gauge; then, slowly rock the cutterhead pulley back and forth so the carbide insert just makes contact as it passes the feeler gauge.

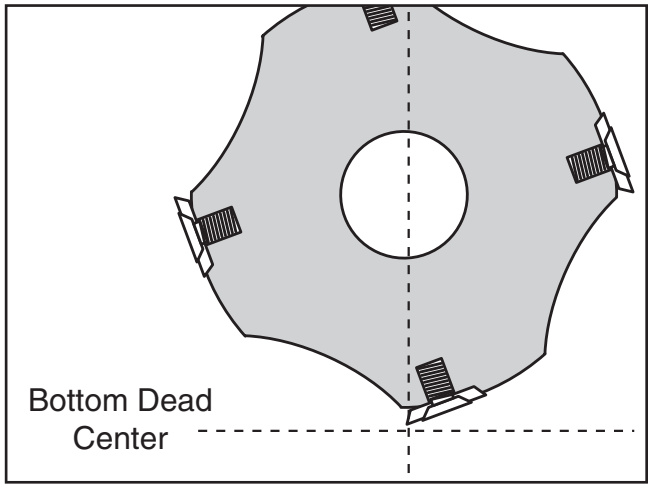


Figure 33. Cutterhead carbide insert at bottom dead center (BDC).

Figure 34. Finding BDC with the Rotacator.

5. Determine which side of the table you will adjust to bring the table parallel with the cutterhead (within 0.003").

6. Use the 6mm hex wrench to loosen the table elevation housing bracket cap screws (underneath the table) for that side of the table (see **Figure 35**).

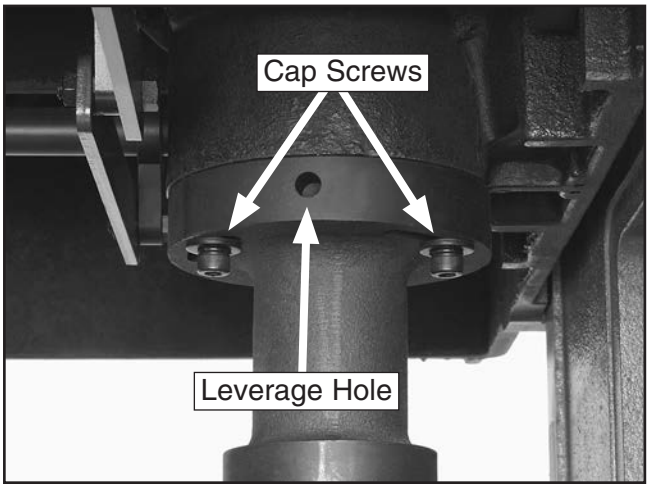


Figure 35. Table elevation screw housing bracket.

7. Insert the long end of the 10mm hex wrench into the leverage hole and turn the bracket until you are satisfied with the table parallelism from side-to-side.

   Note: *The slight deformation of the rubber elevation screw cover is normal and will not affect table movement.*

8. Retighten the cap screws holding the bracket in place.

Adjust Infeed/ Outfeed Rollers & Pressure Bar

Distances Below Cutterhead at BDC:

Infeed Roller	0.020"
Pressure Bar	0"
Outfeed Rollers	0.020"

Tools Needed:	**Qty**
Rotacator	1
Hex Wrench 8mm	1
Wrench 8mm	1
Wrench 14mm	1

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (see **Page 29**) for these adjustments.

If a Rotacator is not available, wood blocks and feeler gauges can be used.

To set the height of the infeed roller, pressure bar, and outfeed rollers using a Rotacator:

1. Make sure the cutterhead and table are parallel, and the cutterhead is at BDC. Reference **Table Parallelism** on **Page 36**.

   Note: *Zero the Rotacator dial after finding the BDC of the cutterhead. This will ensure that the following adjustments are accurate in relation to the cutterhead.*

2. DISCONNECT THE PLANER FROM POWER!

3. Place the Rotacator under the right-hand side of the infeed roller and find the BDC on a serrated edge by sliding the Rotacator right to left in a zigzag pattern—toward the front of the planer, then toward the rear of the planer, and so on.

4. Adjust the height of the infeed roller on the same side as the Rotacator to the specification given at the beginning of this procedure, using the zero setting of the Rotacator as a reference point. **Figure 36** shows the jam nut and set screw for adjusting the roller height.

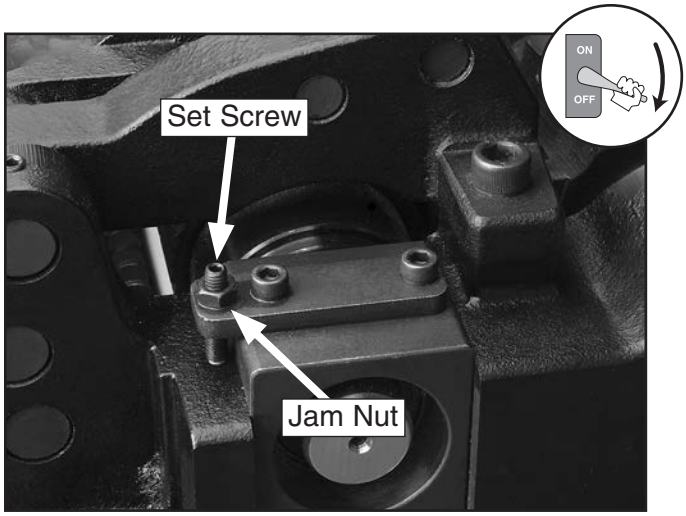


Figure 36. Infeed jam nut and set screw (right side shown).

5. Repeat **Steps 3 & 4** for the left-hand side of the infeed roller.

   Note: *You may have to repeat these adjustments from side-to-side until the entire roller height is correct.*

6. Using the same zeroed reference on the Rotacator, adjust the height of the pressure bar and outfeed rollers to their given specifications. The adjustment cap screw, jam nuts and set screws are shown in **Figures 37 & 38**.

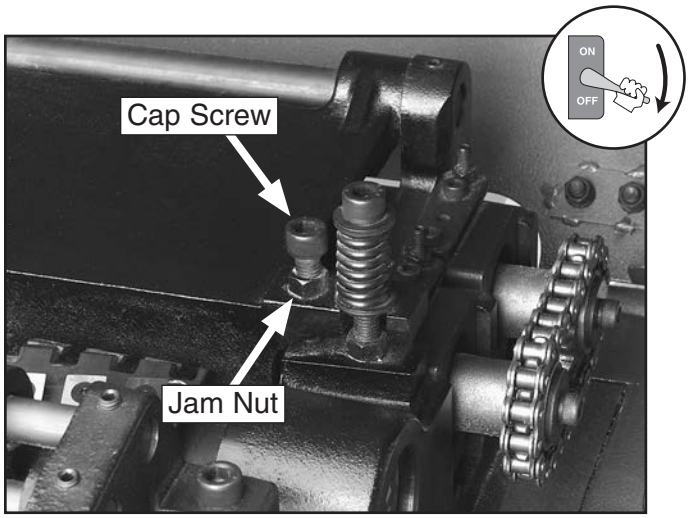


Figure 37. Pressure bar jam nut and set screw (one side shown).

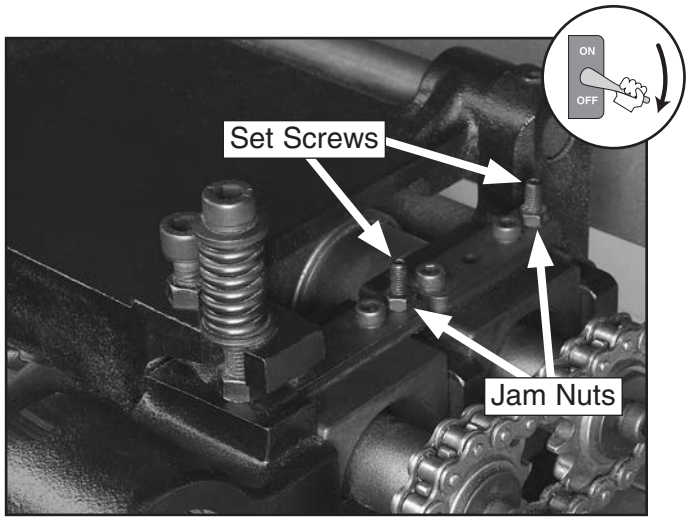


Figure 38. Outfeed jam nuts and set screws (right side shown).

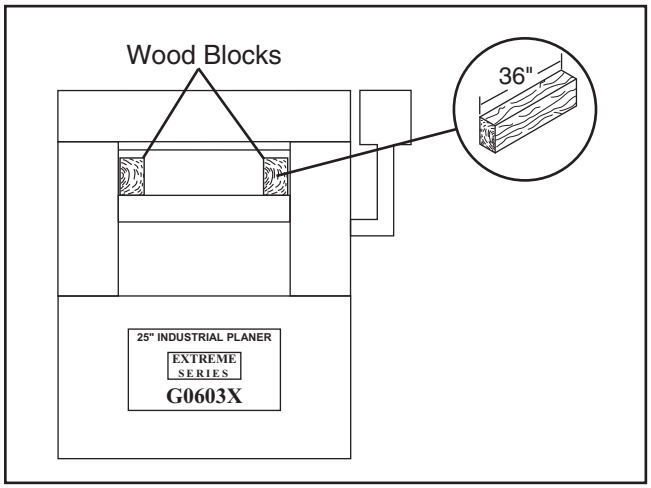


Figure 39. Wood blocks on planer table.

To adjust the height of the infeed roller, pressure bar, and outfeed rollers using wood blocks and a feeler gauge:

1. Build the wood blocks by cutting a STRAIGHT 6' foot long 2" x 4" in half.

   Note: *Having the wood blocks at an even height is critical to the accuracy of your overall adjustments. For best results, remove board warpage by squaring the stock with a jointer and table saw before cutting in half.*

2. Make sure the cutterhead and table are parallel, and the cutterhead is at BDC. Reference **Table Parallelism** on **Page 36**.

3. DISCONNECT THE PLANER FROM POWER!

4. Lower the table rollers below the surface of the table.

5. Place one wood block along the left side of the table, and place the other wood block along the right side of the table, as illustrated in **Figure 39**.

6. Raise the headstock cover.

7. Using the handwheel, adjust the table and use the feeler gauge until there is a 0.020" gap between the edge of a carbide insert at BDC (reference instructions on **Page 37**) and the wood blocks.

8. Lock the table elevation in place, as the wood blocks will now be your reference points for the rest of the adjustments.

9. Loosen the infeed roller jam nut and turn the set screw (see **Figure 36**) on each end of the infeed roller to raise it above the wood block.

10. Turn the set screws back down so the infeed roller just touches the wood blocks on both sides.

11. Tighten the jam nuts, making sure the set screws do not move while tightening.

12. Without moving the table, adjust the pressure bar (**Figure 37**) and outfeed rollers (**Figure 38**) in the same manner, using the wood blocks as the reference point.

    Note: *The pressure bar should be at the same height as the cutterhead. You will need the feeler gauge with the wood blocks to ensure that it is at the same height as the cutterhead with the carbide insert at BDC (reference **Distances Below Cutterhead at BDC** at the beginning of these procedures).*

Adjust Chipbreaker

Distance Below Cutterhead at BDC:
Chip Breaker..... 0.020"

Tools Needed:	Qty
Rotacator	1
Hex Wrench 8mm	1
Metal Shims	as needed

To set the height of the chipbreaker:

1. DISCONNECT THE PLANER FROM POWER!

2. Follow the same methods for determining the height of the chipbreaker in relation to the cutterhead as detailed in the previous procedural block (reference **Page 38**).

3. If an adjustment is necessary to bring the height of the chipbreaker to the specification listed above:

   a. Remove the cap screws on each end of the chipbreaker (see **Figure 40**)

   b. Place the required metal shim(s) between the chipbreaker and the headstock casting.

   c. Replace and tighten the cap screws removed in **Step 3a**.

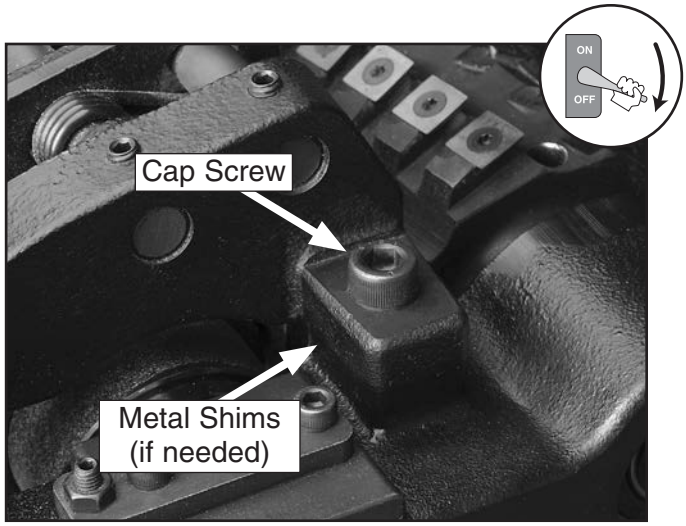


Figure 40. Chipbreaker mounting to headstock casting (right side shown).

