RIKON POWER TOOLS ®

25-212H

12" Planer / Jointer



Operator's Manual

Record the serial number and date of purchase in your manual for future reference.

The serial number can be found on the specification label on the rear of your machine.

Serial Number: _____ Date of purchase: _____

For technical support or parts questions, email techsupport@rikontools.com or call toll free at (877)884-5167

TABLE OF CONTENTS

Specifications	2
Safety Instructions	3 - 6
Getting To Know Your Machine	7
Contents of Package	7
Installation	8
Assembly	8 - 9
Adjustments	10 - 19
Operation	20 - 22
Accessories	22
Maintenance	23
Warranty	23
Troubleshooting	24 - 25
Electricals & Wiring Diagram	5 & 25
Parts Diagrams & Parts Lists	26 - 39

SPECIFICATIONS

Motor	3 HP, TEFC
Motor Speed (no load)	3,400 RPM
Volts	230 V
Amps, Hertz	12 A, 60 Hz
Cutterhead Diameter	2-3/4" (69.85 mm)
Cutterhead Speed (RPM / CPM)	5,500 RPM / 16,500 CPM
25-212H Number of Carbide Inserts, 4-sided	34
25-212H Knife Insert Size (L x W x T)	15mm x 15mm x 2.5mm
Maximum Depth of Cut (Planing & Jointing)	1/8" (3.18 mm)
Maximum Cutting Width (Planing & Jointing)	12" (304.8 mm)
Maximum Cutting Depth (Planing Height)	9" (228 mm)
Planer Table Size	21-1/2" x 13-1/8" (546.10 x 333.38 mm)
Planer Table Size w/Extension	35-1/2" x 13-1/8" (901.70 x 333.38 mm)
Feed Speed Planing SF/min	23 (7 SM/min)
Jointer Table Size	12-1/4" x 55-1/2" (311 x 1410 mm)
Jointer Table Height	33-1/2" (850 mm)
Fence Size	6" x 43-1/4" (152.4 x 1100 mm)
Fence Tilting Degree	0 - 45°
Dust Port	4" Diameter (100 mm)
Dust Collection Required CFM	650
Noise Level (no load) 3ft/1M	≤76dB
Overall Size (LxWxH)	55-3/4" x 31" x 39-1/2" (1410 x 787.40 x 1003 mm)
Base Size	21-1/2” x 19” (546.10 x 482.60 mm)
Net Weight	509 lbs (230.88 kg)

NOTE: The specifications, photographs, drawings and information in this manual represent the current models when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Rikon Power Tools, Inc. to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of these machines.

SAFETY INSTRUCTIONS

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. **The following instructions must be followed at all times.** Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.
There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

SAFETY SYMBOLS

SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, or CAUTION. This symbol may be used in conjunction with other symbols or pictographs.

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

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

CAUTION Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE: Shown without Safety Alert Symbol indicates a situation that may result in property damage.

GENERAL SAFETY

KNOW YOUR POWER TOOL. Read the owner's manual carefully. Learn the tool's applications, work capabilities, and its specific potential hazards.

BEFORE USING YOUR MACHINE

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.

1. Some dust created by using power tools 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.

2. **READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.

3. **GROUND ALL TOOLS.** If the tool is supplied with a 3 prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on the following pages.

4. **AVOID A DANGEROUS WORKING ENVIRONMENT. DO NOT** use electrical tools in a damp environment or expose them to rain.

5. **DO NOT** use electrical tools in the presence of flammable liquids or gases.

6. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.

7. **KEEP VISITORS AND CHILDREN AWAY. DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.

8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

9. **WEAR PROPER CLOTHING. DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

11. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

SAFETY INSTRUCTIONS

12. **KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**

13. **AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the “OFF” position before plugging in the power cord to the electrical receptacle.

14. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning “ON” the machine.

15. **USE ONLY RECOMMENDED ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

16. **NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to the “OFF” position. **DO NOT** leave the tool until it has come to a complete stop.

17. **DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool.

18. **DO NOT** store anything above or near the tool where anyone might try to stand on the tool to reach it.

19. **MAINTAIN YOUR BALANCE. DO NOT** extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. **MAINTAIN TOOLS WITH CARE.** Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

21. **EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

22. **DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**

23. **SECURE ALL WORK.** Use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.

24. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.**
A moment of inattention while operating power tools may result in serious personal injury.

25. **ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES**, including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

26. **USE A PROPER EXTENSION CORD IN GOOD CONDITION.** When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. The table on the following page shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.
USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL’S PLUG.

27. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this product is available from:

- Power Tool Institute
  1300 Summer Avenue
  Cleveland, OH 44115-2851
  www.powertoolinstitute.org

- National Safety Council
  1121 Spring Lake Drive
  Itasca, IL 60143-3201
  www.nsc.org

- American National Standards Institute
  25 West 43rd Street, 4th Floor
  New York, NY 10036
  www.ansi.org

- ANSI 01.1 Safety Requirements for
  Woodworking Machines and the
  U.S. Department of Labor regulations
  www.osha.gov

28. **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others.

SAFETY INSTRUCTIONS

ELECTRICAL SAFETY

⚠ WARNING:

THIS TOOL REQUIRES THE INSTALLATION OF A 220V PLUG (NOT INCLUDED), AND MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

IN THE EVENT OF A MALFUNCTION OR BREAK-DOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and requires a grounding plug (not included). The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY ANY PLUG. If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

CHECK with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.

This tool is intended for use on a circuit that has a 220 volt electrical receptacle. **FIGURE A** shows the type of the 220v, 3-wire electrical plug and electrical receptacle that has a grounding conductor that is required.

Sample of 220 volt plug required for this machine.



NEMA 6-20P

Consult a qualified electrician if the distance of the machine from the electrical panel is greater than 30 feet.

FIG. A

EXTENSION CORDS

⚠ WARNING:

USE OF AN EXTENSION CORD WITH THIS MACHINE IS NOT RECOMMENDED. FOR BEST POWER AND SAFETY, PLUG THE MACHINE DIRECTLY INTO A DEDICATED GROUNDED ELECTRICAL OUTLET THAT IS WITHIN THE SUPPLIED CORD LENGTH OF THE MACHINE.

IF AN EXTENSION CORD NEEDS TO BE USED, IT SHOULD ONLY BE FOR LIMITED OPERATION OF THE MACHINE. THE EXTENSION CORD SHOULD BE AS SHORT AS POSSIBLE IN LENGTH, AND HAVE A MINIMUM GAUGE SIZE OF 14AWG.

USE ONLY A 3-WIRE EXTENSION CORD THAT HAS THE PROPER TYPE OF A 3-PRONG GROUNDING PLUG THAT MATCHES THE MACHINE'S 3-PRONG PLUG AND ALSO THE 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. *

⚠ WARNING: Check extension cords before each use. If damaged replace immediately. Never use a tool with a damaged cord, since touching the damaged area could cause electrical shock, resulting in serious injury.

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

⚠ WARNING: Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with your power tool.

*** Canadian electrical codes require extension cords to be certified SJT type or better.**

**** The use of an adapter in Canada is not acceptable.**

C ETL CM US LISTED

Intertek

THIS SYMBOL DESIGNATES THAT THIS TOOL IS LISTED BY THE INTERTEK TESTING SERVICES, TO UNITED STATES AND CANADIAN STANDARDS.

SAFETY INSTRUCTIONS

SPECIFIC SAFETY INSTRUCTIONS FOR PLANER / JOINTERS

This machine is intended for the surfacing of natural, solid woods. The permissible workpiece dimensions must be observed (see Technical Specification). Any other use not as specified, including modification of the machine or use of parts not tested and approved by the equipment manufacturer, can cause unforeseen damage and invalidate the warranty.

ATTENTION: Use of this planer/jointer still presents risks that cannot be eliminated by the manufacturer. Therefore, the user must be aware that wood working machines are dangerous if not used with care and all safety precautions are adhered to.

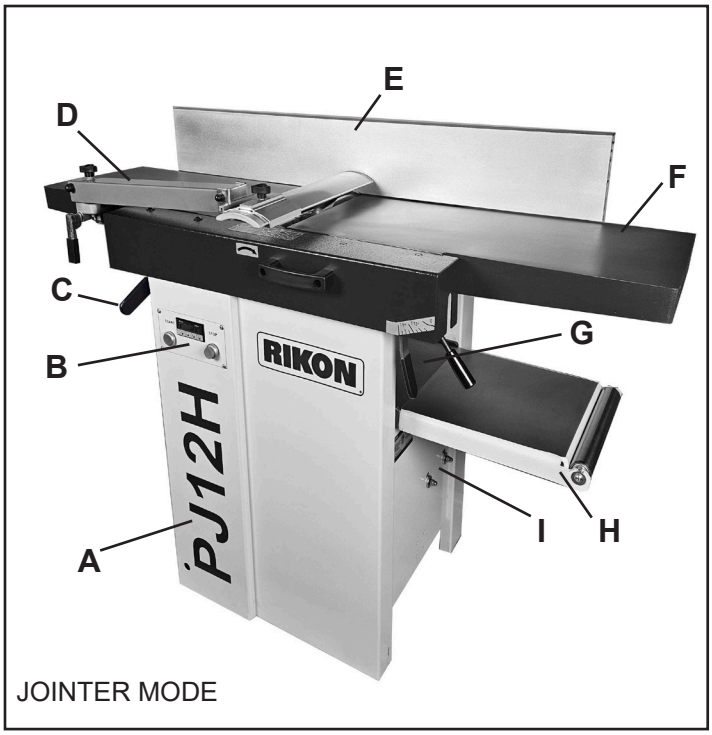
1. Do not operate this machine until you have read all of the following instructions.
2. Do not attempt to operate this machine until it is completely assembled.
3. Do not turn ON this machine if any pieces are damaged or missing.
4. This machine must be properly grounded.
5. If you are not familiar with the operation of the machine, obtain assistance from a qualified person.
6. Always wear approved, safety protective eye wear and hearing protection when operating this machine.
7. Always wear a dust mask and use adequate dust collection and proper ventilation.
8. Do not wear loose clothing or jewelry when operating this machine. Keep long hair tied back.
9. Always make sure the power switch is in the OFF position prior to plugging in the machine.
10. Always make sure the power switch is in the OFF position and the machine is unplugged when doing any cleaning, assembly, setup operation, or when not in use.
11. Make sure all safety guards and hardware are securely tightened before operating the machine.
12. Regularly check that the blades are locked tight in the cutterhead.
13. Always keep hands and fingers away from the cutterhead, chip exhaust opening, feed rollers, belts and pulleys to prevent injury. Use push blocks when jointing wood shorter than 12" long, plus any narrow or thin stock.
14. Never joint wood less than 8" long, widths under 3/4", or material less than 1/4" thick.
15. Never make cuts deeper than 1/8”. Multiple cuts, 1/16" or less, produce better finish results.
16. Make sure there are no loose knots, nails, staples, dirt or foreign objects in the workpiece to be surfaced.
17. Use extra caution with large, warped, very small or awkward workpieces. Joint warped boards flat before planing.
18. Use extra supports (roller stands, saw horses, tables etc, for any workpieces large enough to tip when not held down to the table top surfaces.
19. Surface wood in the same direction of the grain, not across the grain. Never plane end cuts or end grain.
20. Joint and plane only one workpiece at a time. Vary the feeding of the workpieces along the cutterhead, center/left/right, so that all of the knives get used and thus remain sharp, longer.
21. Never reach inside of a running machine, and avoid awkward operations and hand positions where a sudden slip could cause fingers or a hand to move into the cutterhead.
22. Do not clear a jammed workpiece while the machine is running. Stop the machine, unplug it from the power source, and then remove the jammed workpiece. Lowering the table may be necessary to dislodge the workpiece.
23. Keep your face and body to one side of the machine during use, out of line with a possible 'kick back' (lumber caught in by the rotating cutterehead and thrown back towards the operator).
24. The use of any accessories or attachments not recommended may cause injury to you and damage your machine.
25. Sharpen or replace dull or chipped knives immediately, as injury to the user, or the machine, may result.
26. Replacement knives/inserts should be from, or through a source recommended by the manufacturer.
27. Remove material or debris from the work area. Keep work area neat and clean.

This owner’s manual is not a teaching aid and is intended to show assembly, adjustments, and general use.

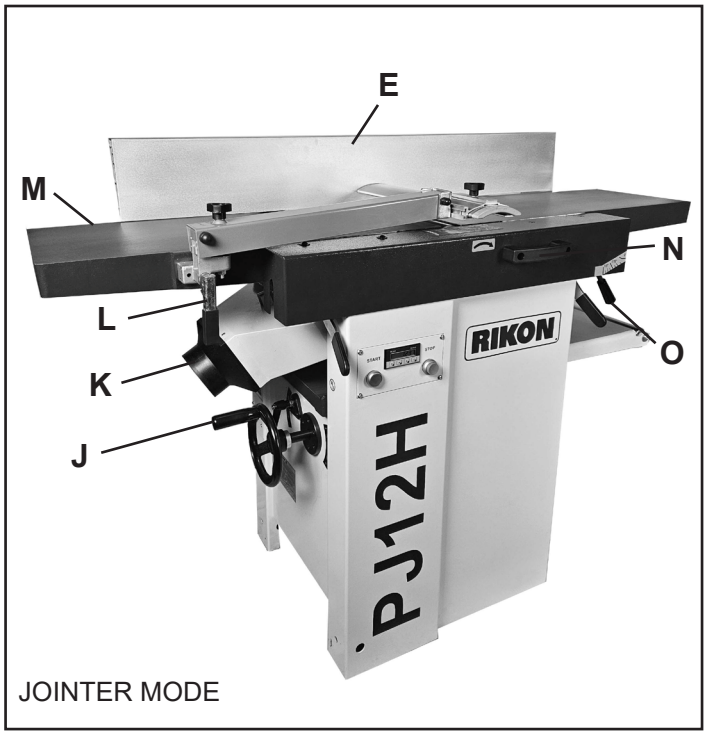
California Proposition 65 Warnings

⚠ **WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood

GETTING TO KNOW YOUR MACHINE

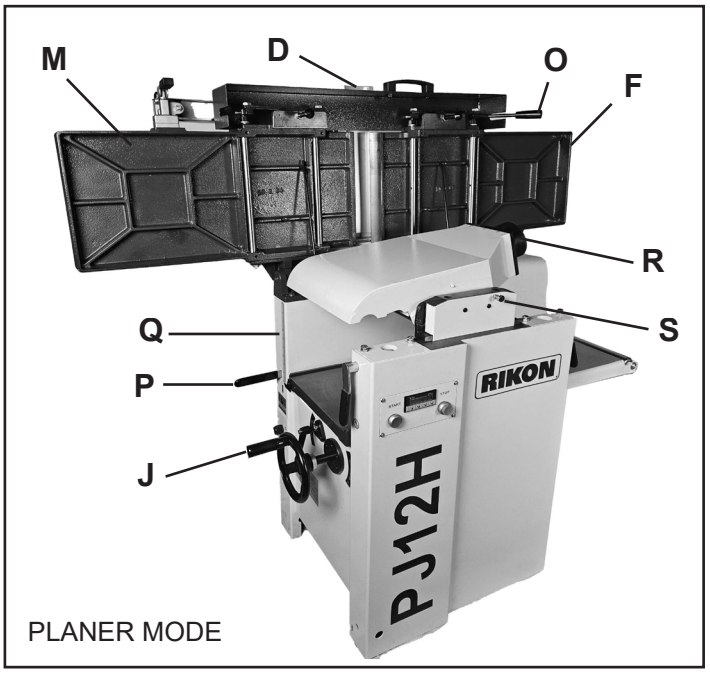


JOINTER MODE



JOINTER MODE

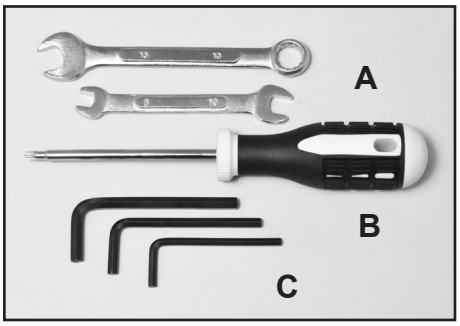
A. Cabinet
B. ON/OFF Switch
C. Jointer Table Lock Handle
D. Cutterhead Guard Assembly
E. Jointer Fence
F. Infeed Table
G. Planer Table
H. Planer Outfeed Table
I. Motor Mounting Fasteners
J. Planer Table Height Adjustment Wheel
K. Dust Port (Jointing Position)
L. Guard Release Lever Handle
M. Outfeed Table
N. Jointer Table Lift Handle
O. Jointer Table Height Adjustment Lever
P. Planer Drive Belt Release Lever
Q. Planer Height Scale
R. Dust Port (Planing Position)
S. Dust Port Lock & Release Knob



PLANER MODE

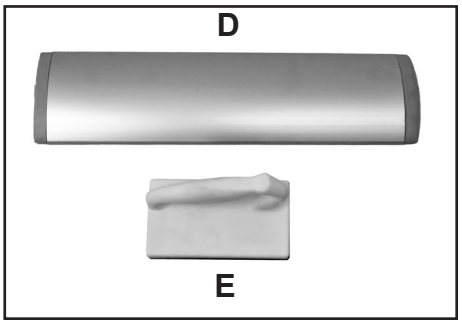
CONTENTS OF PACKAGE

Carefully unpack your machine from its carton. Check for any shipping damage, and make sure the following parts are included. If any parts are missing or broken, please call RIKON Customer Service (877-884-5167) as soon as possible for replacements. DO NOT turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.



LIST OF LOOSE PARTS

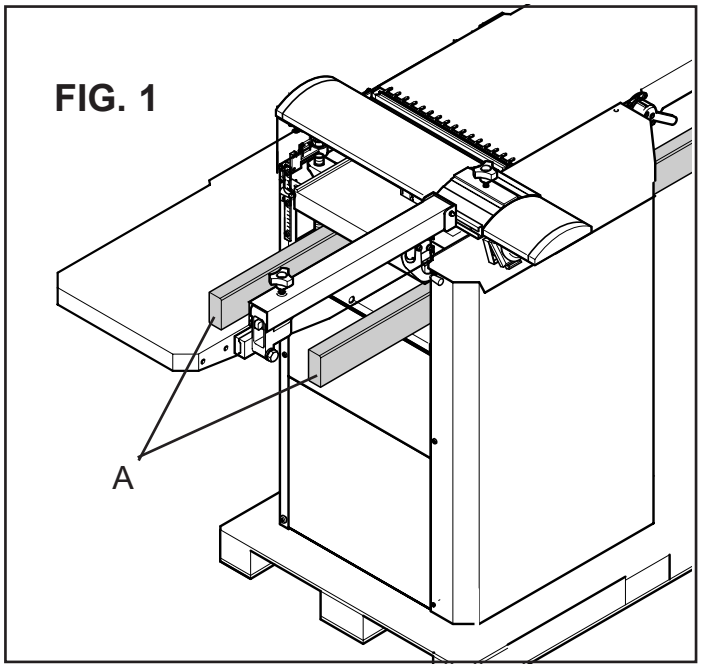
A. Wrenches - 13mm & 10/8mm
B. Star T25 Screwdriver
C. Hex Wrenches - 4, 5 & 6mm
D. Cutterhead Guard Cap
E. Push Block



INSTALLATION

MOVING & INSTALLING THE PLANER

⚠ CAUTION When moving the planer/jointer, DO NOT carry it with the infeed and outfeed rollers. Use a forklift, or pallet jack under the machine to lift and move the planer, or with straps or battens placed under the planer bed. FIG. 1, A.

