

Grizzly ***Industrial, Inc.***®

MODEL G0453W, G0453ZW, G0454W, G0454ZW 15" & 20" PLANERS OWNER'S MANUAL *(For models manufactured since 08/16)*



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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.**

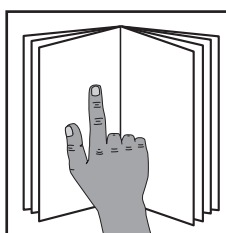
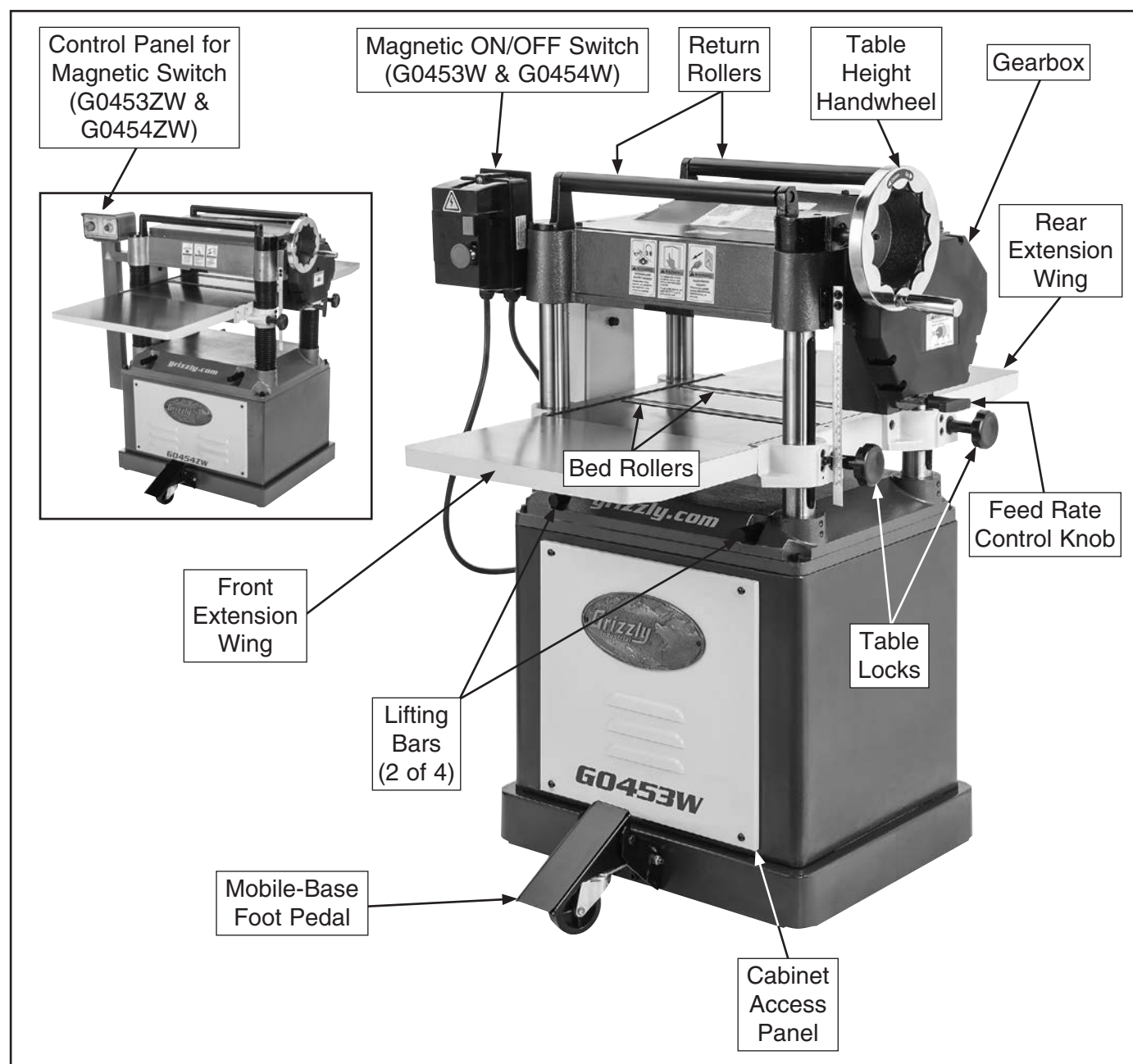
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



⚠ WARNING

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.



Controls & Components



Refer to **Figures 1–3** and the following descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and stay safe when operating this machine.

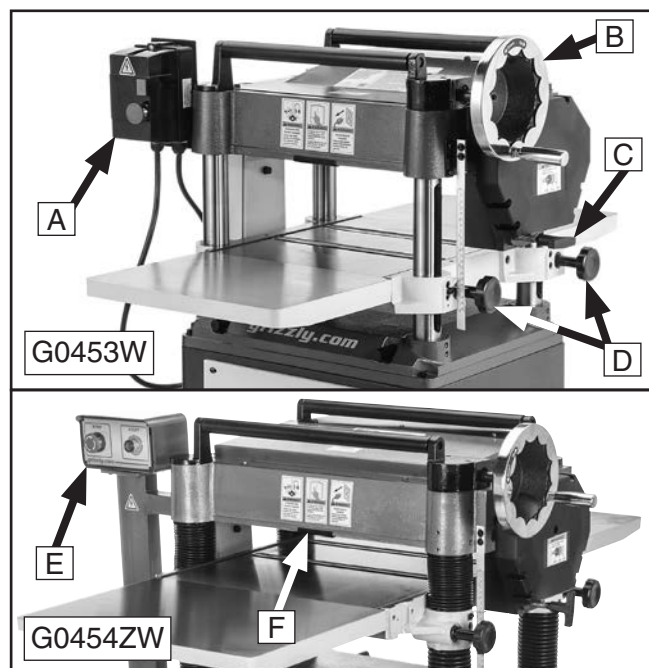


Figure 1. Table elevation and feed controls.

- A. Magnetic ON/OFF Switch:** Green start button turns motor **ON** when pressed. Red Emergency Stop button turns motor **OFF** when pressed; for safety purposes, this button will remain depressed and prevent restarting until reset. Reset by rotating clockwise until it pops out.
- B. Table Height Handwheel:** Raises and lowers table to accommodate different workpiece thicknesses. One complete revolution moves the table approximately $\frac{1}{16}$ ".

- C. Feed Rate Control Knob:** Selects 20 FPM feed rate when pushed in and 16 FPM feed rate when pulled out.
- D. Table Locks:** Secure table height position when tightened.
- E. Control Panel for Magnetic Switch:** Green START button turns motor **ON** when pressed. Red Emergency STOP button turns motor **OFF** when pressed; for safety purposes, this button will remain depressed and prevent restarting until reset. Reset by rotating clockwise until it pops out.
- F. Depth Limiter:** Limits depth of cut to a maximum of $\frac{1}{8}$ " at full width.

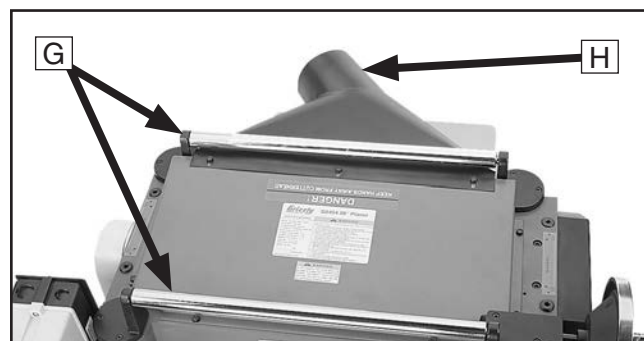


Figure 2. Return rollers and dust port.

- G. Return Rollers:** Assist sliding workpiece back to operator following planing operation.
- H. Dust Port:** Connects to a dust collection system to extract shavings and dust during operation.



Figure 3. Mobile-base foot pedal.

- I. Mobile-Base Foot Pedal:** When engaged, lifts machine onto casters for repositioning. When disengaged, allows machine to rest firmly on floor during operations.



Internal Components

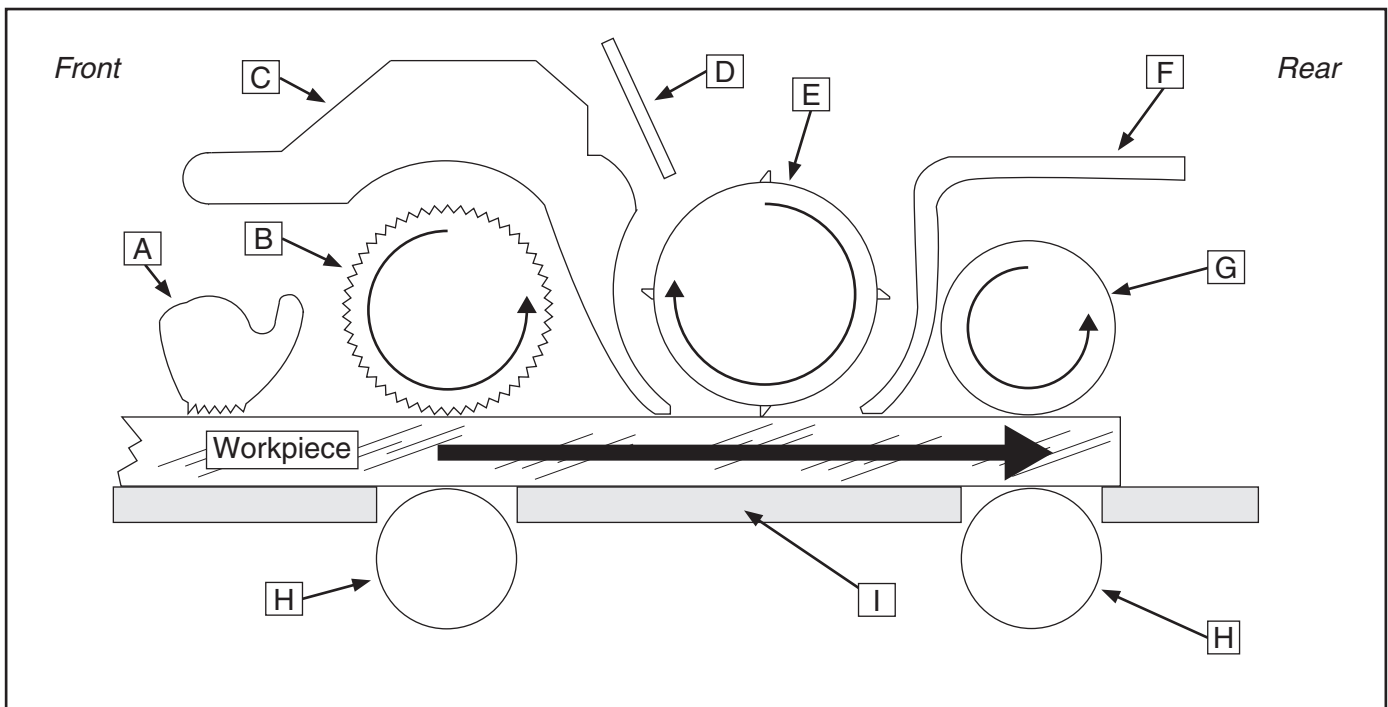


Figure 4. Workpiece path and major planing components (side cutaway view).

- A. Anti-Kickback Fingers:** Provide additional safety for the operator.
- B. Serrated Infeed Roller:** Pulls the workpiece toward the cutterhead.
- C. Chip Breaker:** Breaks off chips created by the cutterhead to prevent tear out and diverts the chips to the dust port.
- D. Chip Deflector:** Directs chips into the dust hood.
- E. Cutterhead:** Holds the knives/indexable carbide inserts that remove material from the workpiece.
- F. Pressure Bar:** Stabilizes the workpiece as it leaves the cutterhead and assists in deflecting wood particles toward the dust hood (G0454W & G0454ZW only).
- G. Outfeed Roller:** Pulls the workpiece through the planer.
- H. Table Rollers:** Provide upward pressure on the workpiece, enabling the feed rollers to pull the workpiece along.
- I. Planer Table:** Provides a smooth and level path for the workpiece as it moves through 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 decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.





MACHINE DATA SHEET

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

MODEL G0453W/ZW-G0454W/ZW PLANERS

| Model Number | G0453W | G0453ZW | G0454W | G0454ZW |
|-------------------------------------------------------|---------------------------------------|-----------------|-------------------|------------------|
| Product Dimensions | | | | |
| Weight | 514 lbs. | 525 lbs | 768 lbs. | 779 lbs. |
| Width (side-to-side) x Depth (front-to-back) x Height | 33½" x 42" x 44" | 38" x 42" x 44" | 39½" x 56½" x 45" | 44" x 56½" x 45" |
| Foot Print (Length x Width) | 19" x 23½" | | 23" x 29" | |
| Shipping Dimensions | | | | |
| Type | Wood Crate | | | |
| Weight | 585 lbs. | 602 lbs. | 853 lbs. | 877 lbs. |
| Width (side-to-side) x Depth (front-to-back) x Height | 33" x 25" x 48" | 37" x 25" x 48" | 38" x 30" x 48" | 43" x 30" x 48" |
| Electrical | | | | |
| Power Requirement | 240V, Single-Phase, 60 Hz | | | |
| Full-Load Current Rating | 12A | | 20A | |
| Minimum Circuit Size | 20A | | 30A | |
| Connection Type | Cord & Plug | | | |
| Power Cord Included | Yes | | | |
| Power Cord Length | 6 ft. | | | |
| Power Cord Gauge | 12 AWG | | | |
| Plug Included | Yes | | | |
| Included Plug Type | 6-20 | | L6-30 | |
| Switch Type | Magnetic Switch w/Overload Protection | | | |
| Motor | | | | |
| Type | TEFC Capacitor-Start Induction | | | |
| Horsepower | 3 HP | | 5 HP | |
| Phase | Single-Phase | | | |
| Amps | 12A | | 20A | |
| Speed | 3450 RPM | | | |
| Power Transfer | Belt Drive | | | |
| Bearings | Sealed & Permanently Lubricated | | | |
| Manufacturer Specifications | | | | |
| Country of Origin | China | | | |
| Warranty | 1 Year | | | |
| Approx. Assembly & Setup Time | 1 Hour | | | |
| Serial Number Location | ID Label | | | |
| ISO 9001 Factory | Yes | | | |
| Certified by NRTL | Yes | | | |



| Model Number | G0453W | G0453ZW | G0454W | G0454ZW |
|------------------------------------------|----------------------------|-------------------|--------------------------|-------------------|
| Main Specifications | | | | |
| Planer Size | 15 in. | | 20 in. | |
| Max. Cut Width | 15 in. | | 20 in. | |
| Max. Stock Thickness | 8 in. | | | |
| Min. Stock Thickness | 3⁄16 in. | | | |
| Min. Stock Length | 6½ in. | | 7½ in. | |
| Number of Cuts Per Inch | 104, 56 | | 104, 83 | |
| Number of Cuts Per Minute | 15,000 | 20,000 | | |
| Cutterhead Speed | 5000 RPM | | | |
| Planing Feed Rate | 16, 20 FPM | | | |
| Max. Cut Depth Planing Full Width | 1⁄8 in. | | | |
| Max. Cut Depth Planing 6-Inch Wide Board | 5⁄32 in. | | 1⁄4 in. | |
| Dust Port Size | 4 in. | | 5 in. | |
| Cutterhead Info | | | | |
| Cutterhead Type | 3-Knife | Spiral | 4-Knife | Spiral |
| Cutterhead Diameter | 3 in. | | 3 1⁄16 in. | |
| Number of Knives | 3 | N/A | 4 | N/A |
| Knife Type | HSS, Single-Sided, Solid | N/A | HSS, Single-Sided, Solid | N/A |
| Knife Length | 15 in. | N/A | 20 in. | N/A |
| Knife Width | 1 in. | N/A | 1 in. | N/A |
| Knife Thickness | 1⁄8 in. | N/A | 1⁄8 in. | N/A |
| Knife Adjustment | Jack Screws | N/A | Jack Screws | N/A |
| Number of Spirals | N/A | 4 | N/A | 4 |
| Number of Indexable Cutters | N/A | 72 | N/A | 96 |
| Cutter Insert Type | N/A | Indexable Carbide | N/A | Indexable Carbide |
| Cutter Insert Length | N/A | 14 mm | N/A | 14 mm |
| Cutter Insert Width | N/A | 14 mm | N/A | 14 mm |
| Cutter Insert Thickness | N/A | 2 mm | N/A | 2 mm |
| Table Info | | | | |
| Table Movement | 8 in. | | | |
| Table Bed Length | 41 3⁄4 in. | | 56 1⁄2 in. | |
| Table Bed Width | 16 in. | | 21 in. | |
| Table Bed Thickness | 2 3⁄8 in. | | | |
| Floor-to-Table Height | 25–32 3⁄4 in. | | 25 3⁄8–33 3⁄4 in. | |
| Construction | | | | |
| Table | Precision-Ground Cast Iron | | | |
| Body | Cast Iron | | | |
| Stand | Steel | | | |
| Cutterhead Assembly | Steel | | | |
| Infeed Roller | Serrated Steel | | | |
| Outfeed Roller | Rubber | | | |
| Paint Type/Finish | Powder Coated | | | |



SECTION 1: SAFETY

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. Always use common sense and good judgment.



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



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



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

Safety Instructions for Machinery



OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

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.



WARNING

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 reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

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

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

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

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.

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

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly **BEFORE** operating machine.

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

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace **BEFORE** operating machine. For your own safety, **DO NOT** operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—**NOT** the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

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



Additional Safety for Planers

WARNING

Amputation, serious cuts, entanglement, or death can occur from contact with rotating cutterhead or other moving parts! Flying chips can cause blindness or eye injuries. Workpieces or knives thrown by cutterhead can strike nearby operator or bystanders with deadly force. To reduce the risk of these hazards, operator and bystanders MUST completely heed hazards and warnings below.

KICKBACK. Know how to reduce the risk of kickback and kickback-related injuries. “Kickback” occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator’s hands are pulled into blade, resulting in amputation or severe lacerations.

AVOID CONTACT WITH MOVING PARTS. Never remove guards/covers or reach inside the planer during operation or while connected to power. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. If a workpiece becomes stuck or sawdust removal is necessary, turn planer **OFF** and disconnect power before clearing.

DULL/DAMAGED KNIVES/INSERTS. Only use sharp, undamaged knives/inserts. Dull or damaged knives/inserts increase the risk of kickback.

INSPECTING STOCK. To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or foreign material. Workpieces with minor warping should be jointed first or planed with the cupped side facing the table.

BODY PLACEMENT. Stand to one side of planer during the entire operation to avoid getting hit if kickback occurs.

GRAIN DIRECTION. Planing across the grain is hard on the planer and may cause kickback. Plane in the same direction or at a slight angle with the wood grain.

PLANING CORRECT MATERIAL. Only plane natural wood stock with this planer. DO NOT plane MDF, OSB, plywood, laminates or other synthetic materials that can break up inside the planer and be ejected towards the operator.

LOOKING INSIDE PLANER. Wood chips fly around inside the planer at a high rate of speed during operation. To avoid injury from flying material, DO NOT look inside planer during operation.

CUTTING LIMITATIONS. To reduce the risk of kickback hazards or damage to the machine, do not exceed the maximum depth of cut or minimum board length and thickness found in the **Data Sheet**. Only feed one board at a time.

INFEED ROLLER CLEARANCE. The infeed roller is designed to pull material into the spinning cutterhead. To reduce the risk of entanglement, keep hands, clothing, jewelry, and long hair away from the infeed roller during operation.

FEED WORKPIECE PROPERLY. To reduce the risk of kickback, never start planer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding, and do not change feed speed during cutting operation.

WORKPIECE SUPPORT. To reduce the risk of kickback, always make sure workpiece can move completely across table without rocking or tipping. Use auxiliary support stands for long stock.

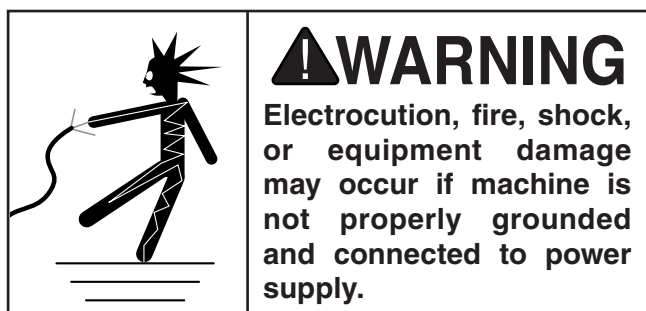
SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

G0453W/G0453ZW

Full-Load Current Rating 12 Amps

G0454W/G0454ZW

Full-Load Current Rating 20 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

! CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

G0453W/G0453ZW

Circuit Requirements

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 20 Amps
Plug/Receptacle NEMA 6-20

G0454W/G0454ZW

Circuit Requirements

Nominal Voltage 208V, 220V, 230V, 240V
Cycle 60 Hz
Phase Single-Phase
Power Supply Circuit 30 Amps
Plug/Receptacle NEMA L6-30



⚠ WARNING

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

Grounding Requirements

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. **DO NOT** modify the provided plug!

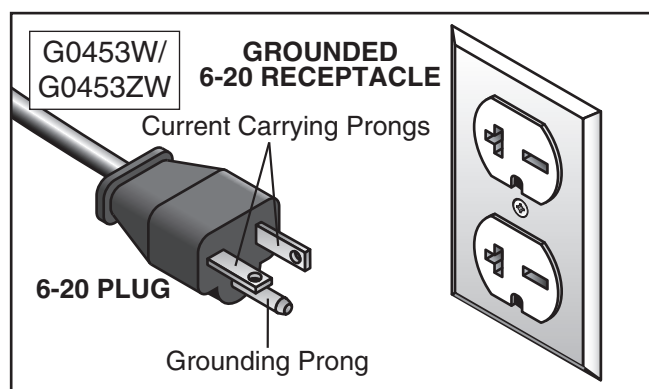


Figure 5. Typical 6-20 plug and receptacle.

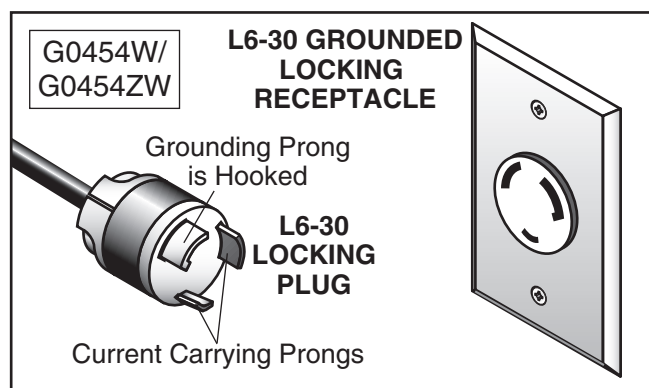
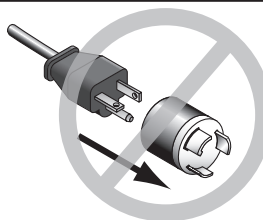


Figure 6. Typical L6-30 plug and receptacle.

⚠ CAUTION



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

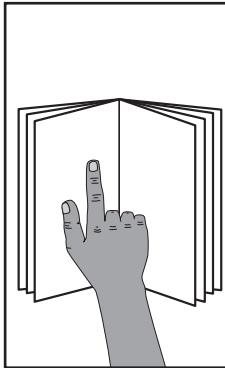
Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size 12 AWG
Maximum Length (Shorter is Better).....50 ft.

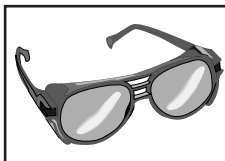


SECTION 3: SETUP



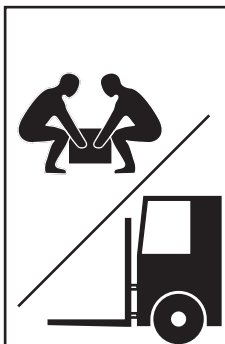
!WARNING

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



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description

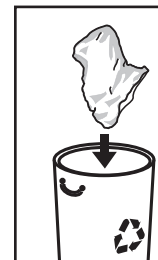
Qty

- Additional People 1
- Safety Glasses 1 Per Person
- Forklift (rated for at least 1000 lbs.)..... 1
- Cleaner/Degreaser (**Page 15**) As Needed
- Disposable Shop Rags..... As Needed
- Phillips Screwdriver #2 1
- Wrench or Socket 12mm 1
- Hex Wrenches 3, 4, 5, 6, 8mm 1 Ea.
- Straightedge 4' 1
- Dust Collection System 1
- 4" Dust Hose w/Clamps (G0453W/ZW) 1
- 5" Dust Hose w/Clamps (G0454W/ZW) 1

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*



!WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.



Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

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

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

| Box Inventory (Figure 7) | Qty |
|-----------------------------------------------|-------|
| A. Planer (Not Shown) | 1 |
| B. Extension Wings | 2 |
| C. Return Roller (15" Models Only) | 1 |
| D. Dust Hood | 1 |
| E. Handwheel | 1 |
| F. Handwheel Handle | 1 |
| G. Foot Pedal Caster Assembly | 1 |
| H. Feed Rate "T" Knob M8-1.25 | 1 |
| I. Hex Wrenches 3, 4, 5, 6mm..... | 1 Ea. |
| J. Hex Wrench 8mm (20" Models Only)..... | 1 |
| K. Rubber Foot Assemblies..... | 2 |
| L. Cap Screws M8-1.25 x 60 (Rear Wheels).. | 2 |
| Lock Washers 8mm (Rear Wheels) | 2 |
| M. Cap Screws M8-1.25 x 50 (Foot Pedal) | 3 |
| Flat Washers 8mm (Foot Pedal) | 6 |
| Lock Washers 8mm (Foot Pedal)..... | 3 |
| Hex Nuts M8-1.25 (Foot Pedal) | 3 |
| N. Rear Wheels..... | 2 |
| O. Table Lock Star Knobs (15" Models Only).. | 2 |

Included w/Straight-Knife Planers (Figure 8)

| | |
|----------------------------|---|
| P. Knife-Setting Jig | 1 |
|----------------------------|---|

Included w/Spiral Cutter Planers (Figure 9)

| | |
|------------------------------------|---|
| Q. Spare Cutterhead Inserts | 5 |
| Torx Screws T-20 M6-1 x 15..... | 5 |
| R. L-Handle Torx Wrench T-20 | 1 |
| S. T-Handle Torx Wrench T-20 | 1 |



Figure 7. Box inventory.

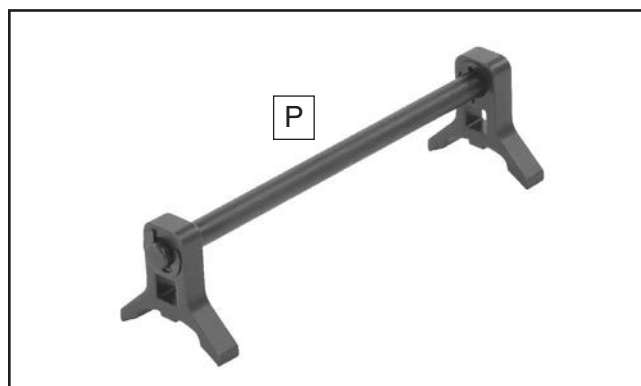


Figure 8. Knife-setting jig for straight-knife planers.

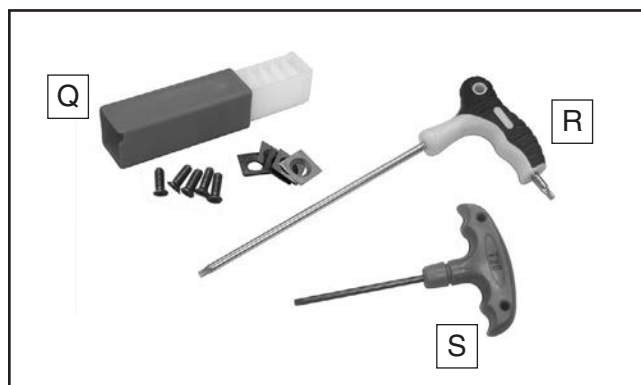


Figure 9. Spare cutterhead inserts and Torx wrenches for spiral cutterhead planers.



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.


There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

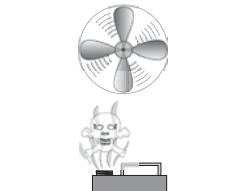
Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

| | |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | ⚠ WARNING Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery. |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| | |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|  | ⚠ CAUTION Many cleaning solvents are toxic if inhaled. Only work in a well-ventilated area. |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|

| |
|---------------------------------------------------------------------------------------------------------------------------|
| NOTICE Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces. |
|---------------------------------------------------------------------------------------------------------------------------|

T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from the **non-painted** parts of the machine during clean up.

| | |
|----------------------------------------------------|---------------------------------------------------------------------------------------|
| <p>Call 1-800-523-4777 To Order</p> |  |
|----------------------------------------------------|---------------------------------------------------------------------------------------|

Figure 10. T23692 Orange Power Degreaser.