Adjust Depth Scale

Tools Needed:	Qty
Hex Wrench 4mm	1

The pointer on the depth scale (see **Figure 41**) should indicate the same value as shown in the bottom actual position LED window of the digital control.

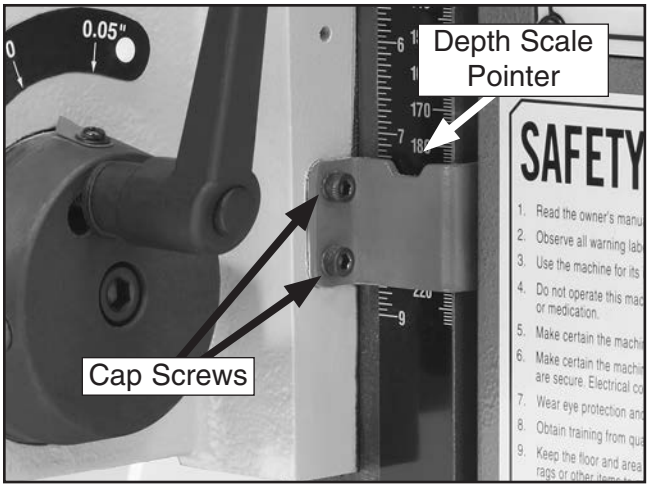


Figure 41. Depth scale pointer.

To adjust the depth scale pointer:

1. Loosen the two cap screws that secure the pointer.

2. Adjust the pointer and retighten the cap screws.

Adjust Table Gibs

Tools Needed: **Qty**
Hex Wrench 4mm 1
Wrench 12mm 1

The table gibs keep the table snug to the ways as it moves up and down. Using the table handwheel, movement should be midway between "hard to move" and "too easy."

To adjust the table gibs:

1. Loosen the gib jam nuts on the table (see **Figure 42**).

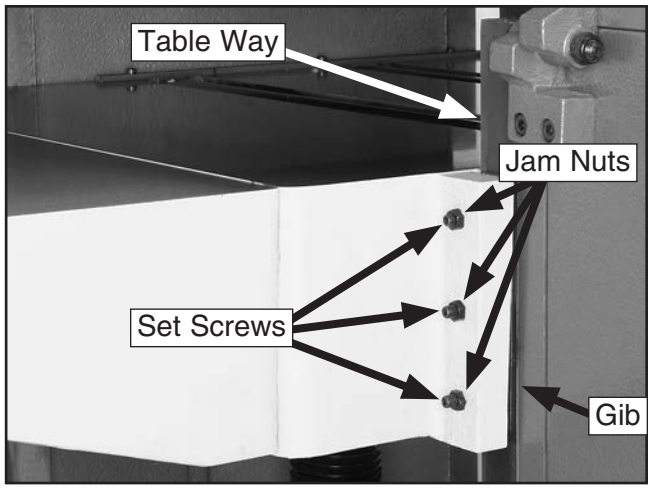


Figure 42. Table gib and way.

2. Adjust the set screws.

Note: *If you unscrew the gib set screws too far, the gib will fall out. If this should happen, replace the gib so that the set screws are seated in the indents on the gib.*

3. Using the table handwheel, move the table up and down to ensure that the gibs are not binding on the table ways.

Calibrate Table Roller Scale

Tools Needed: **Qty**
Straightedge 1
Wrench 14mm 1
Wrench 17mm 1

The table rollers provide even planing pressure from side-to-side and front-to-back by pushing the workpiece up against the feed rollers.

To calibrate the table roller scale:

1. Lower the table all the way down.

2. DISCONNECT THE PLANER FROM POWER!

3. Set the table roller control on the right side of the table to zero.

4. Place the straightedge across the one of the table rollers at one side of the table—the roller should just touch the straightedge.

—If the table roller is level with the table, go to **Step 6**.

—If the table roller is above or below the height of the table, continue to **Step 5**.

Continued on next page ➔

5. Loosen the jam nut (see **Figure 43**) and adjust the hex bolt so that the roller just touches the straightedge; then, retighten the jam nut.

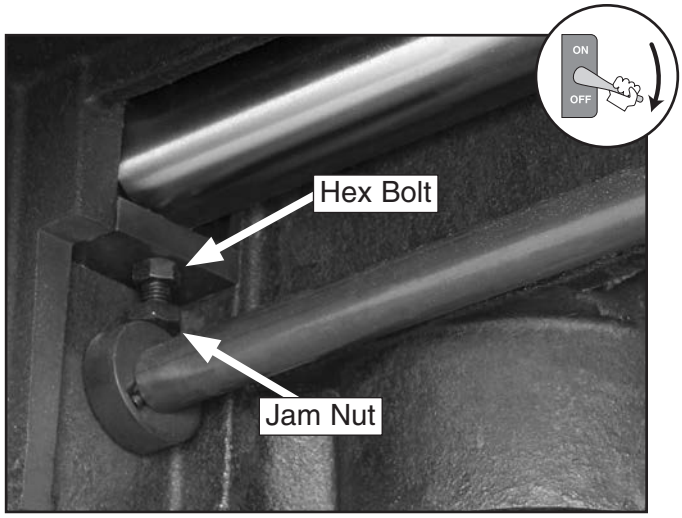


Figure 43. Table roller height adjustment fasteners (left side shown).

6. Repeat **Step 4** for the other side of the same roller.

   Note: *You may have to repeat these adjustments from side-to-side until the entire roller height is correct.*

7. Repeat **Step 4** for the other roller.

Anti-Kickback Fingers

The Model G0603X provides an anti-kickback system as a safety feature. The anti-kickback fingers hang from a rod suspended across the cutterhead casting. The anti-kickback fingers should be inspected regularly.

Check the anti-kickback fingers (see **Figure 44**) to ensure that they swing freely and easily. If the fingers resist easy movement, clean them with a wood resin solvent.

Do not apply oil or other lubricants to the anti-kickback fingers. Oil or grease will attract dust, restricting the free movement of the fingers.

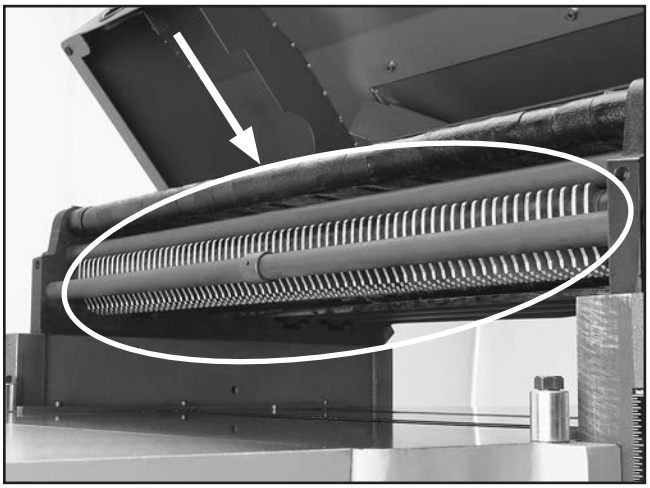


Figure 44. Anti-kickback fingers.

⚠WARNING

Proper operation of the anti-kickback fingers is essential for the safe operation of this machine. Failure to ensure that they are working properly could result in serious operator injury.

V-Belt Pulley Alignment

Tools Needed:	**Qty**
Straightedge	1
Hex Wrench 4mm	1
Wrench 14mm	1

Proper pulley alignment prevents premature belt wear. The pulleys are properly aligned when they are parallel and in the same plane as each other. Looking down across the outside faces of the pulleys, use a straightedge, visual sight or a laser tool on the edge of the pulleys to judge alignment.

To adjust V-belt pulley alignment:

1. DISCONNECT THE PLANER FROM POWER!

2. Remove the top left, bottom left, and bottom rear access panels.

Continued on next page ⟶

3. Loosen the fasteners that hold the motor to the brackets (see **Figure 45**) just enough to allow the motor to be repositioned.

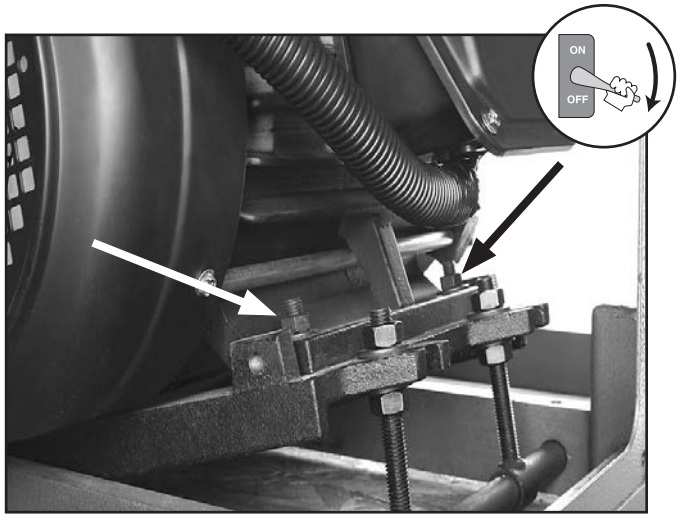


Figure 45. Motor mounting fasteners for adjusting V-belt pulley alignment (bottom rear access panel removed).

4. Slide the motor as required to align the pulleys.

5. Retighten the motor mount fasteners.

6. Retension the V-belts (see **Page 30**).

7. Replace the access panels.

Infeed Roller Tension

Tools Needed: **Qty**
Hex Wrench 4mm..... 1
Wrench 14mm 1

The amount of tension or downward pressure of the infeed roller needs to be enough to push the workpiece into the cutterhead but not enough to gouge or bind the workpiece. Tension requirements will be different for rough lumber and milled lumber.

To adjust infeed roller tension:

1. DISCONNECT THE PLANER FROM POWER!

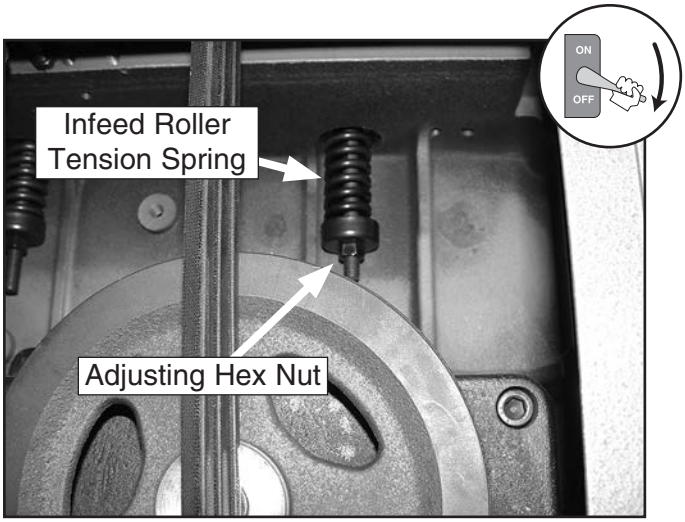


Figure 46. Infeed roller tension spring (left side shown; top left access panel removed).

2. Remove the top right and left access panels and identify the infeed roller tension springs (see **Figure 46**).

3. Adjust the infeed roller tension with the hex nut underneath the tension spring (see **Figure 46**).

   Note: To reduce the tension, lengthen the spring. Conversely, to increase the tension, shorten the spring (see **Figure 47**).

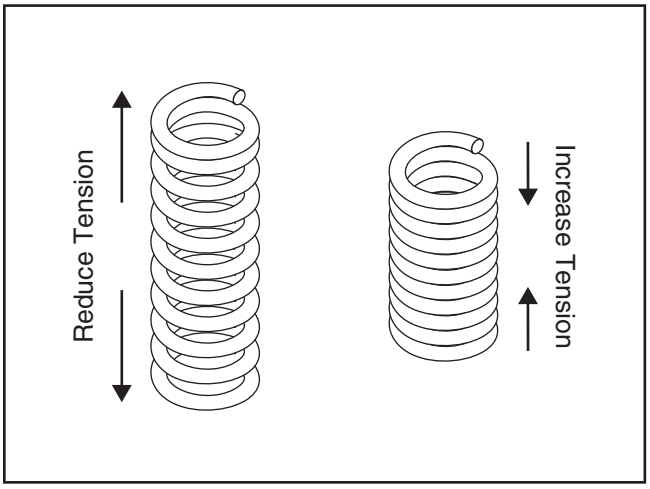


Figure 47. Adjusting tension springs.