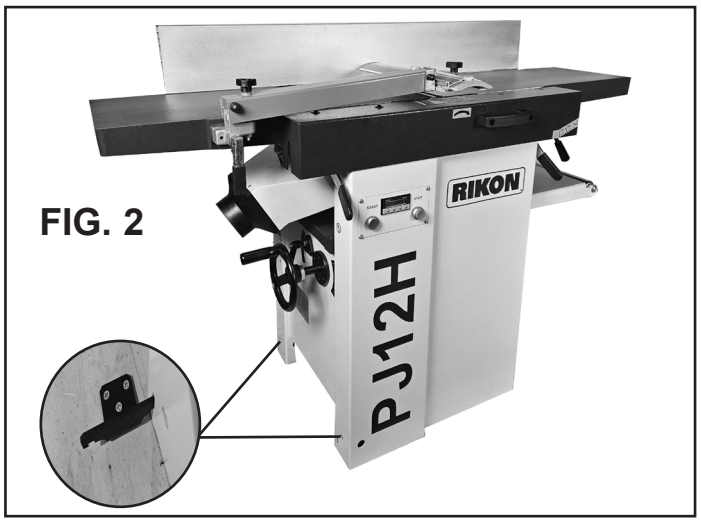


1. Position the machine on a solid, level foundation that is located in an area that ample space in front and in back of the planer/jointer for the moving of lumber to be milled. Align the machine so that during use, any kickback will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions.

2. The machine is firmly secured to a pallet with 4 plates and 12 screws. Once the planer/jointer is in the area where it will reside, unsecure it from the pallet. FIG. 2.

3. Carefully move the machine off the pallet by pushing the lower body/frame of the machine. Do not push or lift the planer/jointer by the extension table, upper lid area, or by the jointer infeed & outfeed tables as this may damage the machine.

4. Once in place in your shop, secure the machine to the floor with lag screws (not supplied).



ASSEMBLY

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE 'OFF' POSITION UNTIL ASSEMBLY IS COMPLETE.

Unpacking and Clean-up

1. Carefully remove all contents from the shipping carton. Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly. If any parts are missing or broken, please call RIKON Customer Service (877-884-5167) as soon as possible for replacements. DO NOT turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.

2. Report any shipping damage to your local distributor. Take photographs for any possible insurance claims.

3. Clean all rust protected surfaces with ordinary house hold type grease or spot remover. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces.

4. Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean dry cloth. Be careful when reaching inside of the planer as the knives are sharp and may cause injury if touched.

5. Set the packing material and shipping carton aside. Do not discard these materials until the machine has been set up and is running properly. If there is an issue, the packing materials can be re-used for shipping purposes.

ASSEMBLY

INSTALLING THE POWER PLUG

The Planer/Jointer is shipped *without* an electrical 220 volt plug, so that the correct plug type can be installed to match the 220 Volt outlet in your shop.

WARNING: Please see page 5 for information on electrical safety and proper plug connections and usage.

The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances. **CHECK** with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

This tool is intended for use on a circuit that has a 220 volt electrical receptacle. **FIGURE 3** shows the type of the 220v, 3-wire electrical plug and electrical receptacle that has a grounding conductor that is required.

Sample of 220 volt plug required for this machine.



NEMA 6-20P

Consult a qualified electrician if the distance of the machine from the electrical panel is greater than 30 feet.

FIG. 3



FIG. 4

INSTALLING THE CUTTERHEAD GUARD

The cutterhead guard is shipped in two parts; the Arm and Bracket Assembly pre-assembled on the outfeed table, and the Guard separately. When fully assembled, the cutterhead guard can be adjusted to provide maximum protection to the user from the cutterhead's sharp insert knives. Always operate the machine with the guard properly adjusted for the width and thickness of your stock being jointed. Keep the guard covering the full cutterhead when the machine is not in use to avoid any accidents.

WARNING: When working on, or near the machine's bed, avoid the risk of personal injury by cuts that may result from touching the knife inserts' sharp edges!

1. Insert the 16-7/8" long x 4" wide Cutterhead Guard (#371) through the guard assembly Sleeve (#373). The guard will slide back and forth to cover the cutterhead, and can be secured in position with the sleeve's top Handle/ Knob (#375). FIG. 4.

The whole Cutterhead Guard Assembly can also be rotated off of the jointer table to give unrestricted access to the cutterhead for surfacing lumber at the maximum jointer width, or for working on the cutterhead.

1. Release the spring-loaded Handle (#385, FIG. 5, A), and the guard assembly will move forward and off of the Locking Support (#387) that is bolted to the outfeed table.

2. With its release from the support, the whole guard assembly can now be rotated to the left where it will hang down out of the way below the jointer table. FIG. 6

3. Reverse the process to re-install the guard assembly onto the jointer table for normal surfacing protection.

NOTE: Extra care must be taken when the Cutterhead Guard Assembly is rotated off the machine, as the sharp knives of the cutterhead are exposed!

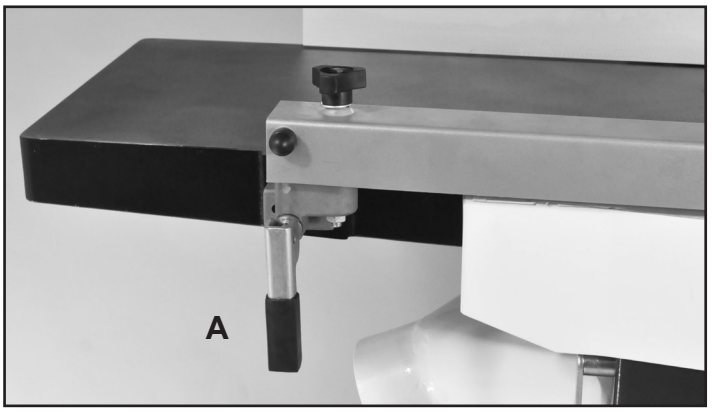


FIG. 5



FIG. 6

ADJUSTMENTS

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

JOINTER FENCE ADJUSTMENT

The jointer fence provides lateral support for the workpiece when surface planing.

1. After loosening the Locking Handles (#259, FIG.7, A), the jointer fence can be moved forward or backwards over the jointer bed and cutterhead, to match the workpiece width.

2. The jointer fence can be tilted to any angle between 90° (0°) to 45° (135°). To adjust the fence angle, loosen the large Locking Handle (#256, B) by pulling it up. The Angle Scale (#258, C) will give the approximate angle of fence tilt. For setting precise angles, a calibrated gauge should also be used to set the fence.

3. Tilt the fence to the angle desired, then re-tighten the locking handle (B), by pushing it down, to ensure the fence is securely in position.

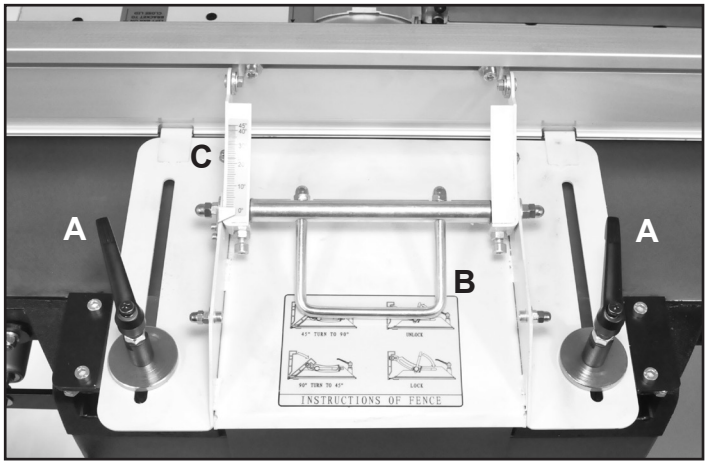


FIG. 7

SETTING THE FENCE TO 90° & 45°

4. To set the fence at 90° to the table surface, set a try square (FIG. 8, D) against the fence extrusion (E).

5. Lightly loosen the two Hex Bolts (#263, F) on the rear of the curved Arm Supports (#252 & 264, G). Adjust the hex bolts until the fence is square with the jointer table.

6. When the fence extrusion is exactly 90°, tighten the bolt's hex Nuts (#253) to secure the fence in position. In the future when the angle is changed, the fence will always set itself at 90° when it tilts up and engages the two set Hex Bolts.

7. To set the fence at exactly 45°, set a miter square (FIG. 9, H) against the fence extrusion. NOTE: This angle is actually 135° from the jointer table.

8. There are two Hex Screws (#257, FIG 9, I) mounted through the vertical sides of the Support Plate (#265,J). These screws touch the rear of the Support Arms (#252 & 264) when the fence is at the 45° setting. Adjust the hex screws until the fence extrusion is exactly set at 45°, then secure the bolts in position with their Cap Nuts.

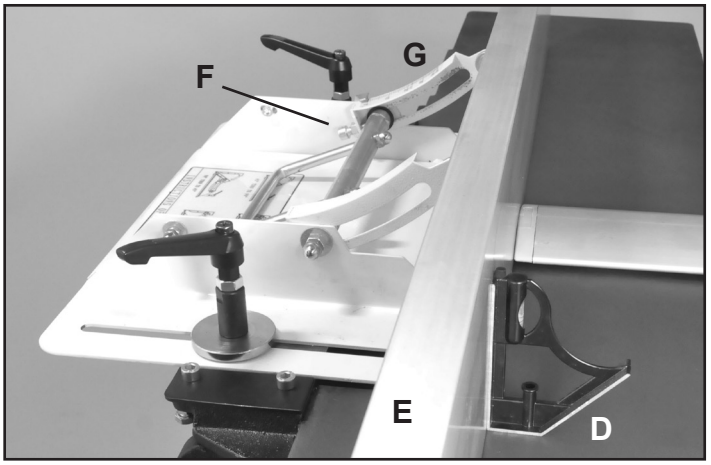


FIG. 8



FIG. 9

INFEED TABLE HEIGHT ADJUSTMENT

The jointer's Infeed Table (#114, FIG. 10, K) is adjusted up and down by using the adjusting Lever (L). This regulates the cutting depth for edge jointing and surface planing.

1. Move the Lever (#103, L) to raise or lower the table.

2. The Scale (M), located next to the adjusting lever, corresponds to the depth of cut - how much material is being removed - from 0" to 1/8".

NOTE: Never make cuts deeper than 1/8". Multiple cuts, 1/16" or less, produce better finish results.



FIG. 10

ADJUSTMENTS

PLANER TABLE HEIGHT ADJUSTMENT

Height adjustment of the planer's table is made with the Hand wheel (#168, FIG. 11, A). One full turn of the crank changes the height of the Planer's Table (#175, B) by 5/32".

- Clockwise Turning = raises the planer bed
- Counter-Clockwise Turning = lowers the planer bed.

The planing thickness is indicated on the Scale (#19, C).

⚠ CAUTION A maximum of 1/8" material can be removed in one pass through the planer. Do not exceed this depth of cut or damage to your machine may result. The maximum thickness of stock to be planed is 7-7/8", and the maximum width of boards is 12" wide.

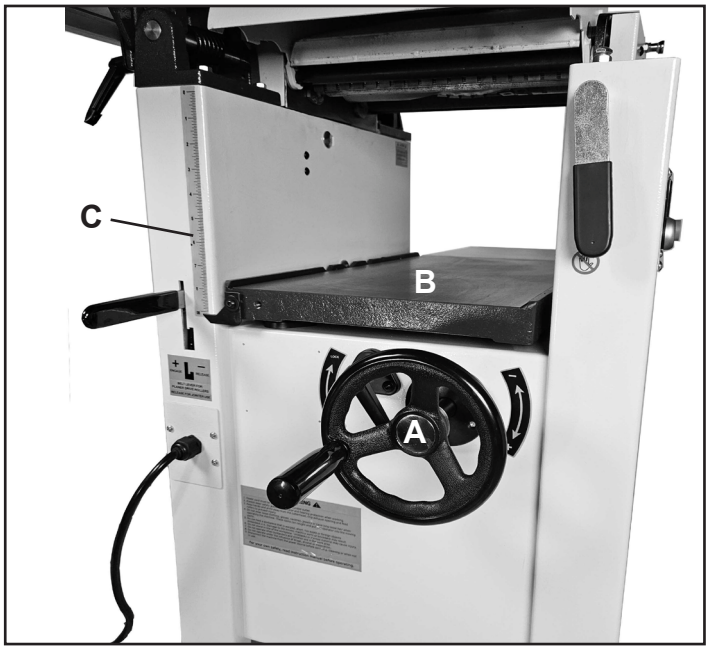


FIG. 11

ADJUSTING THE EXTENSION TABLE

A cast iron Extension Table with a singler roller is supplied pre-installed on the planer to help support lumber as it exits the machine during use. FIG. 12.

1. The roller on the extension table should be level with the planer's table. Use a straight edge to check and confirm that the extension table is properly aligned in height with the planer's table.

2. If the extension table is properly aligned, make sure that the bolts that secure the extension table to the planer's table are tightened. If the extension table is not level, loosen the bolts so that the extension table can be positioned correctly level with the planer's table.

3. Once the extension table is positioned level with the planer's table, secure it in place by tightening the fasteners.

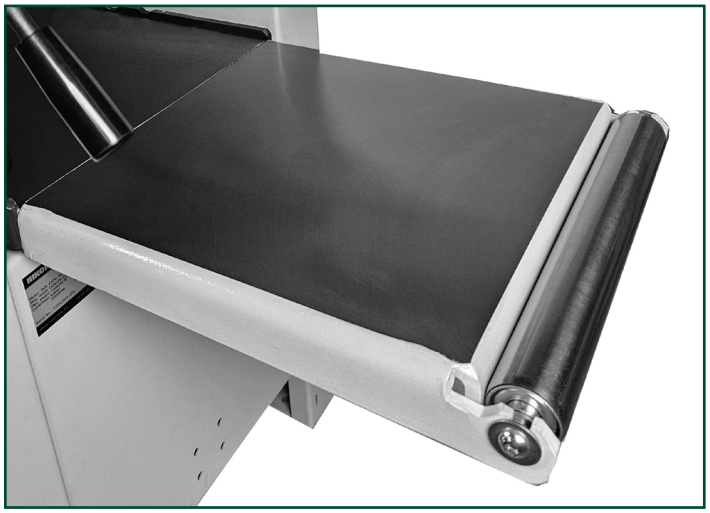


FIG. 12

ON/OFF SWITCHES

The planer is equipped with a safety, push button ON/OFF Switch located on the front of the machine. FIG. 13.

- Push the top green button to start the planer.
- Push the lower red button to stop the planer.

An additional automatic OFF, safety micro-switch (#27) is located under the machine's rear, Right Guard (#91). Should the cover ever be opened while the machine is running, this switch will stop the machine from operating.

NOTE: When working on the planer, the machine should always have the red, OFF button engaged and the cord unplugged from the power source.

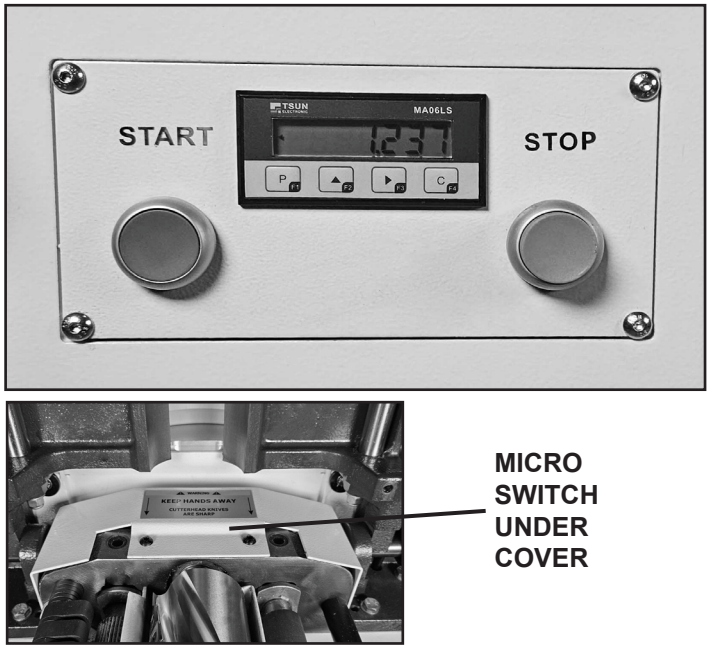


FIG. 13

ADJUSTMENTS

⚠ WARNING **THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ADJUSTMENTS ARE COMPLETE.**

ROTATING OR REPLACING KNIFE INSERTS

This machine has a helical cutterhead with four rows of carbide knife inserts. Each of the 34 inserts on the cutterhead are indexed and have four sharpened sides. If the knives become dull, or one becomes nicked, simply loosen the retaining screws with the supplied star head screwdriver, lift up and rotate the inserts to a new sharpened edge. No setting is required, as the cutterhead has been machined to automatically index and set the inserts in proper position for use. When all four sides of an insert are dull, the insert can be easily removed and a new insert placed in the location.
To rotate or remove and install an insert knife:

1. Unplug power cable.

2. Remove the Screw (#96), that holds the Insert in the cutterhead, and the Insert Knife (#97). FIG. 14.

3. While the insert is removed, clean any resin build-up or trapped dust from the surfaces of the cutterhead with a suitable solvent. A tooth brush works well for safe cleaning around the sharp inserts. Any accumulated dust can affect the seating of the insert in the cutterhead.

4. Rotate the insert so that a new sharpened edge is in position. The inserts have a indication mark on their top surface corner, so that you can reference the positioning of the insert's dulled or sharpened edges. FIG. 14, 15, 16.

5. Tighten the insert's set screw to lock the insert back in position. DO NOT over-tighten the screw or damage to the insert may result. Torque to 50-55 in/lbs.