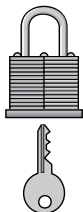
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



CAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20%–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

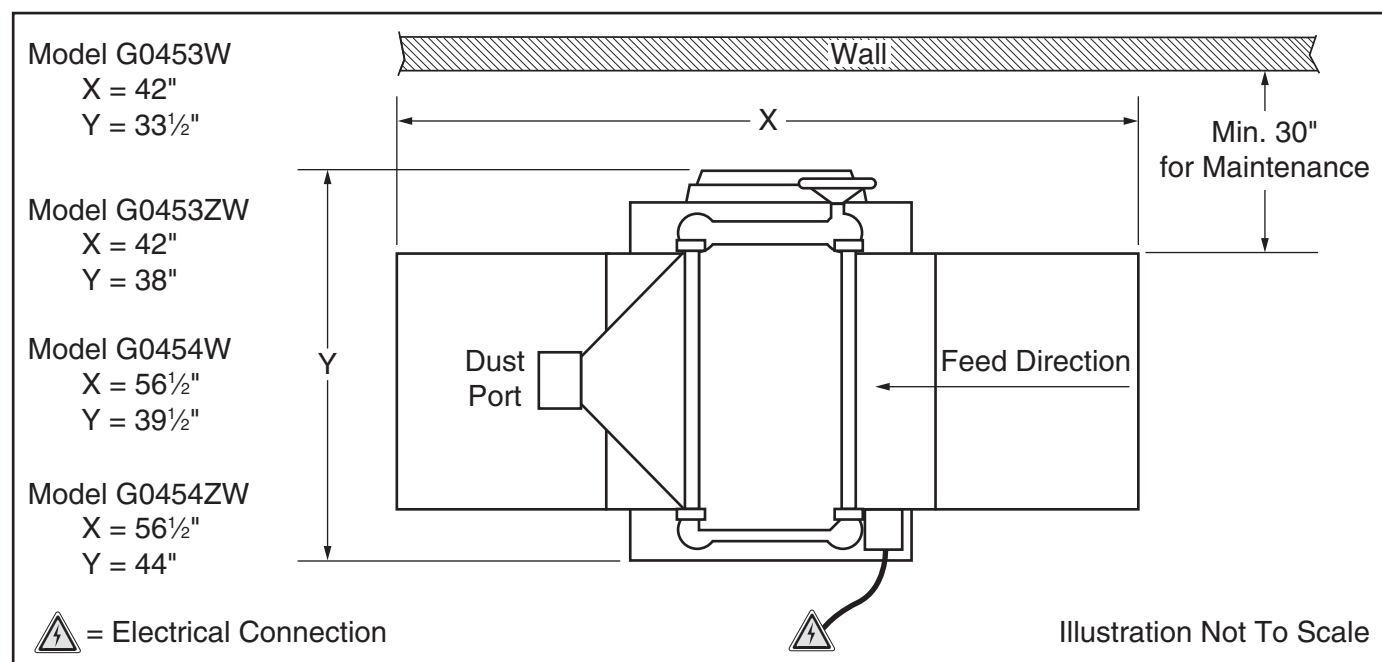
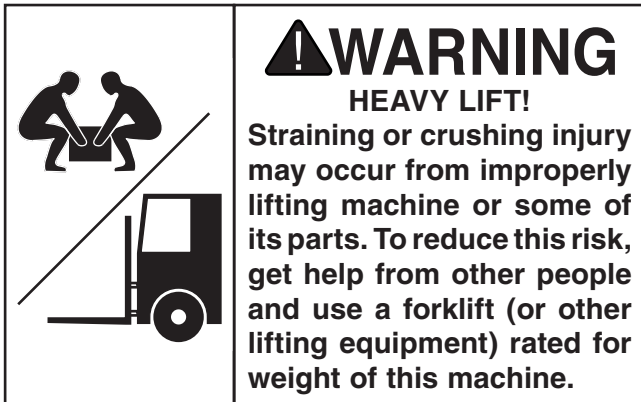


Figure 11. Minimum working clearances.



Lifting & Placing



The planer is equipped with four lifting bars that extend in order to lift and place the planer, as shown in **Figure 12**.

The rear wheels and front feet mount to the bottom of the machine. Therefore, the best time to assemble these components is while the machine is elevated safely by the forklift.

To lift and place machine:

1. Use forklift to lift machine off pallet (see **Figure 12**).

Tip: When positioning lift forks, place shop rags or cardboard between forks and cabinet stand to avoid scratching paint.

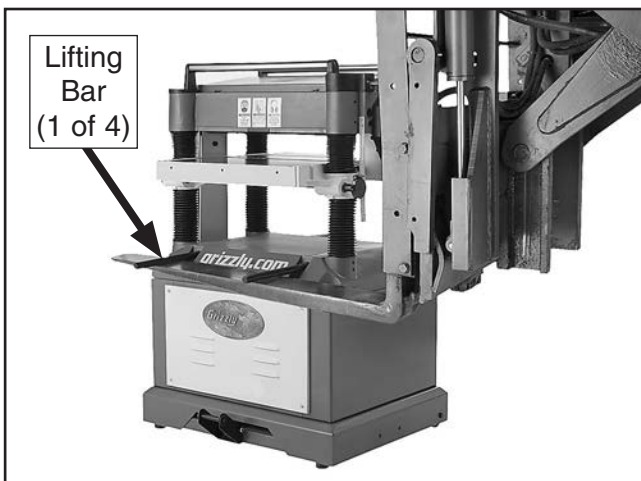


Figure 12. Lifting planer with forklift.

!WARNING

When installing rear wheels and front feet in Steps 2 & 3, machine **MUST** be fully supported by forklift to prevent machine from falling, causing serious crushing injury or death. If machine can not be sufficiently supported during the next two steps, we recommend temporarily setting machine on supports such as 4 x 4 blocks to raise it off the ground.

2. While machine is elevated, install rear wheels using (2) M8-1.25 X 60 cap screws and (2) 8mm lock washers (see **Figure 13**).

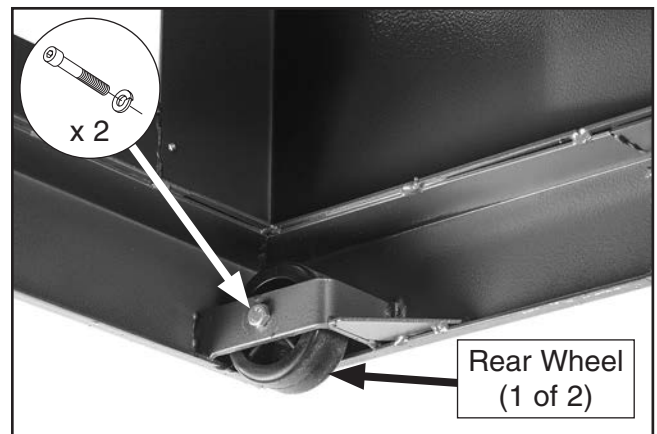


Figure 13. Rear wheels installed with machine elevated by forklift.

3. Install both front feet (see **Figure 14**).

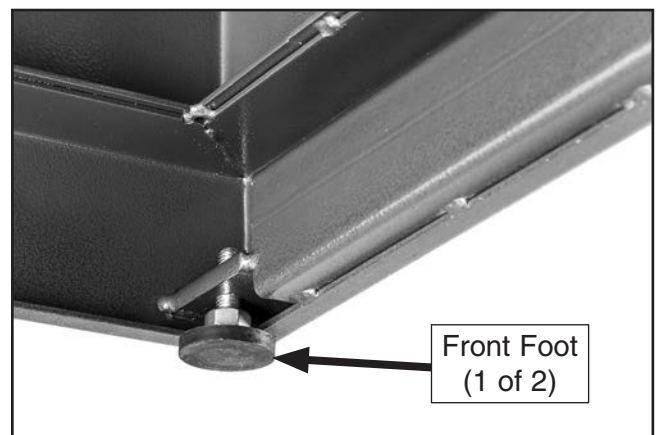


Figure 14. Front feet installed with machine elevated by forklift.

4. Set machine down in suitable location.



Assembly

To assemble planer:

1. **G0453W & G0453ZW:** Attach each table extension wing to planer table with (2) pre-installed M8-1.25 x 25 cap screws, 8mm lock washers, and 8mm flat washers,. Do not fully tighten cap screws at this time.

G0454W & G0454ZW: Attach each table extension wing to planer table with (4) pre-installed M10-1.5 x 25 cap screws, 10mm lock washers, and 10mm flat washers (see **Figure 15**). Do not fully tighten cap screws at this time.

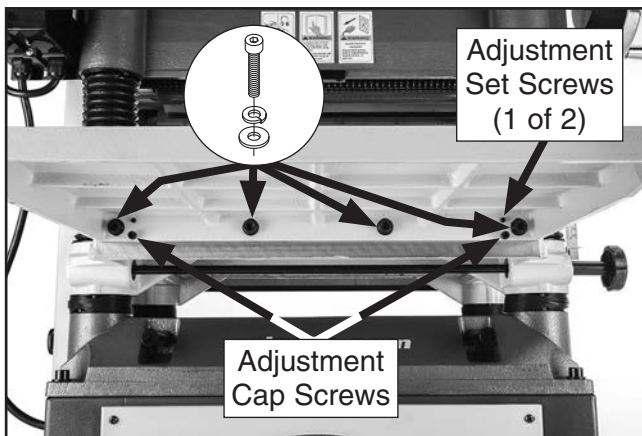


Figure 15. Front extension wing installed (Model G0454ZW shown).

2. Using a straightedge as a guide, and table adjustment set screws and cap screws for leveling control, position extension wings even with table and fully tighten cap screws from **Step 1**.

Note: Be aware that bed rollers will give you a false reading with your straightedge if they are raised above table. Move them down or work around them when leveling extension wings (refer to **Bed Roller Height** on **Page 26** for more information).

3. **G0453W & G0453ZW Only:** Remove one pre-installed hex nut from each table locking rod, then install table lock star knobs on locking rods (see **Figure 16**).

Note: Pre-installed hex nuts on table locking rods are for shipping purposes only and may be discarded after removal.

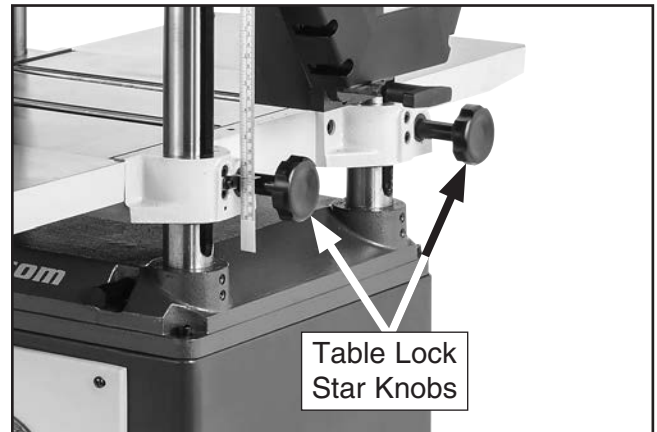


Figure 16. Table lock star knobs installed.

4. Thread handwheel handle into handwheel (see **Figure 17**).
5. Thread feed rate knob onto feed rate shaft (see **Figure 17**).
6. Secure handwheel on shaft with pre-installed M5-8 x 16 cap screw and 5mm flat washer (see **Figure 17**).

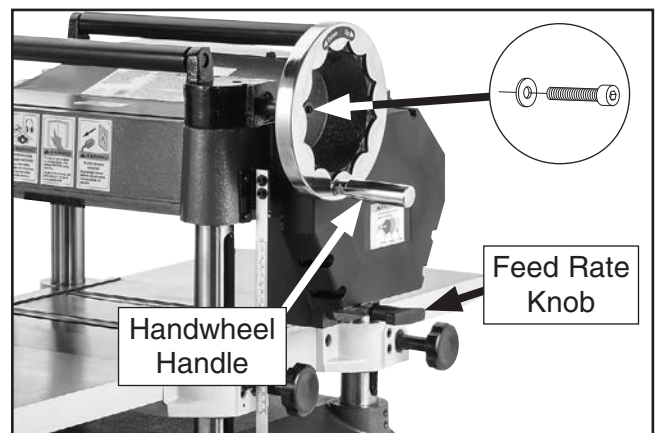


Figure 17. Handwheel and T-knob installed.



7. Attach top and bottom of dust hood to planer with (6) pre-installed M6-1 x 12 flange bolts (see **Figure 18**).

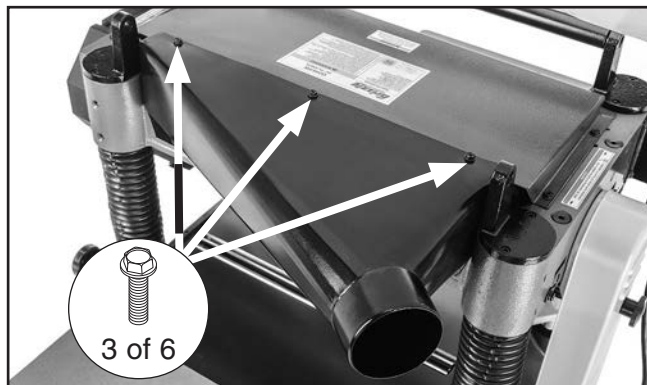


Figure 18. Dust hood attached (Model G0453W shown).

8. **G0453W & G0454W Only:** Mount magnetic switch assembly to side of headstock with (2) pre-installed M6-1 x 12 flange bolts (see **Figure 19**).

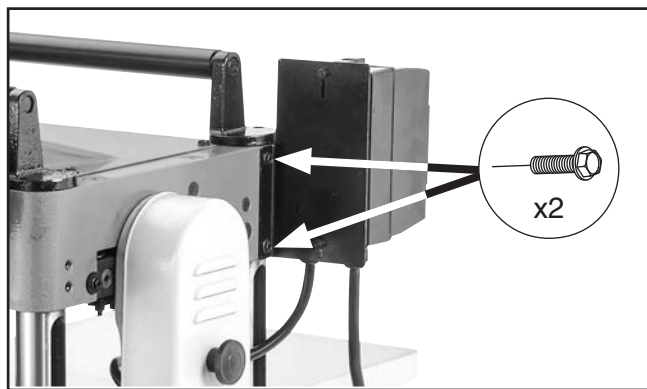


Figure 19. Magnetic switch installed (Models G0453W and G0454W).

9. **G0453W & G0453ZW Only:** Remove two pre-installed cap screws and rear return roller bracket shown in **Figure 20**. Mount rear return roller between brackets, then re-install cap screws.

Note: Models G0453W & G0453ZW ship with the rear return roller as separate inventory because for these models, the return roller blocks access to the dust hood fasteners. Therefore, with these models, the rear return roller must be installed **AFTER** the dust hood.

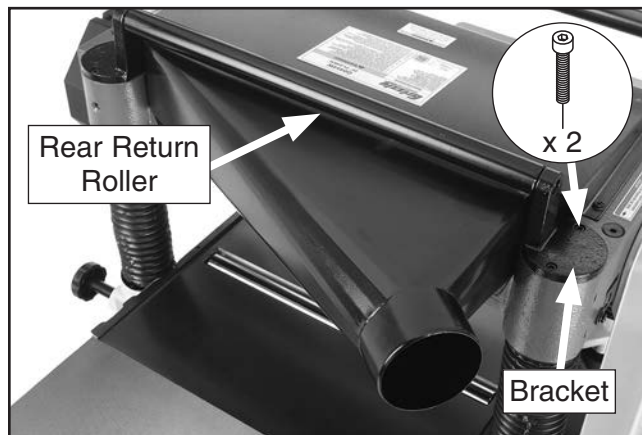


Figure 20. Return roller bar installed.

10. Attach foot-pedal caster assembly to bottom of machine using (3) M8-1.25 x 50 cap screws, (3) 8mm lock washers, (6) 8mm flat washers, and (3) M8-1.25 hex nuts (see **Figure 21**).

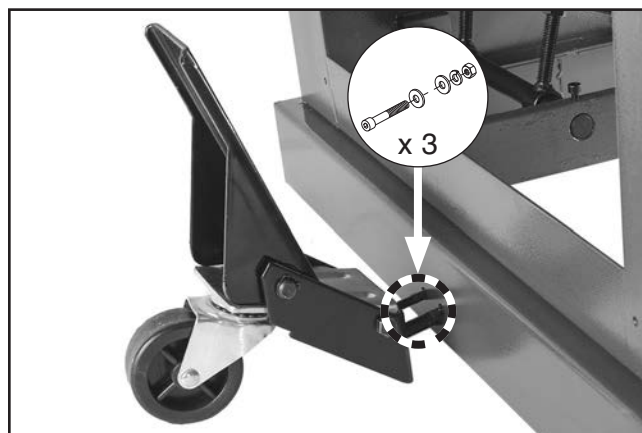


Figure 21. Attaching foot-pedal caster assembly to bottom of machine.



Dust Collection

⚠ CAUTION

This machine creates a lot of wood chips/dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust collection system.

Recommended CFM at Dust Port

- G0453W & G0453ZW400 CFM
- G0454W & G0454ZW625 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect the machine to a dust collection system, fit a 4" dust hose (G0453W & G0453ZW), or a 5" dust hose (G0454W & G0454ZW) over the dust port, and secure in place with a hose clamp (see **Figure 22**). Tug the hose to make sure it does not come off.

Note: A tight fit is necessary for proper performance.

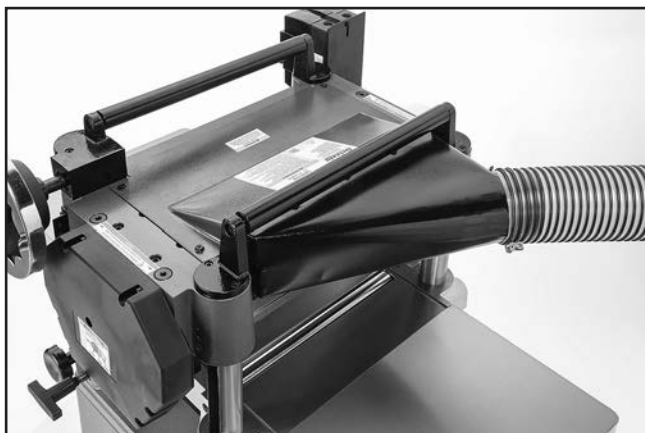


Figure 22. Dust hose connected to dust port.

Checking Gearbox Oil Level

Before starting your machine for the first time, make sure the gearbox has oil. The proper oil level is just even with the bottom of the fill plug hole. The gearbox uses ISO 320, SAE 140 gear oil, or SAE 85W–140 multi-weight gear oil. DO NOT mix oil types.

Note: Although it is not necessary to remove the drive chain cover to access the fill plug (see **Figure 23**), it is more convenient to do so. To remove the cover, remove the seven cap screws that secure it to the planer.

To check gearbox oil level:

1. Use a 14mm wrench or socket to remove gearbox fill plug (see **Figure 23**).

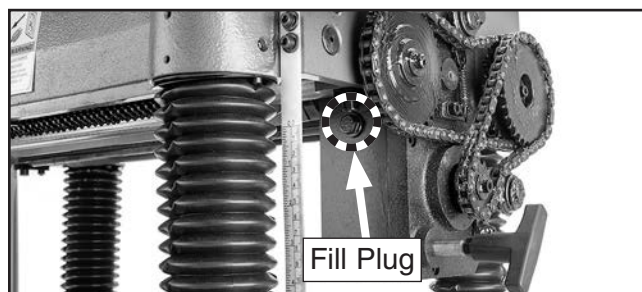


Figure 23. Drive chain cover removed to access gearbox fill plug.

2. Dip the short end of a clean 6mm hex wrench inside fill hole, and then remove it.

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

— If the end of the hex wrench is *not* coated with oil, then you need to add more oil. Refer to **Gearbox Oil** on **Page 36** for instructions on how to do this.

Note: We recommend that you replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure and will help maximize the service life of the machine by flushing away any particles from the break-in and manufacturing process.



Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem **BEFORE** operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

WARNING

Serious injury or death can result from using this machine **BEFORE** understanding its controls and related safety information. **DO NOT** operate, or allow others to operate, machine until the information is understood.

WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools and loose objects away from machine.
2. Push STOP button in.
3. Connect machine to power supply.
4. Twist STOP button clockwise until it springs out (see **Figure 24**). This resets the switch so the machine can start.

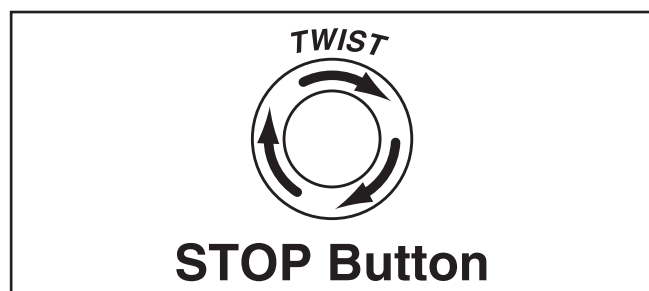


Figure 24. Resetting the switch.

5. Press START button to turn machine **ON**. Verify motor starts up and runs smoothly without any unusual problems or noises.
6. Press STOP button to turn machine **OFF**.
7. **WITHOUT** resetting STOP button, try to start machine by pressing the START button. The machine should not start.
 - If the machine *does not* start, the STOP button safety feature is working correctly. Congratulations! Test Run is complete.
 - If the machine *does* start (with the STOP button pushed in), immediately disconnect power to the machine. The STOP button safety feature is not working correctly and must be replaced before further using the machine. Call Tech Support for help.

NOTICE

After approximately 16 hours of operation, V-belts will stretch and seat into pulley grooves and need to be properly tensioned to avoid severely reducing life of V-belts. Refer to Tensioning/Replacing V-Belts on Page 40 for detailed instructions.

Recommended Adjustments

The adjustments listed below have been performed at the factory. However, because of the many variables involved with shipping, we recommend that you at verify the adjustments to ensure the best possible results from your new machine.

Step-by-step instructions for these adjustments can be found in the **SERVICE** section starting on **Page 37**.

Factory adjustments that should be verified:

- Check V-belt tension (**Page 40**).
- Calibrating table height scale (**Page 46**).
- Pulley alignment (**Page 47**).

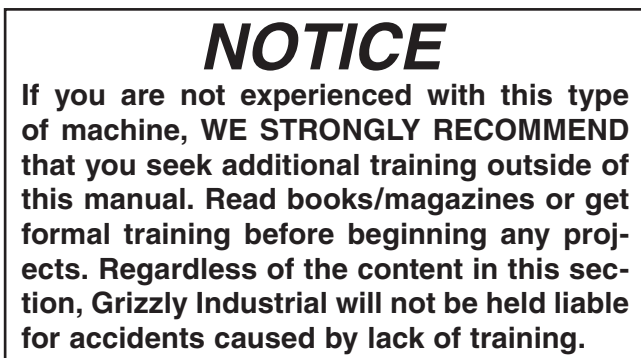
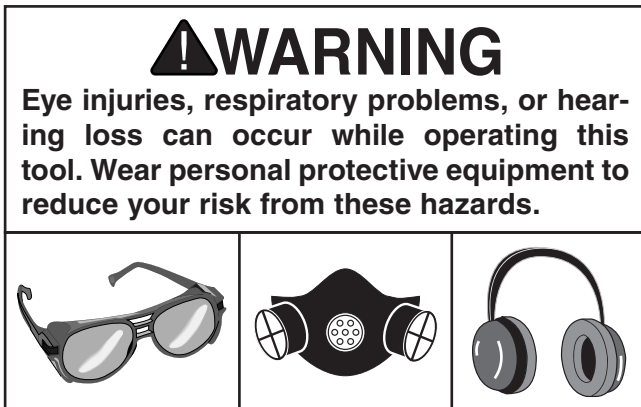


SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual, seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.



To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for planing.
2. Puts on safety glasses or face shield, a respirator, and ear protection.
3. Places workpiece on table with flat side down and correctly adjusts table height for workpiece thickness and depth of cut.
 - If workpiece is bowed, operator surface planes workpiece on a jointer until one side is flat. Doing so ensures that it sits solidly on planer table during operation.
4. When all safety precautions have been taken, turns planer **ON**.
5. Stands to one side of planer path to reduce risk of kickback injuries, then feeds workpiece into planer until infeed roller grabs it.

Note: *Infeed and outfeed rollers control feed rate of workpiece as it passes through planer. Operator does not push or pull on workpiece.*

 - If cut is too deep and bogs down planer, operator immediately reduces depth of cut.
6. Once workpiece is clear of outfeed roller and stops moving, operator removes workpiece from outfeed table and measures workpiece thickness. If further planing is required, operator raises table slightly, such as 1/2-turn of table height handwheel (approximately 1/4 to 1/2 turn of the handwheel), then feeds workpiece into front of planer again.
7. Operator continues process until desired thickness is achieved, then turns machine **OFF**.



Workpiece Inspection

Some workpieces are not safe to use or may require modification before they are. **Before cutting, inspect all workpieces for the following:**

- **Material Type:** This machine is only intended for workpieces of natural wood fiber. Attempting to use workpieces of any other material that may break apart during operation could lead to serious personal injury and property damage.
- **Foreign Objects:** Inspect lumber for defects and 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.
- **Large/Loose Knots:** Loose knots can become dislodged during operation. Large knots can cause kickback and machine damage. Always use workpieces that do not have large/loose knots.
- **Wet or "Green" Stock:** Avoid using 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 cut poorly and cause excessive wear to the machine. Excess moisture can also hasten rust and corrosion of the machine and/or individual components.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!
- **Minor Cupping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table. On the contrary, a workpiece supported on the bowed side will rock during operation and could cause severe injury from kickback.

Wood Types

The species of wood, as well as its condition, greatly affects the depth of cut the planer can effectively take with each pass.

The chart in the figure below shows the Janka Hardness Rating for a number of commonly used species. The larger the number, the harder the workpiece, and the less material should be removed in any one pass for good results.

Note: *The Janka Hardness Rating is expressed in pounds of force required to embed a 0.444" steel ball into the surface of the wood to a depth equal to half the ball's diameter.*

| Species | Janka Hardness |
|--------------------|----------------|
| Ebony | 3220 |
| Red Mahogany | 2697 |
| Rosewood | 1780 |
| Red Pine | 1630 |
| Sugar Maple | 1450 |
| White Oak | 1360 |
| White Ash | 1320 |
| American Beech | 1300 |
| Red Oak | 1290 |
| Black Walnut | 1010 |
| Teak | 1000 |
| Black Cherry | 950 |
| Cedar | 900 |
| Sycamore | 770 |
| Douglas Fir | 660 |
| Chestnut | 540 |
| Hemlock | 500 |
| White Pine | 420 |
| Basswood | 410 |
| Eastern White Pine | 380 |
| Balsa | 100 |

Figure 25. Janka Hardness Rating for some common wood species.



Planing Tips

- Inspect your lumber for twisting or cupping, and surface one face on a jointer if necessary before planing workpiece.
- Scrape off all glue when planing glued-up panels. Dried glue can quickly dull knives/inserts.
- DO NOT plane more than one piece at a time.
- Never remove more than the recommended amount of material on each pass. Only remove a small amount of material on each pass when planing wide or dense stock.
- Support the workpiece on both ends. Get assistance from another person if you are planing long lumber, or use roller stands to support the workpiece.
- Measure the workpiece thickness with calipers to get exact results.
- Carefully inspect all stock to make sure it is free of large knots or foreign objects that may damage your knives/inserts, cause kickback, or be ejected from the planer.
- When possible, plane equal amounts on each side of the board to reduce the chance of twisting or cupping.
- Use the entire width of the planer to wear knives/inserts evenly. With narrow workpieces, alternate between far left, far right, and the middle of the table. Your knives/inserts will remain sharp much longer.
- To avoid "chip marks," always plane WITH the grain direction of the wood. Never plain cross-grain or end-grain.
- Plane ONLY natural wood fiber. Do not plane wood composites or other materials that could break up in the planer and cause operator injury or damage to planer.
- Always true cupped or warped stock on a jointer before planing.

Cutting Problems

Below is a list of wood characteristics you may encounter when planing. The following descriptions of defects will give you some possible answers to problems you may encounter while planing different materials. Possible solutions follow the descriptions.

Chipped Grain

Problem: Usually a result of cutting against the grain, planing lumber with knots or excessive amount of cross grain, or using dull knives/inserts.

Note: *Some amount of chipping is normal with highly figured wood.*

Solution: Decrease the depth of cut. Reduce the feed rate. Inspect your lumber and determine if its grain pattern is causing the problem. If the lumber does not show substantial crossgrain, inspect your knives/inserts.

Fuzzy Grain

Problem: Usually caused by surfacing lumber with too high of a moisture content. Sometimes fuzzy grain is an unavoidable characteristic of some woods, such as basswood. Fuzzy grain can also be caused by dull knives/inserts.

Solution: Check the lumber with a moisture meter. If moisture is greater than 20%, sticker the lumber and allow it to dry. Otherwise, inspect the knife/insert condition.

Snipe

Problem: Occurs when board ends have more material removed than the rest of the board. Usually caused when the workpiece is not properly supported as it goes through the machine. In many cases, however, a small amount of snipe is inevitable.

Solution: Hold workpiece up slightly as it leaves the outfeed end of the planer. The best way to deal with snipe is by planing lumber longer than your intended work length and then cutting off the excess after planing is completed.



Pitch & Glue Build-up

Problem: Glue and resin buildup on the rollers and cutterhead will cause overheating by decreasing cutting sharpness while increasing drag in the feed mechanism. The result can include scorched lumber, uneven knife/insert marks, and chatter.

Solution: Clean the rollers and cutterhead.

Chip Marks or Indentations

Problem: Chip indentation or chip bruising is the result of wood chips not being thrown away from the cutterhead and out of the machine. Instead they are carried around the cutterhead, deposited on the planed surface and crushed by the outfeed roller. Some of the causes of chip indentation are:

- Wood chips/sawdust not being properly expelled from the cutterhead.
- The type of lumber being planed. Certain species have a tendency to chip bruise.
- A high moisture content (over 20%) or surface moisture (refer to **Page 23**).
- Dull knives.
- Excessive depth of cut.

Solution:

- Use a proper dust collection system; adjust chip deflector in or out as necessary.
- Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT surface partially-air-dried (PAD) lumber.
- Make sure planer knives/inserts are sharp.
- Reduce depth of cut.

Rippled Cut

Problem: Regularly spaced indentations across face of workpiece are caused by excessive outfeed roller pressure or excessive feed rate.

Solution: Reduce outfeed roller pressure; reduce feed rate.

Depth of Cut

Table Movement per Handwheel Revolution

One Full Revolution $\frac{1}{16}$ "

The depth of cut on a planer means the amount of material that is removed from the top of the workpiece as it passes underneath the cutterhead.

The depth of cut is set by adjusting the distance of the table below the cutterhead. This distance is the thickness of the workpiece minus the depth of cut. The planing depth of cut is controlled by using the table height handwheel on the right side of the machine. Rotating the handwheel clockwise raises the table.

Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend the maximum depth of cut (per pass) be no more than $\frac{1}{16}$ ". A series of light cuts will give better end results and put less stress on the planer than trying to take off too much material in a single pass.

The depth of cut can be referenced directly from the inch/millimeter scale on the front of the planer, as shown in **Figure 26**. The range of material thickness that can be planed is $\frac{3}{16}$ "–8".