4. Replace both access panels.

Outfeed Roller Tension

Tools Needed:	Qty
Hex Wrench 4mm	1
Wrench 14mm	1

The amount of tension or downward pressure of the outfeed roller needs to be enough to pull the workpiece along the planing path without binding, and prevent snipe to the end of the workpiece by keeping it firmly on the planing table. Tension requirements will be different for rough lumber and milled lumber.

To adjust infeed roller tension:

1. DISCONNECT THE PLANER FROM POWER!

2. Remove the top right and left access panels and identify the infeed roller tension springs (see **Figure 48**).

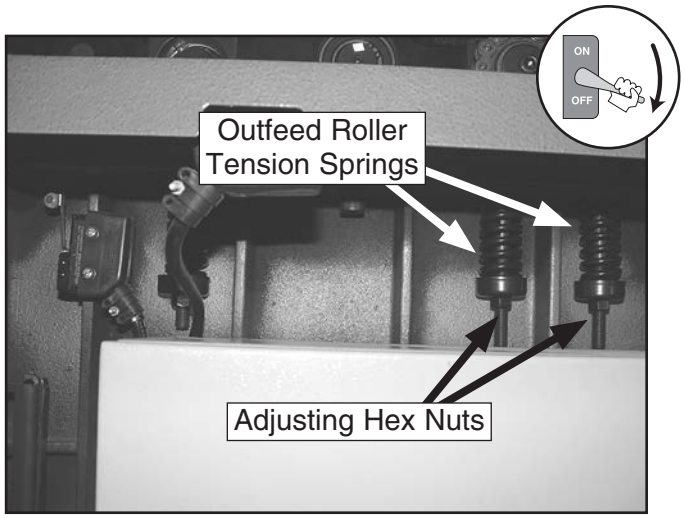


Figure 48. Outfeed roller tension spring (left side shown; top right access panel removed).

Note: To reduce the tension, lengthen the spring. Conversely, to increase the tension, shorten the spring (see **Figure 47** on **Page 43**).

3. Replace both access panels.

Pressure Bar Tension

Tools Needed:	Qty
Hex Wrench 8mm	1
Wrench 14mm	1

The amount of tension or downward pressure of the pressure bar must be enough to keep the workpiece firmly on the planing table as it exits the cutterhead to prevent snipe, but not enough to bind or gouge the workpiece. Tension requirements will be different for rough lumber and milled lumber.

To adjust infeed roller tension:

1. DISCONNECT THE PLANER FROM POWER!

2. Lift the headstock cover and identify the pressure bar tension spring (see **Figure 49**).

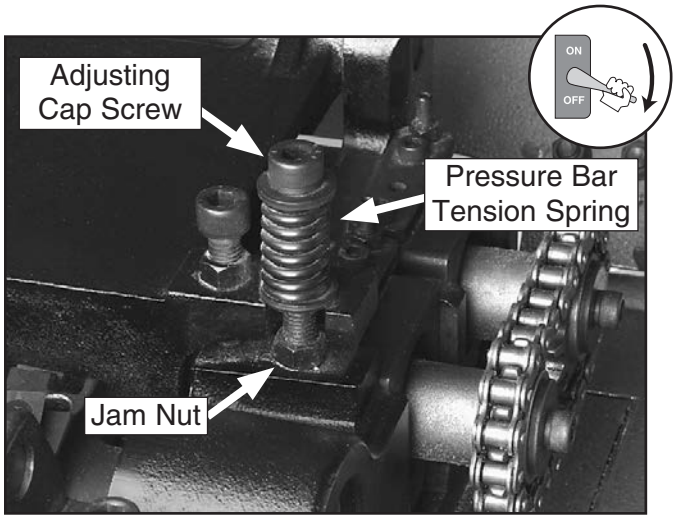


Figure 49. Pressure bar tension spring (right side shown).

3. Loosen the jam nut and adjust the cap screw (see **Figure 49**).

Note: To reduce the tension, lengthen the spring. Conversely, to increase the tension, shorten the spring (see **Figure 47** on **Page 43**).

Digital Control Calibration

Tools Needed: **Qty**
Calipers 1

The value shown in the actual (bottom) LED window of the digital control should be precisely equal to the actual distance from the table to BDC of the cutter carbide insert.

To calibrate the digital control:

1. Make sure that the all other adjustments are correct as directed in this section, starting with **Table Parallelism** on **Page 36**.

2. Plane a wide piece of stock making sure that both top and bottom of the workpiece are as parallel as possible.

3. Using the calipers, measure the thickness in multiple places of the workpiece and record the average value of these measurements.

4. Press the following keys on the digital control:

   a. The "F" key [F].

   b. The "2" key [2].

   c. The ENTER key [ENTER].

   Note: *If this procedure is successful, an LED in the top target window will blink, and "OriGin" will appear in the top target window.*

5. Enter the value that you recorded from **Step 3** above, then press the ENTER key [ENTER].

   Note: This step stores the actual value into permanent memeory. Next, you will need to complete the following steps to load that value for operational use.

6. To load the actual value that was stored in the previous steps, press the following keys:

   a. The "F" key [F].

   b. The "0" key [0].

   c. The ENTER key [ENTER].

   Note: If this step was successful, an LED will blink in both windows, "CHAnGE" will appear in the top window, and "OrG??" will appear in the bottom window.

7. Press the ENTER key [ENTER] to load and use the stored value for the actual distance from the table to the cutter insert.

Electrical Components

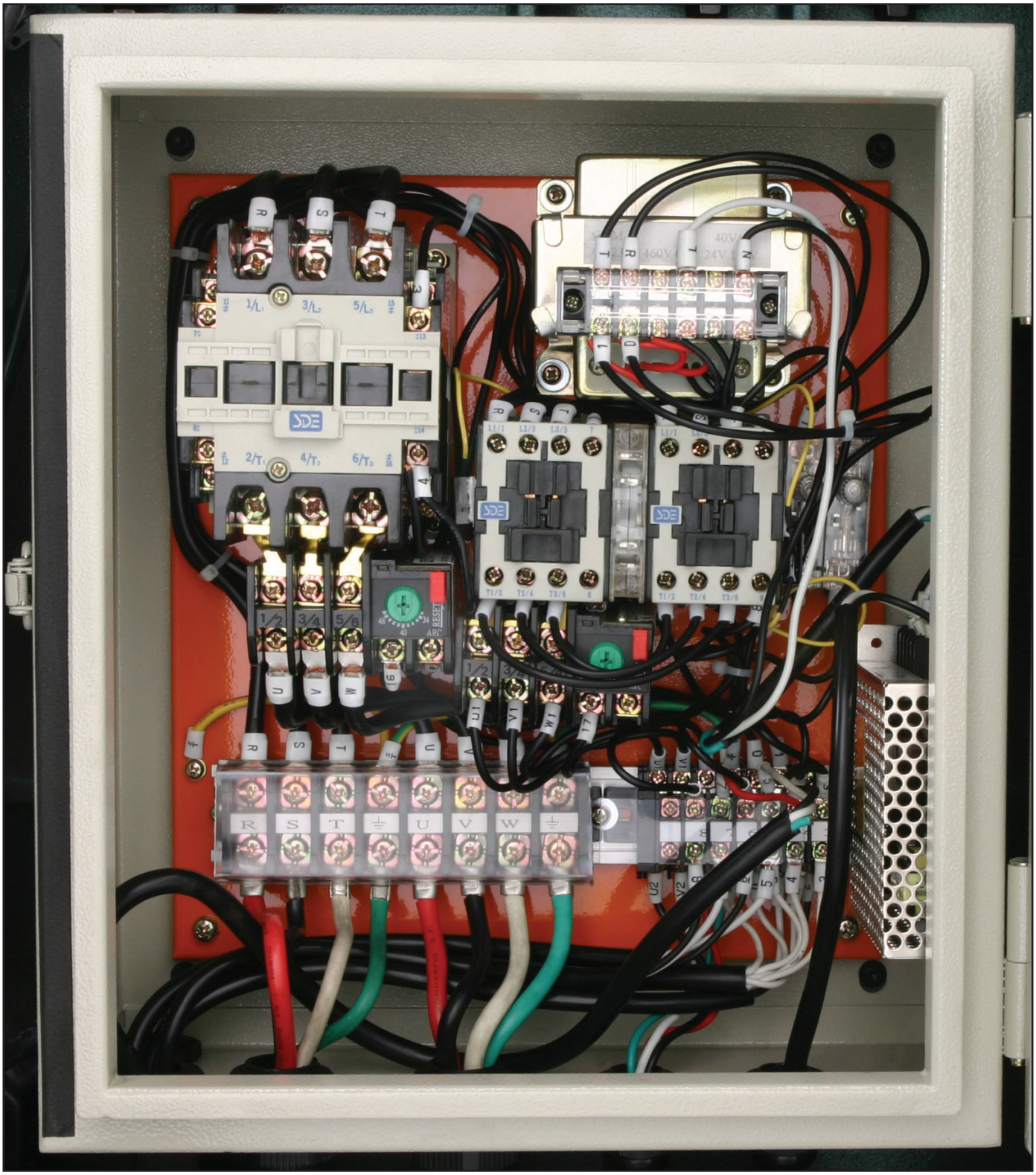


Figure 50. Main electrical box
(top right access panel removed).

Figure 51. Digital control (viewed from back).

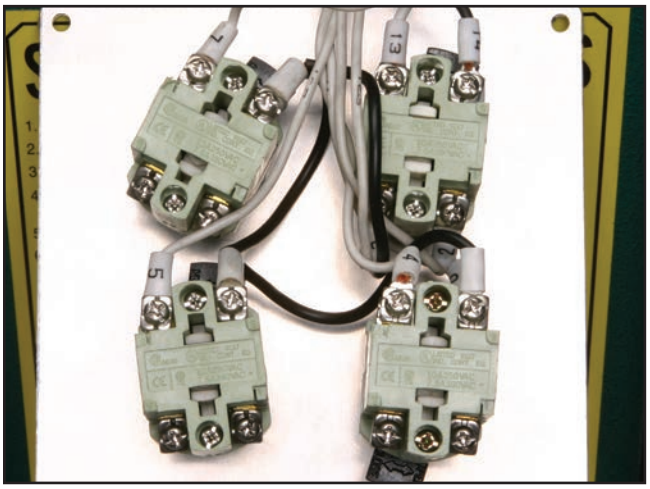


Figure 54. Power/table control (viewed from back).

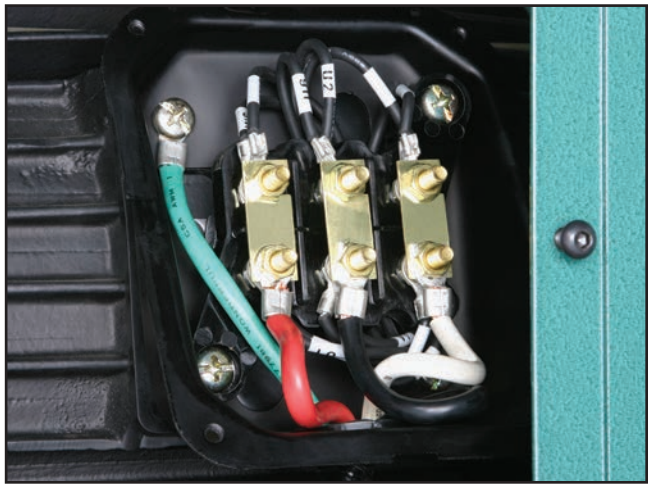


Figure 52. Cutterhead/feed motor junction box.

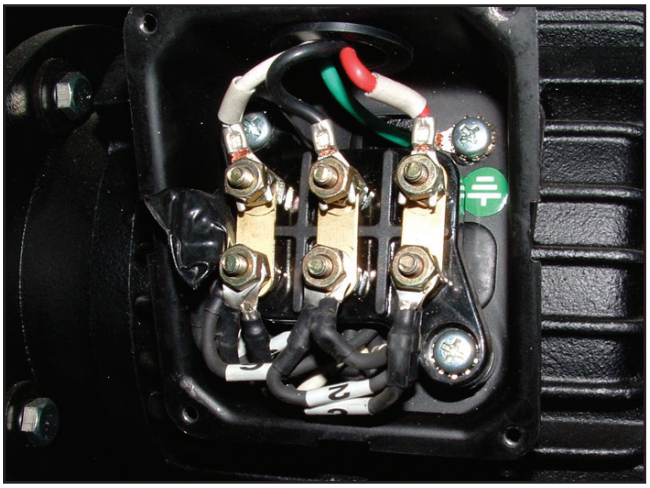


Figure 55. Table motor junction box.