6. Plug in the power cable when you are ready to resume jointing and planing.

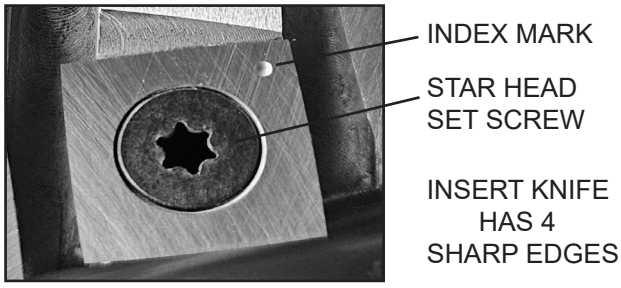


FIG. 14

⚠ CAUTION Wear gloves when changing knife inserts to avoid the risk of personal injury by cuts that may result from touching the sharp edges!

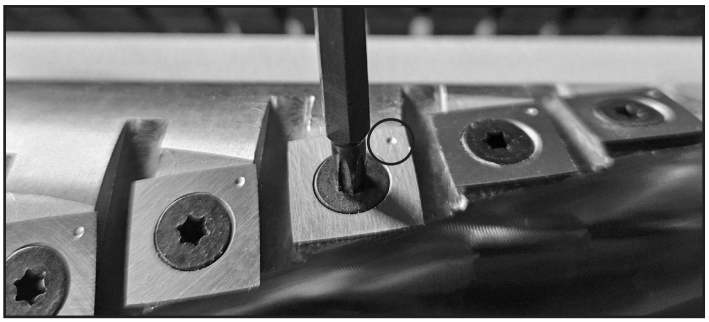


FIG. 15

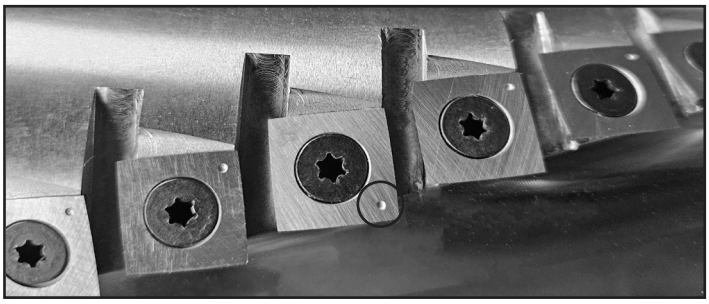


FIG. 16

JOINTER TABLE ALIGNMENT

For the best surfacing of workpieces, the jointer's infeed and outfeed tables must be set at the same level to form a large 'flat' surface. These tables must also be in alignment with the cutterhead for true surfacing, when you measure the flatness of a board from side-to-side and end-to-end.

The machine has been factory set before shipping - the infeed table being set to the cutterhead knives, and then the outfeed table set to the infeed table. But once the machine has been set in its final location in the shop, the table alignments should be checked to make sure that there has been no movement during its handling.

1. Position and lock the infeed table at its high '0" ' setting, so that it should be level with the outfeed table.

2. Slide the fence and cutterhead guard to the sides and off the tables to reveal the whole table surfaces. FIG. 17.



FIG. 17

Continued on page 13

ADJUSTMENTS

Table Alignment continued from page 12

NOTE: It may be easier to remove the fence assembly and guard for this exercise.

3. Rotate the cutterhead so that the knife inserts do not interfere with the measurements that will be taken.

4. With a long metal straight edge, place it length-wise along the outfeed table so that it extends onto the infeed table. The straight edge should lie level across BOTH tables. If it does, the tables are true to each other, and the machine guards can be re-set for use. FIG. 18.
If the straight edge does not lie flat across both tables, then the tables must be adjusted. Tune the outfeed table, as the infeed table was factory set to the cutterhead.

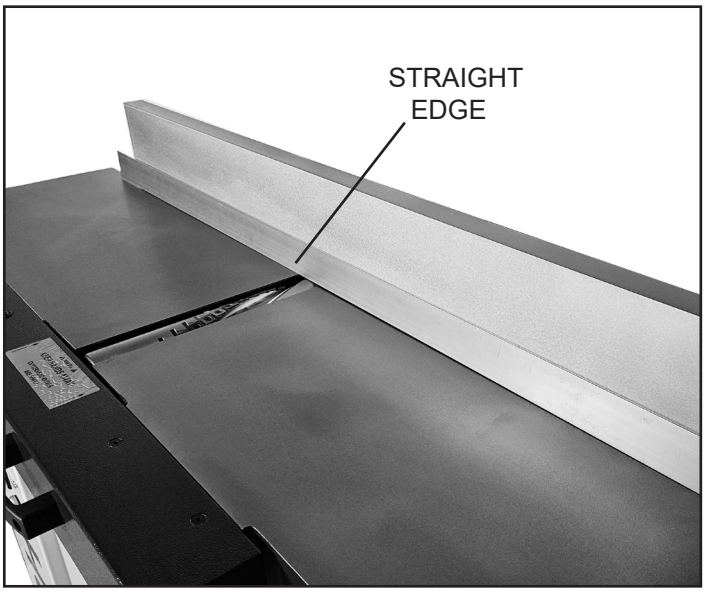


FIG. 18

ADJUSTING THE OUTFEED TABLE

1. The jointer table needs to be lifted up and back into a vertical position. See page 21, steps 1 & 2, for full details on this process. The Dust Chute (#66) should be left in the down, jointer-use position so adjustments can be made.

2. With the table up, the Support Base (#120) for the outfeed table is exposed. The base has three Hex Bolts (#132) and four Set Screws (#134) that fasten the table to the cabinet. The set screws can be adjusted to slightly tilt the table to align it with the infeed table. FIG. 19.

3. Slightly loosen the three hex bolts so that the set screws can be adjusted. With small 1/8 or 1/4 turns of the set screws, tilt the table as needed. A clockwise turn will advance the set screw, a counter-clockwise turn will retract them from the base casting.

- The pair of 2 set screws to the far left will raise the left end of the table. FIG. 19, A & B.
- The pair of 2 set screws to the far right will raise the forward edge of the table, nearest the cutterhead. C & D.
- The pair of screws furthest back in the base will tilt the back of the table upward. B & C.
- The pair of 2 set screws at the front of the base will lift up the front edge of the table. A & D.

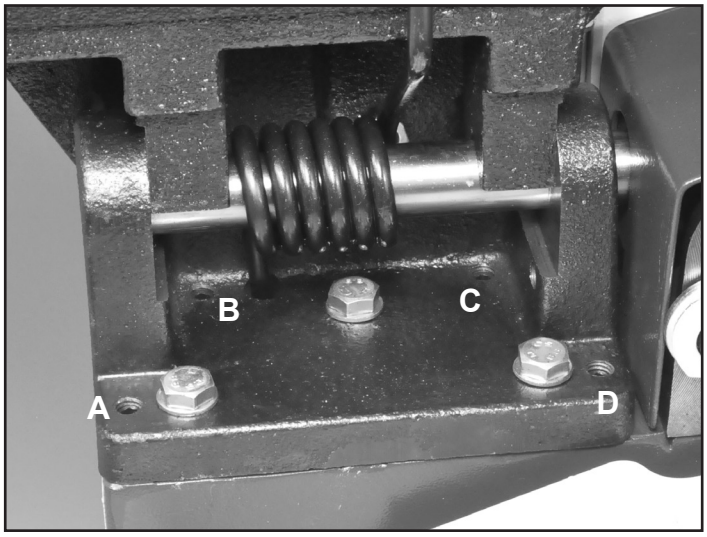


FIG. 19

- The table can also be tilted down, or up, towards a specific corner should the situation arise. Three of the set screws would be adjusted for this. Example: To tilt the far left corner of the table up, set screws D, then A & C would be turned. Screw B would be the 'pivot point'

4. The table can also be tilted forward or back with the two Special Bolts (#18, FIG. 20, E & F). The combination of the six bolts and screws (A-F) provide a great range of table positioning to level it with the infeed table.

5. Once adjustments are made, the outfeed table should be lowered and the flatness measurement taken again with the straight edge. This may require a few attempts to get the tables in alignment. Once level, the three hex bolts (#132) can be tightened to lock the settings. The two Special Bolts (#18) should also be checked to make sure that they are firmly in contact with the table's underside milled surface, and tightened.

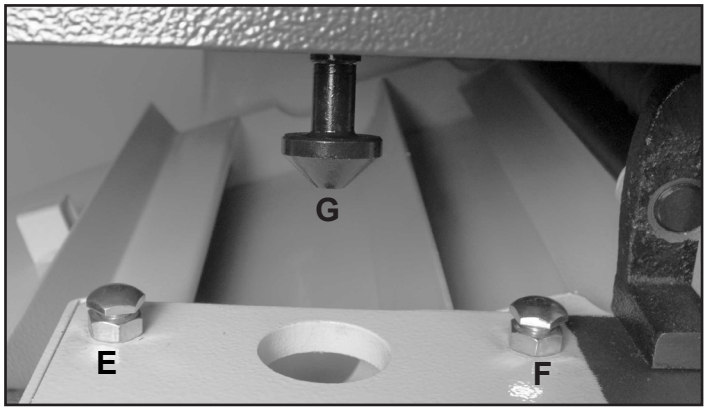


FIG. 20

6. With the table lowered, make sure the two safety Table Locks (#104, G) will engage. These special bolts can be adjusted up or down by their threaded ends, then secured with their attached Nuts (#106). FIG. 20.

7. Re-adjust, or install the fence and guard, then the machine is ready for use.

ADJUSTMENTS

ADJUSTING THE INFEED TABLE

The Infeed Table is pre-set by the factory to align with the cutterhead's knife inserts. Should an adjustment be required, the following steps are needed.

1. Raise the infeed table to its highest, 0", level and use a metal straight edge to check its level flatness with the outfeed table. FIG. 21.

2. The jointer table, with the fence and cutterhead guard, needs to be lifted up and back into a vertical position. See page 21, steps 1 & 2, for full details on this process. The Dust Chute (#66) should be left in the down, jointer-use position so adjustments can be made.

3. With the table up, the Support Base (#120) for the infeed table is exposed. The base has three Hex Bolts (#132) and four Set Screws (#134) that fasten the table to the cabinet. The set screws can be adjusted to slightly tilt the table to align it with the infeed table. FIG. 22.

3. Slightly loosen the three hex bolts so that the set screws can be adjusted. With small 1/8 or 1/4 turns of the set screws, tilt the table as needed. A clockwise turn will advance the set screw, a counter-clockwise turn will retract them from the base casting.

- The pair of 2 set screws to the far left will raise the left end of the table. FIG. 22, A & B.
- The pair of 2 set screws to the far right will raise the forward edge of the table, nearest the cutterhead. C & D.
- The pair of screws furthest back in the base will tilt the back of the table upward. B & C.
- The pair of 2 set screws at the front of the base will lift up the front edge of the table. A & D.

- The table can also be tilted down, or up, towards a specific corner should the situation arise. Three of the set screws would be adjusted for this. Example: To tilt the far left corner of the table up, set screws D, then A & C would be turned. Screw B would be the 'pivot point'

4. The table can also be tilted forward or back with the two Special Bolts (#18, FIG. 23, E & F). The combination of the six bolts and screws (A-F) provide a great range of table positioning to level it with the infeed table.

5. Once adjustments are made, the infeed table should be checked for flatness with the outfeed table with a straight edge. FIG. 21. This may require a few attempts to get the tables in alignment. When the infeed table is flat to the outfeed table, the hex bolts can be tightened to lock the settings.

6. With the table lowered, make sure the two safety Table Locks (#104, G) will engage. These special bolts can be adjusted up or down by their threaded ends, then secured with their attached Nuts (#106). FIG. 23.

7. Re-adjust, or install the fence and guard, then the machine is ready for use.

⚠ WARNING **THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**

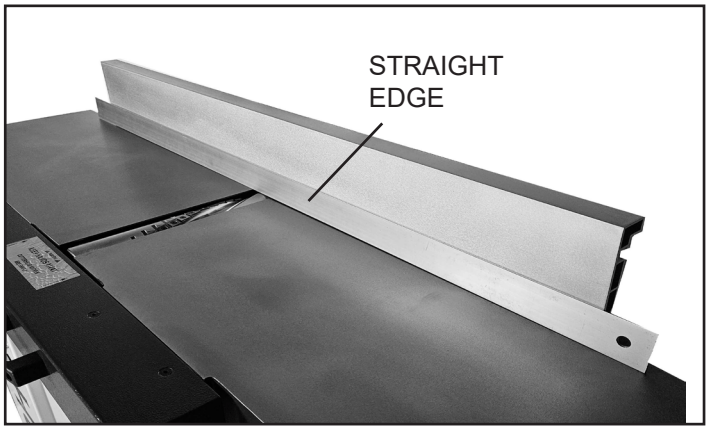


FIG. 21

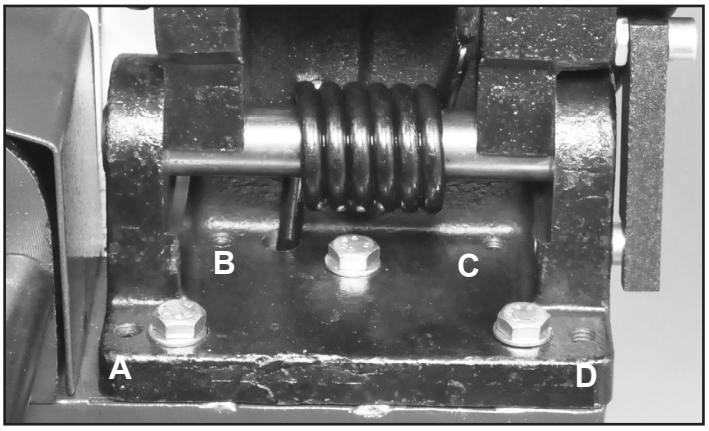


FIG. 22

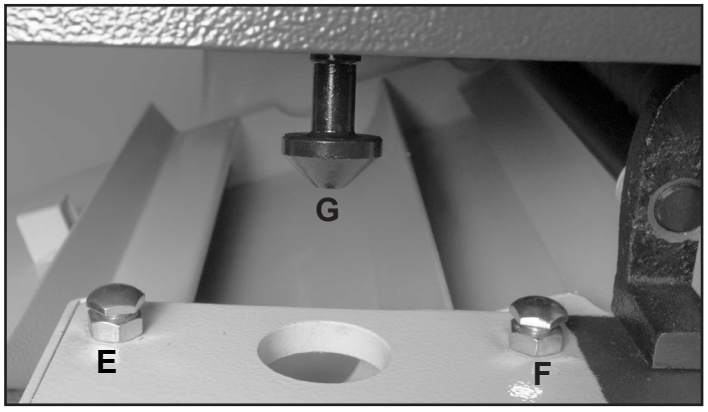


FIG. 23

PLANER TABLE ALIGNMENT

The machine has been factory set before shipping - the planer's table being set parallel to the cutterhead knives. But once the machine has been set in its final location in the shop, the table alignment should be checked to make sure that there has been no movement during its handling.

WARNING: When working on, or near the machine's bed, avoid the risk of personal injury by cuts that may result from touching the knife inserts' sharp edges!

Continued on page 15

ADJUSTMENTS

Planer Table Alignment continued from page 14

1. Make sure that the planer/jointer's switch is turned off, and the plug is disconnected from the power source.

2. The jointer table, with the fence and cutterhead guard, needs to be lifted up and back into a vertical position. See page 21, steps 1 & 2, for full details on this process. The Dust Chute (#66) should be pivoted up onto the infeed table in the planing use position, so adjustments can be made. FIG. 24.

NOTE: The cutterhead is fixed in position and any adjustments must be made through the table's setting.

3. To confirm that the planer table is set parallel to the cutterhead, measurements from the table surface to the underside of the cutterhead are made. The distance from the far right side of the planer's table should be the same as the distance taken at the far left of the table.

4. Place a Gauge Block, or other measuring tool, onto the planer table, directly under the cutterhead. FIG. 25.

5. Raise the table until with the hand wheel until the gauge block makes contact with the cutterhead knife inserts, or the solid body of the cutterhead cylinder.

6. Move the gauge block to the other side of the table to check to see if the gauge block is at the same measurement. If the distance is not the same, then the planer table has to be adjusted to make up this difference.
NOTE: Since the cutterhead is of a helical design, care must be taken to make the measurements at the same spot on the either end of the head. This may require that the cutterhead be rotated so that the gauge block comes in contact with either the knife inserts or body, same as was used on the first measurement taken.

ADJUSTING THE PLANER TABLE

7. The planer table assembly is attached to the cabinet by four Hex Bolts (#184, FIG. 26, A). Next to these bolts are four Hex Socket Screws (#180, B) that can be adjusted to raise an end of the planer table so that it will be parallel with the cutterhead.

8. Slightly loosen the four hex bolts at the corners of the base plate.

9. Depending on which side of the planer's table needs to be raised, turn the hex screws at that side of the base to raise the base/table.

10. Repeat measuring with the gauge block and making adjustments until the table is parallel with the cutterhead.

11. Once the table and cutterhead are parallel, tighten the four hex bolts to secure the fasteners in place.

12. Remove the gauge block from the mouth of the planer and check all parts to confirm the machine is ready for use.

⚠ WARNING **THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**



FIG. 24

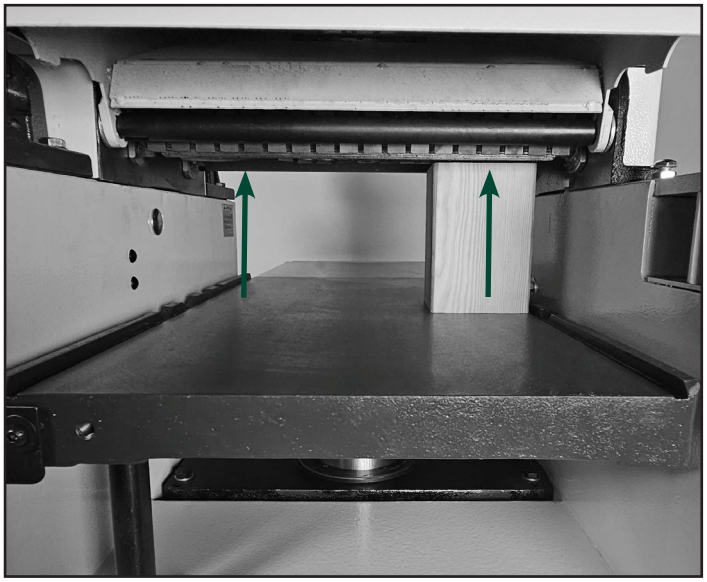


FIG. 25

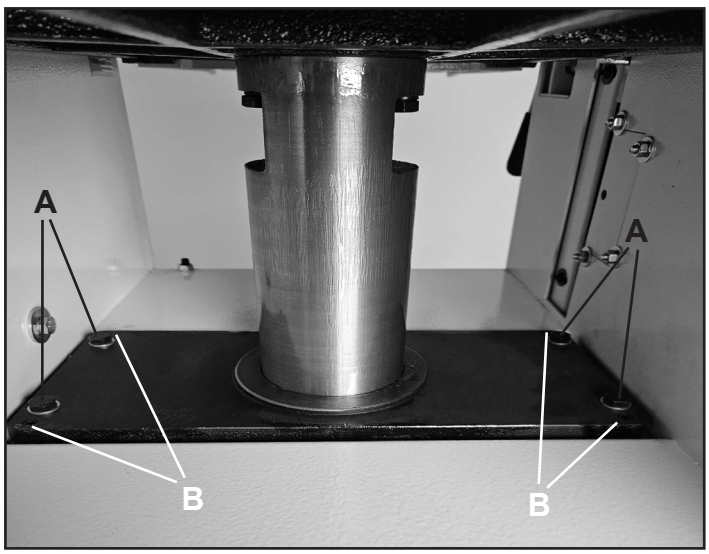


FIG. 26

ADJUSTMENTS

ADJUSTING THE CUTTERHEAD

The Cutterhead that holds the knife inserts is fastened to the machine's cabinet, and is not adjustable. Based on the position of this main component of the machine, all of the other parts - rollers and tables - are then pre-set by the factory to align with the cutterhead. Should any of the tables or rollers get out of parallel with the cutterhead, they can be adjusted separately following the instructions in this manual.