Note: *The scale functions as a general guide only, and is not intended for low-tolerance, precision results.*

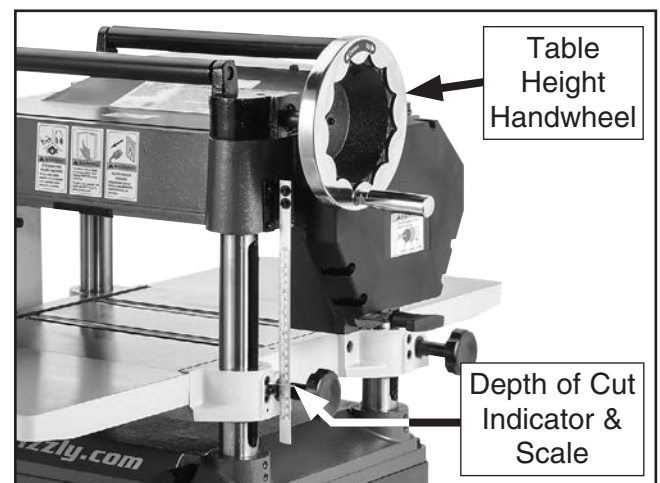


Figure 26. Depth of cut indicator and scale.



Bed Roller Height

Bed Roller Height Range0.002"—0.020"

The correct height of the bed rollers will vary, depending on the type of material you intend to plane. However, as a general rule, keep the bed roller height within 0.002"—0.020" above the table surface, as illustrated in **Figure 27**.

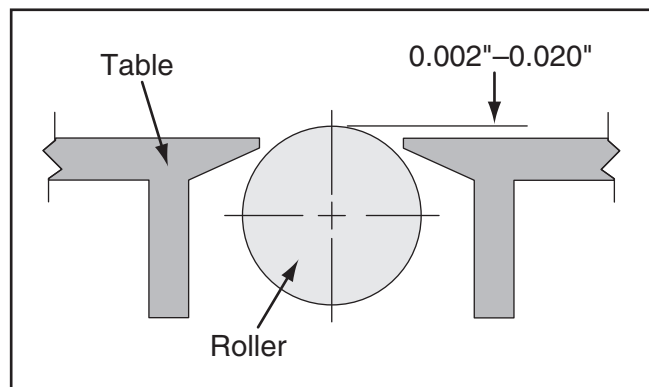


Figure 27. Recommended bed roller height above the table surface.

When planing rough 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.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (refer to **Page 30**) to gauge the bed roller height from the table surface. If a Rotacator is not available, a straightedge and feeler gauges can be used, but care must be taken to achieve accurate results.

NOTICE

Bed rollers that are not adjusted to the correct height or out of alignment with each other can cause poor finishes, inconsistent planing thickness, and other undesirable results.

Tools Needed

| | Qty |
|--------------------------------------|-----|
| Hex Wrench 4mm (G0453W/G0453ZW)..... | 1 |
| Hex Wrench 3mm (G0454W/G0454ZW)..... | 1 |
| Hex Wrench 6mm..... | 1 |
| Rotacator | 1 |

To adjust bed rollers:

1. DISCONNECT MACHINE FROM POWER!
2. Completely lower table to give yourself enough room to work.
3. Loosen set screws (see **Figure 28**) above each of four roller adjustment cams (there are two on each side of planer).

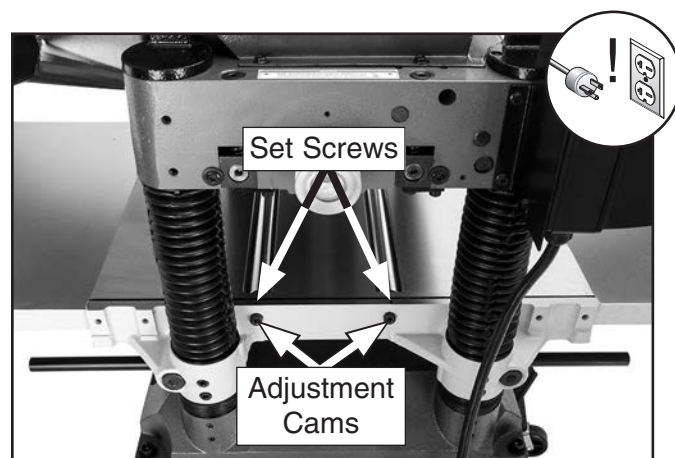


Figure 28. Bed roller height controls.

4. Rotate eccentric adjustment cams to raise or lower bed rollers to desired height above table surface.
5. Verify both sides of each roller are at the same height, then re-tighten set screws to secure in place.
6. Re-check roller heights to make sure they did not change while being secured.

— If roller heights are not correct, repeat this procedure until they are.



Setting Feed Rate

The infeed and outfeed rollers move the workpiece through the planer while keeping it flat and providing a consistent rate of movement. The speed that these rollers move the workpiece through the planer is the feed rate.

Generally, low feed rates are used for dimensioning passes, while higher feed rates are used for finishing passes.

Figure 29 illustrates the three different positions of the feed rate control knob:

- Push knob in to use high feed rate of 20 FPM.
- Pull the knob out to use the low feed rate of 16 FPM.
- Move knob to center position to place gearbox in neutral.

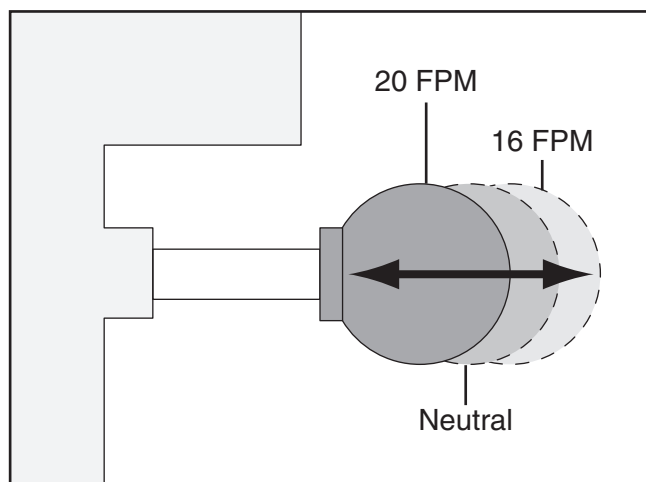
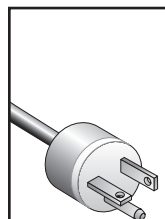


Figure 29. Feed rate control knob positions.

NOTICE

Only change the feed rate when the planer is running, but DO NOT attempt to change the feed rate during any cutting operations or damage to the gearbox will result.

Adjusting/Replacing Knives (G0453W & G0454W)



WARNING

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

CAUTION

Cutterhead knives are extremely sharp. Accidental contact with knives can result in severe cuts. Take great caution whenever working with or around cutterhead knives. Wear heavy leather gloves to reduce risk of severe cuts.

NOTICE

To maintain accurate and consistent planing results, we do not recommend sharpening knives yourself. Instead, just replace dull knives or have them professionally sharpened.

Setting the height of the knives correctly is crucial to the proper operation of your planer and is very important in keeping the knives sharp. If one knife protrudes higher than the others, it will do the majority of the work, dull much faster, and produce poor cutting results.

The knife gauge that is included with the Model G0453W/G0454W is designed to set the knives 0.059" higher than the cutterhead surface.

Note: *If you need to replace or sharpen a knife, you can remove the knife from the cutterhead during **Step 4** of the following procedure. Thoroughly clean out any debris from the knife slots before replacing the knives.*

*Replacement knives are available through Grizzly (refer to **Page 31** for options).*



| Tools Needed | Qty |
|-------------------------------|-------|
| Phillips Screwdriver | 1 |
| Open-End Wrench 12, 13mm..... | 1 Ea. |
| Hex Wrench 3mm..... | 1 |
| Knife-Setting Jig | 1 |

To adjust height of knives:

1. DISCONNECT MACHINE FROM POWER!
2. Remove rear dust hood and top cover to expose cutterhead.
3. Remove belt cover, then rotate cutterhead pulley to give you good access to one of the knives.

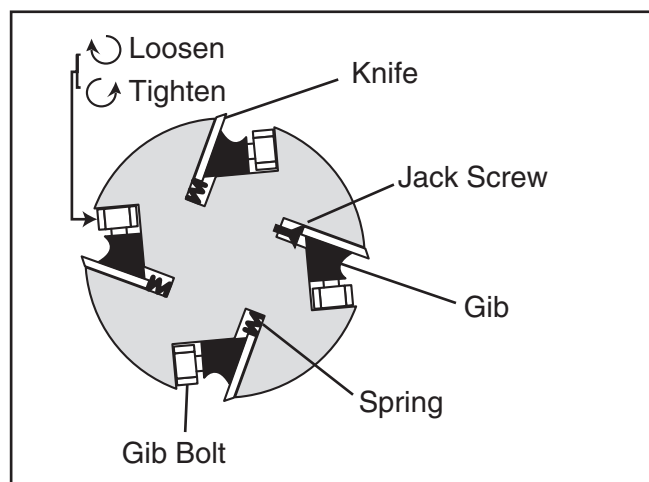


Figure 30. G0453W/G0454W cutterhead components.

4. Loosen cutterhead gib bolts until knife is completely loose, then position knife-setting jig over knife so that knife edge is directly under center pad, as shown in **Figure 31**.

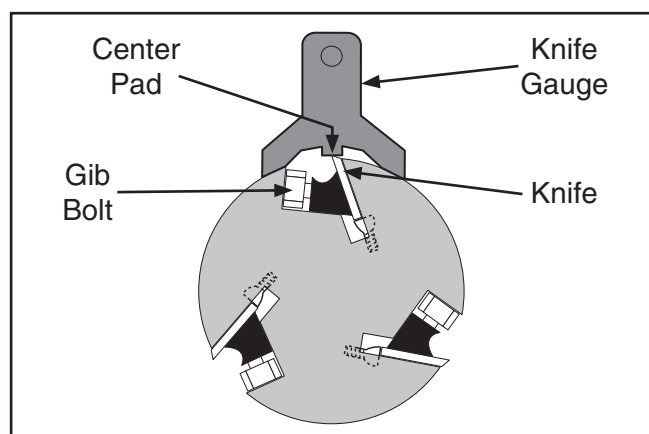


Figure 31. Knife-setting jig correctly positioned over knife.

5. Insert hex wrench into jack screws through access holes in cutterhead (see **Figure 32**). Rotate jack screws to raise or lower knife until it barely touches center pad of knife-setting jig with all legs of jig still firmly on cutterhead, then snug gib bolts enough to hold knife in place.

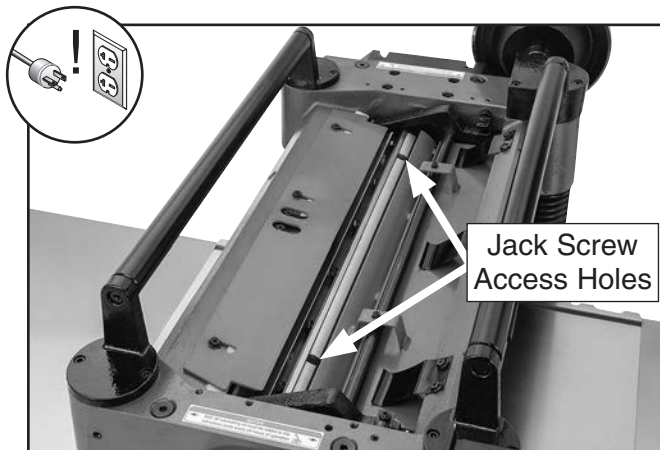


Figure 32. G0453W & G0454W jack screw access hole in cutterhead.

6. Slightly tighten gib bolts, starting at middle and working your way to ends by alternating left and right, as illustrated in **Figure 33**.

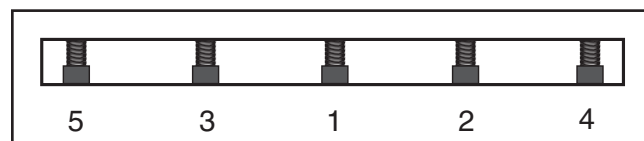


Figure 33. Gib bolt tightening sequence.

7. Repeat **Step 6**, tightening gib bolts a little more.
8. Repeat **Step 6**, tightening gib bolts all the way.
9. Repeat **Steps 4–8** for remaining knives.



Rotating/Replacing Cutterhead Inserts (G0453ZW & G0454ZW)

The spiral cutterhead is equipped with indexable carbide inserts that can be rotated to reveal any one of their four cutting edges. If one edge of the insert becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge, as shown in **Figure 34**.

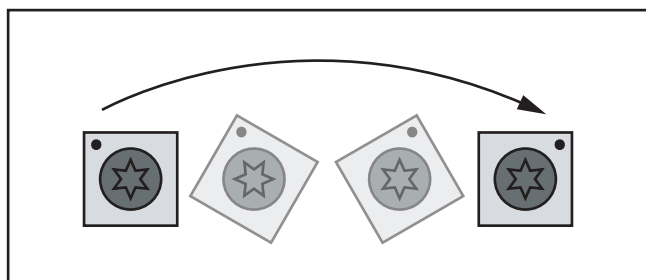


Figure 34. Insert rotating sequence.

| Tools Needed | Qty |
|-------------------------------|-----|
| Phillips Screwdriver #2 | 1 |
| Hex Wrench 5mm..... | 1 |
| Torque Wrench | 1 |
| T-20 Torx Bit | 1 |

To rotate or replace a spiral cutterhead insert:

1. DISCONNECT MACHINE FROM POWER!
2. Remove dust hood, top cover, and belt cover.
3. Put on heavy leather gloves to protect your fingers and hands.

⚠ CAUTION

The carbide inserts are very sharp and can quickly cut your hands. **ALWAYS** use caution and heavy leather gloves when handling these parts to reduce the risk of personal injury.

4. Remove any sawdust or debris from head of insert, Torx screw, and surrounding area (see **Figure 35**).

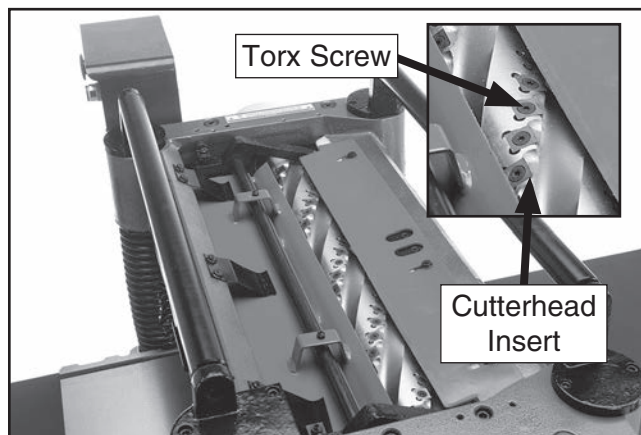


Figure 35. Location of cutterhead inserts and Torx screws.

5. Remove Torx screw and insert, then clean all dust and debris from both parts and pocket they were removed from.

Note: Proper cleaning of insert, Torx screw, and cutterhead pocket is critical to achieving a smooth finish. Dirt or dust trapped between insert and cutterhead will raise insert, and make marks on your workpiece when planing.

Tip: Use low-pressure compressed air or a vacuum nozzle to clean out cutterhead pocket.

6. Replace insert so that a fresh cutting edge faces outward.

— If all four insert cutting edges have been used, replace insert with a new one. Always position insert reference dot in same position when installing a new insert to aid in rotational sequencing.

7. Lubricate Torx screw threads with a very small amount of light machine oil, wipe excess off, and torque screw to 50–55 inch/pounds.

Note: If too much oil is applied to the threads, excess oil will attempt to squeeze out of the threaded hole and raise insert during installation, bringing it out of height alignment.



SECTION 5: ACCESSORIES

! WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

G1738—Rotacator™ Precision Planer Tool

The Rotacator is a dial indicator on a magnetic base, designed for quickly and accurately setting the critical tolerances needed when making planer adjustments. Perfect for adjusting 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 36. G1738 Rotacator™ Precision Planer Tool.

G2790—Universal Knife Grinder

This dry-type Knife Grinder with high-quality cast-iron construction, and large knife holding capacity (will sharpen up to 20" planer/jointer knives) makes this grinder an excellent investment. Features a heavy-duty ½ HP, 110V motor, knife-holding angle adjustable from 20° to 70°, and adjustable-height, 120-grit grinding wheel.



Figure 37. G2790 Universal Knife Grinder.

For G0453ZW/G0454ZW:

H7319—Indexable Carbide Inserts, 10 Pack

These Indexable Carbide Inserts are designed for use in spiral cutterhead systems and made to last up to 10 times longer than a set of HSS steel inserts. Made of solid carbide. Size: 14 x 14 x 2mm.

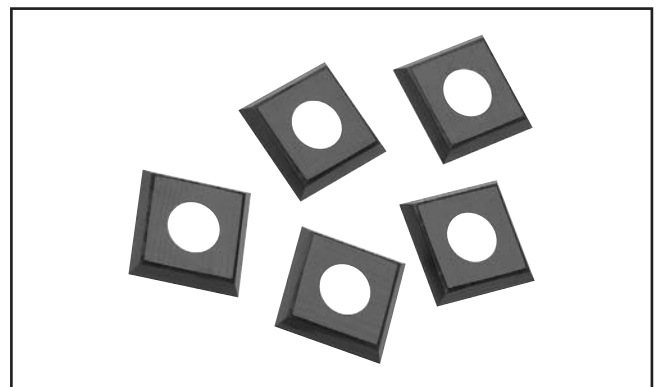


Figure 38. H7319 Indexable Carbide Inserts.

order online at www.grizzly.com or call 1-800-523-4777



G6701—HSS Replacement Knives for Model G0453W, Set of 3

G6702—HSS Replacement Knives for Model G0454W, Set of 4

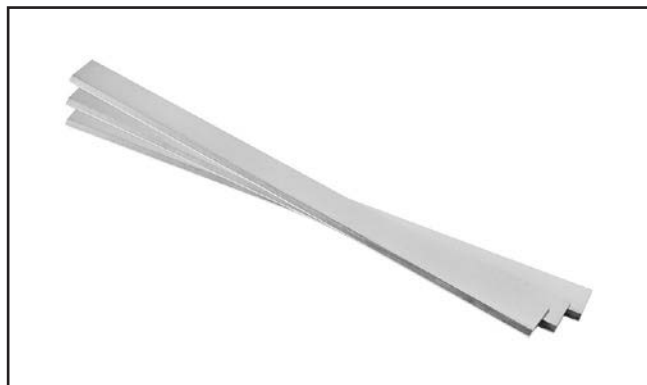


Figure 39. Grizzly planer blades.

G5858—Dispoz-A-Blade® Knife Inserts 15" HSS (Set of 3)

H2262—Dispoz-A-Blade® Knife Inserts 20" HSS (Set of 4)

Install a Dispoz-A-Blade® Knife system in your new planer and save up to 70% on knife replacements for the life of your machine. Each knife insert is double-edged, so you get two knives in one, and is indexed so that all knife inserts can be installed at the same height in just minutes. Yes, that means you can throw away the knife gauge!

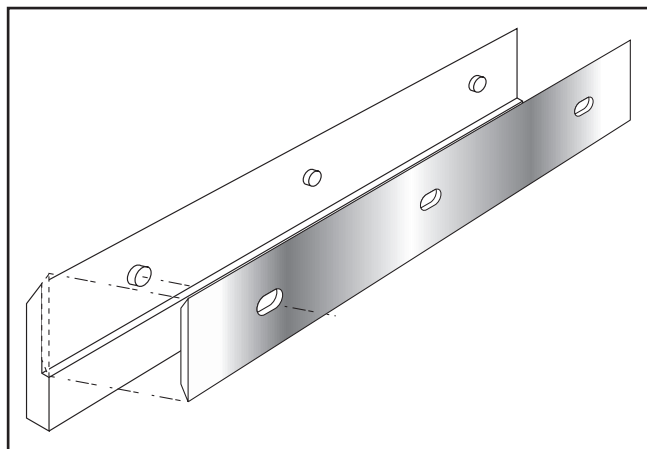


Figure 40. Dispoz-A-Blade® Holder and Knife.

Basic Eye Protection

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20451—"Kirova" Clear Safety Glasses

T20452—"Kirova" Anti-Reflective S. Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 41. Assortment of basic eye protection.

G8982—Roller Table

Use this versatile roller table wherever you need extra workpiece support. Features all-steel welded construction and measures 19" wide x 65" long. Comes with 9 ball-bearing rollers and has four independently adjustable legs for any leveling requirement. Adjustable in height from 26 3/8" to 44 1/8".



Figure 42. G8982 Roller Table.

order online at www.grizzly.com or call 1-800-523-4777



T26979—3-in-1 Workpiece Support Stand

This 3-in-1 Workpiece Support Stand features a rotating head with steel roller topped with 8 rolling balls. The heavy-duty steel frame has four outrigger legs for stability and an adjustable foot for uneven floors. Height adjusts from 27 1/2" to 43" and supports up to 250 lbs. It even folds up for easy storage!



Figure 43. T26979 3-in-1 Workpiece Support Stand.

G2857—Thickness Gauge

Measure thicknesses and diameters quickly with this handy gauge. Wonderful for thickness planners, wood lathes, and other shop measurements. Measures from 1/16" to 2" in 1/32" increments. Made in the U.S.A.



Figure 44. G2857 Thickness Gauge.

H4978—Deluxe Earmuffs - 27dB

H4979—Twin Cup Hearing Protector - 29dB

T20446—Classic Earplugs, 200-pair - 31dB

Protect yourself comfortably with a pair of cushioned earmuffs. Especially important if you or employees operate for hours at a time.



Figure 45. Hearing protection.

H7978—Fractional Digital Caliper

Large LCD readout converts to decimal inch, fractional inch, and millimeters with the push of a button. Measure internal, external dimensions, depth, steps and differential measurements. Features thumb roll and stainless steel construction. Range: 0–6", 0–150mm. Resolution: 0.0005", 0.01mm, 1/128".

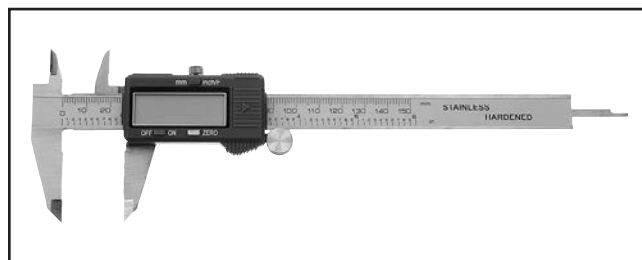


Figure 46. H7978 Fractional Digital Caliper.

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

D4206—Clear Flexible Hose 4" x 10'
 W1034—Heavy-Duty Clear Flex Hose 4" x 10'
 W1015—Y-Fitting 4" x 4" x 4"
 W1017—90° Elbow 4"
 W1019—Hose Coupler (Splice) 4"
 W1317—Wire Hose Clamp 4"
 W1007—Plastic Blast Gate 4"
 W1053—Anti-Static Grounding Kit

We've hand picked a selection of commonly used dust collection components for machines with 4" dust ports.



Figure 48. Dust collection accessories.

SB1365—South Bend Way Oil-ISO 68

Engineered for the high pressure exerted on horizontal or vertical ways and slides. Protects against rust and corrosion. Ensures stick-free, smooth motion which maximizes finishes and extends the life of your machine. Won't gum up! 12 oz. AMGA#2 (ISO 68 Equivalent)



Figure 49. SB1365 Way Oil.

G1028Z2—1½ HP Dust Collector

Specifications:

- Motor: 1½ HP, 120V/240V, prewired 120V, single-phase
- Air suction capacity: 1300 CFM
- Static Pressure: 9"
- Inlet: 6" diameter with two 4" "Y" openings
- Impeller: 12¾" Cast aluminum
- Bag capacity: 5.7 Cubic feet
- Portable base size: 21½" x 33½"
- Bag Size: 19½" x 33"
- Height with bags inflated: 78"
- CSA Certified

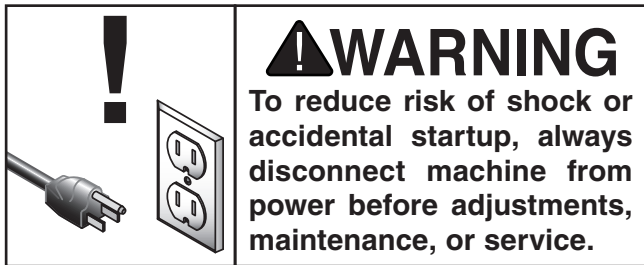


Figure 50. G1028Z2 Dust Collector.

order online at www.grizzly.com or call 1-800-523-4777



SECTION 6: MAINTENANCE



Schedule

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

Note: *This maintenance schedule is based on average daily usage. Adjust the maintenance schedule to match your usage, to keep your planer running smoothly, and to protect your investment.*

Every 8 Hours of Operation:

- Clean machine and protect unpainted cast-iron.
- Lubricate feed rollers bushings (**Page 35**).
- Tighten loose mounting bolts.
- Check/sharpen/replace damaged or worn knives (**Page 27**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

Every 40 Hours of Operation:

- Clean cutterhead and check knife height (**Page 27**).
- Lubricate table columns and leadscrews (**Page 35**).

Every 160 Hours of Operation:

- Check/tension/replace V-belts (**Page 40**).
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Lubricate table height worm gear (**Page 35**).
- Lubricate table height chain and sprockets (**Page 35**).
- Lubricate drive chain and sprockets (**Page 36**).

Yearly:

- Change gearbox oil (**Page 36**).

Cleaning & Protecting

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Protect the unpainted cast iron table by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the table rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Page 33** for more details).

Lubrication

NOTICE

Failure to follow reasonable lubrication practices as instructed in this manual for your machine could lead to premature failure of components and void the warranty.

Your planer features bearings that are lubricated and sealed at the factory. These bearing do not require any further attention unless they need to be replaced. If a bearing fails, your planer will probably develop a noticeable rumble or vibration, which will increase when the machine is under a load. The bearings are standard sizes and can be replaced through Grizzly.

Follow the maintenance schedule on this page and the procedures beginning on **Page 35** to properly lubricate the other planer components, which are essential for long life and trouble-free operation of your planer.



Feed Roller Bushings

Oil Type SB1365 or ISO 68 Equivalent
Oil Amount 2–3 Drops
Frequency Every 8 Hours of Operation

The infeed and outfeed rollers rotate inside bushing blocks on both ends of the rollers. Add 2–3 drops of ISO 68 machine oil to the center hole of the four feed roller tension adjustment bolts on top of the head casting, as shown in **Figure 51**.

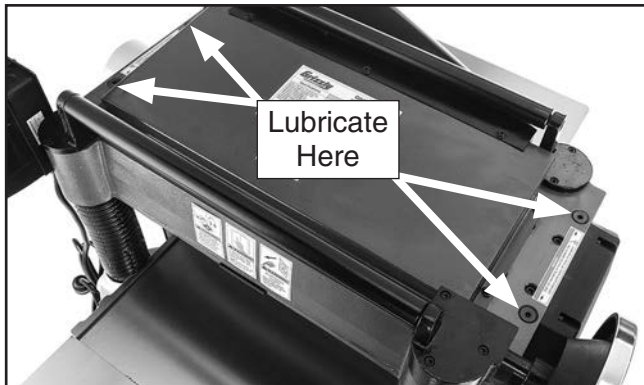


Figure 51. Lubrication of feed roller bushings.

Columns & Leadscrews

Oil Type SB1365 or ISO 68 Equivalent
Oil Amount Thin Coat
Grease Type NLGI#2 Equivalent
Frequency Every 40 Hours of Operation

The table rides on the columns and is moved by the rotation of the leadscrews inside the columns. Loosen the dust sleeve (see **Figure 52**) to access the columns and leadscrews. Apply a thin coat of ISO 68 machine oil to the outside surface of the columns and brush on a light application of multi-purpose grease to the leadscrew threads. Move the table up and down to distribute the lubricant.

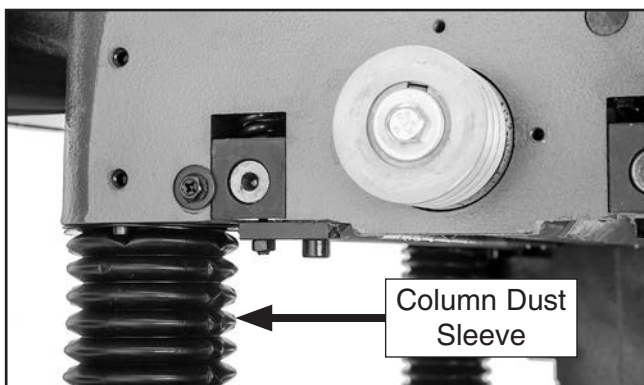


Figure 52. Location of column dust sleeve.

Table Height Worm Gear

Grease Type NLGI#2 Equivalent
Frequency Every 160 Hours of Operation

Remove the three cap screws that secure the worm gear housing (see **Figure 53**), then lift the housing and handwheel assembly off the machine. Clean away any debris from the housing and gears, then brush on a moderate amount of multi-purpose grease to the gear teeth.

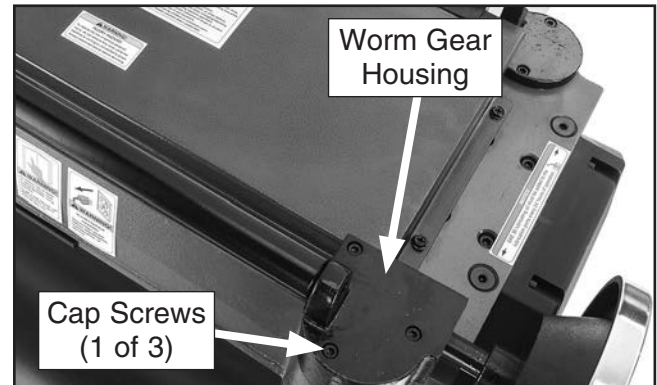


Figure 53. Location of the table height worm gear housing.

Table Height Chain & Sprockets

Grease Type NLGI#2 Equivalent
Frequency Every 160 Hours of Operation

The table leadscrews are synchronized by the table height chain and sprockets located underneath the planer base (see **Figure 54**). Use shop rags and mineral spirits to clean away debris and grime, then brush on a light coat of multi-purpose grease to the chain and sprockets.

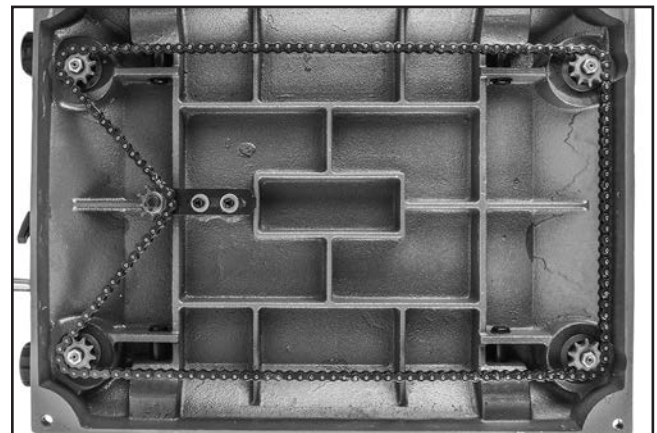


Figure 54. Table height chain and sprockets as viewed from underneath the base.