Figure 53. Headstock cover limit switch (top right access panel removed).

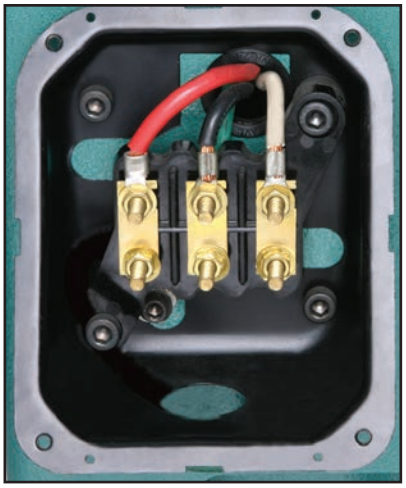


Figure 56. Power feed junction box.

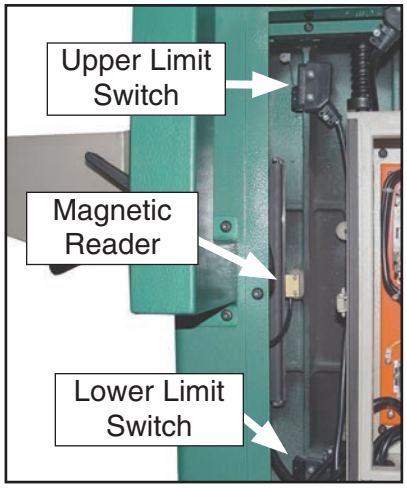


Figure 57. Upper and lower table limit switches, and table height magnetic reader (top right access panel removed).

Overview
Wiring Diagram

DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk
WHITE	Wt
GREEN	Gn
RED	Rd
YELLOW	Yl
YELLOW/GREEN	YG

Main Electrical Panel
Page 49

Headstock Cover Limit Switch
Page 47

Upper Table Limit Switch
Page 47

Lower Table Limit Switch
Page 47

Cutter/Feed Motor
Page 51

Table Adjustment Motor
Page 51

Power Feed Terminal

Ground

Digital Controls
Page 50

9-Conductor Serial Cable

Page 47

Table Height Magnetic Reader

Power/Table Control
Page 50

3-Phase 220 VAC

Disconnect Switch (as recommended)

Ground
Hot
Hot
Hot

WARNING!

SHOCK HAZARD! Disconnect power before working on wiring.

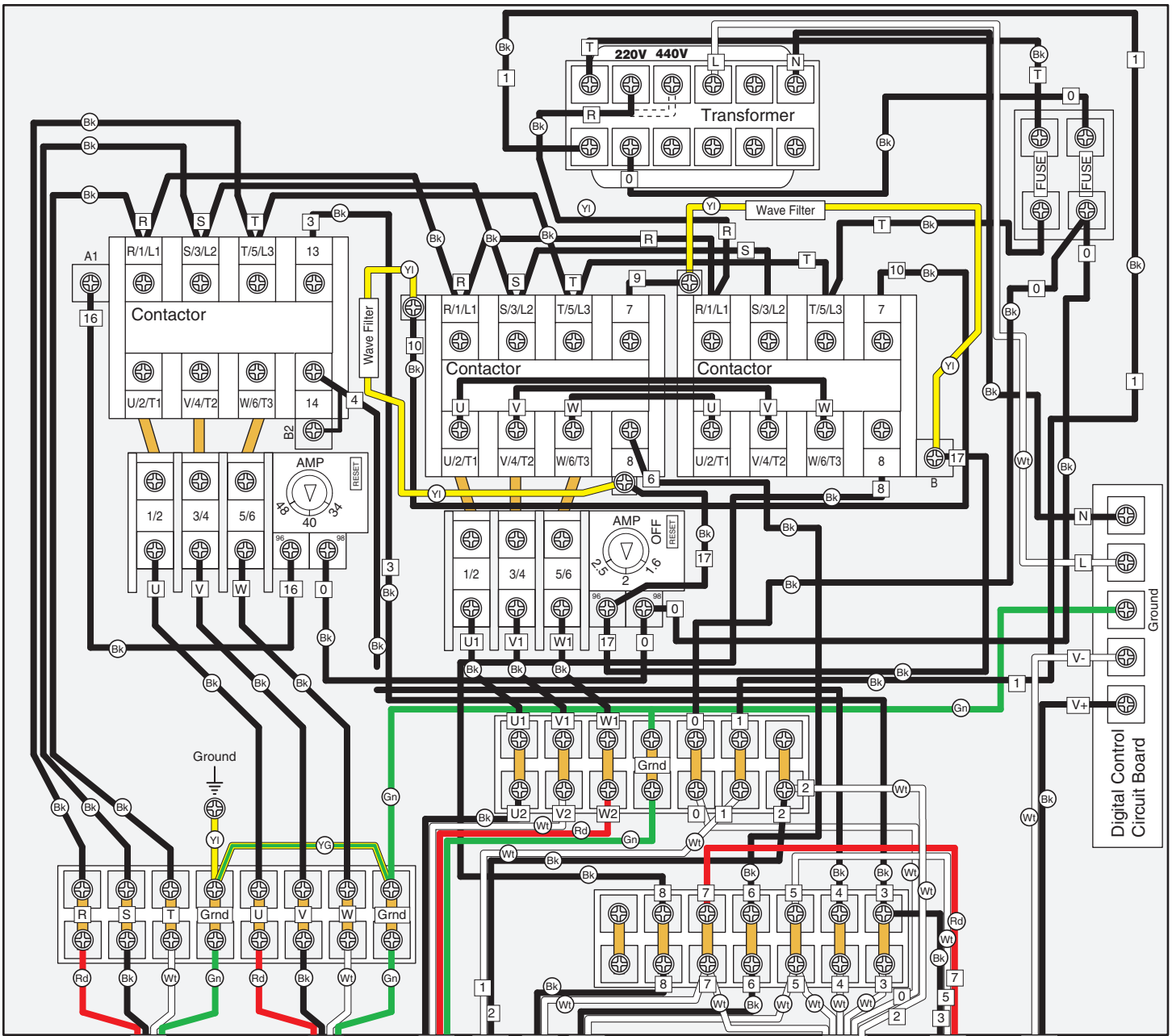
Main Electrical Box 220V Wiring Diagram

⚠ DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk	RED	Rd
WHITE	Wt	YELLOW	Yl
GREEN	Gn	YELLOW/GREEN	YG



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Controls
Wiring Diagram

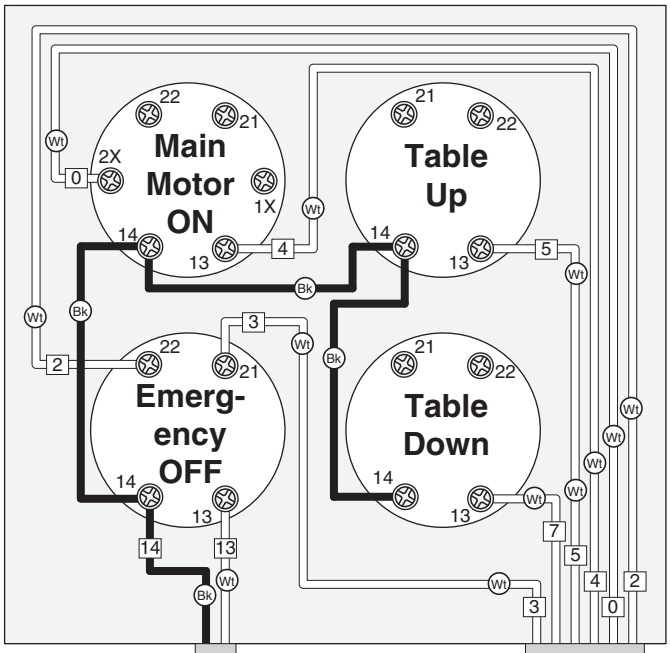
⚠ DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk
WHITE	Wt
GREEN	Gn
RED	Rd
YELLOW	Yl
YELLOW/GREEN	YG

POWER/TABLE CONTROLS
As Viewed From the Back



To Main Electrical Box

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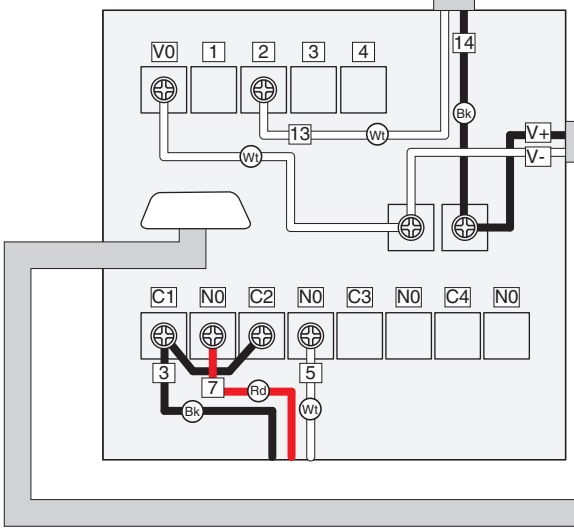
DIGITAL CONTROLS
As Viewed From the Back



To Main Electrical Box

Page 49

9-Conductor Serial Cable to Table Height Magnetic Reader

Page 48

Motor Wiring Diagram

DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	Bk
WHITE	Wt
GREEN	Gn
RED	Rd
YELLOW	Yl
YELLOW/GREEN	YG

NOTICE

These motor wiring diagrams are current at the time of printing; however, always use the diagram on the inside of the junction box cover when rewiring your motor!

Main Electrical Panel

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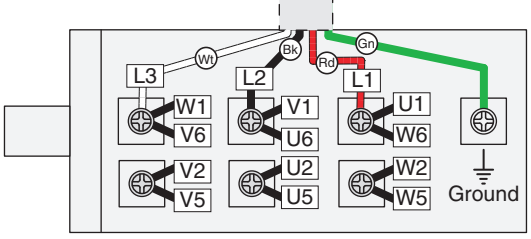
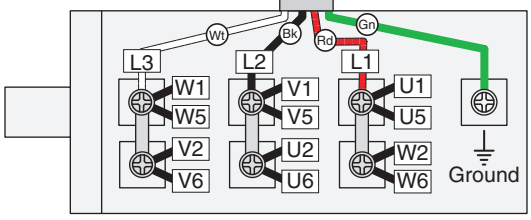
CUTTERHEAD/FEED MOTOR

(must also replace overload relays for 440V)

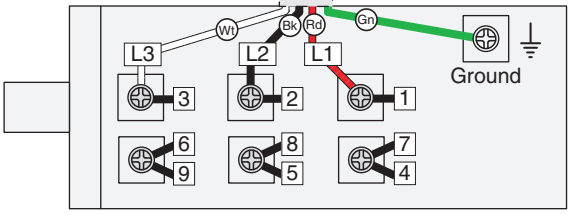


440VAC (Optional)

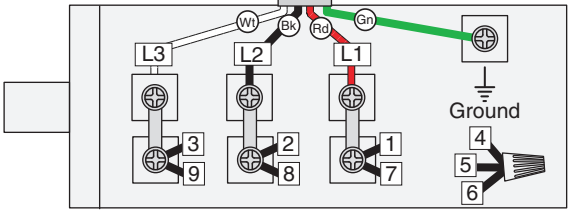


220VAC (Prewired)