ADJUSTING THE FEED ROLLERS

The Infeed (#78) and Outfeed (#61) Rollers are pre-set by the factory to align parallel with the cutterhead and knife inserts. These spring loaded rollers are set just below the cutterhead, so that they engage the lumber and move it through the planer. Should an adjustment be required to increase or decrease the amount of downward pressure they exert on the lumber, the following steps are needed.

1. Make sure that the planer/jointer's switch is turned off, and the plug is disconnected from the power source.

2. The jointer table, with the fence and cutterhead guard, needs to be lifted up and back into a vertical position. See page 21, steps 1 & 2, for full details on this process.

3. With the jointer table up, the Front Guard (#53, A) and Rear Guard (#91, B) must be removed to access the bolts that will adjust the feed rollers' pressure. FIG. 27.
NOTE: The Front Guard with the 2 screws (#52) removed, can be rotated out of the way, leaving the dust collector's spring-loaded Locating Pin (#51, P) in place. FIG. 28.
The Rear Guard can be removed once the 2 locating screws are removed, by lowering the jointer table then removing the fence assembly.

4. Under the Cutterblock Brackets (#57 & 69), the Tightening Screws (#73) hold the compression Springs (#72) in place on the brass Shaft Sleeves (#59). The bottom Hex Bolts (#67, FIG. 28, N) can be tightened or loosened with a wrench to adjust the feed rollers. FIG. 28.

- By raising the hex bolts UP, the spring is compressed and the downward pressure of its roller is increased upon the lumber being fed through the planer.
- By lowering the hex bolts DOWN, the spring compression is reduced, and its rollers exert less pressure down onto the lumber.

5. Once the rollers are set, secure the Bolts (#67) in place with the Nuts (#64), re-install the guards, lower the jointer table with fence & guard, and the machine is ready for use.

ADJUSTING DRIVE BELTS

The cutterhead drive belt and the feed gear drive belt need to be checked periodically and re-tightened if necessary. Belts will stretch with use, especially when they are new and are breaking in. Both drive belts are located behind the machine's rear cover and side panel. FIG. 29, A & B.

⚠ WARNING **THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**

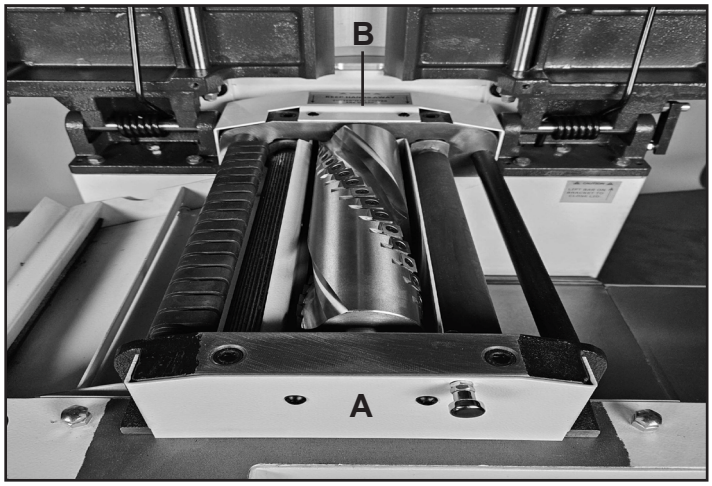


FIG. 27

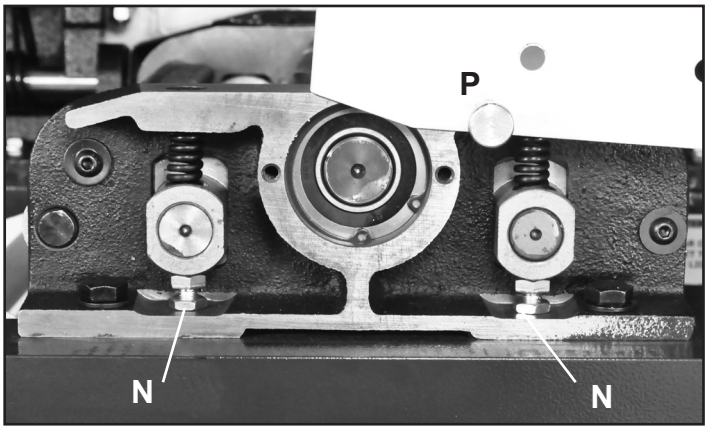


FIG. 28

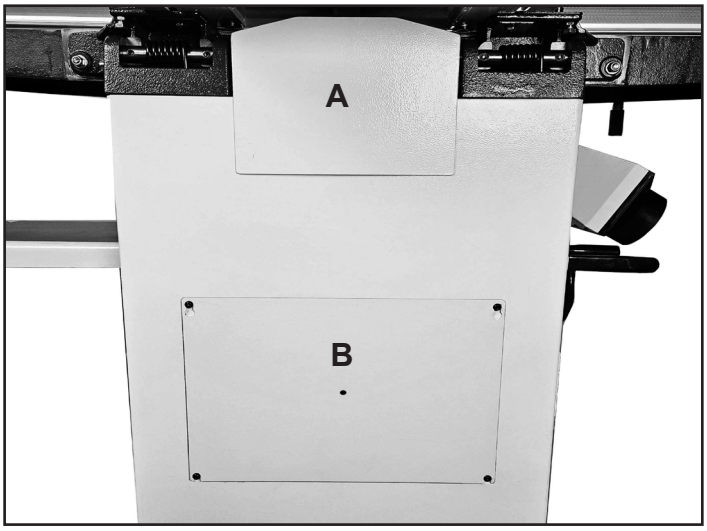


FIG. 29

Continued on page 17

ADJUSTMENTS

Drive Belt Adjustment continued from page 16

To inspect, adjust or change the drive belts:

1. Make sure that the planer/jointer's switch is turned off, and the plug is disconnected from the power source.

2. Remove the fence assembly, the Rear Guard (#91) and the cabinet's rear Belt Cover Plate (#40) to expose the motor, pulleys and belts. FIG. 29.

TENSIONING THE DRIVE BELTS

3. Check the *Cutterhead Drive V-Belt* (#228, FIG. 30, A) tension with thumb pressure. The drive belt should not give more than 3/8" in the center. FIG. 31.

4. From outside, rear of the machine, loosen the four Cap Nuts (#201, FIG. 32) that secure the motor in place. Lift the motor to slacken the tension on the drive belt, or move it down to increase the belt tension.

5. When the belt tension is correct, tighten the same motor mounting cap nuts that were loosened in step 4.

6. The *Feed Roller V-Belt* (#214), FIG. 30, B) is automatically tensioned with the Spring (#229, C) and requires no adjustments.

7. The *Feed Roller Chain* (#227, FIG. 30, D) is factory set and should not require any setting changes. However, to increase or decrease the chain overlap, the Pulley with Sleeves (#32, E) can be adjusted in or out with its center Bolt and Nut (#20 & 31).

NOTE: While the rear guard and belt cover plate are open, remove any chips and dust that may have accumulated with a dust collector or brush.

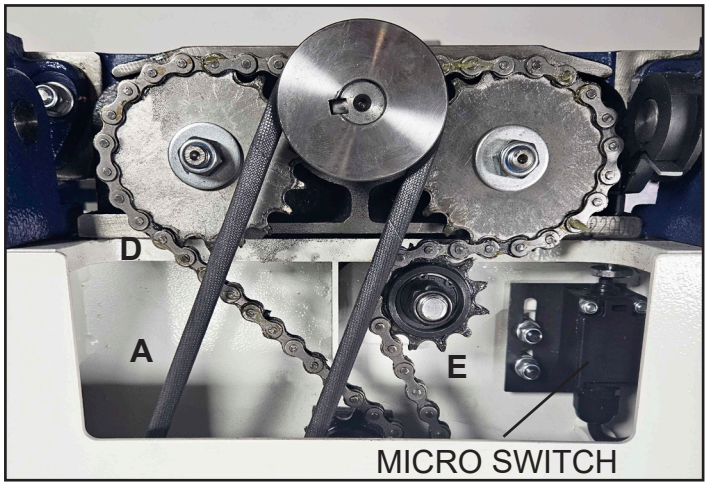
8. When all belts have been checked and any maintenance has been done, replace the rear guard and belt cover plate and secure them in position with their screws.

REPLACING THE DRIVE BELTS

1. To replace the *Drive V-Belt* (#228), follow the same steps, #3-5 above. Loosen the tension until the belt can be easily removed from the Motor Pulley (#208 / 208A) and Cutterhead Pulley (#94). Once removed, reverse the steps to install and re-tension the new belt on the pulleys.

2. To replace the *Feed Roller V-Belt* (#214), the Drive Belt must first be removed. With the motor loose and lifted, there should be enough slack to install a new Feed Roller Belt. If not, the tensioning Spring (#229) can also be unhooked to allow the Handle & Bracket Assembly (#217) to swing loose. Re-fastened the spring once the belt has been installed. Then reverse the steps to install the drive belt and re-tension it on the pulleys.

3. When all work on the belts has been done, replace the rear guard and belt cover plate and secure them in position with their screws.



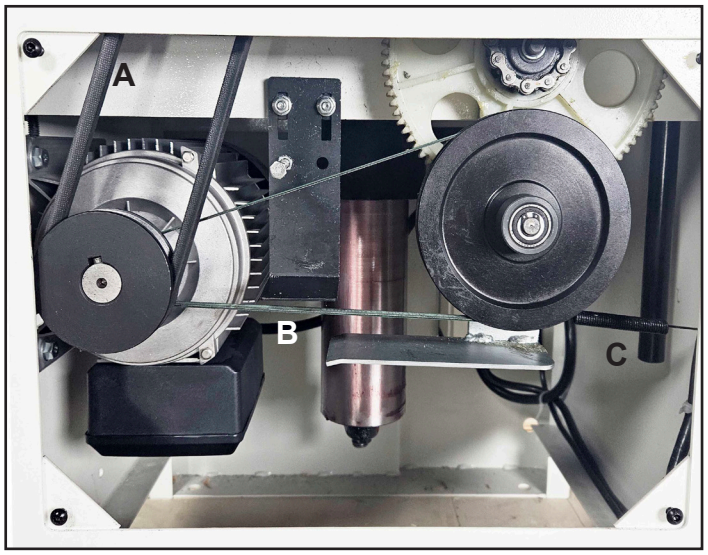


FIG. 30

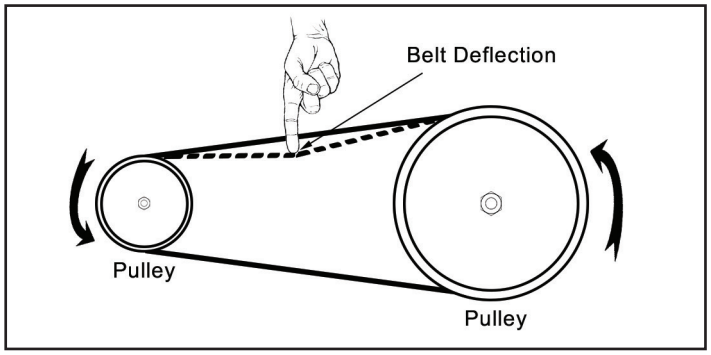


FIG. 31

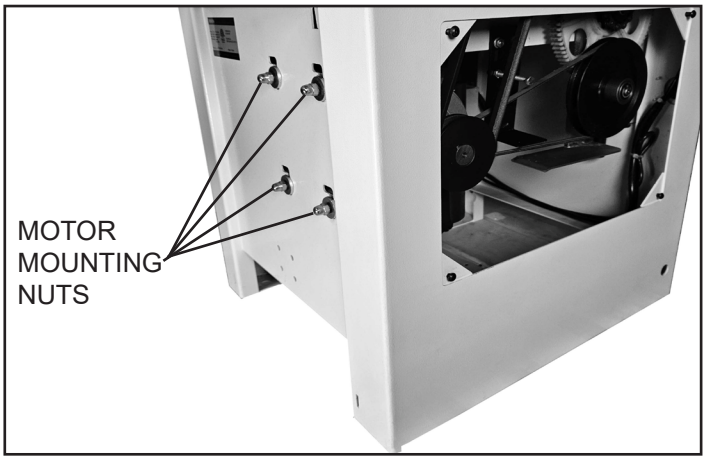
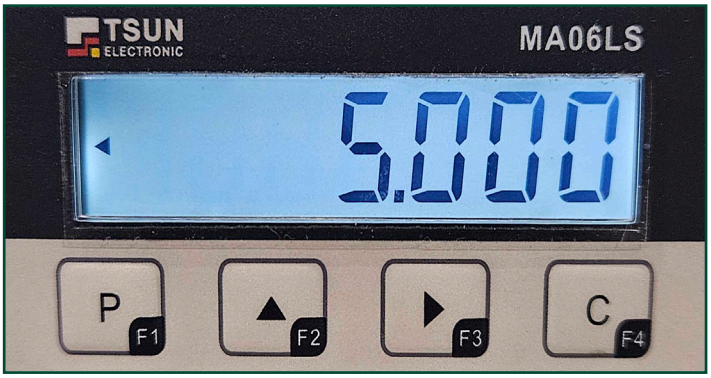


FIG. 32

ADJUSTMENTS

PLANER DIGITAL DEPTH SCALE



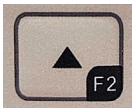
This Planer/Jointer combination machine is equipped with a digital depth scale for the planing function.

Accurate and Easy-to-Read Display: The digital display ensures easy reading and precise control of the cutting height of the planer table. The display can read Imperial or Metric measurements. The display example is reading 5".

Button Functions:



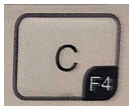
Function Key/Confirmation Key: Press this key to enter the Parameter, and then press enter the parameters that need to be modified.



Modifier Key: Set parameters to modify parameters. Long press (4 seconds): Quick learning (Installation spacing error adjustment).



Toggle Keys: With parameter switching, and the number of keys that need to be modified, long press (4 seconds). Modify direction of operation (0 or 1).



Clear or Exit current function.

Key Function / Programming

number	Function description	parameter	Windows default	Parameter description	remark
P01	Current value setting (or operated by a shortcut key)	-99999~~999999	0	Save the input value as the current value	revised，press “ P F1 ” Confirm call out
P02	Measureorientation (or operated by a shortcut key)	0~1	1	0 or 1 on behalf of two directions	Change direction sensor，Can also change the direction of measurement
P03	Adaptive calibration	GO	GO	GO:go into，slow motion（Can move repeatedly）sensor，About 10 seconds to move 150mm，After the completion of learning back to the current value measurement	If the correction is not successful，Please adjust the distance between the sensor and the magnetic stripe，Recommended 1~~2MM
P10	measurement unit / changing-over	/Length /angle /inch	00	00：mm；absolute mode 01：mm；relative mode 10：INCH；(absolute mode) 11: INCH；(relative mode) 20：angle；(absolute mode) 21: angle；(relative mode)	Through the password：**1234**

Continued on page 19

ADJUSTMENTS

Planer Table Depth Scale continued from page 18

P11	Proportional coefficient	0.00001~2.99999	1	show value =real value of the measured*Proportional coefficient	Through the password: **1234**
P12	Concentric circle diameter	0.01~999.99	500.00	diameter of the disk magnetic stripe stickers value	diameter plus magnetic stripe thickness 1.5mm*2=3mm
P13	resolution ratio	0.1, 0.05, 0.01, 1	0.1	linear measure：mm Angle display： °	Through the password: **1234**
P15	Timing off screen	0~1	0	0 ： Do not enable automatic off screen 1 : After 5 minutes off by default	Through the password: **1234** Press any key to wake up
P20	Factory Reset	SURE?	Null	restore the default factory settings	Enter the password before restoration ： 4321
P21	debug completed Duplicate record functions	SURE?	Null	press “ P F1 ” affirm	Through the password: 5321 ， Enter the parameters
P22	Restore the debugcomplete backup	SURE?	Null	press “ P F1 ” affirm	Through the password: 5321 ， Enter the parameters

Error display	Description of Error
	Low power indication sig When this flag appears, please，Replace the AA battery immediately，Note: change one section at a time to avoid data loss
MM	Unit of length (mm)
INCH	Unit of length (inches)
	Relative mode， If you do not have this plotting according to the current absolute mode
	Angle mode，If you do not have this plot represents the current length model
E01	Prompt parameter input error
E06	Sensor failure：①Sensor damage ； ②Sensor cable damage；
E07	Magnetic stripe detection failed：①No magnetic stripe；②Magnetic stripe damage；③The reading head is too far away from the magnetic stripe
E08	Low battery，Suggest changing battery immediately
E09	Read head is too close to the tape
E10	Read head is too far from the tape
E20	Measurement value is out of range

OPERATION

⚠ WARNING Before turning on the machine, review the safety precautions listed on pages 3 to 6. Make sure that you fully understand the features, adjustments and capabilities of the machine that are outlined throughout this manual.

JOINTER OPERATION

The function of the jointer is to surface plane flat, one side or edge of a board/workpiece.