Drive Chain & Sprockets

Grease Type.....NLGI#2 Equivalent
Frequency..... Every 160 Hours of Operation

The infeed and outfeed rollers receive the transferred power from the cutterhead through the drive chain system on the right side of the machine, as shown in **Figure 55**.

Remove the table height handwheel and the safety covers attached to the inside of the drive chain cover, then remove the cover to access these parts.

Use shop rags and mineral spirits to clean away any debris and grime, then brush on a light coat of multi-purpose grease to the chain and sprockets.

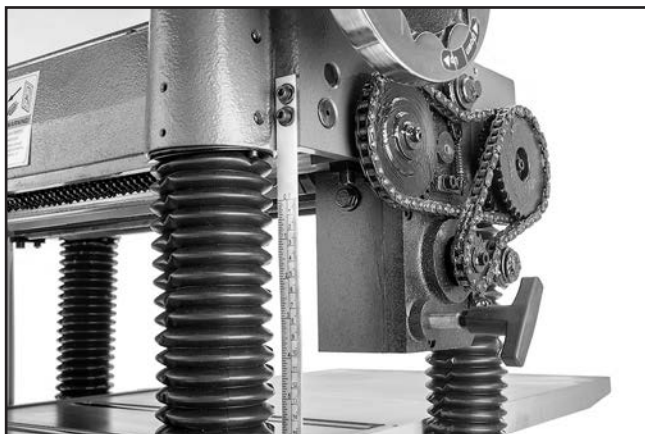


Figure 55. Location of drive chains and sprockets.

Gearbox Oil

Oil TypeISO 320 or SAE 140 Gear Oil
Oil Amount.....20 Oz.
Frequency..... After First 20 Hours, Then Yearly

Note: SAE 85W-140 multi-weight gear oil may also be used. DO NOT mix oil types!

Note: We recommend that you replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure and will help maximize the service life of the machine by flushing away any particles from the break-in and manufacturing process.

Although it is not necessary to remove the drive chain cover to access the fill and drain plugs, it is more convenient to do so (see **Figures 56–57**). Replace the gearbox oil with ISO 320 or equivalent oil until it just reaches the fill plug.

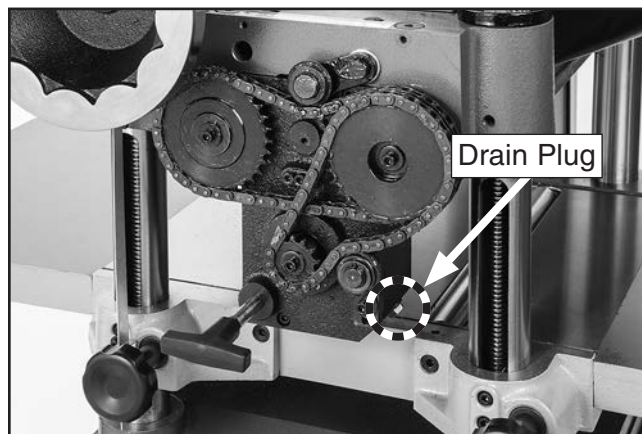


Figure 56. Gearbox drain plug.

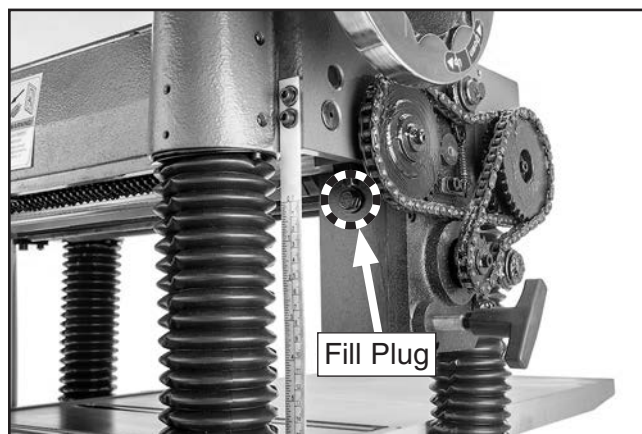


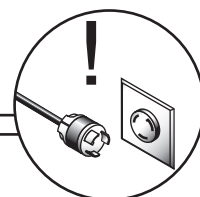
Figure 57. Gearbox fill plug.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** Please gather the serial number and manufacture date of your machine before calling.

Troubleshooting



Motor & Electrical

| Symptom | Possible Cause | Possible Solution |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Machine does not start or a breaker trips. | <ol style="list-style-type: none"> Emergency stop button depressed/at fault. Incorrect power supply voltage or circuit size. Thermal overload relay has tripped. Power supply circuit breaker tripped or fuse blown. Motor wires connected incorrectly. Wiring open/has high resistance. Power switch at fault. Centrifugal switch at fault. Start capacitor at fault. Thermal overload relay at fault. Contactors not energized; at fault. Motor at fault. | <ol style="list-style-type: none"> Rotate button head to reset. Replace. Ensure correct power supply voltage and circuit size. Reset; contact Tech Support if relay frequently trips. Ensure circuit is sized correctly and free of shorts. Reset circuit breaker or replace fuse. Correct motor wiring connections. Check/fix broken, disconnected, or corroded wires. Replace switch. Adjust/replace centrifugal switch if available. Test/replace. Replace. Test all legs for power/replace. Test/repair/replace. |
| Machine stalls or is underpowered. | <ol style="list-style-type: none"> Machine undersized for task. Workpiece not suitable for machine. Motor overheated, causing thermal overload to trip. Belt(s) slipping; oil/grease on belt(s). Dull knives/inserts. Dust collection problem causing internal components to clog up with shavings. Motor wired incorrectly. Centrifugal switch at fault. Run capacitor at fault. Pulley slipping on shaft. Contactors not energized/has poor contacts. Motor bearings at fault. | <ol style="list-style-type: none"> Reduce feed rate/depth of cut. Only cut wood/ensure moisture is below 20%. Allow motor to cool, reset overload if necessary, and reduce depth of cut. Clean/tension/replace belt(s); align pulleys (Page 40). Sharpen/replace knives, or replace inserts (Page 27). Clear blockages in dust chute/ducting, ensure dust collector is operating efficiently. Wire motor correctly. Adjust/replace centrifugal switch if available. Test/repair/replace. Tighten loose pulley; replace pulley/shaft if damaged. Test all legs for power/replace. Test/repair/replace. |
| Machine has vibration or noisy operation. | <ol style="list-style-type: none"> Motor or component loose. V-belt(s) worn, loose, or slapping cover. Pulley loose. Bed rollers protruding unevenly. Plastic chip deflector hitting knives. Motor fan rubbing on fan cover. | <ol style="list-style-type: none"> Inspect/tighten loose bolts/nuts; replace damaged components. Tension/replace belts as a matched set (Page 40). Re-align/replace shaft, pulley set screw, and key. Adjust bed rollers (Page 42). Adjust chip deflector; replace if necessary. Fix/replace fan cover; replace loose/damaged fan. |



Motor & Electrical (Continued)

| Symptom | Possible Cause | Possible Solution |
|-------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Machine has vibration or noisy operation. | 7. Knives/gibs at fault. 8. Motor bearings at fault. 9. Cutterhead bearings at fault. | 7. Sharpen/replace knives; set knife alignment/height correctly (Page 27). 8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. 9. Replace bearing(s). |

Machine Operation

| Symptom | Possible Cause | Possible Solution |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Excessive snipe (gouge in end of board that is uneven with rest of 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 bed rollers are set too high. 2. Outfeed extension slopes down or is not level with main table. 3. Chipbreaker/pressure bar set too low. 4. Workpiece is not supported as it leaves planer. 5. Some snipe is inevitable. | 1. Lower bed rollers (Page 42). 2. Shim outfeed extension wing level with main table. 3. Raise height of chipbreaker or pressure bar (Page 42). 4. Hold workpiece up slightly as it leaves outfeed end of planer. 5. Plane lumber longer than your intended workpiece length, then cut off excess after planing complete. |
| Workpiece stops/slow in middle of cut. | 1. Taking too heavy of a cut. 2. One or both of 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. Pitch and glue build up on planer components. | 1. Take a lighter cut. 2. Lower/raise bed rollers (Page 42). 3. Raise height of chipbreaker or pressure bar (Page 42). 4. Lower/raise feed rollers (Page 42). 5. Clean internal cutterhead components with a pitch/resin dissolving solvent. |
| Chipping (consistent pattern). | 1. Knots or conflicting grain direction in wood. 2. Taking too deep of a cut. 3. Feeding workpiece too fast. 4. Mis-adjusted chipbreaker. 5. Nicked or chipped knife/insert. | 1. Inspect workpiece for knots and grain direction; only use clean stock, and cut WITH the grain. 2. Take a smaller depth of cut. (Reduce cutting depth when planing hard woods.) 3. Slow down feed rate. 4. Adjust both sides of chipbreaker to correct height. 5. Replace affected knife (Page 27), or have it sharpened; rotate/replace insert (Page 29). |
| Chipping/indentation in workpiece surface (inconsistent pattern). | 1. Chips aren't being properly expelled from cutterhead. 2. Chip breaker not set correctly. | 1. Use a proper dust collection system. 2. Correctly adjust chip breaker (Page 42). |
| Fuzzy grain. | 1. Wood may have high moisture content or surface wetness. 2. Dull knives/inserts. | 1. Check moisture content is below 20% and allow to dry if moisture is too high. 2. Replace knives (Page 27) or have them professionally sharpened; rotate/replace inserts (Page 29). |
| Long lines or ridges that run along length of board. | 1. Nicked or chipped knife/inserts. | 1. Replace knives (Page 27) or have them professionally sharpened; rotate/replace inserts (Page 29). |



Machine Operation (Continued)

| Symptom | Possible Cause | Possible Solution |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Uneven cutting marks, wavy surface, or chatter marks across face of board. | <ol style="list-style-type: none"> 1. Feeding workpiece too fast. 2. Chipbreaker or pressure bar set unevenly or not low enough. 3. Knives not installed evenly/inserts not properly installed. 4. Worn cutterhead bearings. | <ol style="list-style-type: none"> 1. Slow down feed rate. 2. Adjust height of chipbreaker or pressure bar (Page 42). 3. Adjust knives with knife gauge (Page 27); remove inserts, properly clean mounting pocket and re-install (Page 29). 4. Replace cutterhead bearings. |
| Glossy surface. | <ol style="list-style-type: none"> 1. Knives/inserts are dull. 2. Feeding workpiece too slow. 3. Cutting depth too shallow. | <ol style="list-style-type: none"> 1. Replace knives (Page 27) or have them professionally sharpened; rotate/replace inserts (Page 29). 2. Increase feed rate. 3. Increase depth of cut. |
| If workpiece twists in machine. | <ol style="list-style-type: none"> 1. Pressure bar set unevenly. 2. Feed rollers not parallel with table. | <ol style="list-style-type: none"> 1. Adjust height of pressure bar (Page 42). 2. Adjust feed rollers (Page 42). |



Tensioning/ Replacing V-Belts

NOTICE

After approximately 16 hours of operation, V-belts will stretch and seat into pulley grooves and need to be properly tensioned to avoid severely reducing life of V-belts.

Three V-belts transfer power from the motor to the cutterhead, and then to the infeed and outfeed rollers with the use of the drive chain system. To ensure efficient transfer of power to these systems, make sure the V-belts are always properly tensioned and in good condition.

If the V-belts are worn, cracked, or damaged, replace them. Always replace the V-belts with a matched set of three, or belt tension may not be even among the belts, causing premature belt failure.

CAUTION

V-belts and pulleys will be hot after operation. Allow them to cool before handling.

| Tools Needed | Qty |
|----------------------------|-----|
| Phillips Screwdriver | 1 |
| Open-End Wrench 18mm..... | 1 |

To tension/replace V-belts:

1. DISCONNECT MACHINE FROM POWER!
2. Remove V-belt cover from left side of machine to expose belts, as shown in **Figure 58**.

Note: A collection of black belt dust at the bottom of the belt cover is normal during the life of the belts.

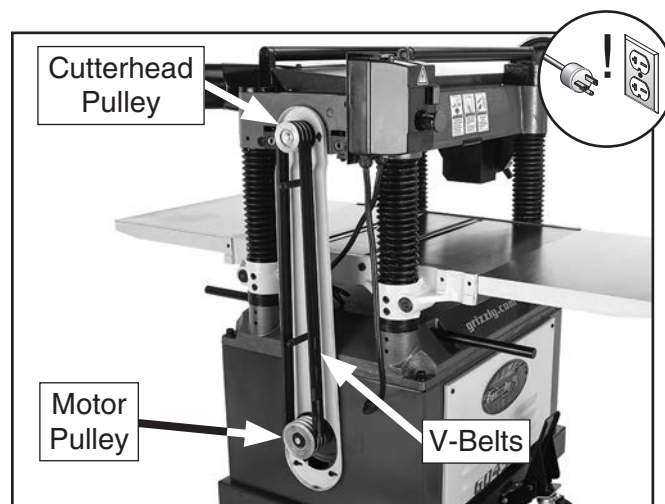


Figure 58. Belt cover removed to expose V-belts and pulleys.

3. Remove front cabinet cover to access motor, as shown in **Figure 59**.

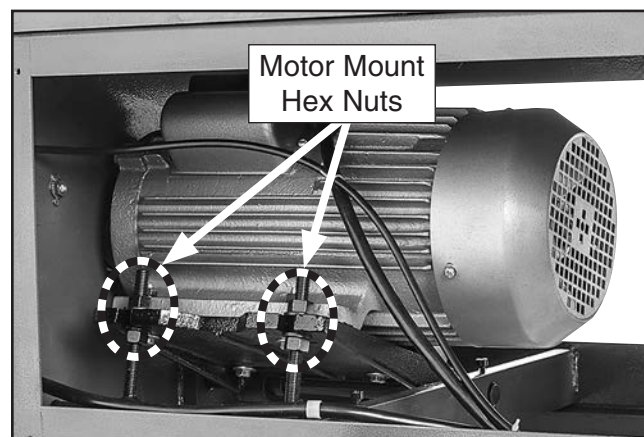


Figure 59. Front cabinet cover removed to access motor.



4. If V-belts need to be replaced, raise motor to release belt tension (see next step for instructions), roll them off pulleys, then replace with a matched set of 3.
5. To adjust V-belt tension, loosen both top motor mount hex nuts (see **Figure 59** on **Page 40**), then adjust bottom hex nuts to raise or lower motor.

Note: V-belts are correctly tensioned when there is approximately $\frac{3}{4}$ " deflection when moderate pressure is applied to them midway between pulleys, as illustrated in **Figure 60**.

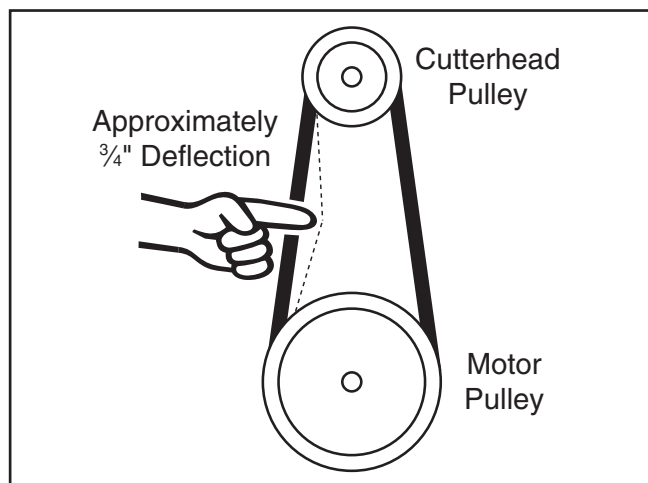


Figure 60. Belt deflection when V-belts are correctly tensioned.

6. After V-belts are correctly tensioned, tighten top motor mount hex nuts, then re-install cabinet cover and belt cover.

Tensioning Table Height Chain

The table height chain transfers movement from the elevation handwheel to the columns that control table height. The chain drive can be adjusted to remove slack if the chain stretches over time or is loosened during table leveling procedures.

| Tools Needed | Qty |
|-------------------------------|-----|
| Phillips Screwdriver #2 | 1 |
| Hex Wrench 6mm..... | 1 |

To adjust table height chain tension:

1. DISCONNECT MACHINE FROM POWER!
2. Remove front and rear cabinet covers to access table height to chain (see **Figure 61**).
3. Loosen cap screws, then push idler sprocket against chain with moderate pressure. While maintaining pressure on idler sprocket, re-tighten cap screws (see **Figure 61**).

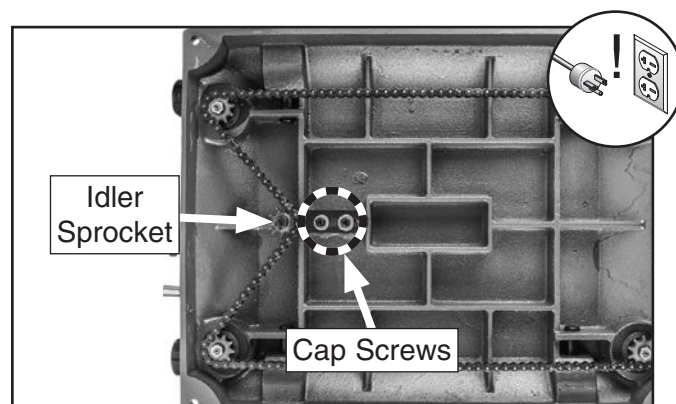


Figure 61. Table height chain adjustment (shown without stand for purpose of illustration).

4. Clean and lubricate chain and sprockets (refer to **Table Height Chain & Sprockets** on **Page 35** for detailed instructions), then re-install front and rear cabinet covers.

NOTICE

DO NOT let chain fall off sprockets. It can be very difficult to return chain to its proper location on sprockets without changing table adjustments.



Feed Rollers, Chip Breaker & Pressure Bar Heights

It is essential that the feed rollers, chip breaker, and pressure bar are set at the correct distance below the cutterhead knives/inserts at BDC (bottom dead center) to ensure that the workpiece moves through the planer evenly and the correct distance from the cutterhead knives/inserts.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator for these adjustments (refer to **Page 30**).

If a Rotacator is not available, a 6' 2x4 cut into two even sized pieces and a feeler gauge set can be used, but care must be taken when jointing the wood to achieve accurate results.

Dist. Below Knife/Insert at BDC (Figure 62)

| | | |
|----|-------------------------------------|--------|
| A. | Infeed Roller | 0.020" |
| B. | Chip Breaker..... | 0.020" |
| C. | Pressure Bar (20" Models Only)..... | 0.008" |
| D. | Outfeed Roller | 0.040" |

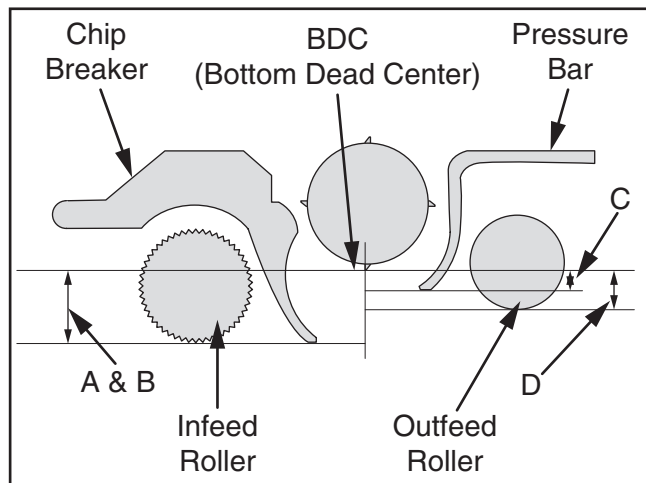


Figure 62. Planer component recommended clearances (illustration is not to scale).

Using a Rotacator

| Tools Needed | Qty |
|-----------------------------------------|-------|
| Phillip's Screwdriver..... | 1 |
| Hex Wrenches 2.5, 3mm..... | 1 Ea. |
| Open-End Wrench or Socket 8, 10mm | 1 Ea. |
| Rotacator (see Page 30) | 1 |

To use a rotacator:

1. DISCONNECT MACHINE FROM POWER!
2. Make sure knives are set to correct height (refer to **Adjusting/Replacing Knives** on **Page 27** for detailed instructions). If machine is spiral cutterhead, make sure all inserts are properly installed (refer to **Rotating/Replacing Cutterhead Inserts** on **Page 29** for detailed instructions).
3. Lower table at least 4" below head casting, then lock it in place.
4. Remove dust hood, top cover, belt cover, and drive chain cover.
5. Using your Rotacator, find bottom dead center (BDC) of any knife/insert edge by slowly rocking cutterhead pulley back and forth, then set Rotacator dial to "0" (see **Figure 63**).

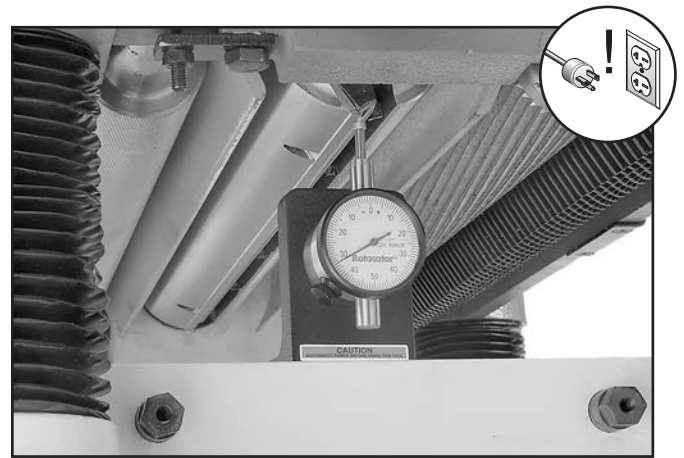


Figure 63. Example of using a Rotacator to find BDC.

6. Move feed speed knob to neutral position to allow infeed roller to freely rotate.
7. Keeping Rotacator dial at "0", position it under right-hand side of infeed roller and find BDC of a serrated edge by rocking infeed roller back and forth.



8. Loosen jam nuts and use set screws on each side of feed roller (see **Figure 64**) to adjust height of infeed roller bushing block until Rotacator dial shows 0.020", which is the recommended distance for infeed roller below cutterhead.

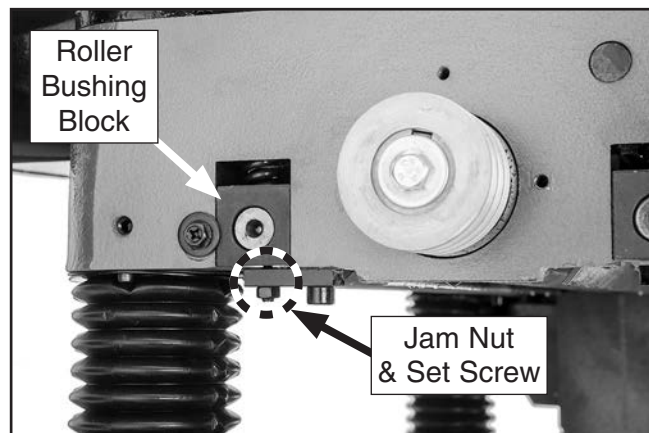


Figure 64. Infeed roller bushing block and height adjustment controls.

9. Repeat **Steps 7–8** on left-hand side of infeed roller.
10. Re-check both sides of infeed roller and, if necessary, make further adjustments until infeed roller height from side-to-side is 0.020" below BDC of cutterhead knife/insert, then re-tighten both jam nuts.
11. Keeping same "0" reference on Rotacator dial from **Step 5**, repeat **Steps 7–10** for outfeed roller, but adjust it until it is 0.040" below BDC of cutterhead knife/insert.

12. Using same "0" reference on Rotacator dial from **Step 5**, perform similar steps as described above to adjust height of chip breaker to its recommended specification given at beginning of this subsection. The adjustment controls are shown in **Figure 65**.

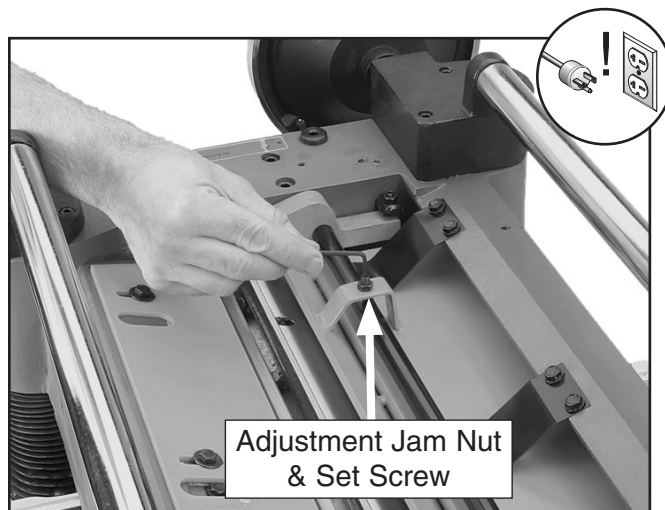


Figure 65. Example of adjusting the chip breaker height.

13. **Model G0454W & G0454ZW Only:** Repeat **Step 12** for pressure bar height adjustment. The adjustment controls are shown in **Figure 66**.



Figure 66. Example of adjusting the pressure bar height.

14. Re-install belt cover, top cover, drive chain cover, and dust hood.



Using Wood Blocks

| Tools Needed | Qty |
|--------------------------------------|-----|
| Phillips Screwdriver #2 | 1 |
| Hex Wrench 3mm..... | 1 |
| Open-End Wrench or Socket 10mm | 1 |
| 2x4 6' Long..... | 1 |
| Feeler Gauge Set..... | 1 |

To use wood blocks:

1. Build wood blocks by cutting a *straight* 6-foot-long 2x4 in half.

Note: Having the wood blocks at an even height is critical to the accuracy of your overall adjustments. For best results, make the 2x4 square with a jointer and table saw before cutting it in half.

2. Make sure knives are set to correct height (refer to **Adjusting/Replacing Knives** on **Page 27** for detailed instructions).
3. DISCONNECT MACHINE FROM POWER!
4. Lower bed rollers below table surface (refer to **Bed Roller Height** on **Page 26** for detailed instructions).
5. Place wood blocks along sides of table, as illustrated in **Figure 67**.

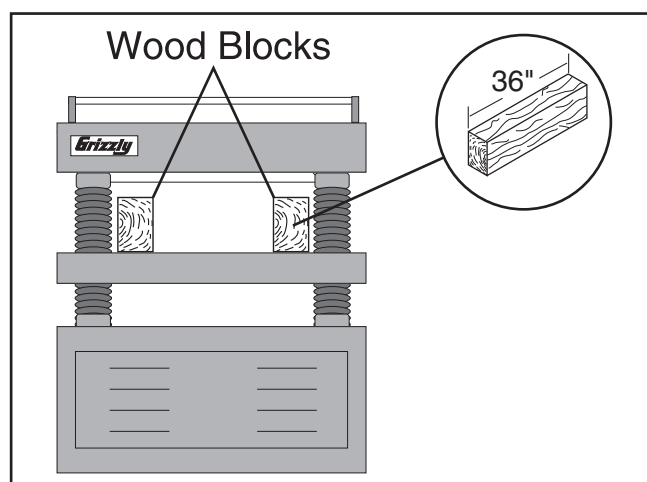


Figure 67. Wood blocks properly positioned on the planer table.

6. Remove dust hood, top cover, belt cover, and drive chain cover.
7. Raise table until wood blocks get close to cutterhead.
8. Use belt to rotate cutterhead and continue raising table until blocks just barely touch cutterhead knife/insert at its lowest point of rotation (BDC).
9. Lock table in place. Upward pressure of wood blocks will be holding infeed and outfeed rollers, chip breaker, and pressure bar at same level as knife/insert at BDC.
10. Loosen jam nuts and set screws on each side of infeed roller (see **Figure 68**).
11. Using a feeler gauge, adjust set screw so it is 0.020" from roller bushing block (see **Figure 68**), then tighten jam nut. Repeat on other side of infeed roller.

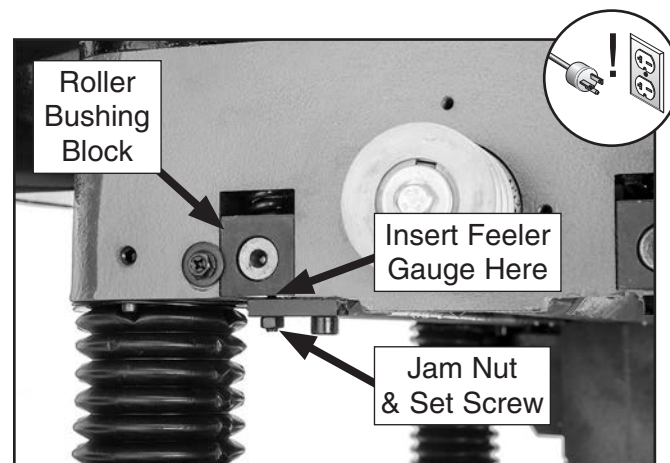


Figure 68. Feeler gauge location for adjusting infeed roller height when using wood blocks.

12. Repeat **Steps 10–11** with outfeed roller, only adjust the gaps to 0.040".



13. Loosen jam nuts and set screws on each side of chip breaker (see **Figure 69**).
14. Using a feeler gauge, adjust set screw so it is 0.020" from cross bar (see **Figure 69**), then tighten jam nut. Repeat on other side of chip breaker.

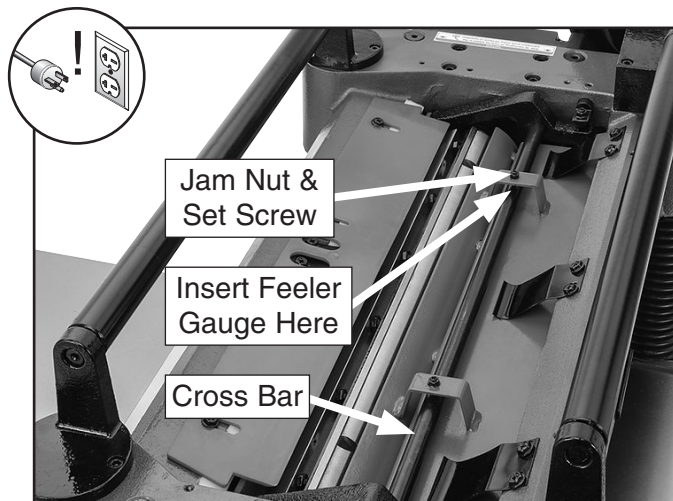


Figure 69. Feeler gauge location for adjusting chip breaker height when using wood blocks.