TABLE MOTOR

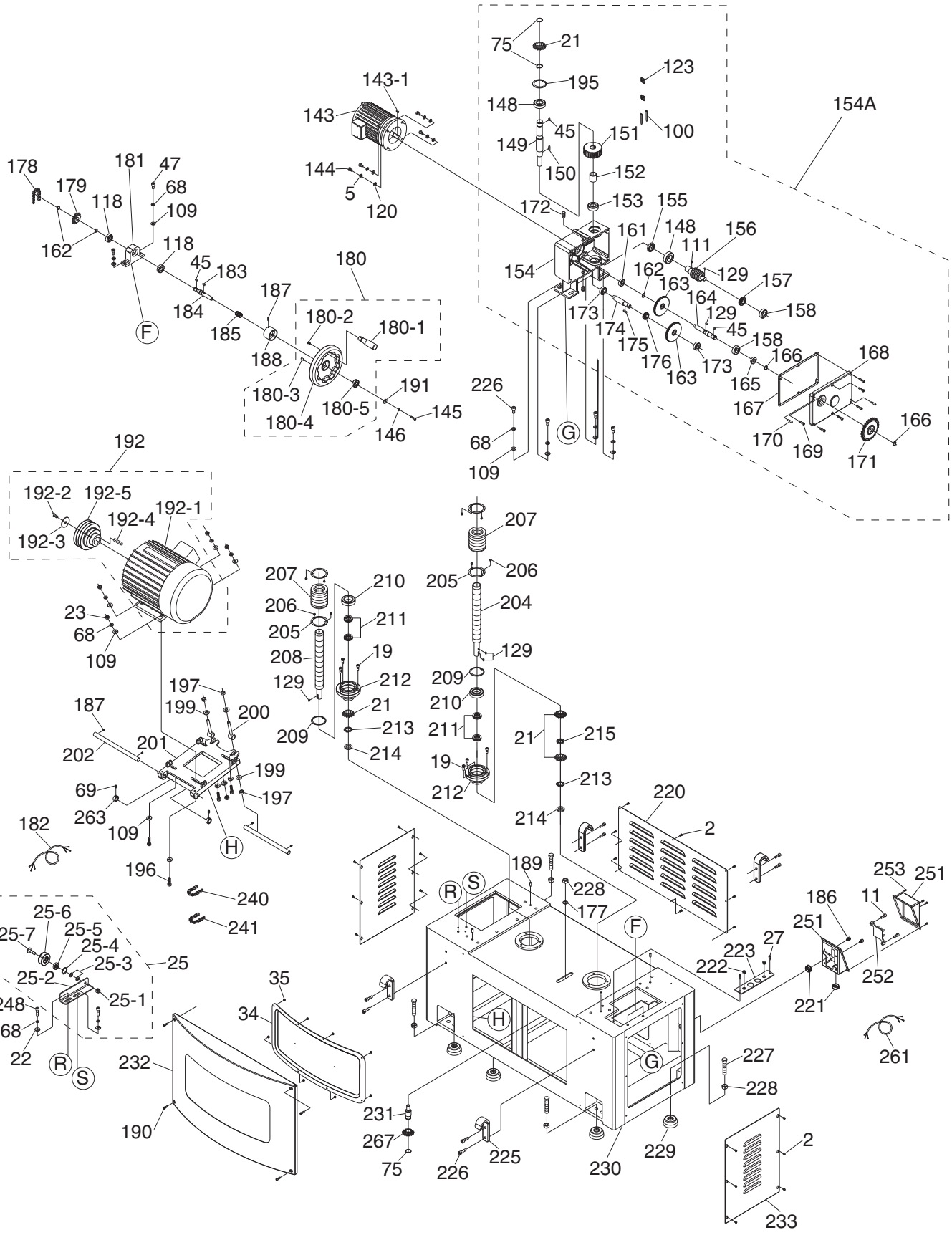


440VAC (Optional)



220VAC (Prewired)

Base Parts Breakdown



Base Parts List

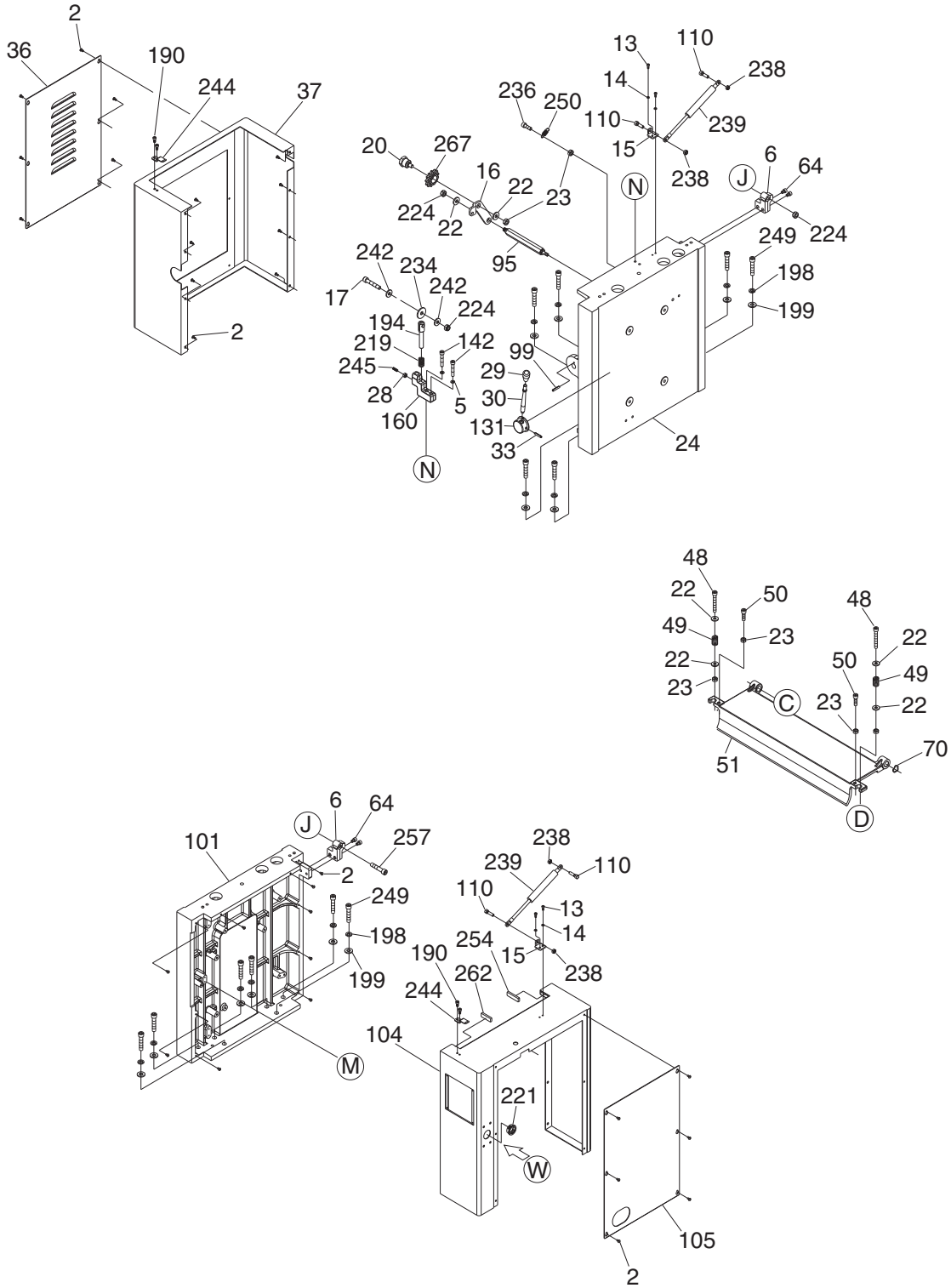
REF	PART #	DESCRIPTION
2	PB04M	HEX BOLT M6-1 X 10
5	PLW04M	LOCK WASHER 8MM
11	PSB31M	CAP SCREW M8-1.25 X 25
19	PSB14M	CAP SCREW M8-1.25 X 20
21	P0603X021	SPROCKET
22	PW04M	FLAT WASHER 10MM
23	PN02M	HEX NUT M10-1.5
25	P0603X025	IDLER ASSEMBLY
25-1	PLN05M	LOCK NUT M10-1.5
25-2	P0603X025-2	PLATE
25-3	PW04M	FLAT WASHER 10MM
25-4	PR35M	INT RETAINING RING 30MM
25-5	P6200	BALL BEARING 6200ZZ
25-6	P0603X025-6	IDLER
25-7	PB14M	HEX BOLT M10-1.5 X 35
27	PSB01M	CAP SCREW M6-1 X 16
34	P0603X034	FRONT COVER
35	PN06M	HEX NUT M5-.8
45	PK10M	KEY 5 X 5 X 12
47	PSB61M	CAP SCREW M10-1.5 X 20
68	PLW06M	LOCK WASHER 10MM
69	PSS16M	SET SCREW M8-1.25 X 10
75	PR11M	EXT RETAINING RING 25MM
100	P0603X100	BUNDING 250MM
109	PW04M	FLAT WASHER 10MM
111	PSS16M	SET SCREW M8-1.25 X 10
118	P0603X118	BALL BEARING 6203-2NSE
120	PW01M	FLAT WASHER 8MM
123	P0603X123	PLATE
129	PK06M	KEY 5 X 5 X 10
143	P0603X143	MOTOR
143-1	PK34M	KEY 5 X 5 X 20
144	PB07M	HEX BOLT M8-1.25 X 25
145	PSB02M	CAP SCREW M6-1 X 20
146	PLW03M	LOCK WASHER 6MM
148	P6205	BALL BEARING 6205ZZ
149	P0603X149	SHAFT
150	PK01M	KEY 5 X 5 X 22
151	P0603X151	WORM GEAR
152	P0603X152	BUSHING
153	P6204	BALL BEARING 6204ZZ
154	P0603X154	WORM GEAR BOX
155	P0603X155	OIL SEAL
156	P0603X156	WORM SHAFT
157	P0603X157	GEAR
158	P6203	BALL BEARING 6203ZZ
161	P0603X161	BEARING
162	PR06M	EXT RETAINING RING 16MM
163	P0603X163	GEAR
164	P0603X164	SHAFT

REF	PART #	DESCRIPTION
165	P0603X165	OIL SEAL
166	PR18M	EXT RETAINING RING 17MM
167	P0603X167	GASKET
168	P0603X168	GEAR BOX COVER
169	PSB06M	CAP SCREW M6-1 X 25
170	PRP93M	ROLL PIN 6 X 25
171	P0603X171	SPROCKET
172	P0603X172	OIL PLUG
173	P6202	BALL BEARING 6202ZZ
174	P0603X174	GEAR SHAFT
175	PK34M	KEY 5 X 5 X 20
176	P0603X176	GEAR
177	PW08M	FLAT WASHER 16MM
178	P0603X178	CHAIN
179	P0603X179	SPROCKET
180	P0603X180	HANDLE ASSEMBLY
180-1	P0603X180-1	HANDLE
180-2	PFH02M	FLAT HD SCR M6-1 X 12
180-3	PRP92M	ROLL PIN 8 X 18
180-4	P0603X180-4	WHEEL
180-5	P6004	BALL BEARING 6004ZZ
181	P0603X181	HANDLE BRACKET
182	P0603X182	BOTTOM MOTOR CORD
183	PK20M	KEY 5 X 5 X 15
184	P0603X184	HANDLE SHAFT
185	P0603X185	COMPRESSION SPRING
186	PSB52M	CAP SCREW M8-1.25 X 10
187	PSS11M	SET SCREW M6-1 X 16
188	P0603X188	HANDLE SHAFT
189	PRP92M	ROLL PIN 8 X 18
190	PSB04M	CAP SCREW M6-1 X 10
191	PW03M	FLAT WASHER 6MM
192	P0603X192	CUTTERHEAD MOTOR ASSEMBLY
192-1	P0603X192-1	MOTOR 15HP/220/3PH
192-2	PSB11M	CAP SCREW M8-1.25 X 16
192-3	PW01M	FLAT WASHER 8MM
192-4	P0603X192-4	KEY 10 X 8 X 56
192-5	P0603X192-5	MOTOR PULLEY
195	PR26M	INT RETAINING RING 52MM
196	PB73M	HEX BOLT M10-1.5 X 50
197	PN09M	HEX NUT M12-1.75
199	PW06M	FLAT WASHER 12MM
200	P0603X200	ADJUSTING SHAFT ASSEMBLY
201	P0603X201	MOTOR PLATE
202	P0603X202	SHAFT
204	P0603X204	LEAD SCREW
205	P0603X205	SPECIAL RING
206	PFB13M	FLANGE BOLT M4-.7 X 8
207	P0603X207	DUST BOOT
208	P0603X208	LEAD SCREW

REF	PART #	DESCRIPTION
209	PR70M	INT RETAINING RING 68MM
210	P0603X210	BALL BEARING 6008-2NSE
211	P51105	THRUST BEARING 51105
212	P0603X212	BUSHING
213	PTLW14M	EXT TOOTH WASHER 25MM
214	P0603X214	SPECIAL HEX NUT M25-1.5
215	P0603X215	SPROCKET PLATE
220	P0603X220	REAR COVER
221	P0603X221	STRAIN RELIEF NB-2430
222	P0603X222	STRAIN RELIEF NB-1216
223	P0603X223	PLATE
225	P0603X225	LIFTING HOOK
226	PSB72M	CAP SCREW M10-1.5 X 30
227	PB159M	HEX BOLT M16-2 X 80
228	PN13M	HEX NUT M16-2