To use the jointer:

- Place the workpiece on top of the right, infeed table.
- The workpiece will be cut on its underside by the rotating cutterhead knives. FIG. 34.
- When jointing, the feeding direction of the workpiece is right-to-left over the cutterhead. FIG. 33.

NOTE: Workpiece dimensions:

- Length: use a push stick to feed boards shorter than 12" ; for lumber over 60" use support rollers.
- Width: maximum 12".
- Thickness: minimum 1/4". The use of push blocks is necessary when face planing thin material.
- Depth of Cut: maximum 1/8". Multiple cuts of 1/16" or less, produce better finish results.

1. Set the jointer fence position and angle as required.
2. Set the depth of cut / thickness.
3. Adjust the cutterhead guard for user protection. FIG. 34 and 36.
4. Release the Belt Lever for Planer Drive Rollers (#217), at the jointer outfeed end of the cabinet. FIG. 35. This will transfer more power directly to the cutterhead.
5. Place the workpiece against the jointer fence for support through the cutting action.
6. Assume the proper operating position: stand to the side of the infeed table with feet apart for stability through the whole cutting process. FIG. 33.

NOTE: When cutting narrow board edges or workpieces more than 3" thick, set the cutterhead guard so that it is close to the side against the workpiece. FIG. 36.

- For planing the face of a plank or workpieces up to 3" thick, lower the cutterhead guard to just above the workpiece. Adjust the guard to distances not exceeding the dimensions recommended below, and in FIG. 34:
  - Rear edge (A) – workpiece maximum 1/8" (3mm).
  - Front edge (B) – workpiece maximum 3/32" (2mm).

6. Turn the machine on and place the workpiece on the infeed table. Feed the workpiece toward the cutterhead, exerting downward pressure until the workpiece clears the cutterhead on the outfeed table side. Always keep your hands away from the cutterhead to avoid any accidents.

- Run boards at different positions along the width of the cutterhead to utilize the full length of the cutting knives. Jointing in one area of the cutterhead, will quickly dull the knives in that area.

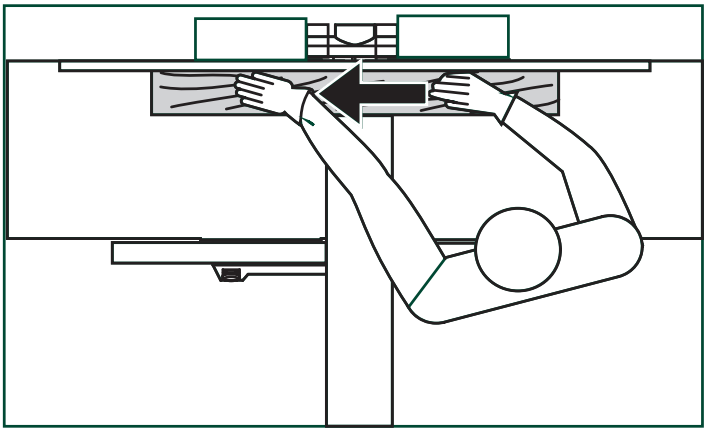


FIG. 33

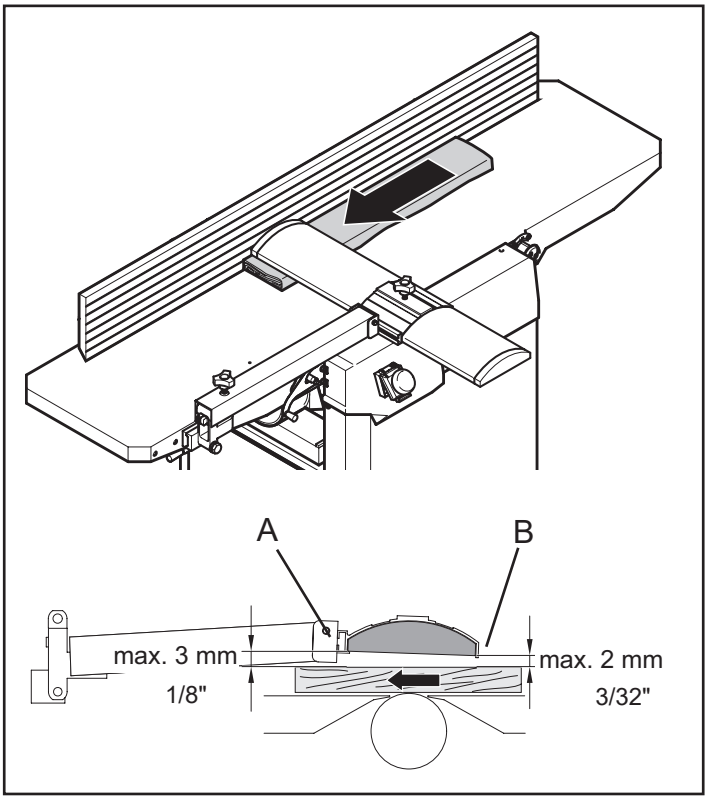


FIG. 34



FIG. 35

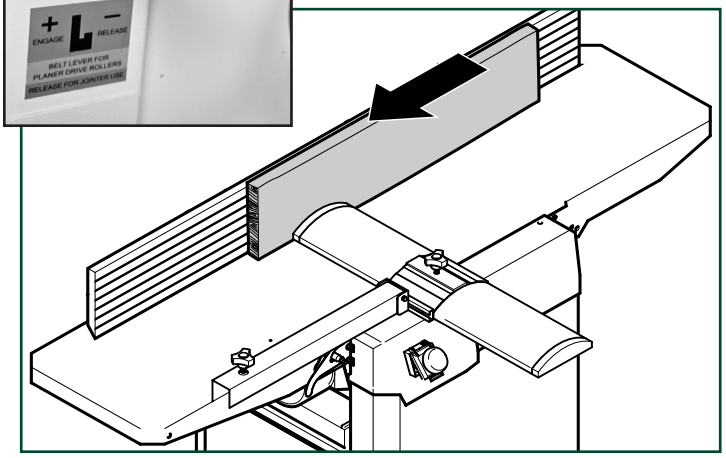


FIG. 36

PLANER OPERATION

Thickness planing is used to reduce a workpiece with one already surface planed surface to a desired thickness.

To use the planer, the upper, jointer table & fence assemblies must be tilted up and out of the way. FIG. 38.

1. Secure the jointer fence and cutterhead guard in place with their locking handles (#256, 259 & 375, FIG. 37, A).

2. Twist the two clamping Handles (#12 & 39, FIG. 38, B) up and then pull them outward to release the jointer tables. Swing the table (C) and fence assemblies up and to the back of the machine. Make sure the table's Locking Block (#117, D) is engaged to keep the table in the upward position. **NOTE: When closing/lowering the table, don't forget to release the locking block, or damage to the machine may occur.**

3. Pivot the Dust Chute (#66, FIG. 38, E) up and over the cutterhead where it will automatically lock in place with the Locking Pin (#51, F). Attach your dust collector's 4" hose to the dust port before any planing is done.

⚠ WARNING It is extremely important that a dust collection system is used with this planer to eliminate harmful airborne dust, prevent the build-up of chips that may jam the roller system in the cutterhead, and to keep the working area clean of debris.

To use the planer:

- The board surface that has been already jointed flat rests down onto the planer's table.
- The board will be cut on its upper surface by the cutterhead as it passes through the planer.
- When planing, the feeding direction of the workpiece is left-to-right under the cutterhead. FIG. 39.

NOTE: Workpiece dimensions for planing;

- Length: minimum 12"; for lumber over 60" use roller supports.
- Width: maximum 12".
- Thickness: minimum 1/4"; maximum 7-7/8".
- Depth of Cut: maximum 1/8". Multiple cuts of 1/16" or less, produce better finish results.

NOTE: The Belt Lever for Planer Drive Rollers (#217, FIG. 38, G) must be set in the 'ENGAGE' position to activate the drive rollers.

1. To feed the workpiece into the machine, assume proper operating position, FIG. 39. Stand offset to one side of the feed opening to avoid any kick-back, should it occur. Do not push the lumber once the infeed roller has been engaged. Let the infeed roller move the workpiece into the planer at its own pace.

2. To remove the workpiece from the machine, position yourself offset to one side of the outfeed opening. FIG. 40. Do not pull the lumber as it exits the machine. Let the out-feed roller move the workpiece out of the planer at its own rate, but support the lumber as it extends past the extension rollers, if needed.

Continued on page 21

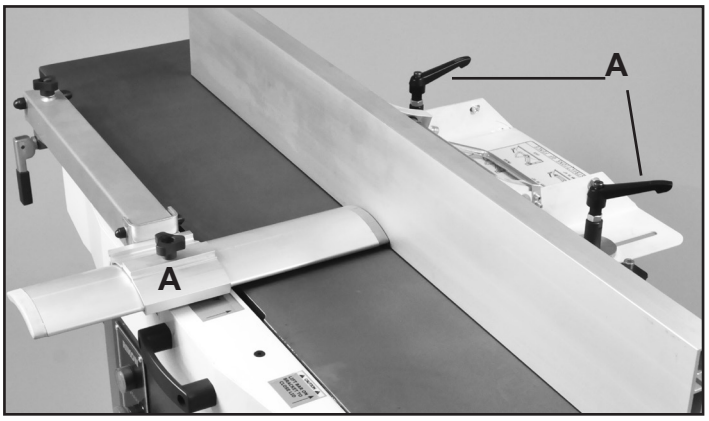


FIG. 37

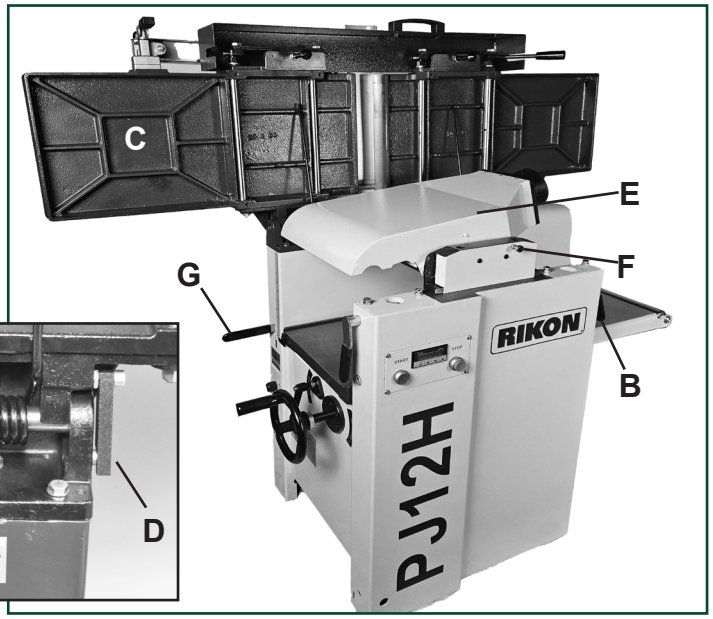


FIG. 38

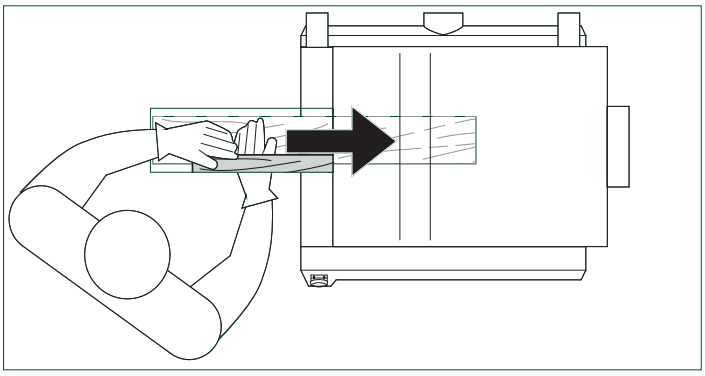


FIG. 39

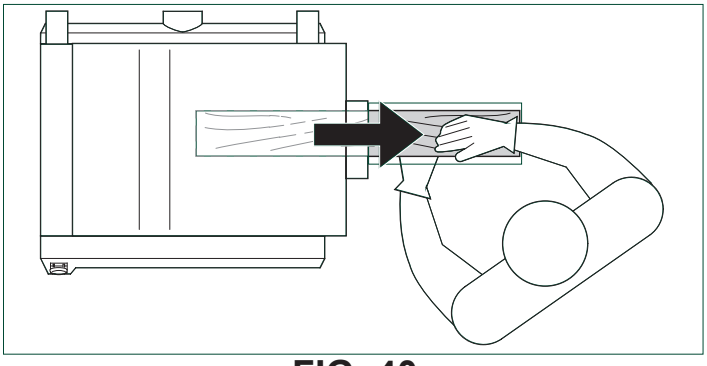


FIG. 40

OPERATION

Planer Operation continued from page 21

3. Set planing thickness. Measure your board's thickness and set the planer to this measurement, or 1/16" under this figure. For the initial pass, you do not want to take off an excessive amount of stock (over 1/8"), or damage to the planer may result. Repeated passes through the planer will get you to your final desired board thickness.

4. Feed boards slowly and straight into the planer. Boards will be automatically fed through the planer by the infeed and outfeed rollers.

- Guide workpieces straight into and through the planer. The cutting action of the cutterhead may try to turn a board being surfaced, so slight controlling of the board may be necessary. Do not push the board forward, let the planer's rollers automatically move the board through the machine.

5. Remove the board from the planer. Ref: Step 2, Do not pull the lumber as it exits the machine. Let the out-feed roller move the workpiece out of the planer at its own rate, but support the lumber as it extends past the extension rollers, if needed.

- Make sure that there are no loose knots, nails, staples, dirt or foreign objects in the wood to be planed.

- Surface wood in the same direction of the grain, not across the grain. Never plane end cuts or end grain.

- Do not plane boards that are less than 12" long. Short boards should be planed end to end with other boards to prevent kick-back and snipe.

- Boards longer than 60" should have additional support as they enter and exit the planer, so that they do not tip up or down, causing snipe on the ends.

- Run boards through the planer at different positions along the width of the bed to utilize the full length of the cutting knives. Planing only in the center, or through one side of the planer, will quickly dull the knives in that area.

- To thickness plane stock with surfaces are not parallel, use suitable feeding aids (make fitting templates).

SNIPE

The term 'snipe' refers to the depression that may occur at the front or rear of a board during planing. It is caused by uneven pressure on the cutterhead when a board is fed into the planer, or when exiting. FIG. 41.

Avoid snipe by keeping your lumber firmly down onto the planer bed at the beginning of the cut, and also at the end of the cutting action, as the lumber exits the planer.

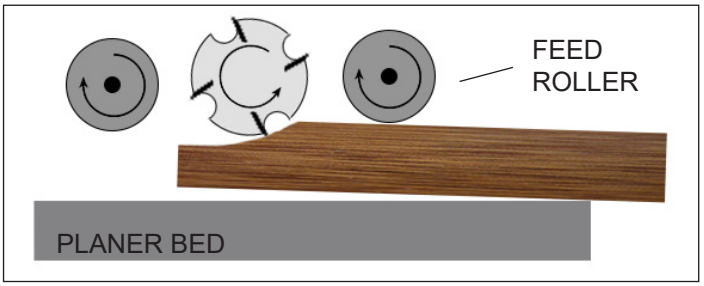
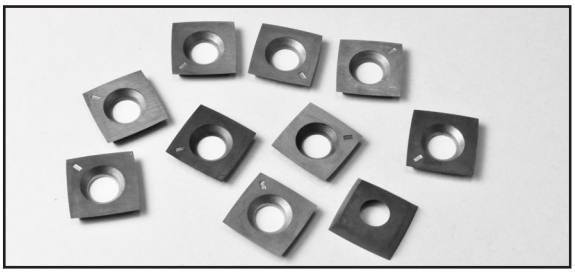


FIG. 41

ACCESSORIES

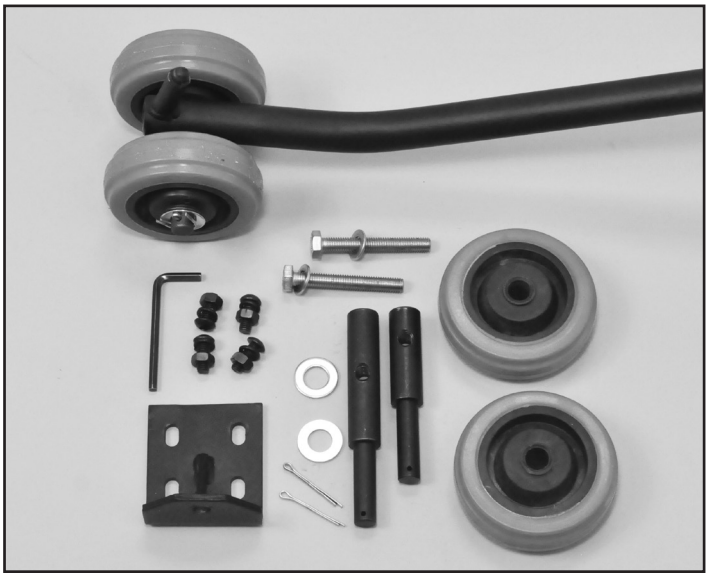


25-599 CARBIDE INSERT KNIVES - PK OF 10

Carbide inserts with 4 pre-sharpened cutting edges. Just rotate the insert to change to a new sharp edge.

25-594 INSERT MOUNTING SCREWS - PK 10

Flat head, Star T25 machine screws.



25-905 MOBILITY KIT

Includes wheels, hardware and tow bar for easy moving of your machine around the shop.

MAINTENANCE & WARRANTY

⚠ WARNING: Turn the power switch “OFF” and disconnect the plug from the outlet prior to adjusting or maintaining the machine. DO NOT attempt to repair or maintain the electrical components of the motor. Contact a qualified service technician for this type of maintenance.

1. Before each use:

- Check the power cord and plug for any wear or damage.
- Check for any loose screws or hardware.
- Check the area to make sure it is clear of any misplaced tools, lumber, cleaning supplies, etc. that could hamper the safe operation of the planer.

2. To avoid a build-up of wood dust, regularly clean all parts of the machine using a soft cloth, brush or compressed air. A general cleaning should be done after every use to avoid future problems and ensure the machine is in ready condition for the next time it is used.

WARNING: If blowing sawdust, wear proper eye protection to prevent debris from blowing into eyes.

3. Check the knives to make sure that they are not loose from the cutterhead, dull or nicked. Making sure that they are in proper operating condition will ensure that the quality of your surfaced lumber will be the best possible.

4. Lubricate all bearing points and chains regularly with a few drops of light motor oil. Cutterhead ball bearings are lifetime lubricated, sealed, and do not need any further care. Keep the drive belts free of oil and grease.

5. Regularly clean the planer bed columns to prevent the build-up of wood chips and dust. Treat the posts with a dry lubricant spray. Do not use ordinary oil which will collect dust and hamper the operation of the machine.