15. Repeat **Steps 13–14** for pressure bar height adjustment, but adjust the gap to 0.008" (see **Figure 70**).

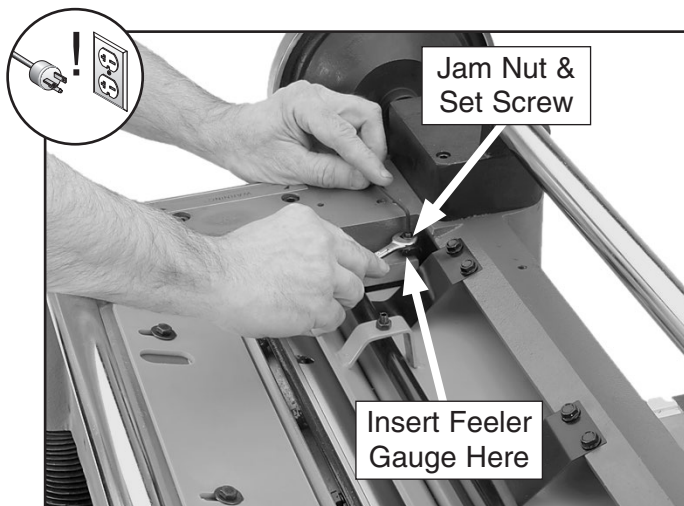


Figure 70. Feeler gauge location for adjusting pressure bar height when using wood blocks.

16. Re-install belt cover, top cover, drive chain cover, and dust hood.

Adjusting Roller Spring Tension

The infeed and outfeed rollers keep the workpiece moving through the planer. There are springs that exert downward pressure on the rollers while still allowing them to raise with an uneven workpiece surface. Proper roller spring tension is crucial to keep the workpiece moving through the planer during operation.

Roller spring tension will vary depending upon the type of wood you are planing. When adjusting the roller spring tension keep the following in mind:

- If you are planing milled lumber with a relatively consistent surface, use less spring tension.
- If you are planing rough lumber with inconsistent surfaces, use greater spring tension to keep the stock moving through the planer.
- If the workpiece consistently stops feeding during operation, the roller spring tension may need to be increased.

| Tools Needed | Qty |
|---------------------|-----|
| Hex Wrench 6mm..... | 1 |

To adjust roller spring tension:

1. DISCONNECT MACHINE FROM POWER!
2. Rotate tension screws clockwise to increase tension, and counterclockwise to decrease tension (see **Figure 71**).

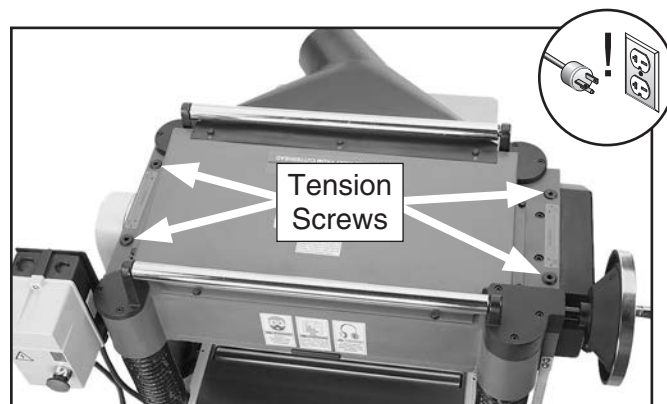


Figure 71. Roller spring tension adjustment screws.



Positioning Chip Deflector

Chip Deflector Gap Setting 1/4"

When properly distanced from the cutterhead, the chip deflector directs the chips into the dust hood, and keeps them from falling onto the outfeed roller and being pressed into the workpiece.

| Tools Needed | Qty |
|-------------------------------|-----|
| Phillips Screwdriver #2 | 1 |
| Fine Ruler or Calipers | 1 |

To adjust chip deflector gap:

1. DISCONNECT MACHINE FROM POWER!
2. Remove dust hood, top cover, and belt cover.
3. Use cutterhead pulley to rotate cutterhead until a knife/insert reaches closest distance to chip deflector (see **Figure 72**), then measure distance between knife/insert and chip deflector.

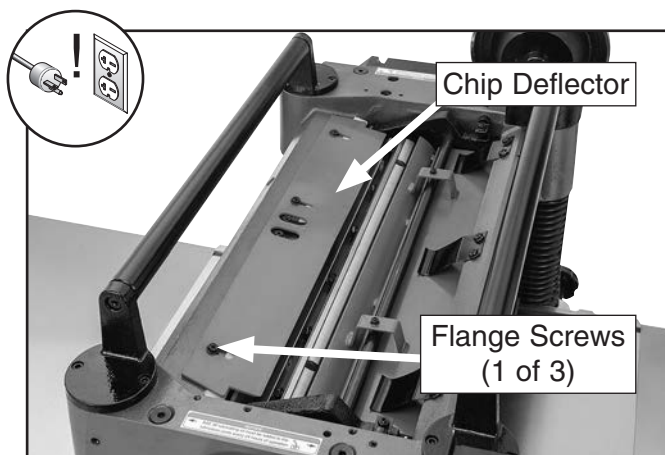


Figure 72. Chip deflector and securing flange bolts.

4. If distance measured in **Step 3** is *not* equal to 1/4", then loosen flange screws that secure chip deflector and adjust gap to 1/4".
5. Re-tighten flange screws, then replace belt cover, top cover, and dust hood.

Calibrating Table Height Scale

Although correctly set at the factory, the table height scale can be adjusted for accuracy if it becomes necessary.

| Tools Needed | Qty |
|---------------------------|-----|
| Hex Wrench 4mm..... | 1 |
| Scrap Piece of Stock..... | 1 |
| Calipers | 1 |

To re-position scale:

1. Plane a scrap piece of stock until it is flat and of even thickness along its length.

Note: Turn board over between each pass.

2. Use calipers to measure board thickness.
3. If there is a discrepancy between board thickness and reading on table height scale, loosen both screws shown in **Figure 73**, adjust scale in relation to pointer, then re-tighten screws.

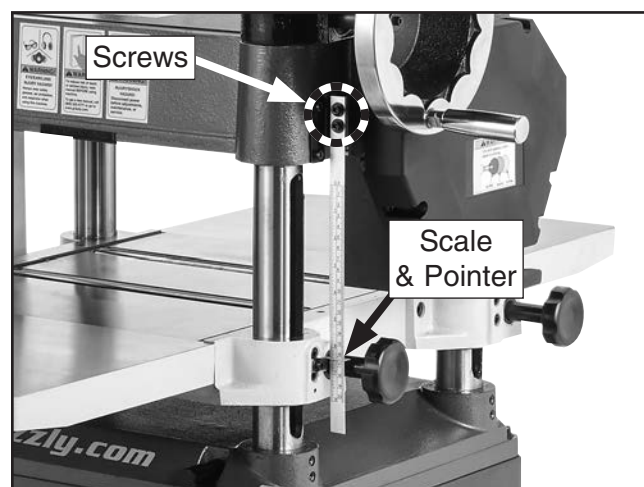


Figure 73. Location of table height scale.



Anti-Kickback Fingers

The anti-kickback fingers are an important safety feature of your planer. The fingers hang from a rod suspended across the head casting and in front of the infeed roller, as shown in **Figure 74**. This design allows the workpiece to easily enter the planer but reduces the risk of kickback by digging into the workpiece if it moves backward.

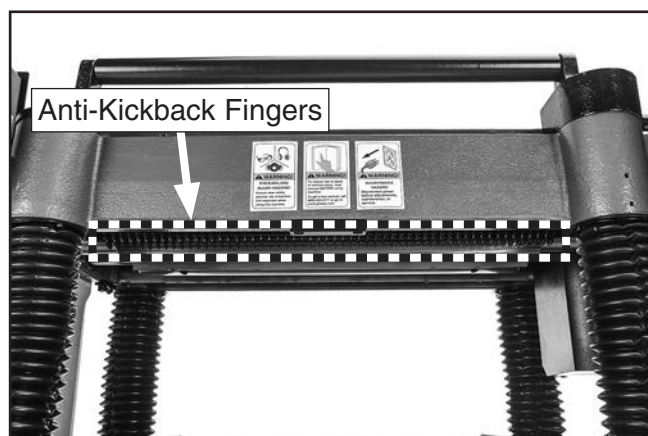


Figure 74. Anti-kickback fingers.

Check the anti-kickback fingers regularly to ensure they swing freely and easily. If the fingers do not swing freely and easily, first clean them with a wood resin solvent, then inspect them for damage. If any of the fingers are damaged, the device must be replaced before using the machine.

Do not apply oil or other lubricants to the anti-kickback fingers that will attract dust and restrict free movement of the fingers.

WARNING

Proper operation of anti-kickback fingers is critical for safe operation of this planer. DO NOT operate planer if anti-kickback fingers are not operating correctly. Failure to heed this warning could result in serious personal injury.

Pulley Alignment

Proper pulley alignment prevents premature V-belt wear and unnecessary load on the motor. The pulleys are properly aligned when they are parallel and in the same plane as each other.

Tools Needed

| | Qty |
|--------------------------------------|-----|
| Straightedge 3' | 1 |
| Hex Wrench 6mm..... | 1 |
| Open-End Wrench or Socket 13mm | 1 |

To check/re-align pulleys:

1. DISCONNECT MACHINE FROM POWER!
2. Remove both cabinet covers and belt cover, then use straightedge to check pulley alignment, as shown in **Figure 75**.

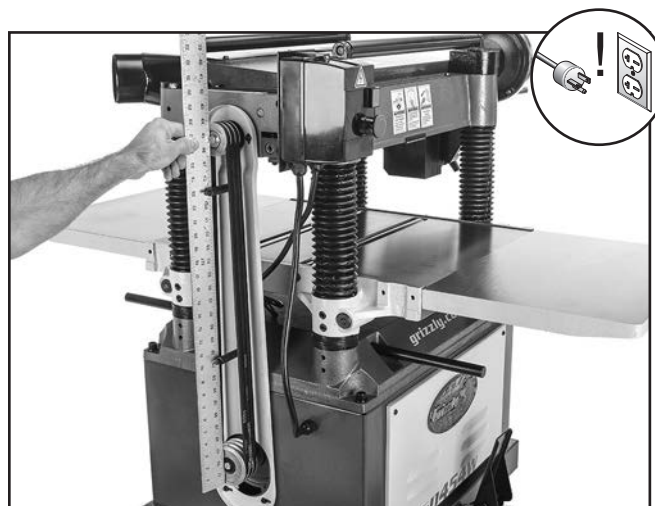


Figure 75. Checking pulley alignment.

— If pulleys are not in same plane, loosen cap screw or hex bolt that secures pulley to shaft, adjust pulleys in or out until they are in plane, then re-tighten cap screws.

— If pulleys are not parallel, loosen four motor mount hex nuts, shift motor on its mount until pulleys are parallel, then re-tighten motor mount hex nuts.

3. Re-check pulleys and repeat **Step 2** if necessary.
4. When you are satisfied with pulley alignment, re-tighten all fasteners, then replace belt cover and cabinet covers.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.
















CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

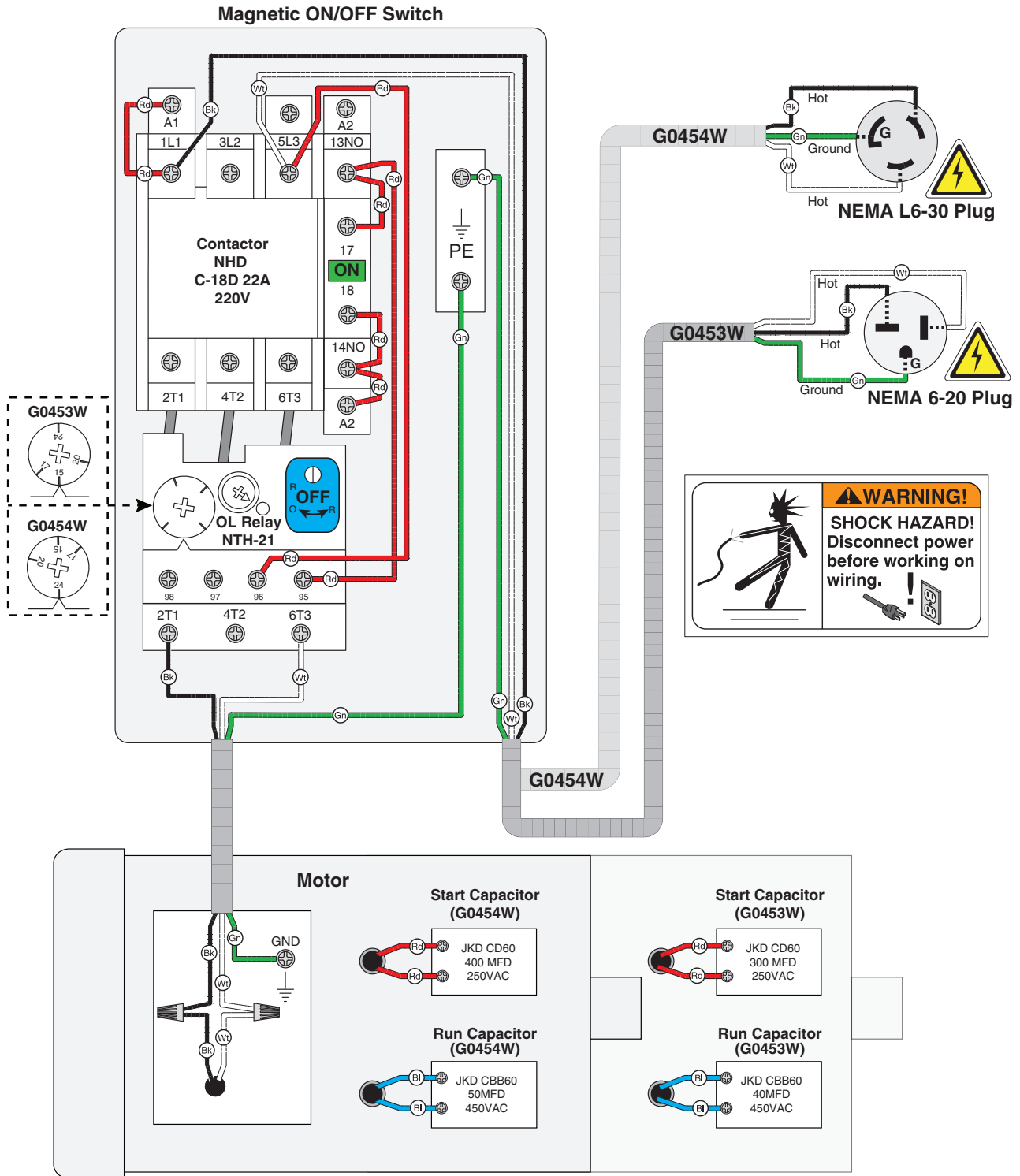
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

| | | | | | | | |
|-------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------|
| BLACK |  | BLUE |  | YELLOW |  | LIGHT BLUE |  |
| WHITE |  | BROWN |  | YELLOW GREEN |  | BLUE WHITE |  |
| GREEN |  | GRAY |  | PURPLE |  | TURQUOISE |  |
| RED |  | ORANGE |  | PINK |  | | |



Wiring Diagram (G0453W/G0454W)



Electrical Components (G0453W/G0454W)

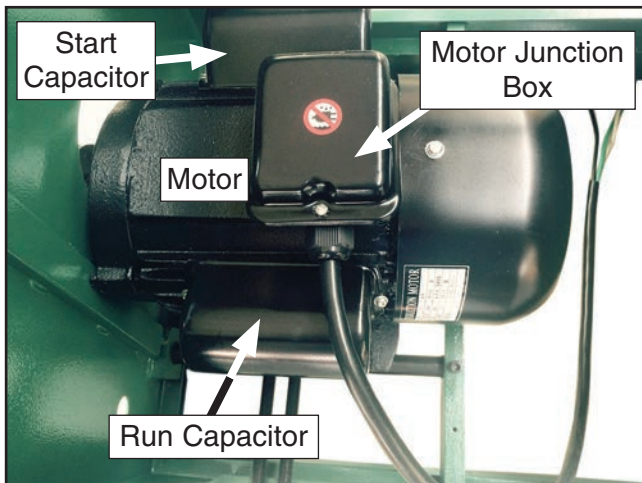


Figure 76. G0453W motor and component location.

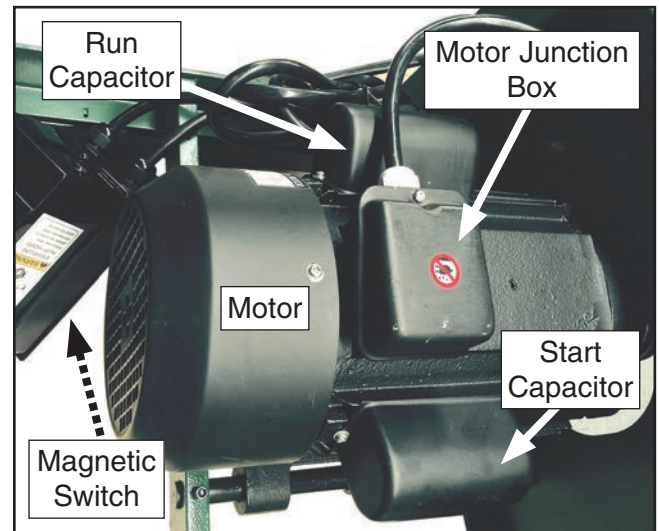
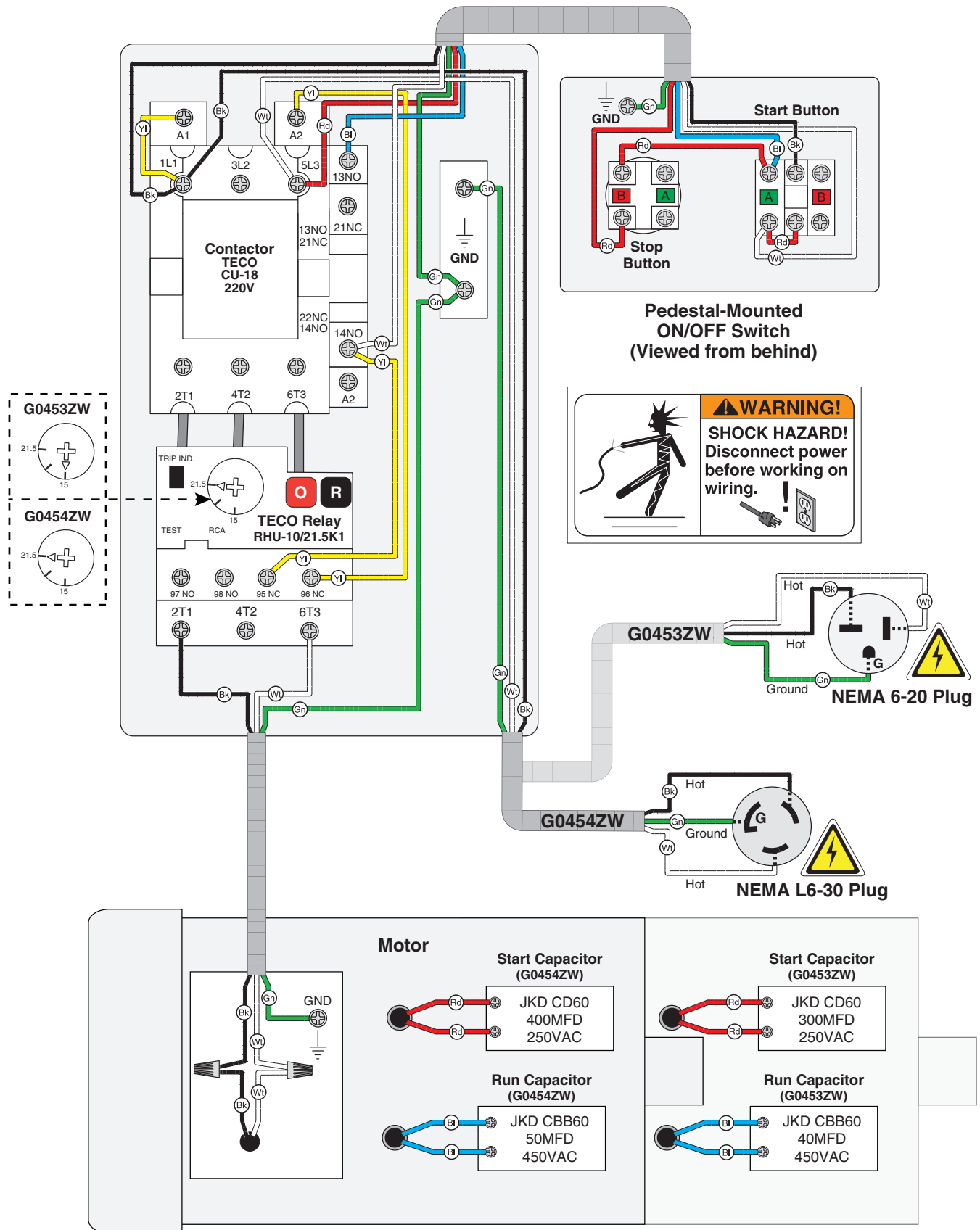


Figure 78. G0454W motor and component location.



Figure 77. G0453W magnetic switch with cover removed.

Wiring Diagram (G0453ZW/G0454ZW)



Electrical Components (G0453ZW/G0454ZW)

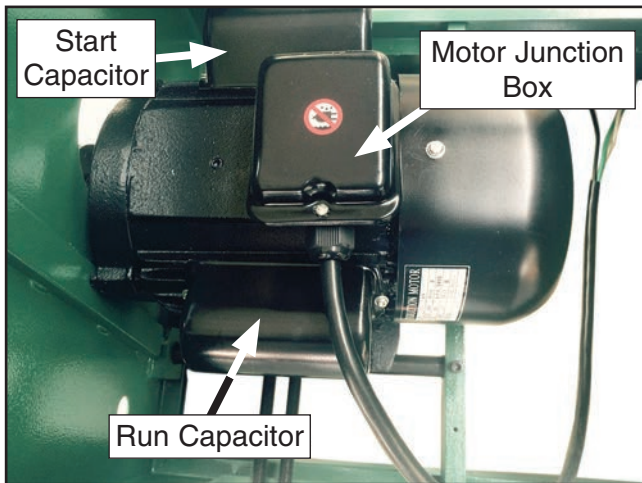


Figure 79. G0453ZW motor and component location.

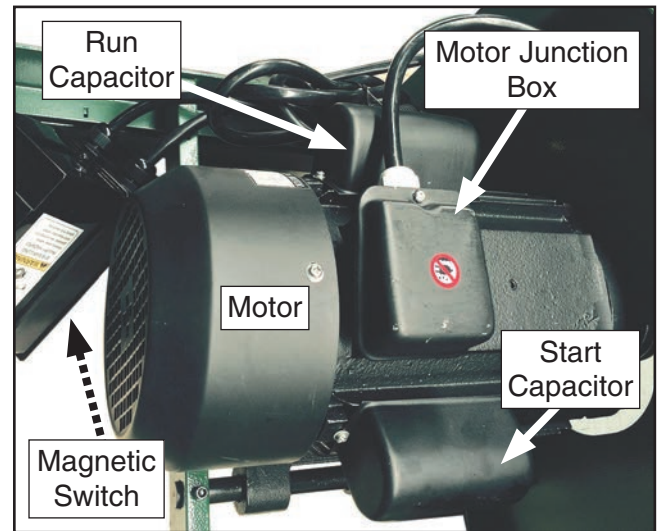


Figure 81. G0454ZW motor and component location.

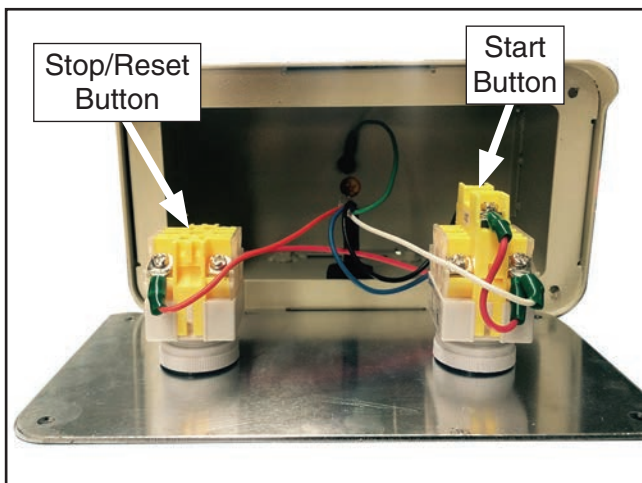


Figure 80. Pedestal-mounted control panel with cover removed.

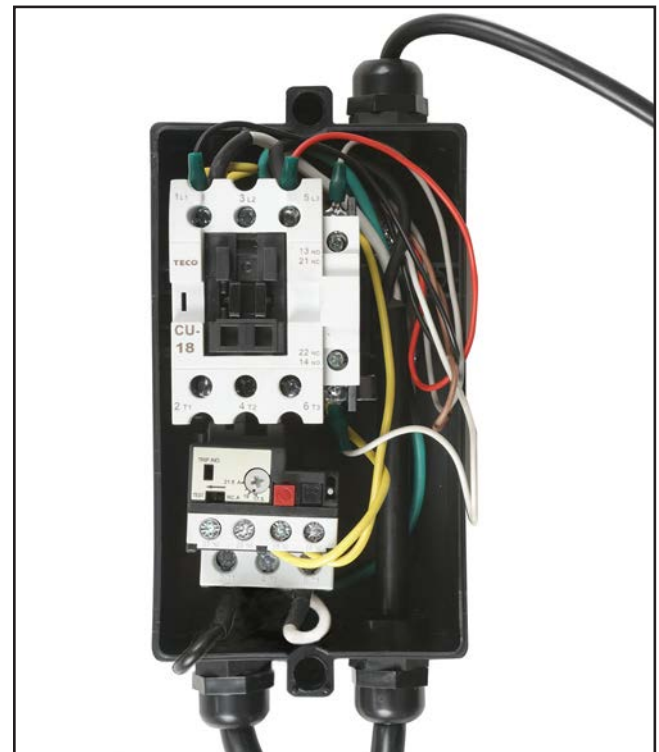


Figure 82. Magnetic switch mounted inside motor cabinet.