REF	PART #	DESCRIPTION
229	P0603X229	FOOT
230	P0603X230	BASE
231	P0603X231	SHAFT
232	P0603X232	BASE FRONT COVER
233	P0603X233	BASE COVER
240	P0603X240	CHAIN #40 X 54
241	P0603X241	CHAIN #40 X 84
248	PSB64M	CAP SCREW M10-1.5 X 25
251	P0603X251	JUNCTION BOX COVER
252	P0603X252	TERMINAL BLOCK
253	P0603X253	BUTTON HD CAP SCR M5-.8 X 10
261	P0603X261	CORD
263	P0603X263	SPACER
267	P0603X267	IDLER SPROCKET

Column Parts Breakdown

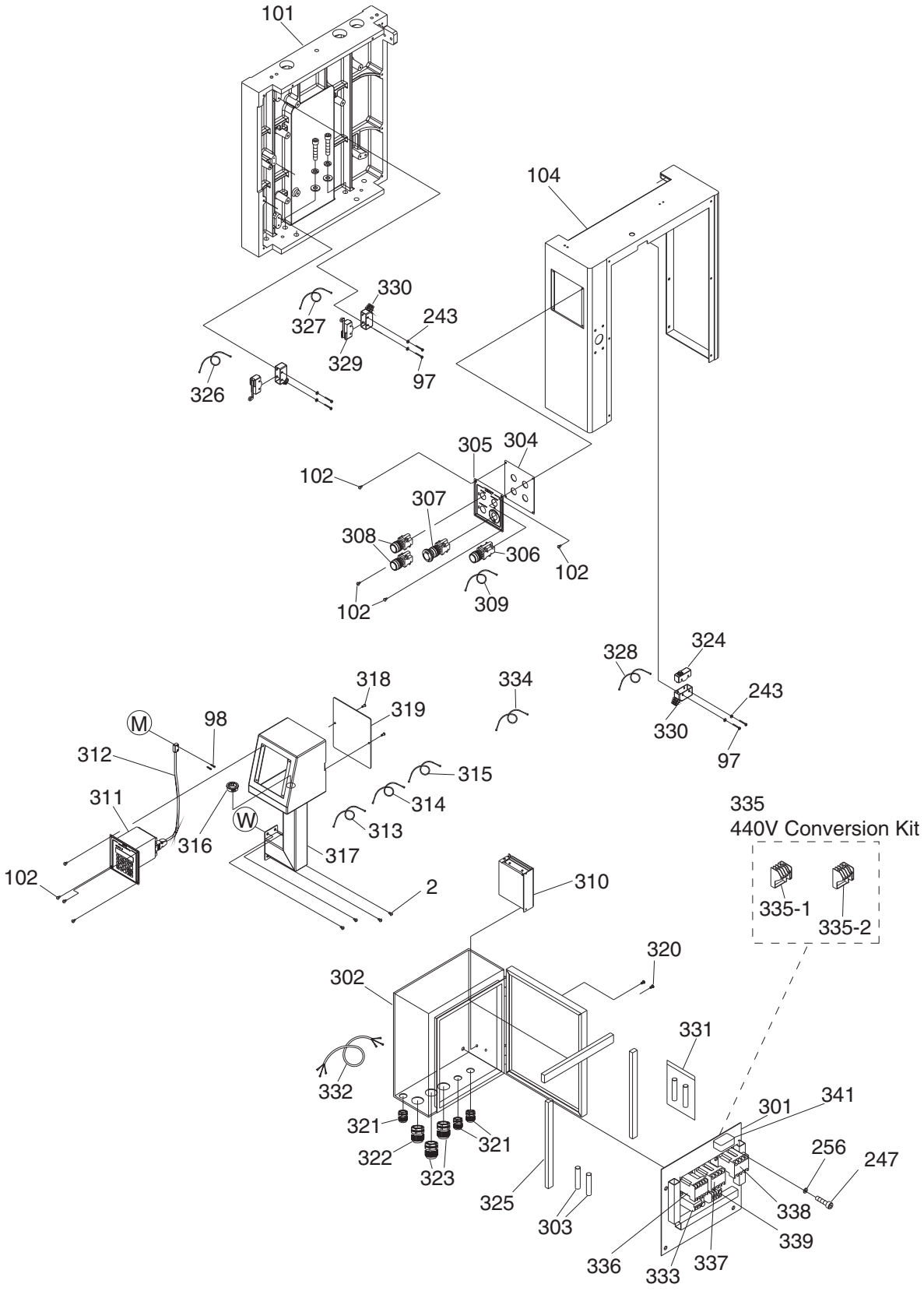


Column Parts List

REF	PART #	DESCRIPTION
2	PB04M	HEX BOLT M6-1 X 10
5	PLW04M	LOCK WASHER 8MM
6	P0603X006	HINGE
13	PSB33M	CAP SCREW M5-.8 X 12
14	PLW01M	LOCK WASHER 5MM
15	P0603X015	CYLINDER FITTING
16	P0603X016	SPROCKET BRACKET
17	PSB84M	CAP SCREW M10-1.5 X 35
20	P0603X020	SHAFT
22	PW04M	FLAT WASHER 10MM
23	PN02M	HEX NUT M10-1.5
24	P0603X024	LEFT COLUMN
28	PN01M	HEX NUT M6-1
29	P0603X029	KNOB
30	P0603X030	SHAFT
33	PRP05M	ROLL PIN 5 X 30
36	P0603X036	LEFT PLATE
37	P0603X037	LEFT COVER
48	PSB91M	CAP SCREW M10-1.5 X 75
49	P0603X049	COMPRESSION SPRING
50	PSB47M	CAP SCREW M10-1.5 X 40
51	P0603X051	CASTING PRESSURE BAR
64	PSB40M	CAP SCREW M8-1.25 X 35
70	P0603X070	WAVY WASHER
95	P0603X095	SHAFT
99	PRP94M	ROLL PIN 5 X 14
101	P0603X101	RIGHT COLUMN

REF	PART #	DESCRIPTION
104	P0603X104	RIGHT COVER
105	P0603X105	RIGHT PLATE
110	P0603X110	SPECIAL SCREW
131	P0603X131	HANDLE BASE
142	PSB12M	CAP SCREW M8-1.25 X 40
160	P0603X160	BRACKET
190	PSB04M	CAP SCREW M6-1 X 10
194	P0603X194	SHAFT
198	PLW05M	LOCK WASHER 12MM
199	PW06M	FLAT WASHER 12MM
219	P0603X219	COMPRESSION SPRING
221	P0603X221	STRAIN RELIEF NB-2430
224	PN02M	HEX NUT M10-1.5
234	P0603X234	FENDER WASHER 10MM
236	PSB70M	CAP SCREW M10-1.5 X 45
238	PN03M	HEX NUT M8-1.25
239	P0603X239	CYLINDER
242	PW04M	FLAT WASHER 10MM
244	P0603X244	PLATE
245	PSS25M	SET SCREW M6-1 X 20
249	PSB92M	CAP SCREW M12-1.75 X 40
250	P0603X250	EXTENSION SPRING
254	P0603X254	SPONGE 40 X 10 X 2
257	P0603X257	HEX BOLT M10-1.5 X 70
262	P0603X262	PAD 33 X 10 X 2
267	P0603X267	IDLER SPROCKET

Electric Parts Breakdown

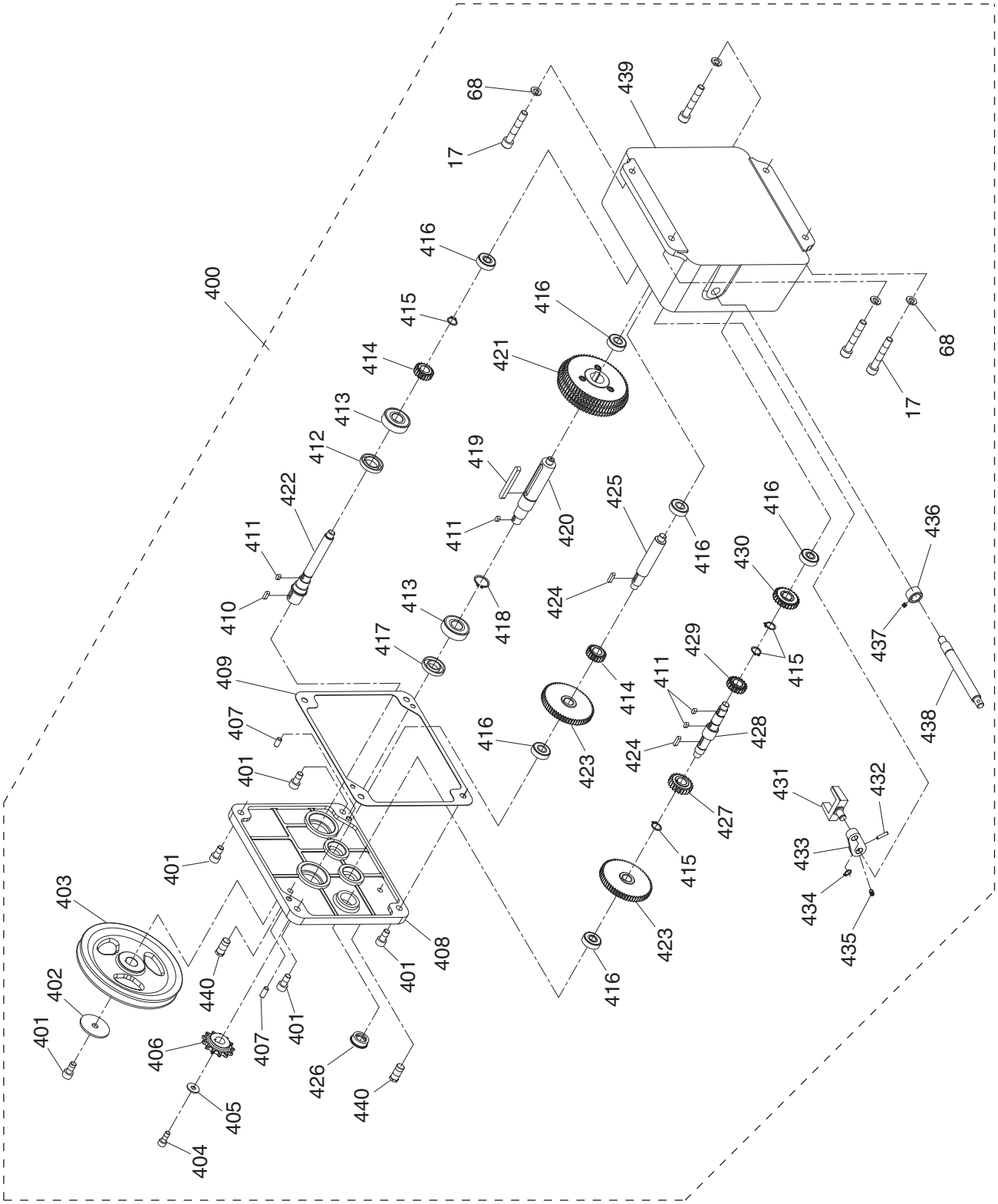


Electric Parts List

REF	PART #	DESCRIPTION
2	PB04M	HEX BOLT M6-1 X 10
6	P0603X006	HINGE
97	PS51M	PHLP HD SCR M4-.7 X 30
98	P0603X098	BUTTON HD CAP SCR M3-.5 X 15
101	P0603X101	RIGHT COLUMN
102	P0603X102	BUTTON HD CAP SCR M4-.7 X 10
104	P0603X104	RIGHT COVER
243	PW05M	FLAT WASHER 4MM
247	PSB26M	CAP SCREW M6-1 X 12
256	PW03M	FLAT WASHER 6MM
301	P0603X301	ELECTRICAL BOARD
302	P0603X302	ELECTRICAL BOX
303	P0603X303	FUSE LIGHT
304	P0603X304	INNER BOARD
305	P0603X305	OUTER BOARD
306	P0603X306	MAIN MOTOR BUTTON
307	P0603X307	EMERGENCY BUTTON
308	P0603X308	TABLE BUTTON
309	P0603X309	CSA CORD 18AWG/7C/880MM
310	P0603X310	DIGITAL CONTROL CIRCUIT BOARD
311	P0603X311	KEYPAD ASSEMBLY & DIGITAL READOUT
312	P0603X312	SENSOR CABLE
313	P0603X313	CSA CORD 18AWG/2C/1300MM
314	P0603X314	CSA CORD 18AWG/3C/1320MM
315	P0603X315	CSA CORD 18AWG/2C/820MM
316	P0603X316	STRAIN RELIEF NB-2430
317	P0603X317	CONTROLLER BRACKET