6. Keep the jointer and planer tables free of resin and rust. Clean them regularly with a non-flammable solvent, then coat with a light film of dry lubricant spray, or wax, to enhance passage of workpiece on/over the tables.

WARNING: When cleaning or working on the tables, avoid the risk of personal injury by cuts that may result from touching the knife inserts' sharp edges! Lower the planer table to its maximum 'down' position, so that there is ample distance between the table and the cutterhead's sharp inserts for your safety.

7. Clean the feed rollers with a soft rag, and non-flammable solvent if there is resin build-up on the metal rollers. Do not apply solvents on a 'rubber' coated roller, as it may affect the material. Be careful to keep hands away from the sharp cutterhead knife inserts. Do not apply any lubricant to the rollers as they must 'grab' the lumber to move it through the planer and so must not slip.

8. Check the anti-kickback fingers to make sure that they are clean of any dust or resin, so that they swing freely. Lubricate only with a dry lubricant, never oil or grease.

9. Check the belt tension after the first 3-5 hrs. of operation to ensure that the belts have not become stretched and loose from their 'breaking in' use. See page 17 for instructions.

RIKON POWER TOOLS®

5-Year Limited Warranty

RIKON Power Tools Inc. (“Seller”) warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of five (5) years from the date the product was purchased at retail. This warranty may not be transferred.

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This five-year warranty does not cover products used for commercial, industrial or educational purposes. The warranty term for these claims will be limited to a two-year period.

This limited warranty does not apply to accessory items such as blades, drill bits, sanding discs, grinding wheels, belts, guide bearings and other related items.

Seller 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, proof of purchase documentation must be provided which has the date of purchase and an explanation of the complaint.

The Seller reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

To register your machine online, visit RIKON at www.rikontools.com/warranty
To take advantage of this warranty, or if you have questions, please contact us at 877-884-5167 or email warranty@rikontools.com

TROUBLESHOOTING

⚠ WARNING **FOR YOUR OWN SAFETY, ALWAYS TURN OFF AND UNPLUG THE MACHINE BEFORE CARRYING OUT ANY TROUBLESHOOTING.**

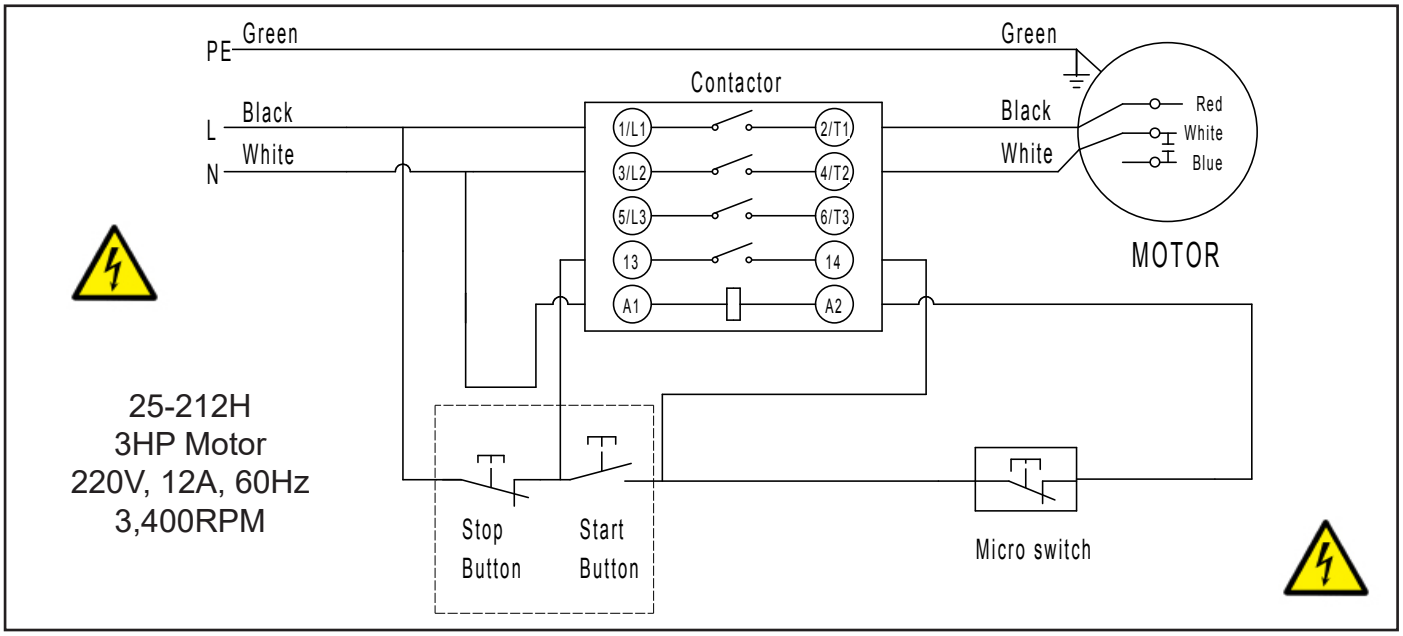
SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
Machine will not start.	1. No power 2. Blown fuse 3. Main on/off switch or Micro switch is not functioning 4. Motor failure	1. Check power source, plug and wiring. 2. Check fuse, replace if it is blown. 3. Check position of the switches. Contact local dealer for repair or replacement. 4. Inspect motor for failed components. Contact Dealer for repair or replacement.
Circuit Breakers trip and /or Fuses are blown	1. Wrong circuit size for the machine 2. Motor is overloaded under strain from taking too heavy of cut 3. Use of an extension cord	1. Check circuit/fuse rating and amps of the motor. Install CORRECT rated breaker/fuse. 2. Take lighter cuts in planing lumber. 3. No extension cord, or use heavier gauge cord.
Machine bogs down in the cut	1. Excessive depth of cut 2. Feed rate is too fast 3. Knives are dull	1. Decrease depth of cut. 2. Reduce feed rate. 3. Replace or sharpen knives.
Cutting and planer feed rate is not consistent	1. Belts are loose 2. Chips and dust build-up on parts	1. Check pulleys and belts for tension & wear. 2. Unplug machine and clean all parts.
TROUBLESHOOTING THE JOINTER		
Jointer fence is not accurate at 90° or 45°	1. Fence stops are not properly adjusted 2. Locking handles are loose	1. Re-adjust the fence stops. 2. Check all handles to make sure that they are properly tightened before starting the machine.
'Chatter' marks on lumber	1. Feed rate is too fast	1. Slow the feed rate down.
Cutterhead slows down when jointing	1. Feed rate is too fast 2. Downward pressure on the cutterhead knives is too great 3. Planer drive rollers are operating	1. Slow down feeding the wood over the cutterhead. 2. Apply less downward pressure 3. Release belt lever for the planer drive rollers
Small raised lines are running along the surface	1. Knives are nicked or broken	1. Rotate insert knives to new sharp edges.
Jointed stock is concave on the back end of the board	1. Knives are set higher than the outfeed table	1. Raise the outfeed table level with the cutterhead & knives.
Jointed stock is concave on the front end of the board	1. Outfeed table is set higher than the knives	1. Lower the outfeed table level with the cutterhead & knives.
Stock is concave in the middle of the board	1. Table is out of level	1. Raise the table ends.
Milled surface is torn - also called 'chip out' or 'tear out'	1. Cutting against the grain 2. Cut is too deep 3. Knives are dull	1. Cut with the grain. For figured woods, take shallow cuts to minimize tear out. 2. Reduce cutting depth to 1/16" or less. 3. Rotate insert knives to new sharp edges.
Milled surface grain is rough, raised or fuzzy	1. Lumber has a high moisture content 2. Knives are dull	1. Reduce the moisture content by drying it, or switch to other properly seasoned lumber. 2. Rotate insert knives to new sharp edges.
Milled surface is glossy	1. Cutting depth is too shallow 2. Knives are dull 3. Feed rate is too slow	1. Increase depth of cut slightly. 2. Rotate insert knives to new sharp edges. 3. Increase feed rate.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
TROUBLESHOOTING THE PLANER		
Poor feeding of lumber through the planer	1. Drive belt is worn or broken 2. Drive belt tension spring is broken 3. Lumber sticking on planer's table 4. Feed rollers not applying enough pressure on lumber	1. Check and replace as necessary. 2. Check tension and/or replace the spring. 3. Clean the table and apply silicone based lubricant to reduce friction. 4. Adjust the feed roller pressure.
Not planing lumber to a uniform thickness	1. Planer table is not level to cutterhead	1. Adjust table and/or cutterhead as needed.
Board thickness does not match scale markings	1. Depth of cut scale not set correct	1. Adjust scale to match board thickness
Small raised lines are running along the surface	1. Knives are nicked or broken	1. Rotate insert knives to new sharp edges.
Snipe on board ends (NOTE: Snipe can be reduced, but not fully eliminated)	1. Feed rollers not set properly 2. Lumber not supported when fed into or exiting the planer 3. Short boards not butted	1. Adjust feed roller height for applying pressure onto lumber to keep flat on table. 2. Support long boards with roller stands. 3. Run boards butt end to end through planer
Planed surface is torn - also called 'chip out' or 'tear out'	1. Cutting against the grain 2. Cut is too deep 3. Knives are dull	1. Cut with the grain. For figured woods, take shallow cuts to minimize tear out. 2. Reduce cutting depth to 1/16" or less. 3. Rotate insert knives to new sharp edges.
Planed surface grain is rough, raised or fuzzy	1. Lumber has a high moisture content 2. Knives are dull	1. Reduce the moisture content by drying it, or switch to other properly seasoned lumber. 2. Rotate insert knives to new sharp edges.
Planed surface is glossy	1. Cutting depth is too shallow 2. Knives are dull 3. Feed rate is too slow	1. Increase depth of cut slightly. 2. Rotate insert knives to new sharp edges. 3. Increase feed rate.

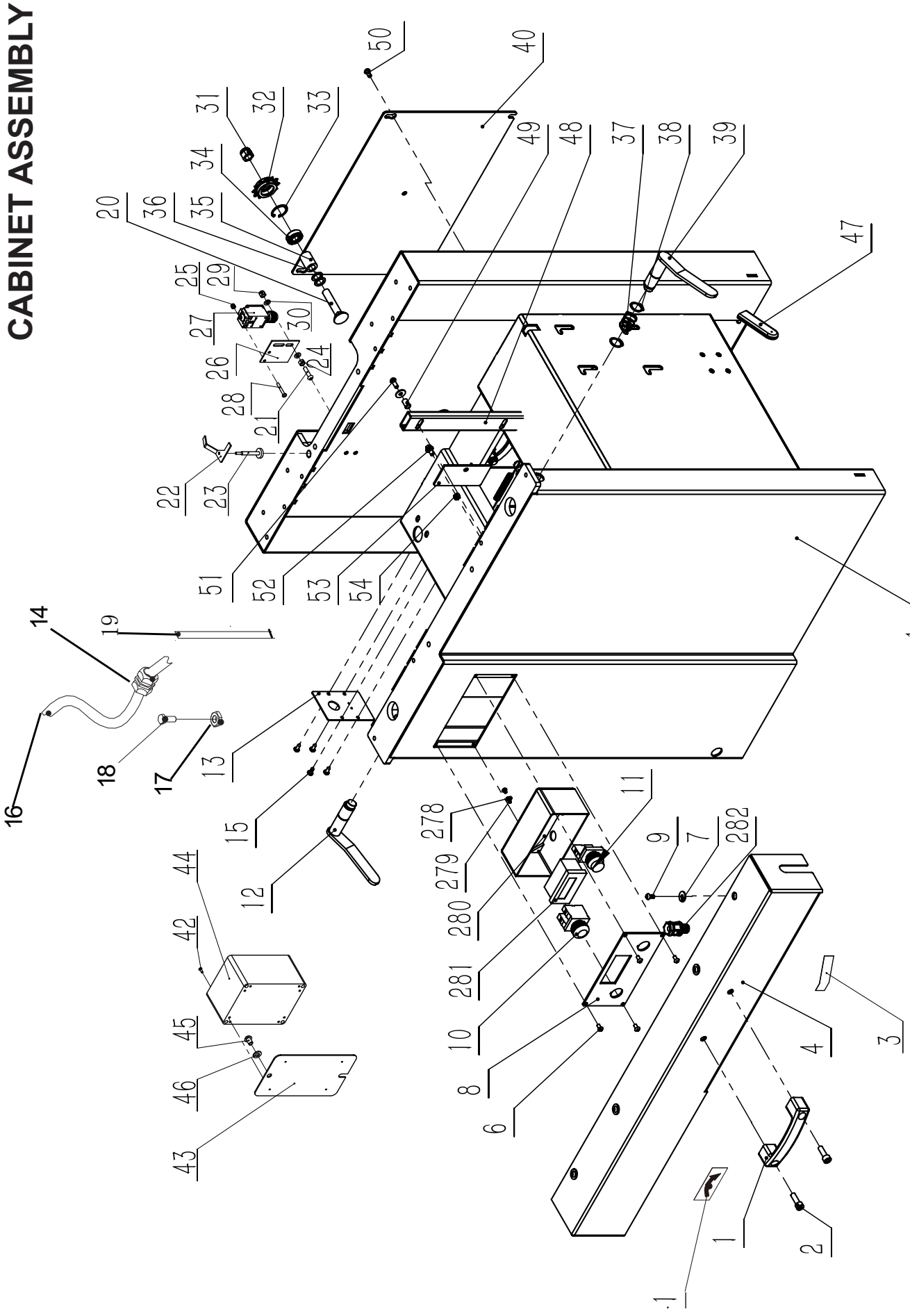
WIRING DIAGRAM

⚠ WARNING: This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician. See page 5 for additional electrical information.



PARTS DIAGRAM

CABINET ASSEMBLY



NOTE: Please reference the Key Number when calling for Replacement Parts.
For Parts under Warranty, the Serial Number of your machine is required.

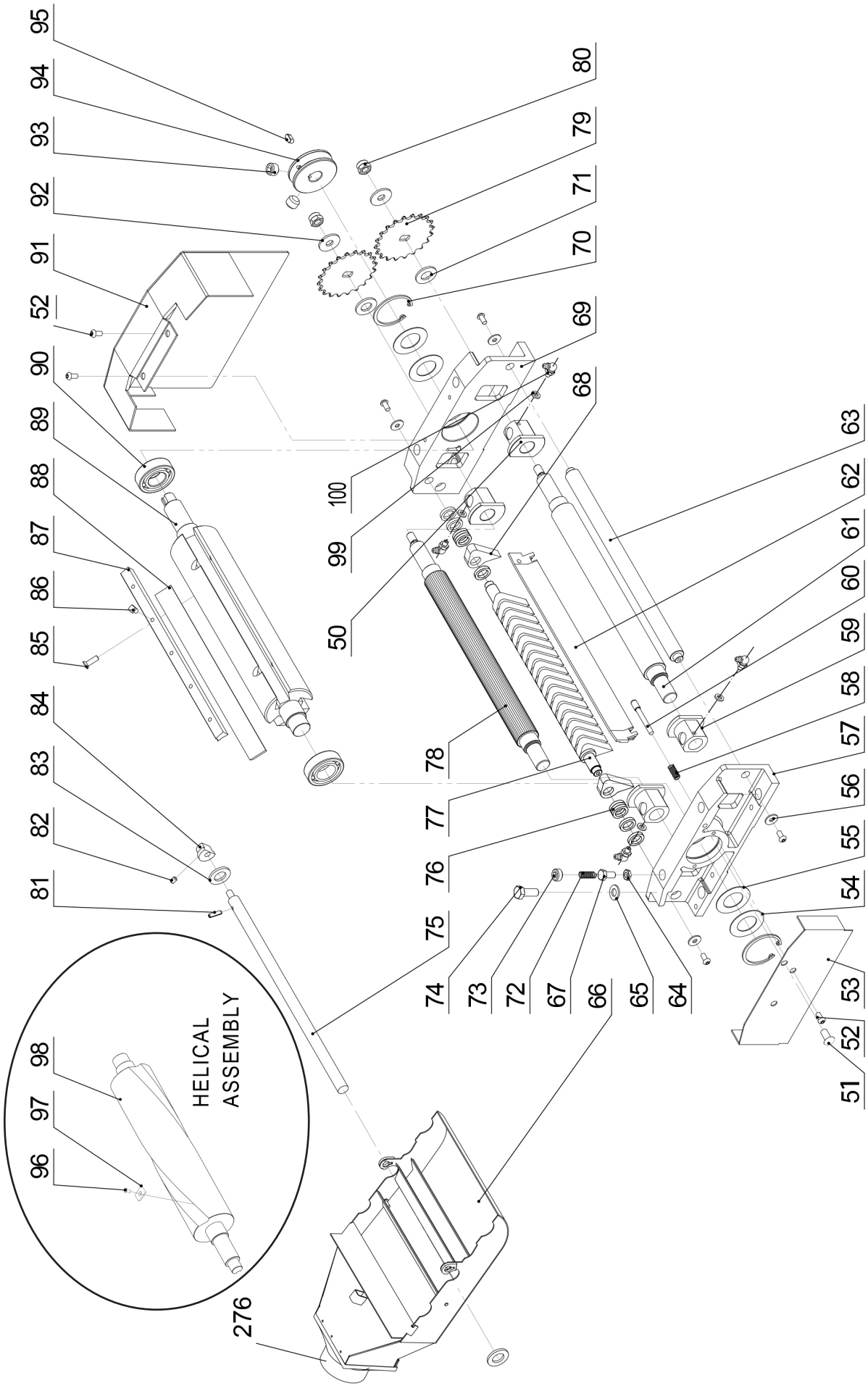
KEY NO.	DESCRIPTION	PART NO.
1	Handle	P25-210H-1
2	Hex.Screw M8X25	P25-210H-2
3	Label	P25-210H-3
4	Left cover	P25-212H-4
5	Frame	P25-212H-5
6	Hex flat rnd hd M5X10	P25-212H-6
7	Hex flat rnd hd M6X12	P25-210H-7
8	Switch plate	P25-212H-8
9	Big washer 6	P25-210H-9
10	Start button	P25-212H-10
11	Stop button	P25-212H-11
12	Handle	P25-210H-12
13	Plug board	P25-210H-13
14	Cable strain relief M16	P25-210H-14
15	Pan screw M4X10	P25-210H-15
16	Power cable	P25-210H-16
17	Nut M8	P25-210H-17
18	Ball head bolt	P25-210H-18
19	Scale	P25-210H-19
20	Square neck M12X65	P25-210H-20
21	Hex flat rnd hd M6X25	P25-210H-21
22	Plate	P25-210H-22
23	Rod	P25-210H-23
24	Nut M6	P25-210H-24
25	Hex nut M4	P25-210H-25
26	Switch plate	P25-210H-26
27	Micro switch	P25-210H-27
28	Pan screw M4X30	P25-210H-28
29	Lock nut	P25-210H-29
30	Plat washer 6	P25-210H-30

KEY NO.	DESCRIPTION	PART NO.
31	Hex locking nut M12	P25-210H-31
32	Tensioning wheel	P25-212H-32
33	Circlip	P25-210H-33
34	Bearing	P25-210H-34
35	Tube	P25-210H-35
36	Washer	P25-210H-36
37	Handle spring	P25-210H-37
38	Circlip	P25-210H-38
39	Handle	P25-210H-39
40	Belt cover plate	P25-212H-40
41	Sticker	P25-210H-41
42	Pan screw M4X10	P25-210H-42
43	Relay seat plate	P25-210H-43
44	Relay assembly	P25-210H-44
45	Screw M8X12	P25-210H-45
46	Flat washer 8	P25-210H-46
47	Handle sleeve	P25-212H-47
48	Installation plate	P25-212H-48
49	Nut M6X16	P25-212H-49
50	Hex flat nd hd screw M6X12	P25-212H-50
51	Hex socket hd screw M6X25	P25-212H-51
52	Hex flange bolt M6X12	P25-212H-52
53	Plate	P25-212H-53
54	Hex nut M6	P25-212H-54
278	Washer 4	P25-212H-278
279	Pan screw M4X8	P25-212H-279
280	Switch box	P25-212H-280
281	Digital display	P25-212H-281
282	Cable strain relief M16	P25-212H-282

NOTE: Please reference the Key Number when calling for Replacement Parts.
For Parts under Warranty, the Serial Number of your machine is required.