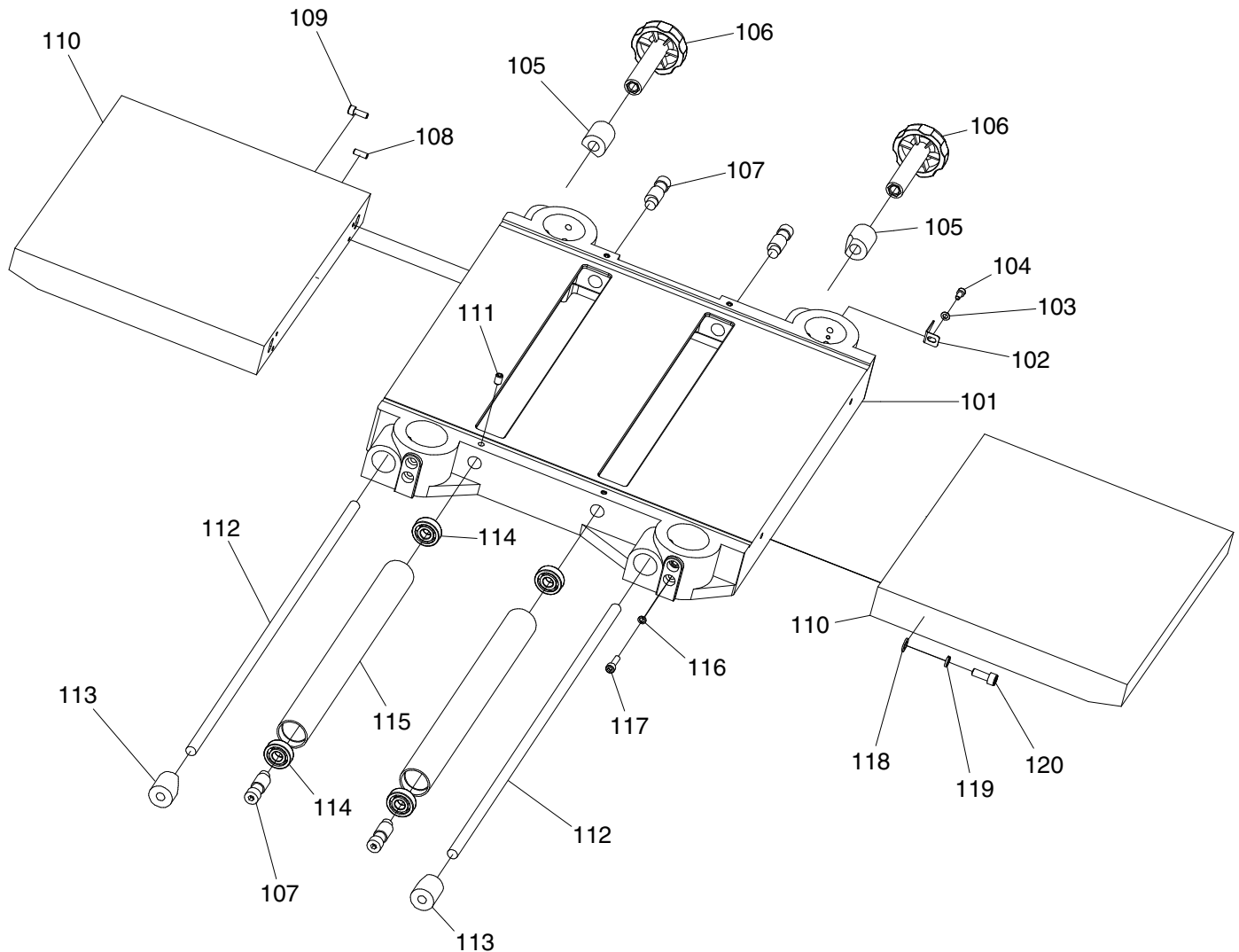
Headstock (G0453W & G0453ZW) Parts List

| REF | PART # | DESCRIPTION |
|-----|------------|---------------------------------------------|
| 2 | P0453W002 | REVOLVING HANDLE 80L, M10-1.5 X 18 |
| 3 | P0453W003 | HANDWHEEL TYPE-14 200D X 12B-K X M10-1.5 |
| 4 | P0453W004 | SPACER |
| 5 | P0453W005 | INT RETAINING RING 32MM |
| 6 | P0453W006 | BALL BEARING 6201ZZ |
| 7 | P0453W007 | WORM GEAR |
| 8 | P0453W008 | WORM HOUSING |
| 9 | P0453W009 | CAP SCREW M5-.8 X 16 |
| 10 | P0453W010 | FENDER WASHER 5MM |
| 11 | P0453W011 | KEY 4 X 4 X 16 |
| 12 | P0453W012 | CAP SCREW M6-1 X 55 |
| 13 | P0453W013 | RETURN ROLLER BRACKET |
| 14 | P0453W014 | RETURN ROLLER |
| 15 | P0453W015 | CAP SCREW M6-1 X 16 |
| 16 | P0453W016 | UPPER COVER |
| 17 | P0453W017 | FLANGE BOLT M6-1 X 12 |
| 18 | P0453W018 | UPPER COVER GASKET |
| 19 | P0453W019 | DUST HOOD 4" |
| 20 | P0453W020 | EXT RETAINING RING 10MM (G0453W) |
| 21A | P0453W021A | KNIFE-SETTING JIG (G0453W) |
| 21 | P0453W021 | KNIFE-SETTING JIG FOOT (G0453W) |
| 22 | P0453W022 | KNIFE-SETTING JIG SHAFT (G0453W) |
| 23 | P0453W023 | CAP SCREW M6-1 X 20 |
| 24 | P0453W024 | GEARBOX COVER |
| 25 | P0453W025 | REAR GEARBOX COVER PLATE (R) |
| 26 | P0453W026 | CHIP DEFLECTOR PLATE |
| 27 | P0453W027 | OIL PORT M24-3 X 20 |
| 28 | P0453W028 | HEAD CASTING (G0453W) |
| 28 | P0453ZW028 | HEAD CASTING (G0453ZW) |
| 29 | P0453W029 | SET SCREW M10-1.5 X 12 |
| 30 | P0453W030 | REAR BELT COVER |
| 31 | P0453W031 | SET SCREW M6-1 X 8 |
| 32 | P0453W032 | CUTTERHEAD PULLEY |
| 33 | P0453W033 | FLAT WASHER 8 X 28 X 2.5MM |
| 34 | P0453W034 | HEX BOLT M8-1.25 X 20 |
| 35 | P0453W035 | V-BELT M58 3L580 |
| 36 | P0453W036 | BELT COVER |
| 37 | P0453W037 | KNURLED KNOB 26L, M8-1.25 (PLASTIC) |
| 38 | P0453W038 | PLATE SPRING |
| 39 | P0453W039 | GIB (G0453W) |
| 40 | P0453W040 | GIB SCREW M8-1.25 X 10 (G0453W) |
| 41 | P0453W041 | PLANER KNIVES 15" X 1" X 1/8" 3-PK (G0453W) |
| 42 | P0453W042 | FLAT HD CAP SCR M5-.8 X 10 (G0453W) |
| 43 | P0453W043 | CAP SCREW M6-1 X 10 |
| 44 | P0453W044 | REAR GEARBOX COVER PLATE (L) |
| 45 | P0453W045 | CAP SCREW M5-.8 X 10 |
| 46 | P0453W046 | FLAT WASHER 5MM |
| 47 | P0453W047 | SCALE BRACKET |
| 48 | P0453W048 | DEPTH LIMITER |
| 49 | P0453W049 | FLAT HD SCR M5-.8 X 10 |

| REF | PART # | DESCRIPTION |
|------|--------------|-----------------------------------------|
| 50 | P0453W050 | KEY 5 X 5 X 15 |
| 51 | P0453W051 | SET SCREW M8-1.25 X 12 |
| 52 | P0453W052 | PULLEY SPACER |
| 53 | P0453W053 | HEX NUT M8-1.25 |
| 54 | P0453W054 | LOCK WASHER 8MM |
| 55 | P0453W055 | FLAT WASHER 8MM |
| 56 | P0453W056 | STANDOFF-HEX M8-1.25 X 10, M8-1.25 X 14 |
| 57 | P0453W057 | CUTTERHEAD 15" 3-KNIFE (G0453W) |
| 58 | P0453W058 | KEY 8 X 7 X 45 (G0453W) |
| 59 | P0453W059 | BALL BEARING 6205ZZ |
| 60 | P0453W060 | DEPTH-OF-CUT SCALE |
| 61 | P0453W061 | SET SCREW M5-.8 X 16 |
| 62 | P0453W062 | HEX NUT M5-.8 |
| 63 | P0453W063 | COMPRESSION SPRING 3.75 X 18.5 X 65 |
| 64 | P0453W064 | BUSHING BLOCK |
| 65 | P0453W065 | OUTFEED ROLLER |
| 66 | P0453W066 | BUSHING BLOCK PLATE |
| 67 | P0453W067 | UPPER SHAFT |
| 68 | P0453W068 | MIDDLE SHAFT |
| 69 | P0453W069 | CHIP BREAKER |
| 70 | P0453W070 | CAP SCREW M8-1.25 X 20 |
| 71 | P0453W071 | HEX NUT M6-1 |
| 72 | P0453W072 | SET SCREW M6-1 X 16 |
| 73 | P0453W073 | MOTOR PULLEY |
| 74 | P0453W074 | INFEED ROLLER |
| 75 | P0453W075 | SHAFT |
| 76 | P0453W076 | ANTI-KICKBACK FINGER |
| 77 | P0453W077 | SPACER |
| 79 | P0453W079 | MAG SWITCH ASSY NDH MS1-18D (G0453W) |
| 79-1 | P0453W079-1 | MAG SWITCH BOX (G0453W) |
| 79-2 | P0453W079-2 | CONTACTOR NHD C-12D 220V (G0453W) |
| 79-3 | P0453W079-3 | OL RELAY NHD NTH-17 14-17A (G0453W) |
| 79-4 | P0453W079-4 | PLASTIC SCREW 12 X 22MM (G0453W) |
| 79-5 | P0453W079-5 | TAP SCREW M5 X 20 (G0453W) |
| 79-6 | P0453W079-6 | AUXILIARY CONTACT BLOCK (G0453W) |
| 81 | P0453W081 | SWITCH BOX MOUNTING BRACKET (G0453W) |
| 82 | P0453W082 | HEX NUT M5-.8 (G0453W) |
| 83 | P0453W083 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 84 | P0453W084 | POWER CORD 12G 3W 72" 6-20P |
| 85 | P0453ZW085 | SPIRAL CUTTERHEAD 15" 4-ROW (G0453ZW) |
| 85-1 | P0453ZW085-1 | FLAT HD TORX T20 M6-1 X 15 (G0453ZW) |
| 85-2 | P0453ZW085-2 | CARBIDE INSERT 14 X 14 X 2 (G0453ZW) |
| 86 | P0453ZW086 | L-HANDLE TORX DRIVE T-20 (G0453ZW) |
| 87 | P0453W087 | HEX WRENCH 6MM |
| 88 | P0453W088 | HEX WRENCH 5MM |
| 89 | P0453W089 | HEX WRENCH 4MM |
| 90 | P0453W090 | HEX WRENCH 3MM |
| 91 | P0453ZW091 | T-HANDLE TORX DRIVE T-20 (G0453ZW) |
| 92 | P0453ZW092 | KEY 8 X 7 X 45 (G0453ZW) |



Table (G0453W & G0453ZW)

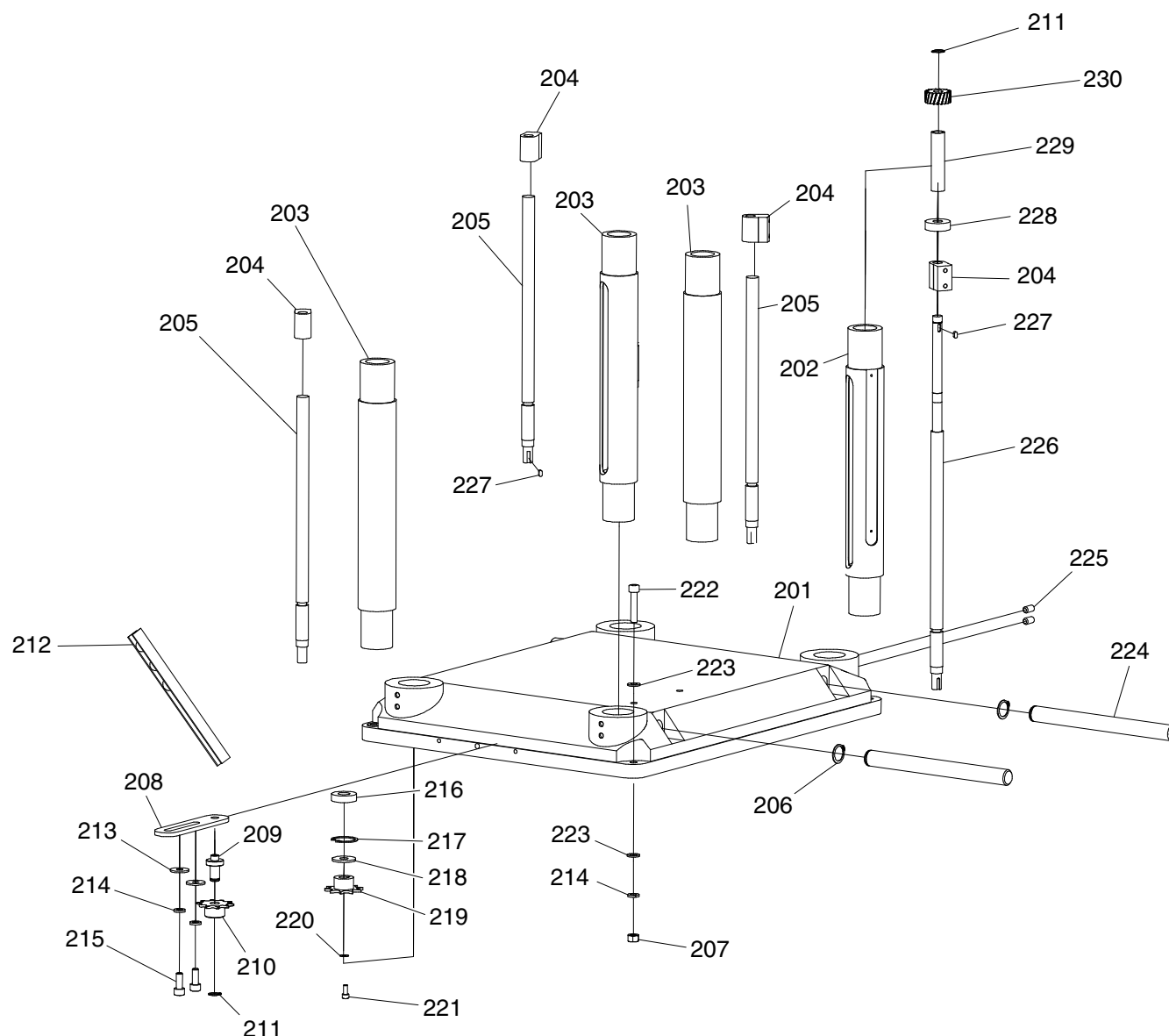


| REF | PART # | DESCRIPTION |
|-----|-----------|-----------------------------------|
| 101 | P0453W101 | MAIN TABLE |
| 102 | P0453W102 | POINTER |
| 103 | P0453W103 | FLAT WASHER 5MM |
| 104 | P0453W104 | CAP SCREW M5-.8 X 10 |
| 105 | P0453W105 | GIB |
| 106 | P0453W106 | STAR KNOB M12-1.75, 60 DIA X 103L |
| 107 | P0453W107 | ECCENTRIC SHAFT |
| 108 | P0453W108 | SET SCREW M6-1 X 16 |
| 109 | P0453W109 | CAP SCREW M6-1 X 16 |
| 110 | P0453W110 | TABLE EXTENSION WING |

| REF | PART # | DESCRIPTION |
|-----|-----------|------------------------|
| 111 | P0453W111 | SET SCREW M8-1.25 X 12 |
| 112 | P0453W112 | LOCKING ROD |
| 113 | P0453W113 | LOCK SLEEVE |
| 114 | P0453W114 | BALL BEARING 6201ZZ |
| 115 | P0453W115 | BED ROLLER |
| 116 | P0453W116 | LOCK WASHER 6MM |
| 117 | P0453W117 | CAP SCREW M6-1 X 20 |
| 118 | P0453W118 | FLAT WASHER 8MM |
| 119 | P0453W119 | LOCK WASHER 8MM |
| 120 | P0453W120 | CAP SCREW M8-1.25 X 25 |



Base (G0453W & G0453ZW)

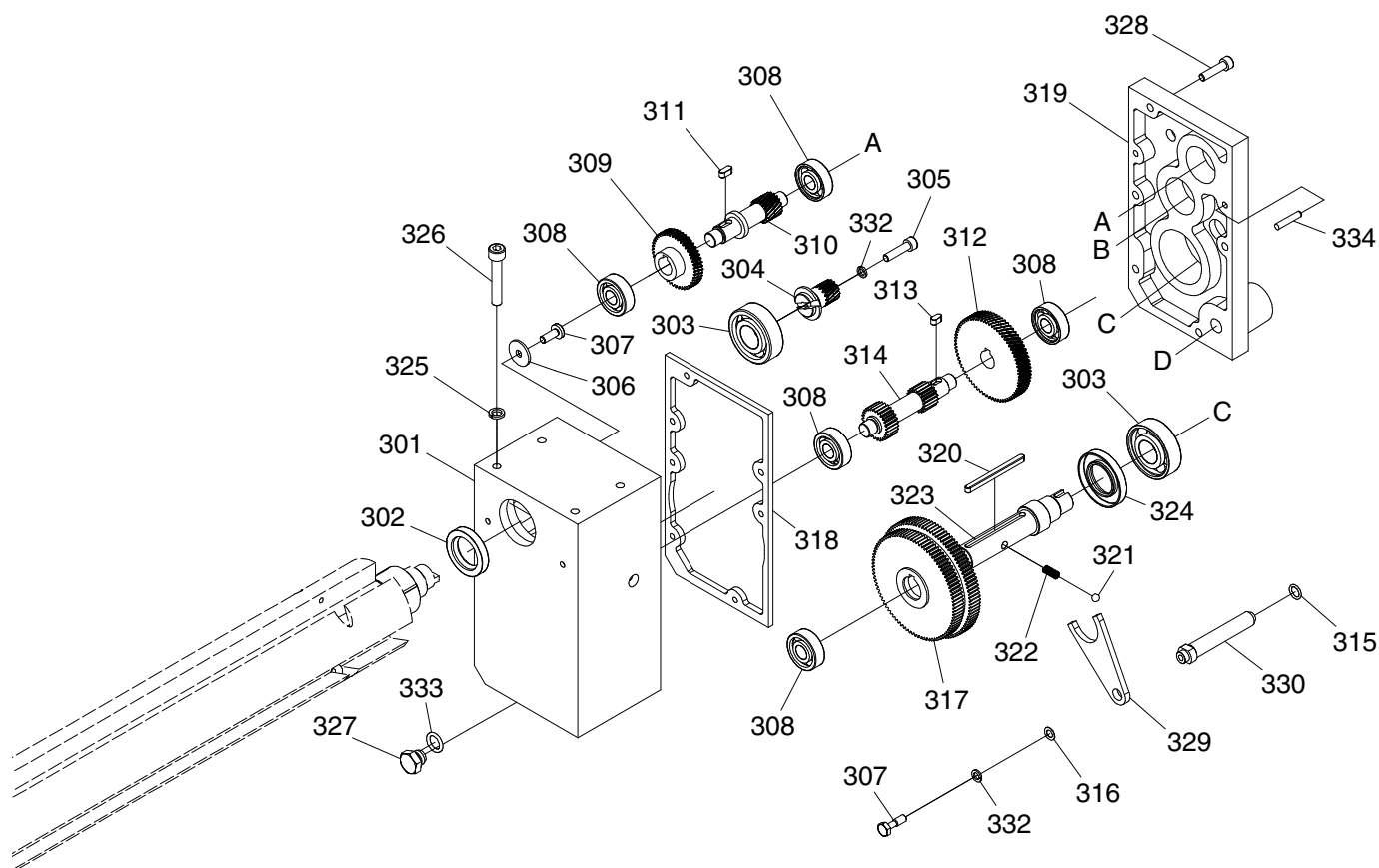


| REF | PART # | DESCRIPTION |
|-----|-----------|-------------------------|
| 201 | P0453W201 | BASE |
| 202 | P0453W202 | SCALE COLUMN |
| 203 | P0453W203 | COLUMN |
| 204 | P0453W204 | LEADSCREW NUT |
| 205 | P0453W205 | SECONDARY LEADSCREW |
| 206 | P0453W206 | EXT RETAINING RING 20MM |
| 207 | P0453W207 | HEX NUT M8-1.25 |
| 208 | P0453W208 | CHAIN TENSION BRACKET |
| 209 | P0453W209 | GEAR SHAFT |
| 210 | P0453W210 | GEAR 10T |
| 211 | P0453W211 | EXT RETAINING RING 12MM |
| 212 | P0453W212 | CHAIN 081-1 X 134 |
| 213 | P0453W213 | FENDER WASHER 8MM |
| 214 | P0453W214 | LOCK WASHER 8MM |
| 215 | P0453W215 | CAP SCREW M8-1.25 X 20 |

| REF | PART # | DESCRIPTION |
|-----|-----------|-------------------------|
| 216 | P0453W216 | BALL BEARING 6002ZZ |
| 217 | P0453W217 | INT RETAINING RING 32MM |
| 218 | P0453W218 | SPACER 12.5 X 19 X 4MM |
| 219 | P0453W219 | GEAR 10T |
| 220 | P0453W220 | FENDER WASHER 6MM |
| 221 | P0453W221 | CAP SCREW M5-.8 X 12 |
| 222 | P0453W222 | CAP SCREW M8-1.25 X 40 |
| 223 | P0453W223 | FLAT WASHER 8MM |
| 224 | P0453W224 | LIFTING BAR |
| 225 | P0453W225 | SET SCREW M8-1.25 X 16 |
| 226 | P0453W226 | PRIMARY LEADSCREW |
| 227 | P0453W227 | KEY 4 X 4 X 12 |
| 228 | P0453W228 | BALL BEARING 6201ZZ |
| 229 | P0453W229 | BUSHING |
| 230 | P0453W230 | GEAR 20T |



Gearbox (G0453W & G0453ZW)



REF PART # DESCRIPTION

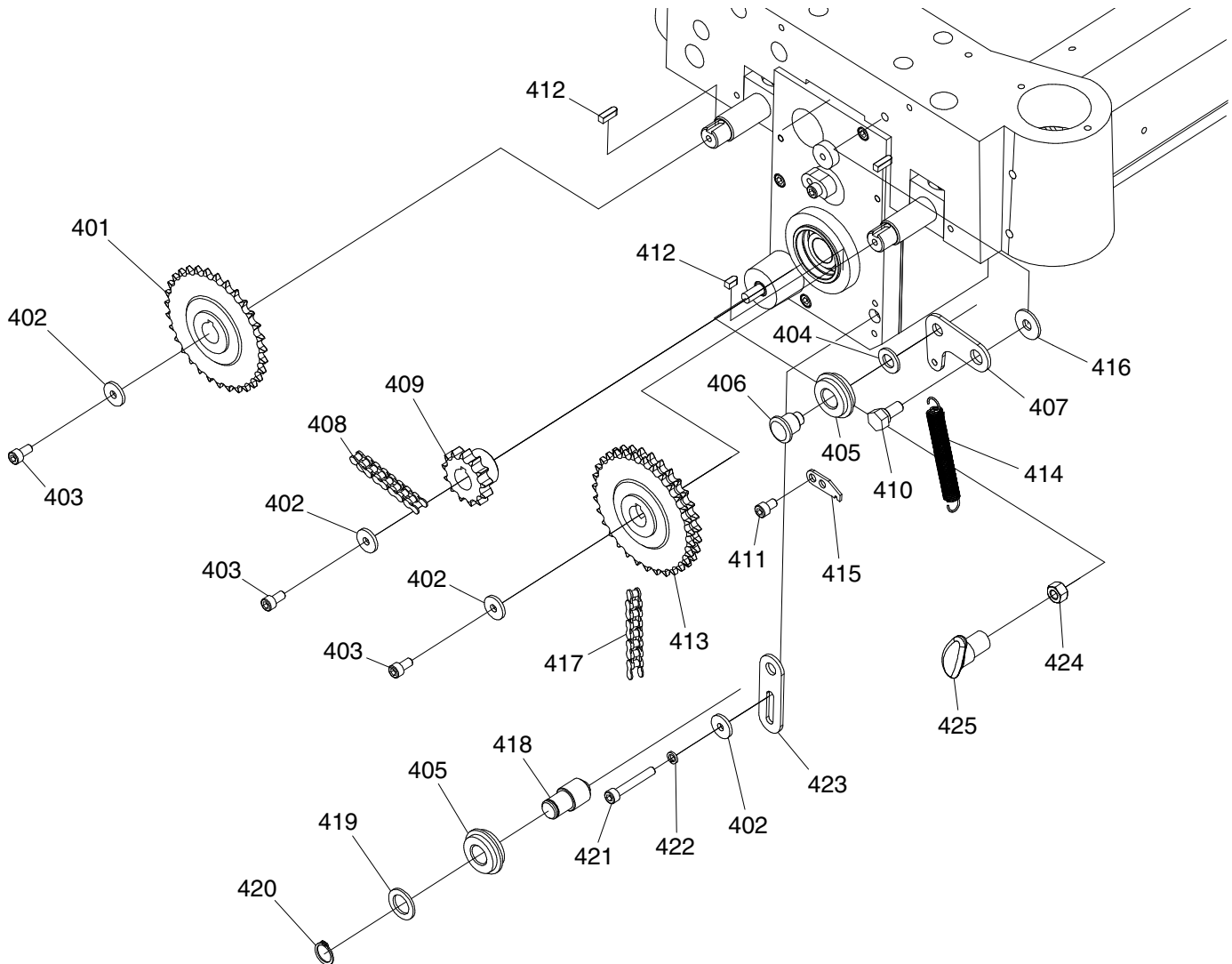
| | | |
|-----|-----------|------------------------|
| 301 | P0453W301 | GEARBOX |
| 302 | P0453W302 | OIL SEAL 25 X 40 X 7 |
| 303 | P0453W303 | BALL BEARING 6204ZZ |
| 304 | P0453W304 | GEAR 15T |
| 305 | P0453W305 | CAP SCREW M6-1 X 25 LH |
| 306 | P0453W306 | FENDER WASHER 6MM |
| 307 | P0453W307 | FLANGE BOLT M6-1 X 12 |
| 308 | P0453W308 | BALL BEARING 6201-OPEN |
| 309 | P0453W309 | GEAR 47T |
| 310 | P0453W310 | GEARED SHAFT 18T |
| 311 | P0453W311 | KEY 5 X 5 X 12 |
| 312 | P0453W312 | GEAR 71T |
| 313 | P0453W313 | KEY 5 X 5 X 10 |
| 314 | P0453W314 | COMBO GEAR 22T/18T |
| 315 | P0453W315 | O-RING 10.8 X 2.4 P11 |
| 316 | P0453W316 | FLAT WASHER 6MM |
| 317 | P0453W317 | COMBO GEAR 92T/96T |

REF PART # DESCRIPTION

| | | |
|-----|-----------|-----------------------------------|
| 318 | P0453W318 | GEARBOX COVER GASKET |
| 319 | P0453W319 | GEARBOX COVER |
| 320 | P0453W320 | KEY 5 X 5 X 40 |
| 321 | P0453W321 | STEEL BALL 6MM |
| 322 | P0453W322 | COMPRESSION SPRING 0.5 X 5 X 20.2 |
| 323 | P0453W323 | SHAFT |
| 324 | P0453W324 | OIL SEAL 25 X 47 X 7 |
| 325 | P0453W325 | LOCK WASHER 8MM |
| 326 | P0453W326 | CAP SCREW M8-1.25 X 45 |
| 327 | P0453W327 | DRAIN PLUG M12-1.25 X 16 |
| 328 | P0453W328 | CAP SCREW M6-1 X 25 |
| 329 | P0453W329 | SHIFTING FORK |
| 330 | P0453W330 | SHIFTING SHAFT |
| 332 | P0453W332 | LOCK WASHER 6MM |
| 333 | P0453W333 | O-RING 9 X 1.8 |
| 334 | P0453W334 | ROLL PIN 5 X 25 |



Feed Gearing (G0453W & G0453ZW)

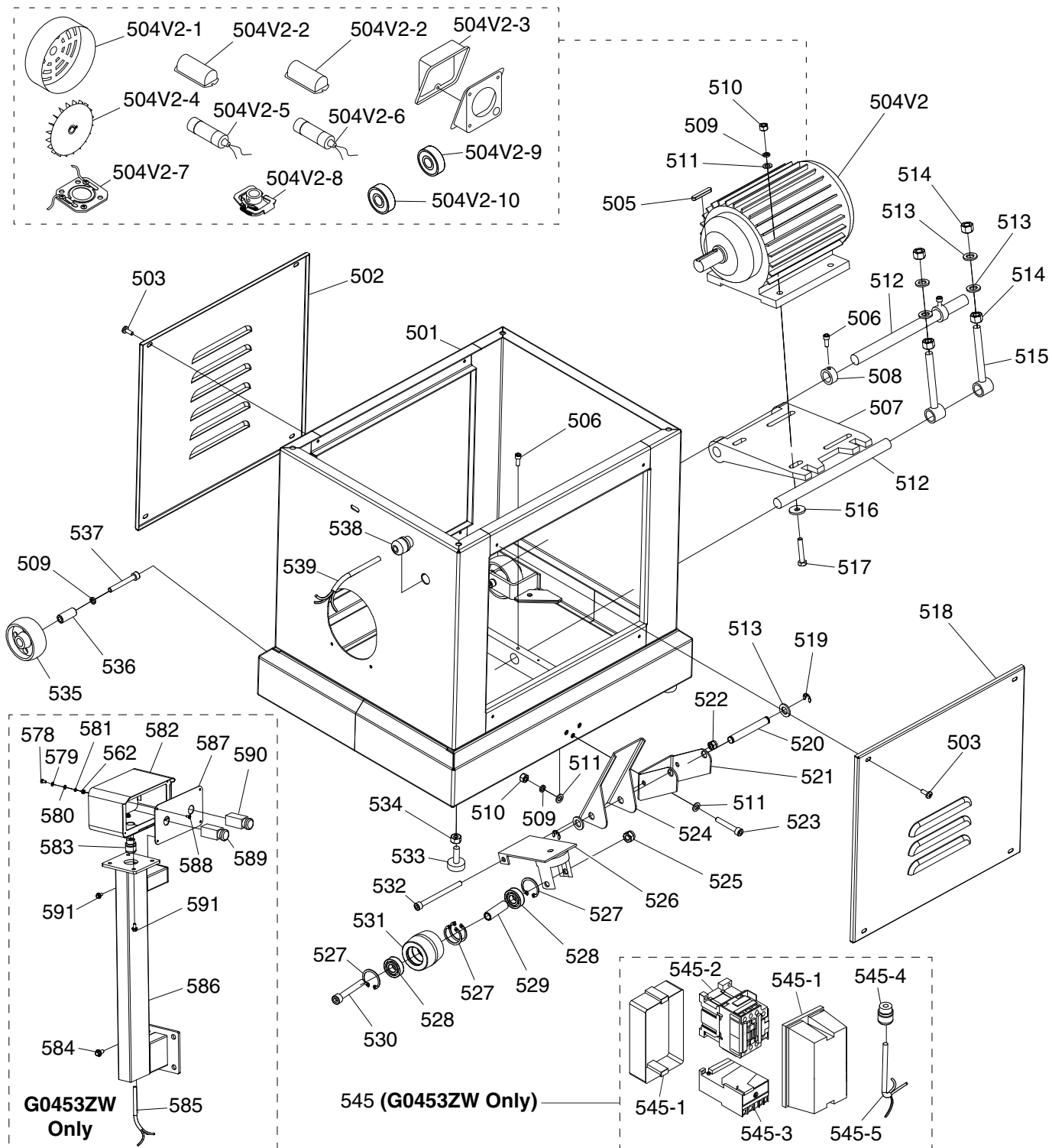


| REF | PART # | DESCRIPTION |
|-----|-----------|--------------------------------------|
| 401 | P0453W401 | SPROCKET 32T |
| 402 | P0453W402 | FENDER WASHER 6MM |
| 403 | P0453W403 | CAP SCREW M6-1 X 16 |
| 404 | P0453W404 | FLAT WASHER 10MM |
| 405 | P0453W405 | CHAIN TENSIONER |
| 406 | P0453W406 | CHAIN TENSIONER SHAFT |
| 407 | P0453W407 | CHAIN TENSIONER BRACKET (UPPER) |
| 408 | P0453W408 | CHAIN 06B-1 X 48 |
| 409 | P0453W409 | SPROCKET 13T |
| 410 | P0453W410 | SHOULDER BOLT M8-1.25 X 16, 12 X 3.5 |
| 411 | P0453W411 | CAP SCREW M6-1 X 10 |
| 412 | P0453W412 | KEY 5 X 5 X 15 |
| 413 | P0453W413 | DOUBLE-STRAND SPROCKET 32T |

| REF | PART # | DESCRIPTION |
|-----|-----------|---------------------------------|
| 414 | P0453W414 | EXTENSION SPRING 1 X 8 X 26.5 |
| 415 | P0453W415 | SPRING BRACKET |
| 416 | P0453W416 | SPACER 8 X 28 X 3MM |
| 417 | P0453W417 | CHAIN 06B-1 X 64 |
| 418 | P0453W418 | SHAFT |
| 419 | P0453W419 | SPACER 16 X 25 X 2MM |
| 420 | P0453W420 | EXT RETAINING RING 15MM |
| 421 | P0453W421 | CAP SCREW M6-1 X 40 |
| 422 | P0453W422 | LOCK WASHER 6MM |
| 423 | P0453W423 | CHAIN TENSIONER BRACKET (LOWER) |
| 424 | P0453W424 | HEX NUT M8-1.25 |
| 425 | P0453W425 | T-KNOB M8-1.25, 70 DIA X 48L |