REF	PART #	DESCRIPTION
318	P0603X318	BUTTON HD CAP SCR M4-.7 X 10
319	P0603X319	CONTROLLER COVER
320	P0603X320	BUTTON HD CAP SCR M3-.5 X 6
321	P0603X321	STRAIN RELIEF PG13.5
322	P0603X322	STRAIN RELIEF PG21
323	P0603X323	STRAIN RELIEF BG26
324	P0603X324	LIMIT SWITCH MJ2-1306
325	P0603X325	COVER PAD
326	P0603X326	CSA CORD 18AWG/2C/600MM
327	P0603X327	CSA CORD 18AWG/2C/950MM
328	P0603X328	CSA CORD 18AWG/2C/970MM
329	P0603X329	LIMIT SWITCH MJ2-1703
330	P0603X330	LIMIT SWITCH HOUSING
331	P0603X331	FUSE BLOCK
332	P0603X332	CSA CORD 16AWG/4C/880MM
333	P0603X333	CUTTERHEAD/FEED MOTOR 220V OVERLOAD RELAY
334	P0603X334	CONTROLLER CORD
335	P0603X335	440V CONVERSION KIT
335-1	P0603X335-1	OL RELAY SDE RA-30 18-26A
335-2	P0603X335-2	OL RELAY SDE RA-30 0.9-1.5A
336	P0603X336	CUTTERHEAD/FEED MOTOR 220V CONTACTOR
337	P0603X337	TABLE MOTOR 220V CONTACTOR
338	P0603X338	CONTROL 220V CONTACTOR
339	P0603X339	TABLE MOTOR 220V OVERLOAD RELAY
340	P0603X340	WAVE FILTER 1MF, 120 OHM, 2E
341	P0603X341	TRANSFORMER

Gearbox Parts Breakdown

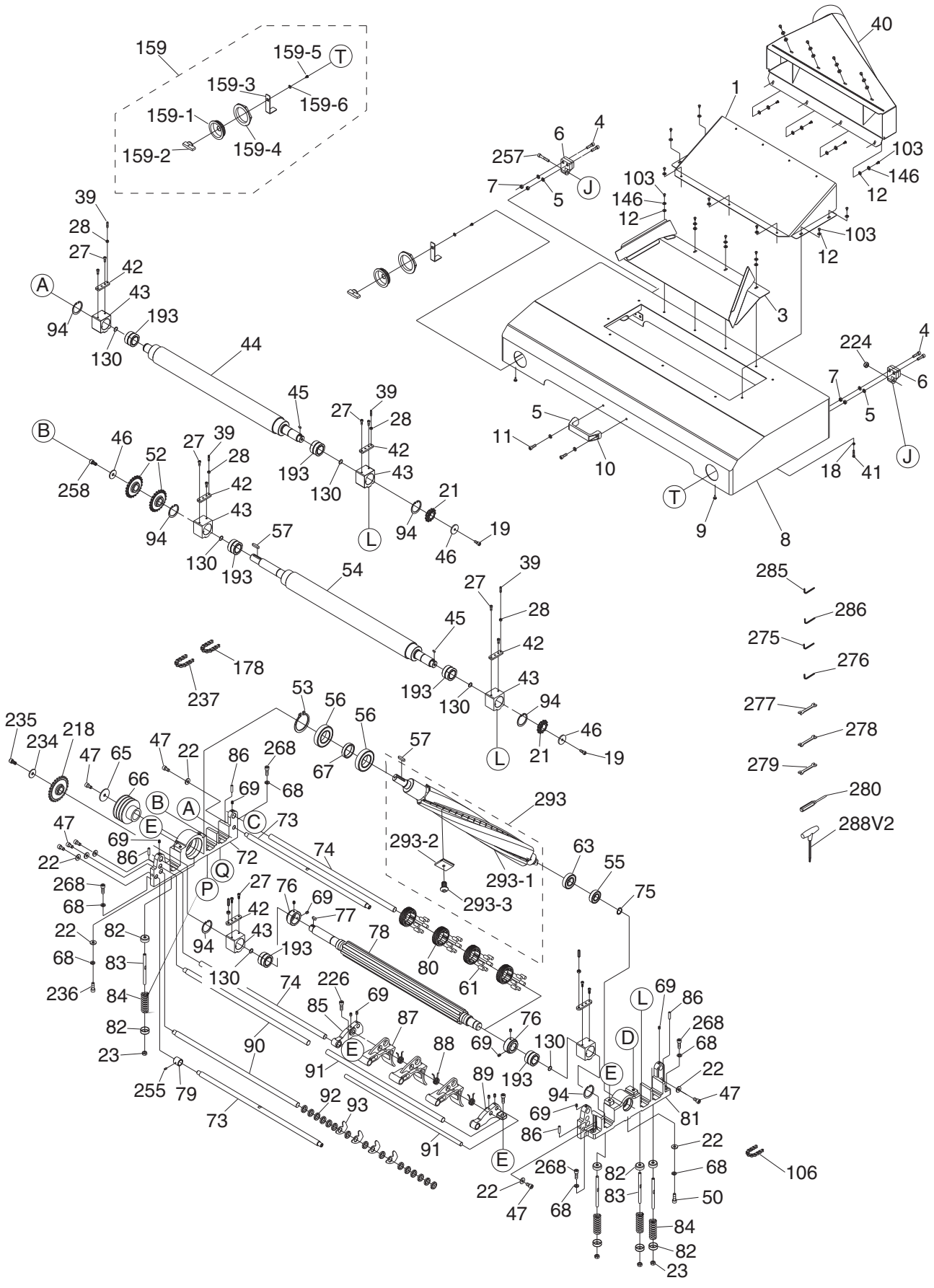


Gearbox Parts List

REF	PART #	DESCRIPTION
17	PSB84M	CAP SCREW M10-1.5 X 35
68	PLW06M	LOCK WASHER 10MM
400	P0603X400	FEED GEAR BOX ASSY
401	PSB61M	CAP SCREW M10-1.5 X 20
402	PW04M	FLAT WASHER 10MM
403	P0603X403	PULLEY
404	PSB14M	CAP SCREW M8-1.25 X 20
405	PW01M	FLAT WASHER 8MM
406	P0603X406	SPROCKET
407	PRP92M	ROLL PIN 8 X 18
408	P0603X408	LEFT GEAR BOX COVER
409	P0603X409	GASKET
410	PK08M	KEY 5 X 5 X 16
411	PK06M	KEY 5 X 5 X 10
412	P0603X412	OIL SEAL
413	P6204-2RS	BALL BEARING 6204 2 RUB SHIELDS
414	P0603X414	GEAR 20T
415	PR06M	EXT RETAINING RING 16MM
416	P6201-2RS	BALL BEARING 6201 2 RUB SHIELDS
417	P0603X417	OIL SEAL
418	PR11M	EXT RETAINING RING 25MM
419	P0603X419	KEY 8 X 7 X 72

REF	PART #	DESCRIPTION
420	P0603X420	SHAFT
421	P0603X421	GEAR
422	P0603X422	SHAFT
423	P0603X423	GEAR 60T
424	PK34M	KEY 5 X 5 X 20
425	P0603X425	SHAFT
426	P0603X426	OIL SIGHT GLASS
427	P0603X427	GEAR 22T
428	P0603X428	SHAFT
429	P0603X429	GEAR 18T
430	P0603X430	GEAR 24T
431	P0603X431	SHIFTING FORK
432	PRP56M	ROLL PIN 4 X 25
433	P0603X433	SHIFTING BRACKET
434	PR01M	EXT RETAINING RING 10MM
435	PSS02M	SET SCREW M6-1 X 6
436	P0603X436	BUSHING
437	PSS02M	SET SCREW M6-1 X 6
438	P0603X438	SHAFT
439	P0603X439	RIGHT GEAR BOX COVER
440	P0603X440	OIL PLUG

Headstock Parts Breakdown



Headstock Parts List

REF	PART #	DESCRIPTION
1	P0603X001	DUST COVER
3	P0603X003	DEFLECTION PLATE
4	PSB13M	CAP SCREW M8-1.25 X 30
5	PLW04M	LOCK WASHER 8MM
6	P0603X006	HINGE
7	PN03M	HEX NUT M8-1.25
8	P0603X008	TOP COVER
9	P0603X009	PAD
10	P0603X010	HANDLE
11	PSB31M	CAP SCREW M8-1.25 X 25
12	PW03M	FLAT WASHER 6MM
18	PN06M	HEX NUT M5-.8
19	PSB14M	CAP SCREW M8-1.25 X 20
21	P0603X021	SPROCKET
22	PW04M	FLAT WASHER 10MM
23	PN02M	HEX NUT M10-1.5
27	PSB01M	CAP SCREW M6-1 X 16
28	PN01M	HEX NUT M6-1
39	PSS28M	SET SCREW M6-1 X 30
40	P0603X040	DUST PORT
41	PB94M	HEX BOLT M5-.8 X 25
42	P0603X042	PLATE
43	P0603X043	BUSHING
44	P0603X044	REAR ROLLER
45	PK10M	KEY 5 X 5 X 12
46	P0603X046	SPECIAL WASHER
47	PSB61M	CAP SCREW M10-1.5 X 20
50	PSB47M	CAP SCREW M10-1.5 X 40
52	P0603X052	SPROCKET
53	PR43M	EXT RETAINING RING 50MM
54	P0603X054	LONG REAR ROLLER
55	P0603X055	BALL BEARING 6205-2NSE
56	P0603X056	BALL BEARING 6210-2NSE
57	P0603X057	KEY 8 X 7 X 35
61	P0603X061	RUBBER PIN
63	P0603X063	BALL BEARING 6206-2NSE
65	P0603X065	FENDER WASHER 10MM
66	P0603X066	CUTTERHEAD PULLEY
67	P0603X067	BUSHING
68	PLW06M	LOCK WASHER 10MM
69	PSS16M	SET SCREW M8-1.25 X 10
72	P0603X072	LEFT BRACKET
73	P0603X073	SHAFT
74	P0603X074	SHAFT
75	PR11M	EXT RETAINING RING 25MM
76	P0603X076	COLLAR
77	P0603X077	KEY 8 X 7 X 16
78	P0603X078	SHAFT
79	P0603X079	BUSHING
80	P0603X080	INFEED ROLLER
81	P0603X081	RIGHT BRACKET

REF	PART #	DESCRIPTION
82	P0603X082	PLATE
83	P0603X083	SHAFT
84	P0603X084	COMPRESSION SPRING
85	P0603X085	LEFT BRACKET
86	PRP90M	ROLL PIN 8 X 30
87	P0603X087	FRONT PLATE
88	P0603X088	TORSION SPRING
89	P0603X089	RIGHT BRACKET
90	P0603X090	SHAFT
91	P0603X091	SHAFT
92	P0603X092	COLLAR
93	P0603X093	ANTI-KICKBACK PAWL
94	PR25M	INT RETAINING RING 47MM
103	PSBS09M	BUTTON HD CAP SCR M6-1 X 12
106	P0603X106	CHAIN
130	P0603X130	RING
146	PLW03M	LOCK WASHER 6MM
159	P0603X159	KNOB ASSEMBLY
159-1	P0603X159-1	BRACKET
159-2	P0603X159-2	KNOB
159-3	P0603X159-3	PLATE
159-4	P0603X159-4	SPECIAL NUT
159-5	PSBS11M	BUTTON HD CAP SCR M6-1 X 10
159-6	PW03M	FLAT WASHER 6MM
178	P0603X178	CHAIN
193	P0603X193	BALL BEARING 6906
218	P0603X218	SPROCKET
224	PN02M	HEX NUT M10-1.5
226	PSB72M	CAP SCREW M10-1.5 X 30
234	P0603X234	FENDER WASHER 10MM
235	PSB61M	CAP SCREW M10-1.5 X 20
236	PSB70M	CAP SCREW M10-1.5 X 45
237	P0603X237	CHAIN #40 X 72
255	PSS79M	SET SCREW M4-.7 X 6
257	P0603X257	HEX BOLT M10-1.5 X 70
258	PB160M	CAP SCREW M8-1.25 X 20
268	PSB143M	CAP SCREW M10-1.5 X 50
275	PAW05M	HEX WRENCH 5MM
276	PAW08M	HEX WRENCH 8MM
277	PWR1214	COMBO WRENCH 12/14MM
278	PWR1719	WRENCH 17 X 19
279	P0603X279	WRENCH 22 X 24
280	P0603X280	PLHP HD/SLOTTED SCREWDRIVER
285	PAW03M	HEX WRENCH 3MM
286	PAW04M	HEX WRENCH 4MM
288V2	P0495X186V2	T-HANDLE T-25 TORX DRIVER V2.06.11
293	P0603X293	HELICAL CUTTER ASSEMBLY
293-1	P0603X293-1	HELICAL CUTTERHEAD
293-2	P0603X293-2	CARBIDE INSERT 15 X 15 X 2.5
293-3	PFH40	FLAT HD TORX T-25 SCR #10-32 X 1/2