CABINET ASSEMBLY

CUTTERHEAD ASSEMBLY



NOTE: Please reference the Key Number when calling for Replacement Parts.
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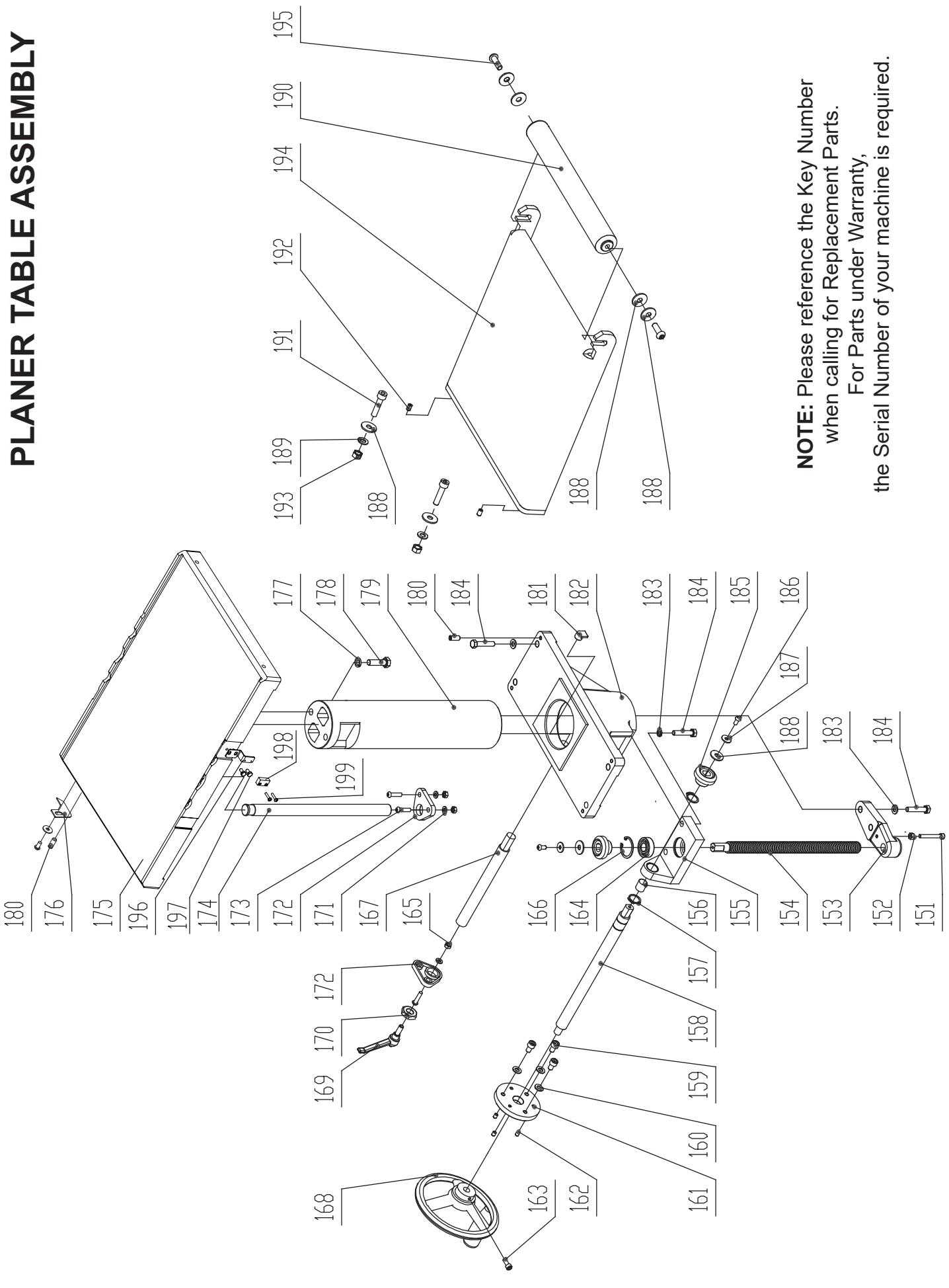
KEY NO.	DESCRIPTION	PART NO.
50	Left bronze bushing	P25-210H-50
51	Locating pin cover	P25-210H-51
52	Screw M6X12	P25-210H-52
53	Inner guide	P25-210H-53
54	Wave washer	P25-210H-54
55	Washer	P25-210H-55
56	Big washer	P25-210H-56
57	Left cutterhead bracket	P25-210H-57
58	Spring	P25-210H-58
59	Right bronze bushing	P25-210H-59
60	Location pin	P25-210H-60
61	Outfeed roller	P25-210H-61
62	Dust board	P25-210H-62
63	Dust board	P25-210H-63
64	Nut M8	P25-210H-64
65	Washer	P25-210H-65
66	Dust collector	P25-212H-66
67	Hexagon bolt M8X16	P25-210H-67
68	Non-return block	P25-210H-68
69	Right cutterhead bracket	P25-210H-69
70	Retainer ring	P25-210H-70
71	Washer	P25-210H-71
72	Spring	P25-210H-72
73	Screw	P25-210H-73
74	Hexagon bolt M10X25	P25-210H-74
75	Rod	P25-210H-75

KEY NO.	DESCRIPTION	PART NO.
76	Bushing	P25-210H-76
77	Rod	P25-210H-77
78	Infeed roller	P25-210H-78
79	Big chain wheel	P25-210H-79
80	Hexagonal self-locking nut	P25-210H-80
81	Pin	P25-210H-81
82	Set screw M6X8	P25-210H-82
83	Flat Washer	P25-210H-83
84	Small eccentric wheel	P25-210H-84
85	Hex jacking screw M6X20	P25-210H-85
86	Square head screw	P25-210H-86
87	Lock bar	P25-210H-87
88	HSS planer knives (Pack 3)	P25-210H-88
89	Cutter shaft	P25-210H-89
90	Bearing	P25-210H-90
91	Right guard	P25-212H-91
92	Big washer	P25-210H-92
93	Set screw M8X6	P25-210H-93
94	Belt pulley for cutter shaft	P25-210H-94
95	Flat key	P25-210H-95
96	Insert screws T25 (Pack 10)	P25-210H-96
97	Carbide insert knives (Pk 10)	P25-210H-97
98	Cutterhead shaft	P25-212H-98
99	Thin nut	P25-210H-99
100	Oil inlet	P25-210H-100
276	Dust port	P25-212H-276

NOTE: Please reference the Key Number when calling for Replacement Parts.
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CUTTERHEAD ASSEMBLY

PLANER TABLE ASSEMBLY



NOTE: Please reference the Key Number when calling for Replacement Parts. For Parts under Warranty, the Serial Number of your machine is required.

KEY NO.	DESCRIPTION	PART NO.
151	Hex socket cap screw M6X45	P25-210H-151
152	Nut M6	P25-210H-152
153	Thread Tube	P25-210H-153
154	Thread rod	P25-210H-154
155	Bracket	P25-210H-155
156	Shaft sleeve	P25-210H-156
157	Circlip	P25-210H-157
158	Lifting shaft	P25-210H-158
159	Hex socket cap screw M8X12	P25-210H-159
160	Flat Washer	P25-210H-160
161	Flange plate	P25-210H-161
162	Set screw M6X8	P25-210H-162
163	Hex socket cap screw M6X16	P25-210H-163
164	Bearing	P25-210H-164
165	Nut M6	P25-210H-165
166	Circlip ring	P25-210H-166
167	Locking lever	P25-210H-167
168	Handwheel	P25-210H-168
169	Adjustable handle	P25-210H-169
170	Thin nut M8	P25-210H-170
171	Flat Washer	P25-210H-171
172	Rings	P25-210H-172
173	Screw M6X25	P25-210H-173
174	Rod	P25-210H-174
175	Planer table	P25-212H-175

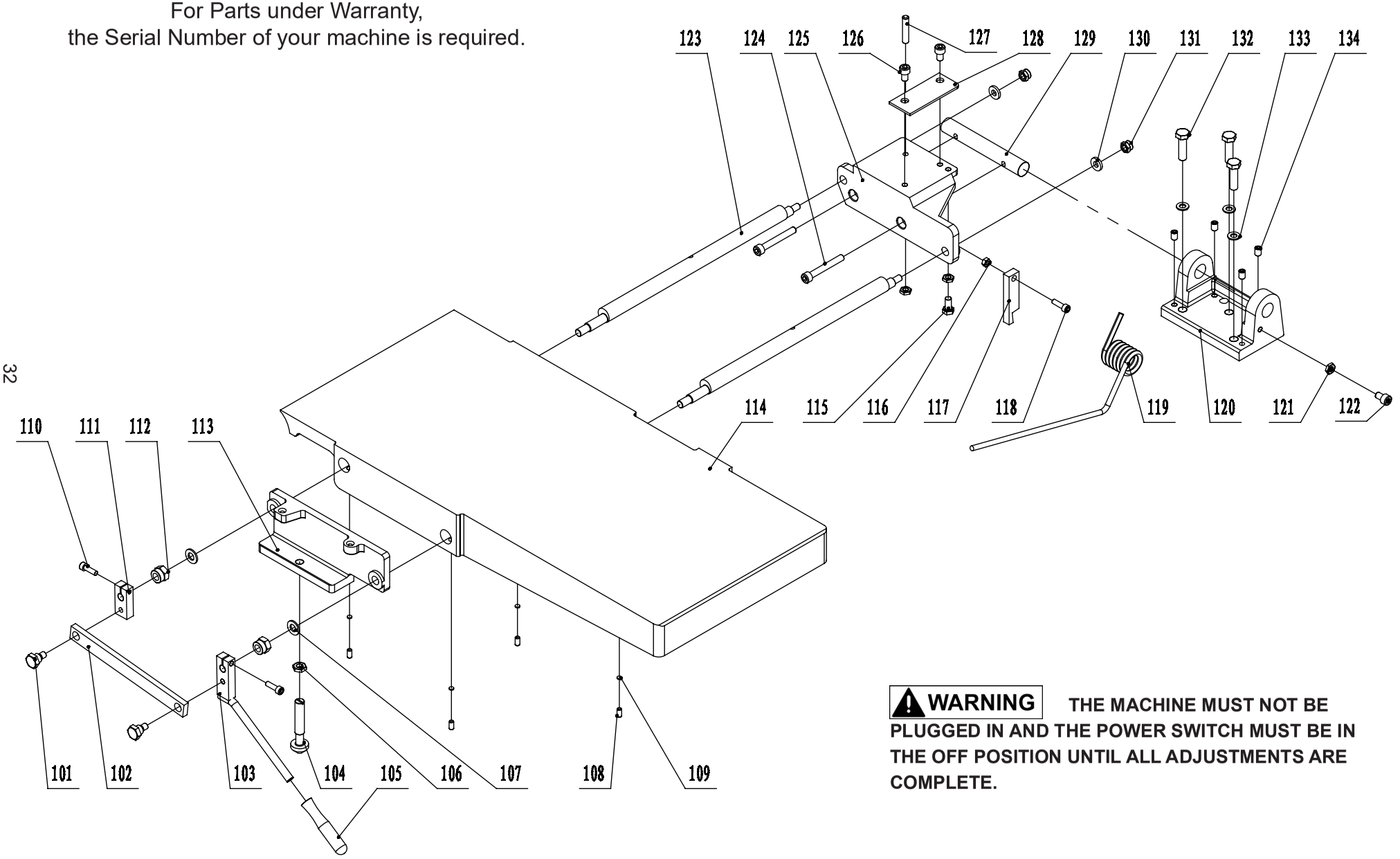
KEY NO.	DESCRIPTION	PART NO.
176	Indicator	P25-210H-176
177	Spring washer Hex head	P25-210H-177
178	screw M10X35	P25-210H-178
179	Tube	P25-210H-179
180	Set screw M8X20	P25-210H-180
181	Locking plate	P25-210H-181
182	Locating sleeve	P25-210H-182
183	Spring washer	P25-210H-183
184	Hexagon bolt M8X35	P25-210H-184
185	Gear	P25-210H-185
186	Screw M6X12	P25-210H-186
187	Big washer	P25-210H-187
188	Big washer	P25-210H-188
189	Flat Washer	P25-210H-189
190	Extension table roller	P25-210H-190
191	Hexagon bolt	P25-210H-191
192	Cap nut M8X10	P25-210H-192
193	Nut	P25-210H-193
194	Extension table support	P25-210H-194
195	Hexagon bolt M8X25	P25-210H-195
196	Mounting plate	P25-212H-196
197	Hex head bolt M6X12	P25-212H-197
198	Digital display	P25-212H-198
199	Pan screw M4X20	P25-212H-199

NOTE: Please reference the Key Number when calling for Replacement Parts.
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PLANER TABLE ASSEMBLY

INFEED TABLE ASSEMBLY

NOTE: Please reference the Key Number
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⚠ WARNING **THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.**

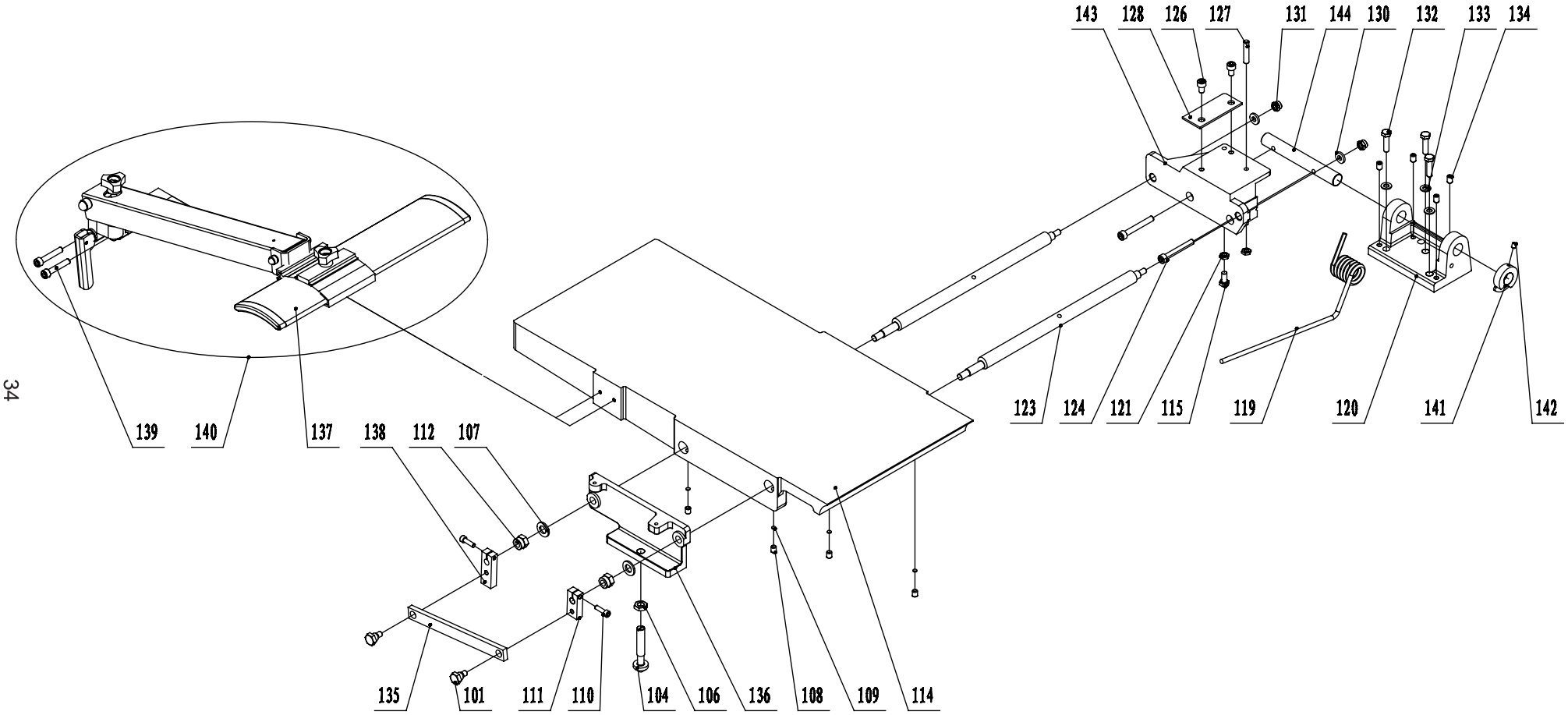
KEY NO.	DESCRIPTION	PART NO.
101	Shoulder bolt	P25-210H-101
102	Rod	P25-210H-102
103	Hand shank	P25-210H-103
104	Table lock	P25-210H-104
105	Handlebar grip	P25-210H-105
106	Nut	P25-210H-106
107	Flat Washer	P25-210H-107
108	Hex screw	P25-210H-108
109	Washer	P25-210H-109
110	Hex screw	P25-210H-110
111	Rod	P25-210H-111
112	Locknut	P25-210H-112
113	Rising rack	P25-210H-113
114	Planer infeed table	P25-212H-114
115	Screw	P25-210H-115
116	Nut	P25-210H-116
117	Table locking block	P25-210H-117