Cabinet (G0453W & G0453ZW)



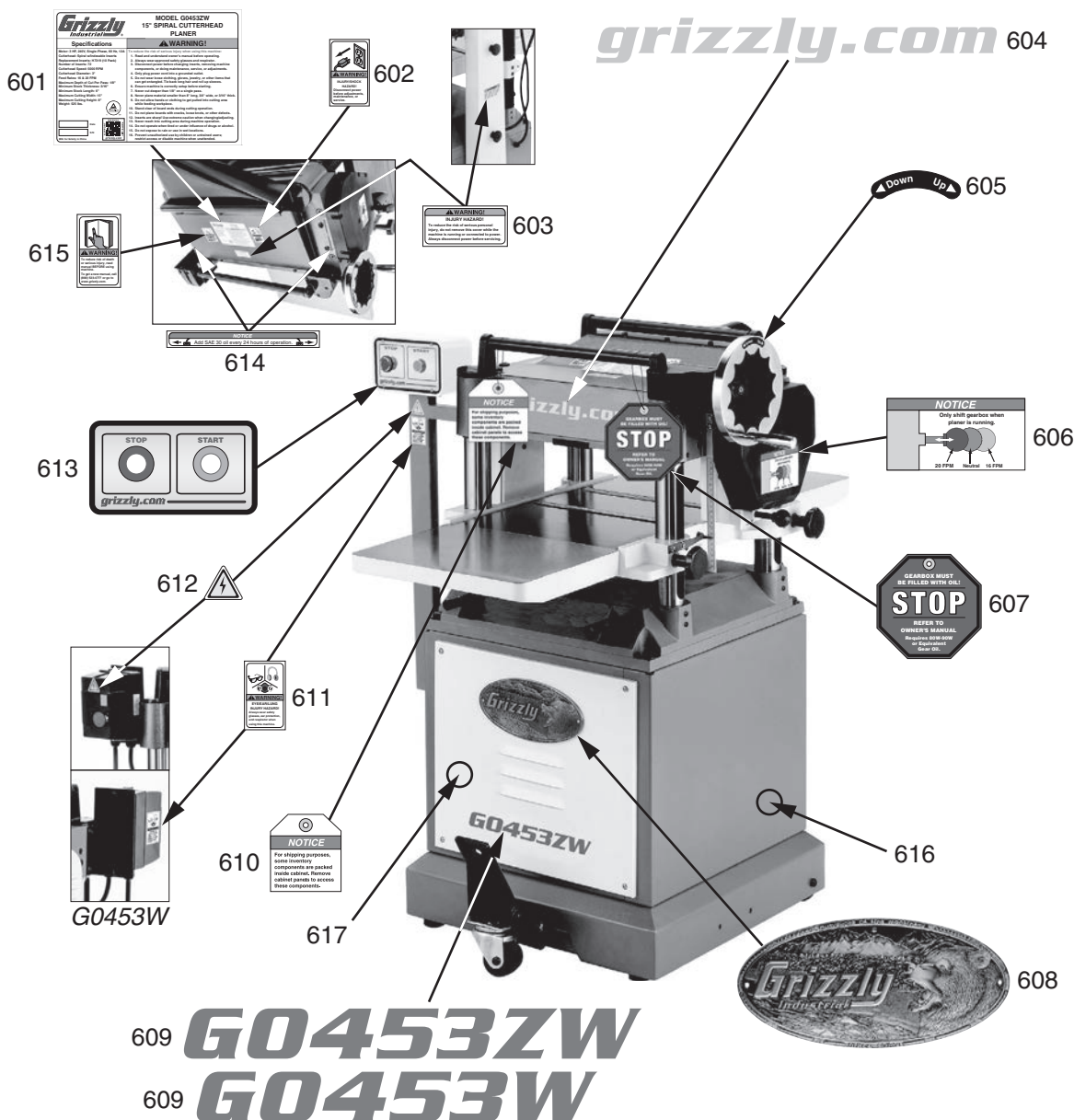
Cabinet (G0453W & G0453ZW) Parts List

| REF | PART # | DESCRIPTION |
|----------|----------------|-------------------------------------|
| 501 | P0453W501 | STAND (G0453W) |
| 501 | P0453ZW501 | STAND (G0453ZW) |
| 502 | P0453W502 | BACK COVER |
| 503 | P0453W503 | PHLP HD SCR M6-1 X 16 |
| 504V2 | P0453W504V2 | MOTOR 3HP 240V 1-PH V2.04.16 |
| 504V2-1 | P0453W504V2-1 | MOTOR FAN COVER |
| 504V2-2 | P0453W504V2-2 | CAPACITOR COVER |
| 504V2-3 | P0453W504V2-3 | MOTOR JUNCTION BOX |
| 504V2-4 | P0453W504V2-4 | MOTOR FAN |
| 504V2-5 | P0453W504V2-5 | S CAPACITOR 300M 250V 1-7/8 X 3-3/4 |
| 504V2-6 | P0453W504V2-6 | R CAPACITOR 40M 450V 1-7/8 X 3-3/4 |
| 504V2-7 | P0453W504V2-7 | CONTACT PLATE |
| 504V2-8 | P0453W504V2-8 | CENTRIFUGAL SWITCH |
| 504V2-9 | P0453W504V2-9 | BALL BEARING 6205ZZ (FRONT) |
| 504V2-10 | P0453W504V2-10 | BALL BEARING 6205ZZ (REAR) |
| 505 | P0453W505 | KEY 8 X 7 X 40 |
| 506 | P0453W506 | CAP SCREW M6-1 X 16 |
| 507 | P0453W507 | MOTOR MOUNT PLATE |
| 508 | P0453W508 | LOCK COLLAR |
| 509 | P0453W509 | LOCK WASHER 8MM |
| 510 | P0453W510 | HEX NUT M8-1.25 |
| 511 | P0453W511 | FLAT WASHER 8MM |
| 512 | P0453W512 | PLATE CONNECTING ROD |
| 513 | P0453W513 | FLAT WASHER 12MM |
| 514 | P0453W514 | HEX NUT M12-1.75 |
| 515 | P0453W515 | ELEVATION BOLT M12-1.75 X 105 |
| 516 | P0453W516 | FENDER WASHER 8MM |
| 517 | P0453W517 | HEX BOLT M8-1.25 X 45 |
| 518 | P0453W518 | FRONT COVER |
| 519 | P0453W519 | E-CLIP 9MM |
| 520 | P0453W520 | WHEEL SHAFT |
| 521 | P0453W521 | PEDAL BRACKET |
| 522 | P0453W522 | LOCK NUT M8-1.25 |
| 523 | P0453W523 | CAP SCREW M8-1.25 X 50 |
| 524 | P0453W524 | FOOT PEDAL |
| 525 | P0453W525 | LOCK NUT M10-1.5 |

| REF | PART # | DESCRIPTION |
|-------|--------------|---------------------------------|
| 526 | P0453W526 | FOOT PEDAL CASTER BASE |
| 527 | P0453W527 | INT RETAINING RING 35MM |
| 528 | P0453W528 | BALL BEARING 6202ZZ |
| 529 | P0453W529 | WHEEL SLEEVE |
| 530 | P0453W530 | CAP SCREW M10-1.5 X 70 |
| 531 | P0453W531 | LOCKING WHEEL |
| 532 | P0453W532 | CAP SCREW M8-1.25 X 100 |
| 533 | P0453W533 | RUBBER FOOT |
| 534 | P0453W534 | HEX NUT M10-1.5 |
| 535 | P0453W535 | REAR WHEEL |
| 536 | P0453W536 | REAR WHEEL BUSHING |
| 537 | P0453W537 | CAP SCREW M8-1.25 X 60 |
| 538 | P0453W538 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 539 | P0453W539 | MOTOR CORD 12G 3W 38" |
| 545 | P0453ZW545 | MAG SWITCH ASSY TECO HUP-11 |
| 545-1 | P0453ZW545-1 | MAG SWITCH BOX |
| 545-2 | P0453ZW545-2 | CONTACTOR TECO CU-11 220V |
| 545-3 | P0453ZW545-3 | OL RELAY TECO RHU-10/1 11.3-16A |
| 545-4 | P0453ZW545-4 | STRAIN RELIEF TYPE-3 M22-1.5 |
| 545-5 | P0453ZW545-5 | MOTOR CORD 12G 3W 38" |
| 562 | P0453ZW562 | HEX NUT M5-.8 |
| 578 | P0453ZW578 | PHLP HD SCR M5-.8 X 10 |
| 579 | P0453ZW579 | EXT TOOTH WASHER 5MM |
| 580 | P0453ZW580 | FLAT WASHER 5MM |
| 581 | P0453ZW581 | LOCK WASHER 5MM |
| 582 | P0453ZW582 | CONTROL PANEL BOX |
| 583 | P0453ZW583 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 584 | P0453ZW584 | FLANGE BOLT M8-1.25 X 16 |
| 585 | P0453ZW585 | SWITCH CORD 20G 5W 70" |
| 586 | P0453ZW586 | CONTROL PANEL PEDESTAL ARM |
| 587 | P0453ZW587 | CONTROL PANEL |
| 588 | P0453ZW588 | PHLP HD SCR M4-.7 X 8 |
| 589 | P0453ZW589 | STOP BUTTON GLY37 22MM |
| 590 | P0453ZW590 | START BUTTON GLY37 22MM |
| 591 | P0453ZW591 | FLANGE BOLT M6-1 X 12 |



Labels (G0453W & G0453ZW)



| REF | PART # | DESCRIPTION |
|-------|--------------|-------------------------------------|
| 601V2 | P0453W601V2 | MACHINE ID LABEL (G0453W) V2.09.16 |
| 601V2 | P0453ZW601V2 | MACHINE ID LABEL (G0453ZW) V2.09.16 |
| 602 | P0453W602 | DISCONNECT POWER LABEL |
| 603 | P0453W603 | BELT COVER LABEL |
| 604 | P0453W604 | GRIZZLY.COM LABEL |
| 605 | P0453W605 | HANDWHEEL ROTATION LABEL |
| 606 | P0453W606 | FEED SELECTOR LABEL |
| 607 | P0453W607 | STOP CHECK OIL TAG |
| 608 | P0453W608 | GRIZZLY NAMEPLATE |
| 609 | P0453W609 | MODEL NUMBER LABEL (G0453W) |

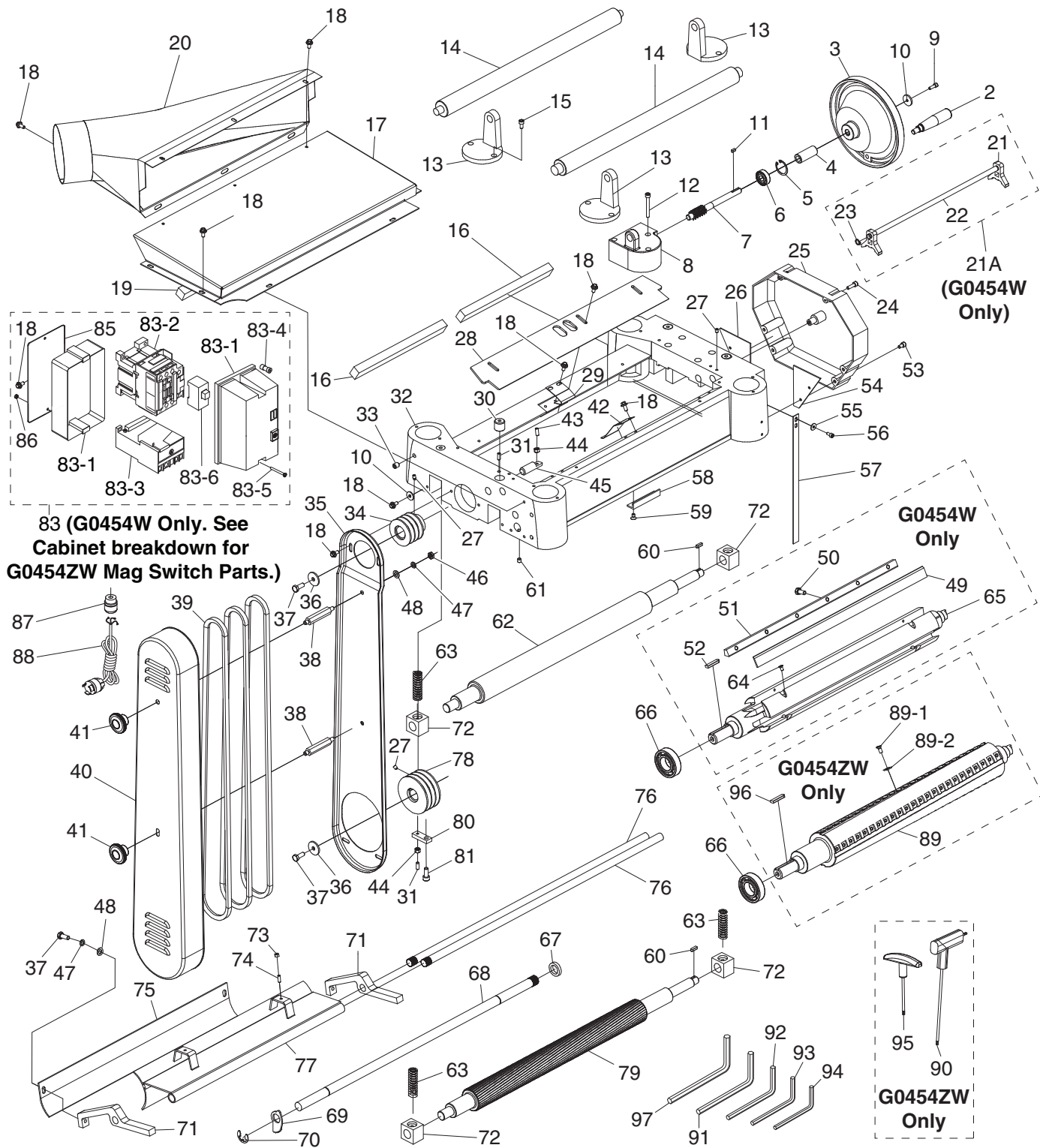
| REF | PART # | DESCRIPTION |
|-----|------------|------------------------------------------|
| 609 | P0453ZW609 | MODEL NUMBER LABEL (G0453ZW) |
| 610 | P0453W610 | INVENTORY COMPONENTS SHIPPING NOTICE TAG |
| 611 | P0453W611 | EYE/EAR/LUNG INJURY HAZARD LABEL |
| 612 | P0453W612 | ELECTRICITY LABEL |
| 613 | P0453ZW613 | CONTROL PANEL LABEL (G0453ZW) |
| 614 | P0453W614 | CHECK OIL NOTICE LABEL |
| 615 | P0453W615 | READ MANUAL LABEL |
| 616 | P0453W616 | GRIZZLY GREEN TOUCH-UP PAINT |
| 617 | P0453W617 | GRIZZLY BEIGE TOUCH-UP PAINT |

⚠ WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.



Headstock (G0454W & G0454ZW)



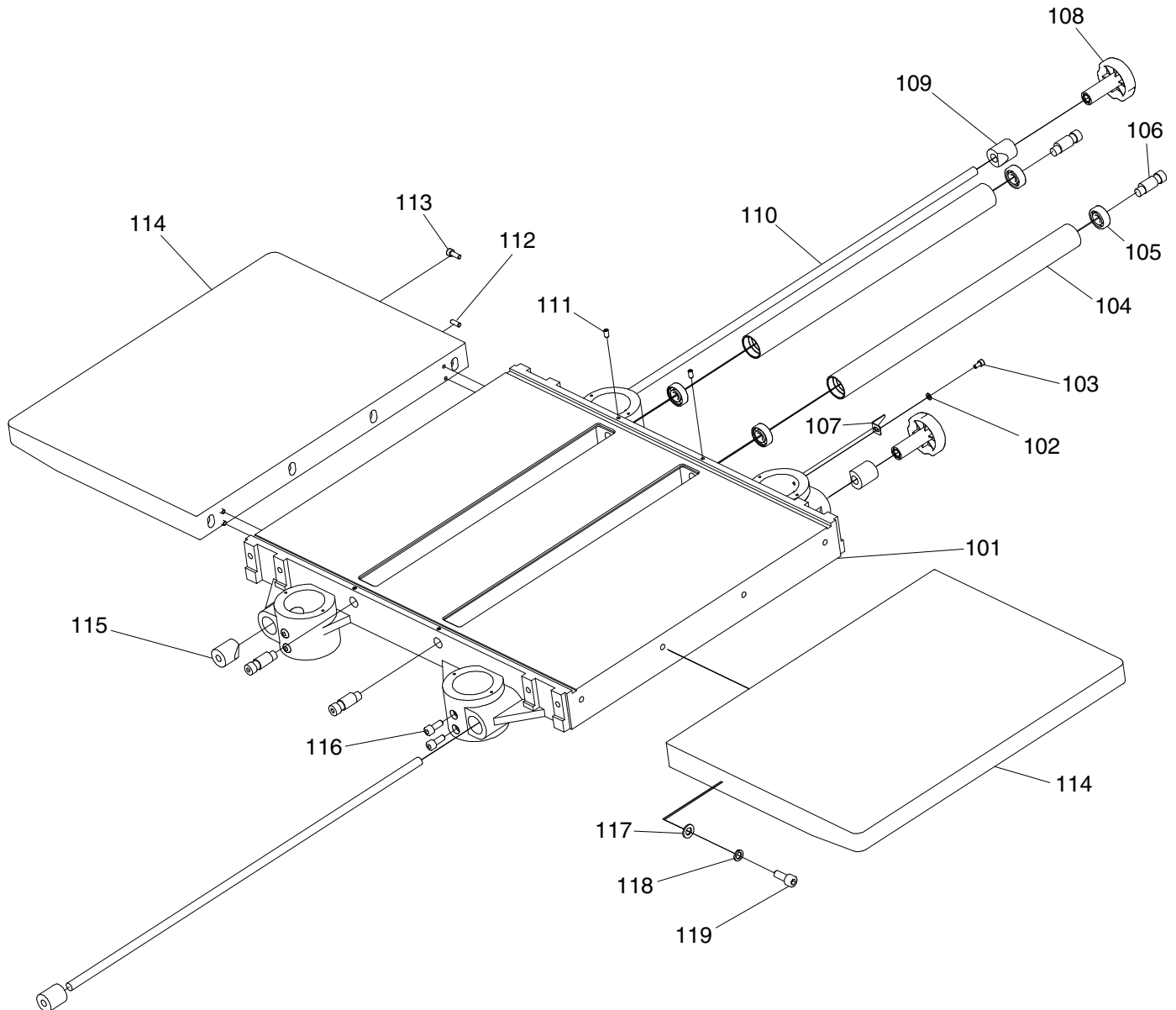
Headstock (G0454W & G0454ZW) Parts List

| REF | PART # | DESCRIPTION |
|-----|------------|---------------------------------------------|
| 2 | P0454W002 | REVOLVING HANDLE 80L, M10-1.5 X 18 |
| 3 | P0454W003 | HANDWHEEL TYPE-14 200D X 12B-K X M10-1.5 |
| 4 | P0454W004 | SPACER |
| 5 | P0454W005 | INT RETAINING RING 32MM |
| 6 | P0454W006 | BALL BEARING 6201ZZ |
| 7 | P0454W007 | WORM GEAR |
| 8 | P0454W008 | WORM HOUSING |
| 9 | P0454W009 | CAP SCREW M5-.8 X 16 |
| 10 | P0454W010 | FENDER WASHER 5MM |
| 11 | P0454W011 | KEY 4 X 4 X 16 |
| 12 | P0454W012 | CAP SCREW M6-1 X 55 |
| 13 | P0454W013 | RETURN ROLLER BRACKET |
| 14 | P0454W014 | RETURN ROLLER |
| 15 | P0454W015 | CAP SCREW M6-1 X 16 |
| 16 | P0454W016 | UPPER COVER GASKET (FRONT) |
| 17 | P0454W017 | UPPER COVER |
| 18 | P0454W018 | FLANGE BOLT M6-1 X 12 |
| 19 | P0454W019 | UPPER COVER GASKET (REAR) |
| 20 | P0454W020 | DUST HOOD 5" |
| 21 | P0454W021 | KNIFE-SETTING JIG FOOT (G0454W) |
| 21A | P0454W021A | KNIFE-SETTING JIG (G0454W) |
| 22 | P0454W022 | KNIFE-SETTING JIG SHAFT (G0454W) |
| 23 | P0454W023 | EXT RETAINING RING 10MM (G0454W) |
| 24 | P0454W024 | CAP SCREW M6-1 X 20 |
| 25 | P0454W025 | GEARBOX COVER |
| 26 | P0454W026 | REAR GEARBOX COVER PLATE (R) |
| 27 | P0454W027 | SET SCREW M6-1 X 8 |
| 28 | P0454W028 | CHIP DEFLECTOR PLATE |
| 29 | P0454W029 | SPRING PLATE |
| 30 | P0454W030 | OIL PORT M22-1.5 X 20 |
| 31 | P0454W031 | SET SCREW M6-1 X 16 |
| 32 | P0454W032 | HEAD CASTING (G0454W) |
| 32 | P0454ZW032 | HEAD CASTING (G0454ZW) |
| 33 | P0454W033 | SET SCREW M10-1.5 X 12 |
| 34 | P0454W034 | CUTTERHEAD PULLEY |
| 35 | P0454W035 | REAR BELT COVER |
| 36 | P0454W036 | FLAT WASHER 8 X 28 X 2.5MM |
| 37 | P0454W037 | HEX BOLT M8-1.25 X 20 |
| 38 | P0454W038 | STANDOFF-HEX M8-1.25 X 10, M8-1.25 X 14 |
| 39 | P0454W039 | V-BELT M58 3L580 |
| 40 | P0454W040 | BELT COVER |
| 41 | P0454W041 | KNURLED KNOB 26L, M8-1.25 (PLASTIC) |
| 42 | P0454W042 | PLATE SPRING |
| 43 | P0454W043 | SET SCREW M6-1 X 20 |
| 44 | P0454W044 | HEX NUT M6-1 |
| 45 | P0454W045 | ADJUSTING SHAFT |
| 46 | P0454W046 | HEX NUT M8-1.25 |
| 47 | P0454W047 | LOCK WASHER 8MM |
| 48 | P0454W048 | FLAT WASHER 8MM |
| 49 | P0454W049 | PLANER KNIVES 20" X 1" X 1/8" 3-PK (G0454W) |
| 50 | P0454W050 | GIB SCREW M8-1.25 X 10 (G0454W) |
| 51 | P0454W051 | GIB (G0454W) |

| REF | PART # | DESCRIPTION |
|------|--------------|---------------------------------------|
| 52 | P0454W052 | KEY 8 X 7 X 35 (G0454W) |
| 53 | P0454W053 | CAP SCREW M6-1 X 10 |
| 54 | P0454W054 | REAR GEARBOX COVER PLATE (L) |
| 55 | P0454W055 | FLAT WASHER 5MM |
| 56 | P0454W056 | CAP SCREW M5-.8 X 10 |
| 57 | P0454W057 | DEPTH-OF-CUT SCALE |
| 58 | P0454W058 | DEPTH LIMITER |
| 59 | P0454W059 | FLAT HD SCR M5-.8 X 10 |
| 60 | P0454W060 | KEY 5 X 5 X 15 |
| 61 | P0454W061 | SET SCREW M8-1.25 X 8 |
| 62 | P0454W062 | OUTFEED ROLLER |
| 63 | P0454W063 | COMPRESSION SPRING 4 X 18.5 X 73 |
| 64 | P0454W064 | FLAT HD CAP SCR M5-.8 X 12 (G0454W) |
| 65 | P0454W065 | CUTTERHEAD 20" 4-KNIFE (G0454W) |
| 66 | P0454W066 | BALL BEARING 6206ZZ |
| 67 | P0454W067 | SPACER |
| 68 | P0454W068 | ANTI-KICKBACK SHAFT |
| 69 | P0454W069 | ANTI-KICKBACK FINGER |
| 70 | P0454W070 | E-CLIP 15MM |
| 71 | P0454W071 | LOCKING ROD BRACKET |
| 72 | P0454W072 | BUSHING BLOCK |
| 73 | P0454W073 | HEX NUT M5-.8 |
| 74 | P0454W074 | SET SCREW M5-.8 X 16 |
| 75 | P0454W075 | PRESSURE PLATE |
| 76 | P0454W076 | LOCKING ROD |
| 77 | P0454W077 | CHIP BREAKER |
| 78 | P0454W078 | MOTOR PULLEY |
| 79 | P0454W079 | INFEED ROLLER |
| 80 | P0454W080 | BUSHING BLOCK PLATE |
| 81 | P0454W081 | CAP SCREW M8-1.25 X 20 |
| 83 | P0454W083 | MAG SWITCH ASSY NDH MS1-18D (G0454W) |
| 83-1 | P0454W083-1 | MAG SWITCH BOX (G0454W) |
| 83-2 | P0454W083-2 | CONTACTOR NHD C-18D 220V (G0454W) |
| 83-3 | P0454W083-3 | OL RELAY NHD NTH-21 21-25A (G0454W) |
| 83-4 | P0454W083-4 | PLASTIC SCREW 12 X 22MM (G0454W) |
| 83-5 | P0454W083-5 | TAP SCREW M5 X 20 (G0454W) |
| 83-6 | P0454W083-6 | AUXILIARY CONTACT BLOCK (G0454W) |
| 85 | P0454W085 | SWITCH BOX MOUNTING BRACKET (G0454W) |
| 86 | P0454W086 | HEX NUT M5-.8 (G0454W) |
| 87 | P0454W087 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 88 | P0454W088 | POWER CORD 12G 3W 72" L6-30P |
| 89 | P0454ZW089 | SPIRAL CUTTERHEAD 20" 4-ROW (G0454ZW) |
| 89-1 | P0454ZW089-1 | FLAT HD TORX T20 M6-1 X 15 (G0454ZW) |
| 89-2 | P0454ZW089-2 | CARBIDE INSERT 14 X 14 X 2 (G0454ZW) |
| 90 | P0454ZW090 | L-HANDLE TORX DRIVE T-20 (G0454ZW) |
| 91 | P0454W091 | HEX WRENCH 6MM |
| 92 | P0454W092 | HEX WRENCH 5MM |
| 93 | P0454W093 | HEX WRENCH 4MM |
| 94 | P0454W094 | HEX WRENCH 3MM |
| 95 | P0454ZW095 | T-HANDLE TORX DRIVE T-20 (G0454ZW) |
| 96 | P0454ZW096 | KEY 8 X 7 X 45 (G0454ZW) |
| 97 | P0454ZW097 | HEX WRENCH 8MM |



Table (G0454W & G0454ZW)

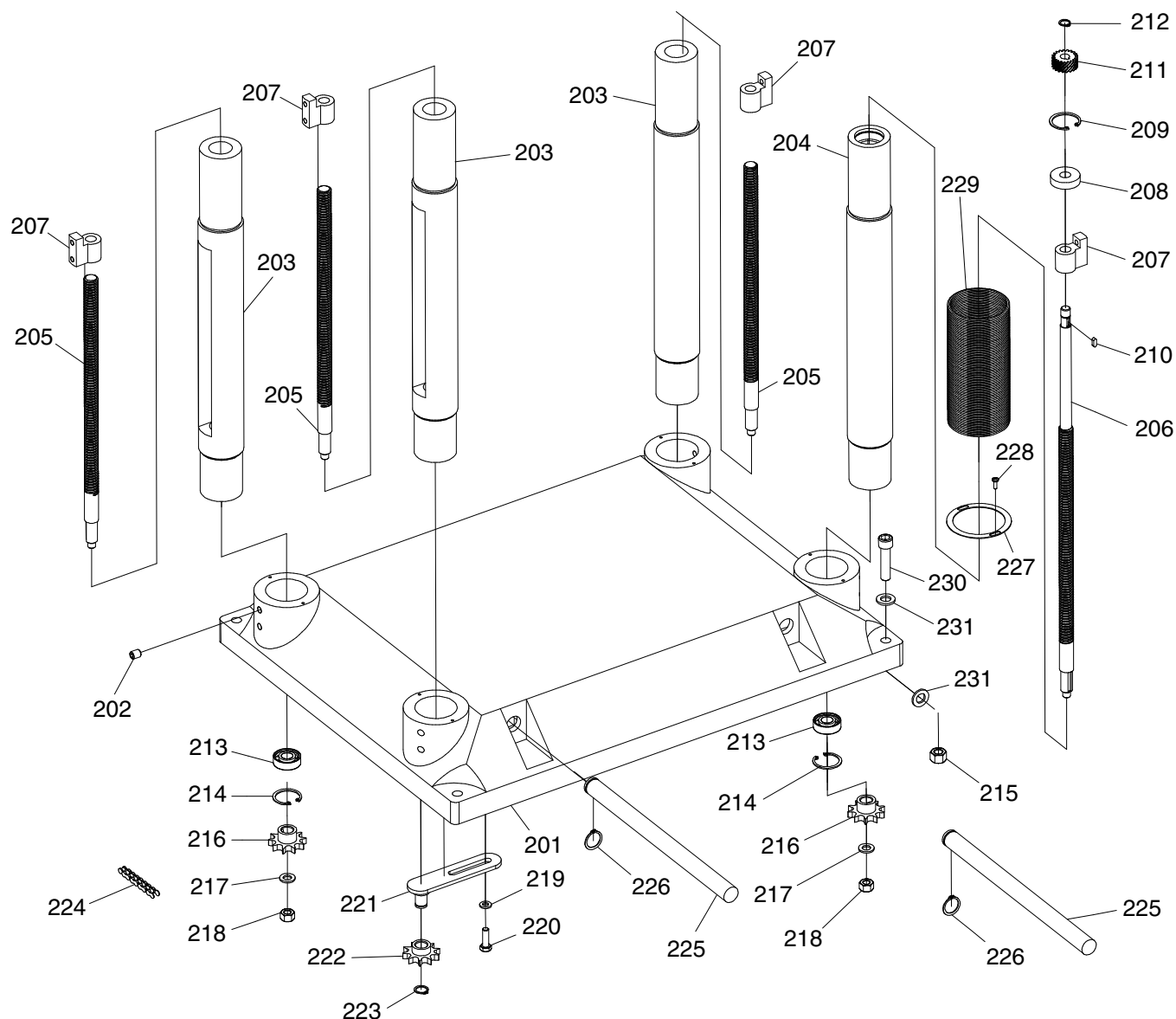


| REF | PART # | DESCRIPTION |
|-----|-----------|----------------------------------|
| 101 | P0454W101 | MAIN TABLE |
| 102 | P0454W102 | FLAT WASHER 5MM |
| 103 | P0454W103 | CAP SCREW M5-.8 X 10 |
| 104 | P0454W104 | BED ROLLER |
| 105 | P0454W105 | BALL BEARING 6201ZZ |
| 106 | P0454W106 | ECCENTRIC SHAFT |
| 107 | P0454W107 | POINTER |
| 108 | P0454W108 | STAR KNOB M12-1.75, 60 DIA X 70L |
| 109 | P0454W109 | GIB |
| 110 | P0454W110 | LOCKING ROD |

| REF | PART # | DESCRIPTION |
|-----|-----------|------------------------|
| 111 | P0454W111 | SET SCREW M6-1 X 12 |
| 112 | P0454W112 | SET SCREW M6-1 X 16 |
| 113 | P0454W113 | CAP SCREW M6-1 X 16 |
| 114 | P0454W114 | TABLE EXTENSION WING |
| 115 | P0454W115 | LOCK SLEEVE |
| 116 | P0454W116 | CAP SCREW M8-1.25 X 20 |
| 117 | P0454W117 | FLAT WASHER 10MM |
| 118 | P0454W118 | LOCK WASHER 10MM |
| 119 | P0454W119 | CAP SCREW M10-1.5 X 25 |