Table Parts Breakdown

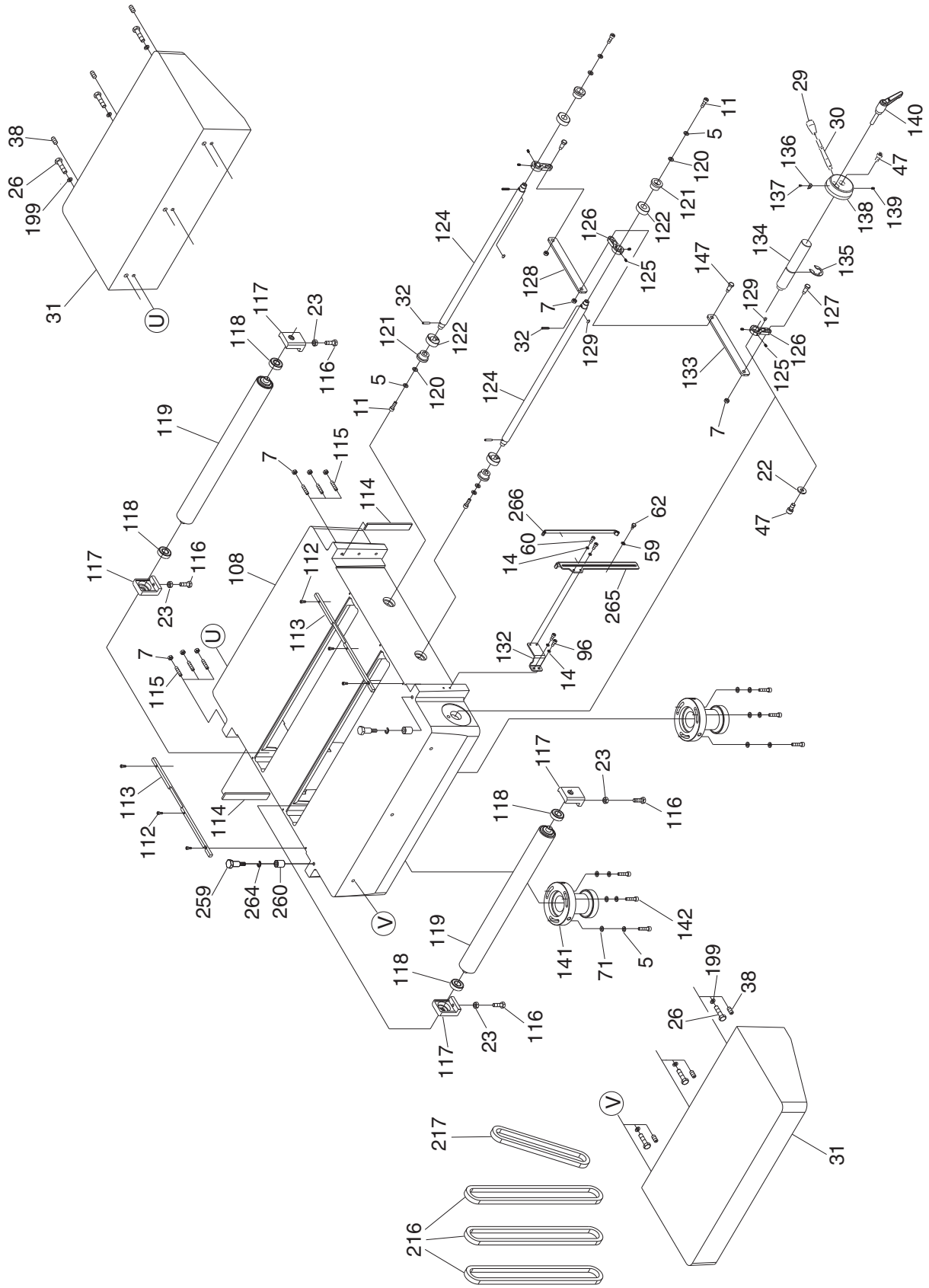
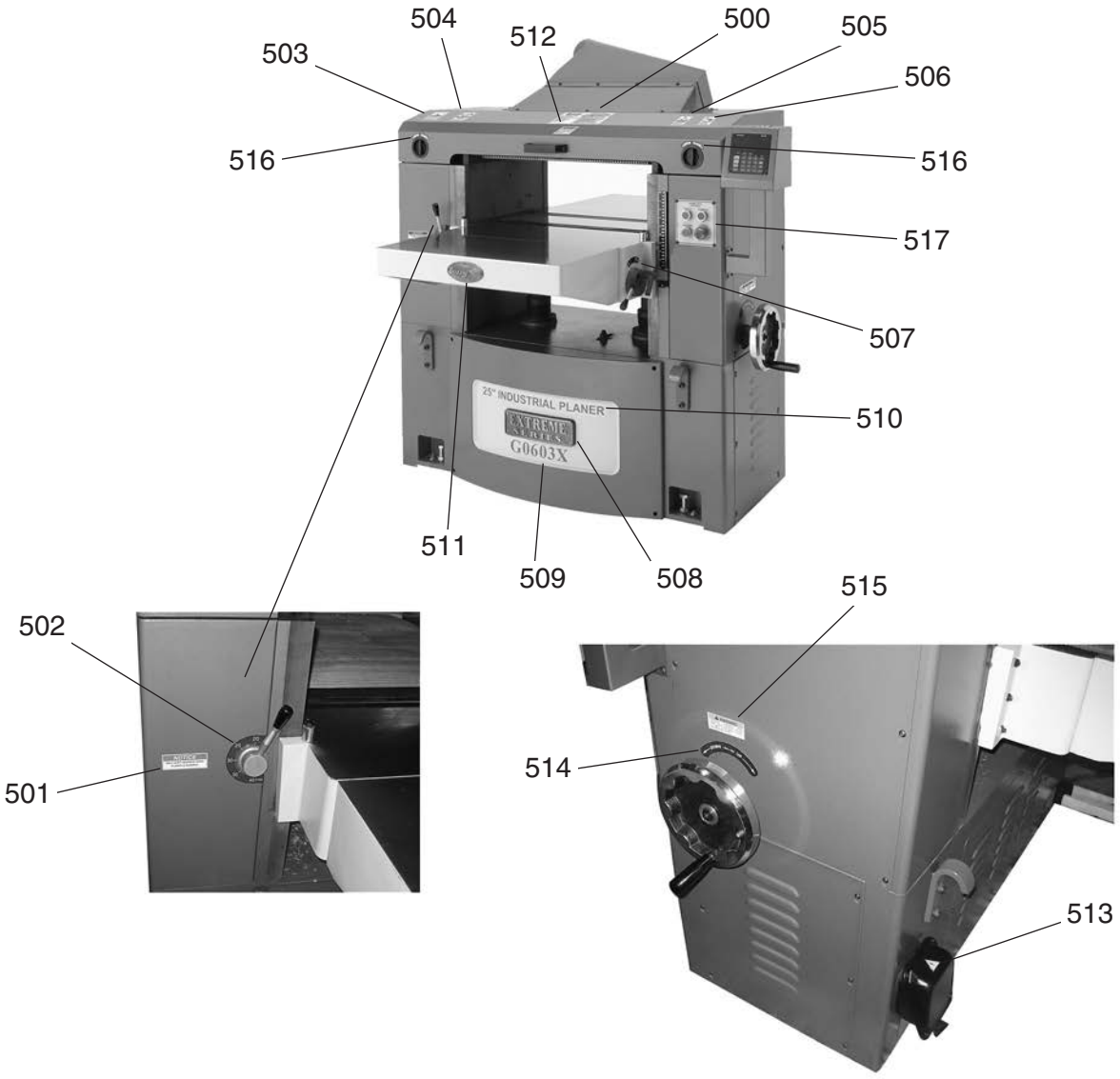


Table Parts List

REF	PART #	DESCRIPTION
5	PLW04M	LOCK WASHER 8MM
7	PN03M	HEX NUT M8-1.25
11	PSB31M	CAP SCREW M8-1.25 X 25
14	PLW01M	LOCK WASHER 5MM
22	PW04M	FLAT WASHER 10MM
23	PN02M	HEX NUT M10-1.5
26	PB33M	HEX BOLT M12-1.75 X 50
29	P0603X029	KNOB
30	P0603X030	SHAFT
31	P0603X031	EXTENSION WING
32	PRP03M	ROLL PIN 5 X 20
38	PSS10M	SET SCREW M10-1.5 X 20
47	PSB61M	CAP SCREW M10-1.5 X 20
59	P0603X059	WAVY WASHER 6MM
60	PSB50M	CAP SCREW M5-.8 X 10
62	P0603X062	SPECIAL SCREW
71	PW01M	FLAT WASHER 8MM
96	PSB50M	CAP SCREW M5-.8 X 10
108	P0603X108	MIDDLE TABLE
112	PSB24M	CAP SCREW M5-.8 X 16
113	P0603X113	GUIDE PLATE
114	P0603X114	POINT PLATE
115	PSS44M	SET SCREW M8-1.25 X 40
116	PB01M	HEX BOLT M10-1.5 X 30
117	P0603X117	ROLLER BRACKET
118	P0603X118	BALL BEARING 6203-2NSE
119	P0603X119	ROLLER
120	PW01M	FLAT WASHER 8MM
121	P0603X121	SHAFT

REF	PART #	DESCRIPTION
122	P0603X122	CAM
124	P0603X124	ROLLER
125	PSS31M	SET SCREW M5-.8 X 8
126	P0603X126	PLATE
127	P0603X127	SPECIAL SCREW
128	P0603X128	BRACKET
129	PK06M	KEY 5 X 5 X 10
132	P0603X132	BRACKET
133	P0603X133	BRACKET
134	P0603X134	SHAFT
135	PEC18M	E-CLIP 24MM
136	P0603X136	POINTER
137	P0603X137	BUTTON HD CAP SCR M4-.7 X 6
138	P0603X138	BRACKET
139	PSS03M	SET SCREW M6-1 X 8
140	P0603X140	HANDLE
141	P0603X141	HOUSING BRACKET
142	PSB12M	CAP SCREW M8-1.25 X 40
147	P0603X147	SPECIAL SCREW
199	PW06M	FLAT WASHER 12MM
216	P0603X216	V-BELT A-86 4L860
217	PVA66	V-BELT A-66 4L660
258	PB160M	CAP SCREW M8-1.25 X 20
259	P0603X259	SPECIAL SCREW
260	P0603X260	BUSHING
264	PEC015M	E-CLIP 8MM
265	P0603X265	BRACKET
266	P0603X266	BRACKET

Label Placement



REF	PART #	DESCRIPTION
500	P0603X500	MACHINE ID LABEL
501	P0603X501	NOTICE SHIFT GEARBOX LBL
502	P0603X502	GEARBOX SPEED LABEL
503	PLABEL-12A	READ MANUAL-VERTICAL NS 7/05
504	PLABEL-11	SAFETY GLASSES 2" X 3 5/16"
505	P0603X505	ELECTRIC DISCONNECT LABEL
506	P0603X506	EAR/LUNG CAUTION LABEL
507	P0603X507	TABLE ROLLER LABEL
508	H7942	EXTREME SERIES PLATE

REF	PART #	DESCRIPTION
509	P0603X509	G0603X LABEL
510	P0603X510	INDUSTRIAL PLANER LABEL
511	G9987	GRIZZLY LOGO PLATE
512	P0603X512	COVER WARNING LABEL
513	PLABEL-14	ELECTRICITY LABEL
514	P0603X514	TABLE CONTROL LABEL
515	P0603X515	WARNING DISENGAGE LABEL
516	P0603X516	OPEN/CLOSE LABEL
517	P0603X517	POWER/TABLE CONTROL LABEL

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

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____

Model # _____ Order # _____ Serial # _____

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

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

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

____ Cabinetmaker & FDM
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

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

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

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

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

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

8. Would you recommend Grizzly Industrial to a friend? _____Yes _____No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____Yes _____No

10. Comments: _____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

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

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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

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

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

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

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

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