KEY NO.	DESCRIPTION	PART NO.
118	Hex screw	P25-210H-118
119	Spring	P25-210H-119
120	Support base	P25-210H-120
121	Nut	P25-210H-121
122	Hex screw	P25-210H-122
123	Eccentric shaft	P25-210H-123
124	Screw	P25-210H-124
125	Front Rack	P25-212H-125
126	Screw	P25-210H-126
127	Hex screw	P25-210H-127
128	Guide plate	P25-210H-128
129	Support bar	P25-210H-129
130	Washer	P25-210H-130
131	Locknut	P25-210H-131
132	Bolt	P25-210H-132
133	Flat washer	P25-210H-133
134	Hex screw	P25-210H-134

NOTE: Please reference the Key Number when calling for Replacement Parts.
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INFEED TABLE ASSEMBLY

OUTFEED TABLE ASSEMBLY



NOTE: Please reference the Key Number when calling for Replacement Parts.
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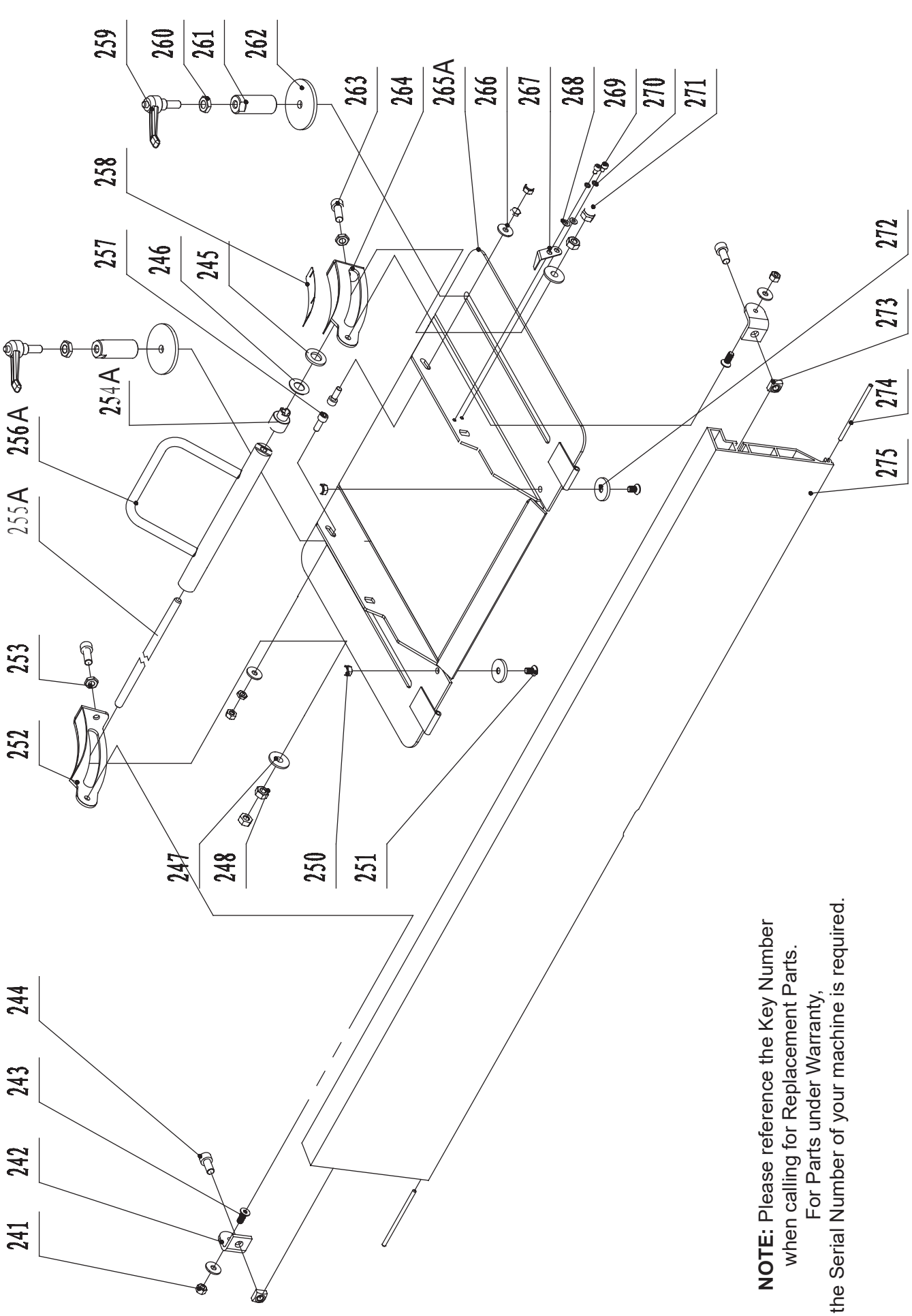
KEY NO.	DESCRIPTION	PART NO.
101	Shoulder bolt	P25-210H-101
104	Tighten tube	P25-210H-104
106	Nut	P25-210H-106
107	Flat Washer	P25-210H-107
108	Hex screw	P25-210H-108
109	Washer	P25-210H-109
110	Hex screw	P25-210H-110
111	Rod	P25-210H-111
112	Locknut	P25-210H-112
114	Planer outfeed table	P25-212H-114
115	Screw	P25-210H-115
119	Spring	P25-210H-119
120	Support base	P25-210H-120
121	Nut	P25-210H-121
123	Eccentric shaft	P25-210H-123
124	Screw	P25-210H-124
126	Screw	P25-210H-126

KEY NO.	DESCRIPTION	PART NO.
127	Hex screw	P25-210H-127
128	Guide plate	P25-210H-128
130	Washer	P25-210H-130
131	Locknut	P25-210H-131
132	Bolt	P25-210H-132
133	Spring washer	P25-210H-133
134	Hex screw	P25-210H-134
135	Rod	P25-210H-135
136	Back rack	P25-212H-136
137	Cutterhead guard	P25-210H-137
138	Rod	P25-210H-138
139	Hex cap screw	P25-210H-139
140	Guard assembly	P25-210H-140
141	Big deflection wheel	P25-210H-141
142	Hex screw	P25-210H-142
143	Back rack	P25-210H-143
144	Back support bar	P25-210H-144

NOTE: Please reference the Key Number when calling for Replacement Parts.
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OUTFEED TABLE ASSEMBLY

FENCE ASSEMBLY



NOTE: Please reference the Key Number when calling for Replacement Parts. For Parts under Warranty, the Serial Number of your machine is required.

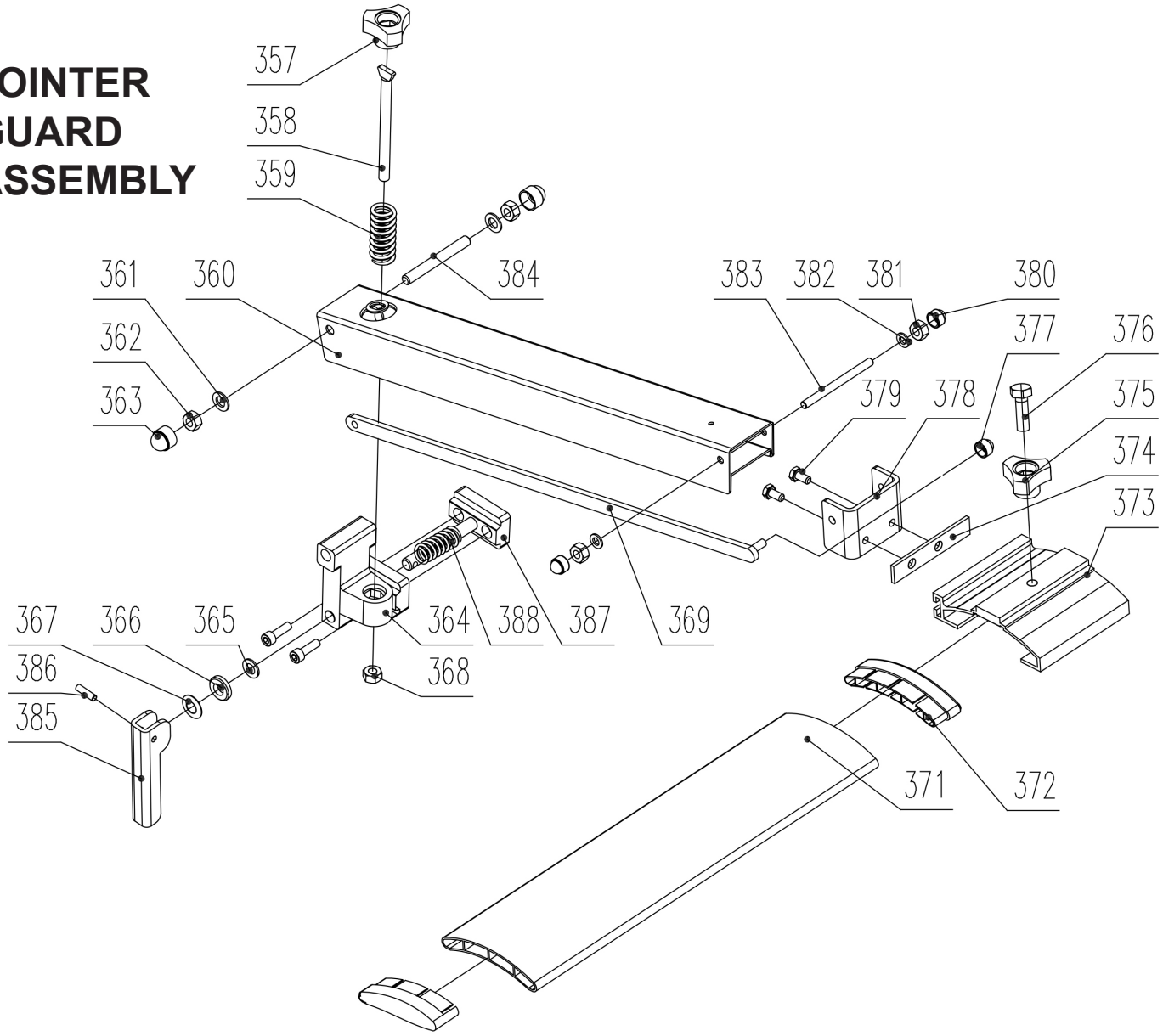
KEY NO.	DESCRIPTION	PART NO.
241	Nut	P25-210H-241
242	Support base	P25-210H-242
243	Hex screw	P25-210H-243
244	Hex screw	P25-210H-244
245	Flat washer	P25-210H-245
246	Disc spring washer	P25-210H-246
247	Big washer	P25-210H-247
248	Nut	P25-210H-248
250	Cap nut	P25-210H-250
251	Hex screw	P25-210H-251
252	Right support arm	P25-210H-252
253	Nut	P25-210H-253
254A	Lock tube	P25-210H-254A
255A	Lock rod	P25-210H-255A
256A	Lock handle	P25-210H-256A
257	Hex screw	P25-210H-257
258	Fence angle label	P25-210H-258

KEY NO.	DESCRIPTION	PART NO.
259	Adjust handle	P25-210H-259
260	Nut	P25-210H-260
261	Lock cylinder	P25-210H-261
262	Washer	P25-210H-262
263	Hex screw	P25-210H-263
264	Left support arm	P25-210H-264
265A	Support plate	P25-210H-265A
266	Big washer	P25-210H-266
267	Angle indicator	P25-210H-267
268	Washer	P25-210H-268
269	Hex screw	P25-210H-269
270	Spring washer	P25-210H-270
271	Cap nut	P25-210H-271
272	Thick washer	P25-210H-272
273	Square nut	P25-210H-273
274	Long pin	P25-210H-274
275	Rip fence	P25-210H-275

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FENCE ASSEMBLY

JOINTER GUARD ASSEMBLY

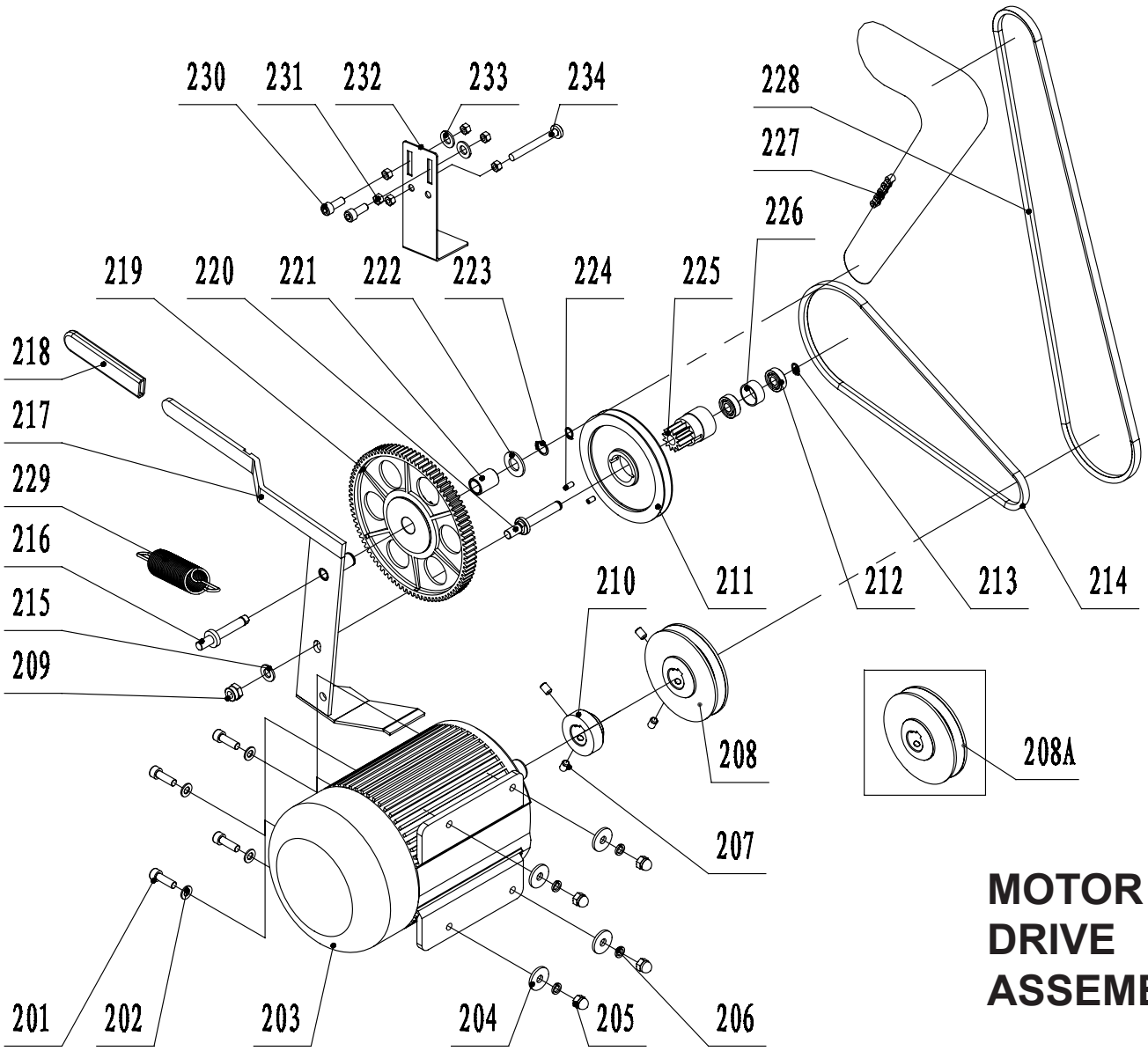


KEY NO.	DESCRIPTION	PART NO.
357	Handle	P25-210H-357
358	Thread pull rod	P25-210H-358
359	Spring	P25-210H-359
360	Arm	P25-210H-360
361	Flat washer	P25-210H-361
362	Hex lock nut	P25-210H-362
363	Nut cover	P25-210H-363
364	Locking support body	P25-210H-364
365	Flat washer	P25-210H-365
366	Thick washer	P25-210H-366
367	Disc spring washer	P25-210H-367
368	Hex nut	P25-210H-368
369	Longer pull rod	P25-210H-369
371	Cutterhead guard	P25-210H-371
372	End socket	P25-210H-372
373	Sliding sleeve	P25-210H-373

KEY NO.	DESCRIPTION	PART NO.
374	Base plate	P25-210H-374
375	Handle	P25-210H-375
376	Nylon bolt	P25-210H-376
377	Hex lock nut	P25-210H-377
378	Sliding sleeve support	P25-210H-378
379	Hex head bolt	P25-210H-379
380	Nut cover	P25-210H-380
381	Hex lock nut	P25-210H-381
382	Nylon washer	P25-210H-382
383	Screw head shaft	P25-210H-383
384	Screw head shaft	P25-210H-384
385	Handle assembly	P25-210H-385
386	Pin roll	P25-210H-386
387	Locking support	P25-210H-387
388	Locking spring	P25-210H-388

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PARTS DIAGRAM & PARTS LIST



MOTOR & DRIVE ASSEMBLY

KEY NO.	DESCRIPTION	PART NO.
201	Hex socket cap screw	P25-210H-201
202	Washer	P25-210H-202
203	Motor	P25-210H-203
204	Big washer	P25-210H-204
205	Cap nut	P25-210H-205
206	Spring washer	P25-210H-206
207	Hex screw	P25-210H-207
208	Motor pulley (25-210)	P25-210H-208
208A	Motor pulley (25-210H)	P25-210H-208A
209	Self-locking nut	P25-210H-209
210	Small wheel	P25-210H-210
211	Belt wheel	P25-210H-211
212	Bearing	P25-210H-212
213	Circlip ring	P25-210H-213
214	Feed roller v-belt	P25-210H-214
215	Washer	P25-210H-215
216	Chain wheel spindle	P25-210H-216
217	Handle & Bracket	P25-210H-217

KEY NO.	DESCRIPTION	PART NO.
218	Handle sleeve	P25-210H-218
219	Big gearwheel	P25-210H-219
220	Belt wheel spindle	P25-210H-220
221	Minor sprocket bush	P25-210H-221
222	Washer	P25-210H-222
223	Circlip ring	P25-210H-223
224	Set screw	P25-210H-224
225	Small gearwheel	P25-210H-225
226	Bush	P25-210H-226
227	Feed roller chain	P25-210H-227
228	Cutterhead v-belt	P25-210H-228
229	Spring tension	P25-210H-229
230	Hex screw	P25-210H-230
231	Nut	P25-210H-231
232	Clamp	P25-210H-232
233	Flat Washer	P25-210H-233
234	Hexagon bolt	P25-210H-234

RIKON POWER TOOLS ®

25-212H



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