Base (G0454W & G0454ZW)

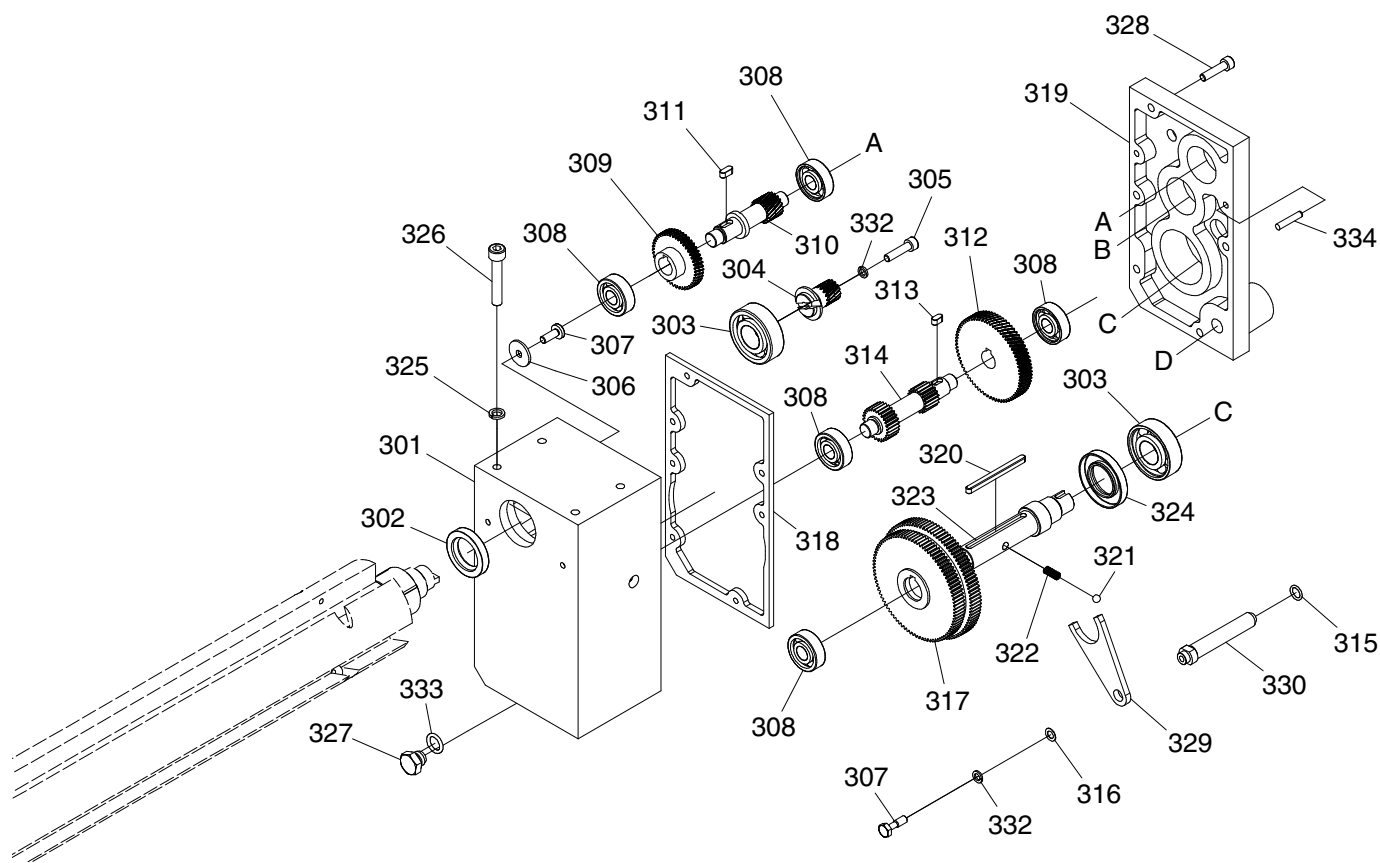


| REF | PART # | DESCRIPTION |
|-----|-----------|-------------------------|
| 201 | P0454W201 | BASE |
| 202 | P0454W202 | SET SCREW M10-1.5 X 12 |
| 203 | P0454W203 | COLUMN |
| 204 | P0454W204 | SCALE COLUMN |
| 205 | P0454W205 | SECONDARY LEADSCREW |
| 206 | P0454W206 | PRIMARY LEADSCREW |
| 207 | P0454W207 | LEADSCREW NUT |
| 208 | P0454W208 | BUSHING |
| 209 | P0454W209 | INT RETAINING RING 38MM |
| 210 | P0454W210 | KEY 4 X 4 X 12 |
| 211 | P0454W211 | GEAR 20T |
| 212 | P0454W212 | EXT RETAINING RING 12MM |
| 213 | P0454W213 | BALL BEARING 6202ZZ |
| 214 | P0454W214 | INT RETAINING RING 35MM |
| 215 | P0454W215 | HEX NUT M12-1.75 |
| 216 | P0454W216 | SPROCKET 10T |

| REF | PART # | DESCRIPTION |
|-----|-----------|-------------------------|
| 217 | P0454W217 | FLAT WASHER 10MM |
| 218 | P0454W218 | HEX NUT M10-1.5 |
| 219 | P0454W219 | FLAT WASHER 8MM |
| 220 | P0454W220 | HEX BOLT M8-1.25 X 20 |
| 221 | P0454W221 | CHAIN TENSION BRACKET |
| 222 | P0454W222 | SPROCKET 10T |
| 223 | P0454W223 | EXT RETAINING RING 15MM |
| 224 | P0454W224 | CHAIN 08A X 166 |
| 225 | P0454W225 | LIFTING BAR |
| 226 | P0454W226 | EXT RETAINING RING 22MM |
| 227 | P0454W227 | DUST BOOT FLANGE CUFF |
| 228 | P0454W228 | CAP SCREW M4-.7 X 10 |
| 229 | P0454W229 | DUST BOOT |
| 230 | P0454W230 | HEX BOLT M12-1.75 X 40 |
| 231 | P0454W231 | FLAT WASHER 12MM |



Gearbox (G0454W & G0454ZW)



REF PART # DESCRIPTION

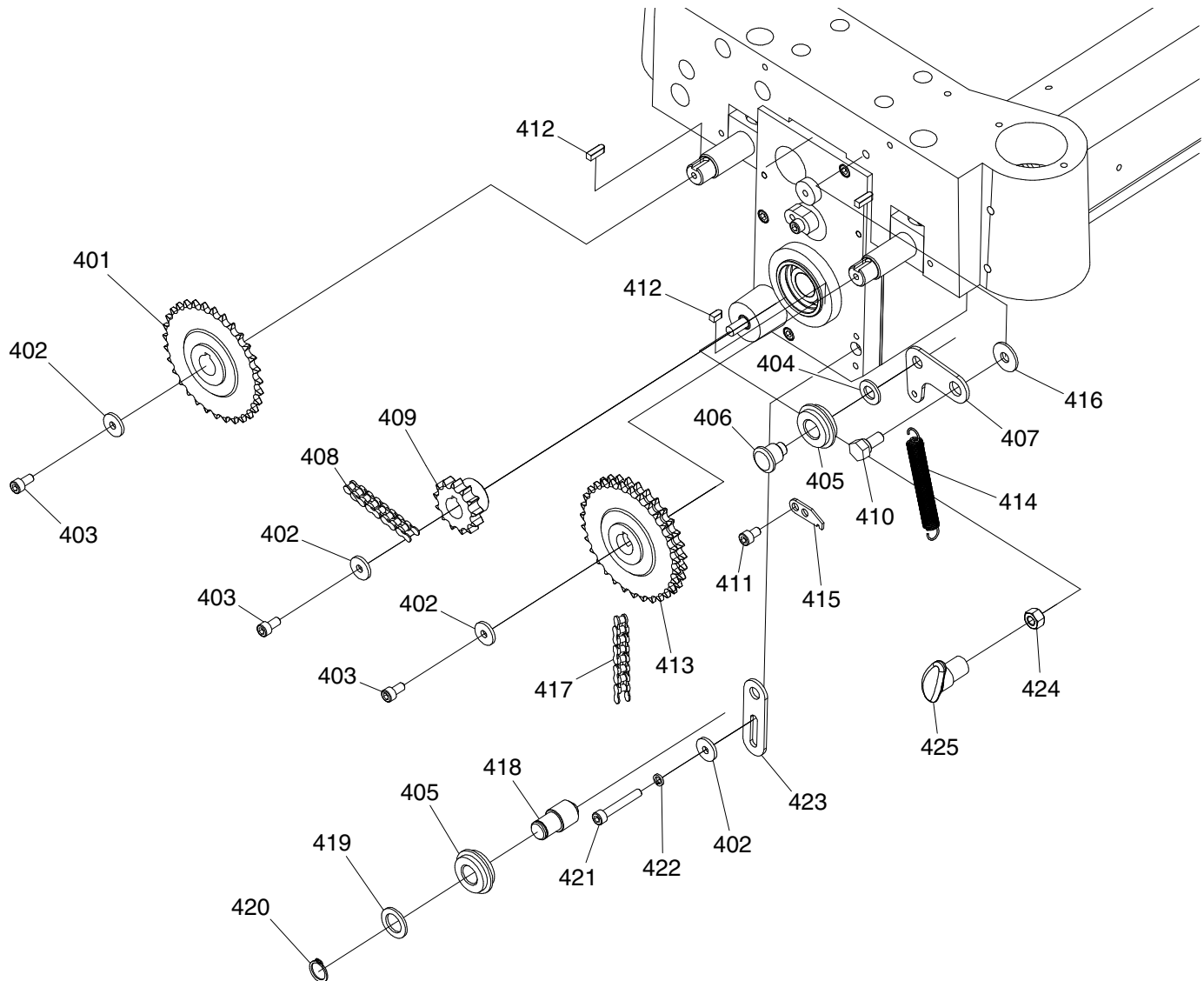
| | | |
|-----|-----------|------------------------|
| 301 | P0454W301 | GEARBOX |
| 302 | P0454W302 | OIL SEAL 25 X 40 X 7 |
| 303 | P0454W303 | BALL BEARING 6204ZZ |
| 304 | P0454W304 | GEAR 15T |
| 305 | P0454W305 | CAP SCREW M6-1 X 25 LH |
| 306 | P0454W306 | FENDER WASHER 6MM |
| 307 | P0454W307 | FLANGE BOLT M6-1 X 12 |
| 308 | P0454W308 | BALL BEARING 6201-OPEN |
| 309 | P0454W309 | GEAR 47T |
| 310 | P0454W310 | GEARED SHAFT 18T |
| 311 | P0454W311 | KEY 5 X 5 X 12 |
| 312 | P0454W312 | GEAR 71T |
| 313 | P0454W313 | KEY 5 X 5 X 10 |
| 314 | P0454W314 | COMBO GEAR 22T/18T |
| 315 | P0454W315 | O-RING 10.8 X 2.4 P11 |
| 316 | P0454W316 | FLAT WASHER 6MM |
| 317 | P0454W317 | COMBO GEAR 92T/96T |

REF PART # DESCRIPTION

| | | |
|-----|-----------|-----------------------------------|
| 318 | P0454W318 | GEARBOX COVER GASKET |
| 319 | P0454W319 | GEARBOX COVER |
| 320 | P0454W320 | KEY 5 X 5 X 40 |
| 321 | P0454W321 | STEEL BALL 6MM |
| 322 | P0454W322 | COMPRESSION SPRING 0.5 X 5 X 20.2 |
| 323 | P0454W323 | SHAFT |
| 324 | P0454W324 | OIL SEAL 25 X 47 X 7 |
| 325 | P0454W325 | LOCK WASHER 8MM |
| 326 | P0454W326 | CAP SCREW M8-1.25 X 45 |
| 327 | P0454W327 | DRAIN PLUG M12-1.25 X 16 |
| 328 | P0454W328 | CAP SCREW M6-1 X 25 |
| 329 | P0454W329 | SHIFTING FORK |
| 330 | P0454W330 | SHIFTING SHAFT |
| 332 | P0454W332 | LOCK WASHER 6MM |
| 333 | P0454W333 | O-RING 9 X 1.8 |
| 334 | P0454W334 | ROLL PIN 5 X 25 |



Feed Gearing (G0454W & G0454ZW)



REF PART # DESCRIPTION

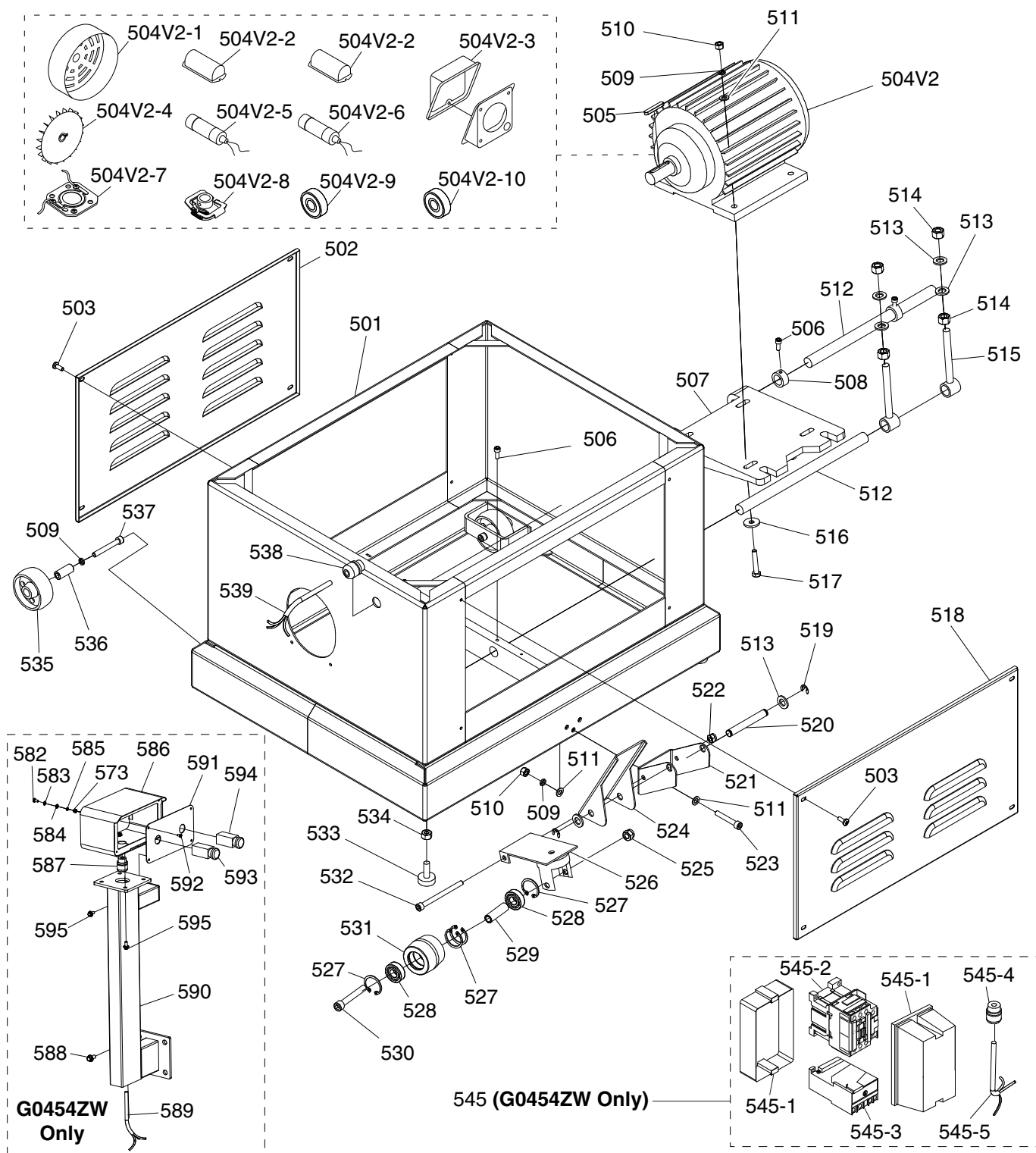
| | | |
|-----|-----------|--------------------------------------|
| 401 | P0454W401 | SPROCKET 32T |
| 402 | P0454W402 | FENDER WASHER 6MM |
| 403 | P0454W403 | CAP SCREW M6-1 X 16 |
| 404 | P0454W404 | FLAT WASHER 10MM |
| 405 | P0454W405 | CHAIN TENSIONER |
| 406 | P0454W406 | CHAIN TENSIONER SHAFT |
| 407 | P0454W407 | CHAIN TENSIONER BRACKET (UPPER) |
| 408 | P0454W408 | CHAIN 06B-1 X 51 |
| 409 | P0454W409 | SPROCKET 14T |
| 410 | P0454W410 | SHOULDER BOLT M8-1.25 X 16, 12 X 3.5 |
| 411 | P0454W411 | CAP SCREW M6-1 X 10 |
| 412 | P0454W412 | KEY 5 X 5 X 15 |
| 413 | P0454W413 | DOUBLE-STRAND SPROCKET 32T |

REF PART # DESCRIPTION

| | | |
|-----|-----------|---------------------------------|
| 414 | P0454W414 | EXTENSION SPRING 1 X 8 X 26.5 |
| 415 | P0454W415 | SPRING BRACKET |
| 416 | P0454W416 | SPACER 8 X 28 X 3MM |
| 417 | P0454W417 | CHAIN 06B-1 X 68 |
| 418 | P0454W418 | SHAFT |
| 419 | P0454W419 | SPACER 16 X 25 X 2MM |
| 420 | P0454W420 | EXT RETAINING RING 15MM |
| 421 | P0454W421 | CAP SCREW M6-1 X 40 |
| 422 | P0454W422 | LOCK WASHER 6MM |
| 423 | P0454W423 | CHAIN TENSIONER BRACKET (LOWER) |
| 424 | P0454W424 | HEX NUT M8-1.25 |
| 425 | P0454W425 | T-KNOB M8-1.25, 70 DIA X 48L |



Cabinet (G0454W & G0454ZW)



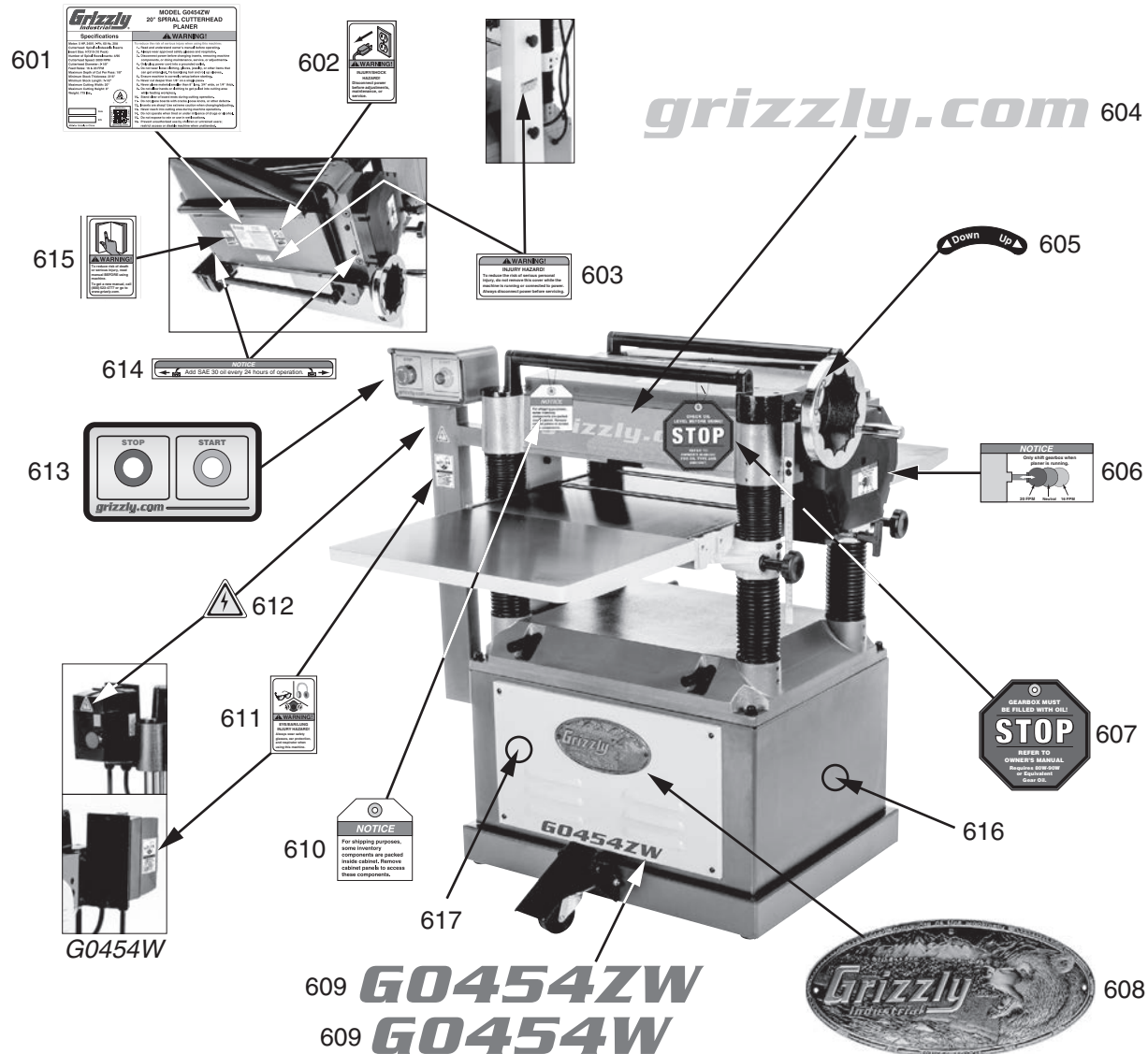
Cabinet (G0454W & G0454ZW) Parts List

| REF | PART # | DESCRIPTION |
|----------|----------------|-------------------------------------|
| 501 | P0454W501 | STAND (G0454W) |
| 501 | P0454ZW501 | STAND (G0454ZW) |
| 502 | P0454W502 | BACK COVER |
| 503 | P0454W503 | PHLP HD SCR M6-1 X 16 |
| 504V2 | P0454W504V2 | MOTOR 5HP 240V 1-PH V2.04.16 |
| 504V2-1 | P0454W504V2-1 | MOTOR FAN COVER |
| 504V2-2 | P0454W504V2-2 | CAPACITOR COVER |
| 504V2-3 | P0454W504V2-3 | MOTOR JUNCTION BOX |
| 504V2-4 | P0454W504V2-4 | MOTOR FAN |
| 504V2-5 | P0454W504V2-5 | S CAPACITOR 400M 250V 1-7/8 X 3-3/4 |
| 504V2-6 | P0454W504V2-6 | R CAPACITOR 50M 450V 1-7/8 X 3-3/4 |
| 504V2-7 | P0454W504V2-7 | CONTACT PLATE |
| 504V2-8 | P0454W504V2-8 | CENTRIFUGAL SWITCH |
| 504V2-9 | P0454W504V2-9 | BALL BEARING 6206ZZ (FRONT) |
| 504V2-10 | P0454W504V2-10 | BALL BEARING 6205ZZ (REAR) |
| 505 | P0454W505 | KEY 8 X 7 X 40 |
| 506 | P0454W506 | CAP SCREW M6-1 X 16 |
| 507 | P0454W507 | MOTOR MOUNT PLATE |
| 508 | P0454W508 | LOCK COLLAR |
| 509 | P0454W509 | LOCK WASHER 8MM |
| 510 | P0454W510 | HEX NUT M8-1.25 |
| 511 | P0454W511 | FLAT WASHER 8MM |
| 512 | P0454W512 | PLATE CONNECTING ROD |
| 513 | P0454W513 | FLAT WASHER 12MM |
| 514 | P0454W514 | HEX NUT M12-1.75 |
| 515 | P0454W515 | ELEVATION BOLT M12-1.75 X 105 |
| 516 | P0454W516 | FENDER WASHER 8MM |
| 517 | P0454W517 | HEX BOLT M8-1.25 X 45 |
| 518 | P0454W518 | FRONT COVER |
| 519 | P0454W519 | E-CLIP 9MM |
| 520 | P0454W520 | WHEEL SHAFT |
| 521 | P0454W521 | PEDAL BRACKET |
| 522 | P0454W522 | LOCK NUT M8-1.25 |
| 523 | P0454W523 | CAP SCREW M8-1.25 X 50 |
| 524 | P0454W524 | FOOT PEDAL |
| 525 | P0454W525 | LOCK NUT M10-1.5 |

| REF | PART # | DESCRIPTION |
|-------|--------------|-----------------------------------|
| 526 | P0454W526 | FOOT PEDAL CASTER BASE |
| 527 | P0454W527 | INT RETAINING RING 35MM |
| 528 | P0454W528 | BALL BEARING 6202ZZ |
| 529 | P0454W529 | WHEEL SLEEVE |
| 530 | P0454W530 | CAP SCREW M10-1.5 X 70 |
| 531 | P0454W531 | LOCKING WHEEL |
| 532 | P0454W532 | CAP SCREW M8-1.25 X 100 |
| 533 | P0454W533 | RUBBER FOOT |
| 534 | P0454W534 | HEX NUT M10-1.5 |
| 535 | P0454W535 | REAR WHEEL |
| 536 | P0454W536 | REAR WHEEL BUSHING |
| 537 | P0454W537 | CAP SCREW M8-1.25 X 60 |
| 538 | P0454W538 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 539 | P0454W539 | MOTOR CORD 12G 3W 38" |
| 545 | P0454ZW545 | MAG SWITCH ASSY TECO HUP-18K |
| 545-1 | P0454ZW545-1 | MAG SWITCH BOX |
| 545-2 | P0454ZW545-2 | CONTACTOR TECO CU-18 220V |
| 545-3 | P0454ZW545-3 | OL RELAY TECO RHU-10/1 17.5-21.5A |
| 545-4 | P0454ZW545-4 | STRAIN RELIEF TYPE-3 M22-1.5 |
| 545-5 | P0454ZW545-5 | MOTOR CORD 12G 3W 38" |
| 573 | P0454ZW573 | HEX NUT M5-.8 |
| 582 | P0454ZW582 | PHLP HD SCR M5-.8 X 10 |
| 583 | P0454ZW583 | EXT TOOTH WASHER 5MM |
| 584 | P0454ZW584 | FLAT WASHER 5MM |
| 585 | P0454ZW585 | LOCK WASHER 5MM |
| 586 | P0454ZW586 | CONTROL PANEL BOX |
| 587 | P0454ZW587 | STRAIN RELIEF TYPE-3 M20-1.5 |
| 588 | P0454ZW588 | FLANGE BOLT M8-1.25 X 16 |
| 589 | P0454ZW589 | SWITCH CORD 20G 5W 82" |
| 590 | P0454ZW590 | CONTROL PANEL PEDESTAL ARM |
| 591 | P0454ZW591 | CONTROL PANEL |
| 592 | P0454ZW592 | PHLP HD SCR M4-.7 X 8 |
| 593 | P0454ZW593 | STOP BUTTON GLY37 22MM |
| 594 | P0454ZW594 | START BUTTON GLY37 22MM |
| 595 | P0454ZW595 | FLANGE BOLT M6-1 X 12 |



Labels (G0454W & G0454ZW)



| REF | PART # | DESCRIPTION |
|-------|--------------|-------------------------------------|
| 601V2 | P0454W601V2 | MACHINE ID LABEL (G0454W) V2.09.16 |
| 601V2 | P0454ZW601V2 | MACHINE ID LABEL (G0454ZW) V2.09.16 |
| 602 | P0454W602 | DISCONNECT POWER LABEL |
| 603 | P0454W603 | BELT COVER LABEL |
| 604 | P0454W604 | GRIZZLY.COM LABEL |
| 605 | P0454W605 | HANDWHEEL ROTATION LABEL |
| 606 | P0454W606 | FEED SELECTOR LABEL |
| 607 | P0454W607 | STOP CHECK OIL TAG |
| 608 | P0454W608 | GRIZZLY NAMEPLATE |
| 609 | P0454W609 | MODEL NUMBER LABEL (G0454W) |

| REF | PART # | DESCRIPTION |
|-----|------------|------------------------------------------|
| 609 | P0454ZW609 | MODEL NUMBER LABEL (G0454ZW) |
| 610 | P0454W610 | INVENTORY COMPONENTS SHIPPING NOTICE TAG |
| 611 | P0454W611 | EYE/EAR/LUNG INJURY HAZARD LABEL |
| 612 | P0454W612 | ELECTRICITY LABEL |
| 613 | P0454ZW613 | CONTROL PANEL LABEL |
| 614 | P0454W614 | CHECK OIL NOTICE LABEL |
| 615 | P0454W615 | READ MANUAL LABEL |
| 616 | P0454W616 | GRIZZLY GREEN TOUCH-UP PAINT |
| 617 | P0454W617 | GRIZZLY BEIGE TOUCH-UP PAINT |

⚠ WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine **MUST** replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.





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

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: _____

FOLD ALONG DOTTED LINE



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Stamp
Here



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



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Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY & 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.



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