



OPERATOR'S MANUAL

Wood Working



JOINTER / PLANER MODEL: JP-1250-1.0

Baileigh Industrial, Inc.
P.O. Box 531
Manitowoc, WI 54221-0531
Phone: 920.684.4990
Fax: 920.684.3944
sales@baileigh.com

REPRODUCTION OF THIS MANUAL IN ANY FORM WITHOUT WRITTEN APPROVAL OF BAILEIGH INDUSTRIAL, INC. IS PROHIBITED. Baileigh Industrial, Inc. does not assume and hereby disclaims any liability for any damage or loss caused by an omission or error in this Operator's Manual, resulting from accident, negligence, or other occurrence.

Table of Contents

THANK YOU & WARRANTY	1
INTRODUCTION.....	3
GENERAL NOTES.....	3
SAFETY INSTRUCTIONS	4
SAFETY PRECAUTIONS	7
Dear Valued Customer:.....	7
TECHNICAL SPECIFICATIONS.....	11
TECHNICAL SUPPORT	11
UNPACKING AND CHECKING CONTENTS.....	12
Cleaning	12
TRANSPORTING AND LIFTING	13
INSTALLATION.....	13
GETTING TO KNOW YOUR MACHINE	15
DUST-COLLECTING	15
ELECTRICAL.....	16
Power cord connection:	17
OPERATING SETUP	18
Jointer to Planer Setup	18
Planer to Jointer Setup	19
Power	20
Planer Controls and Adjustments	20
Jointer Controls and Adjustments.....	21
MACHINE ADJUSTMENT	22
Replacing or rotating knife inserts	22
Jointer Table Lock Handle Adjustment.....	23
Belt Replacement	23
Feed-roller Belt Replacement.....	24
Feed Roller Height Adjustment.....	25
Feed Roller Pressure Adjustment.....	26
Table and Knife Adjustments.....	26
Coplanar Alignment	26
Planer Table Adjustment	29
OPERATION.....	30
Initial Start-up	30
Changing Mode of Operation.....	30
Jointer Operations	30
Surfacing	30
Jointing	31
Bevelling.....	32
Planer Operations	33
Depth of Cut	33
Preparing the Work.....	34
LUBRICATION AND MAINTENANCE	36
Blade Care.....	37
Lubrication	37
TROUBLESHOOTING	38
Performance Troubleshooting – Jointer.....	38

Performance Troubleshooting – Planer	39
Mechanical Troubleshooting – Planer/Joiner.....	40
ELECTRICAL DIAGRAM	41
CUTTER BLOCK GUARD AND OUTFEED ASSEMBLY PARTS DIAGRAM	42
Cutter Block Guard and Outfeed Assembly Parts List	43
CUTTER BLOCK ASSEMBLY PARTS DIAGRAM.....	45
Cutter Block Assembly Parts List.....	46
BASE ASSEMBLY PART DIAGRAM	48
Base Assembly Parts List.....	49
INFEED TABLE ASSEMBLY PARTS DIAGRAM.....	51
Infeed Table Assembly Parts List	52
DRIVE AND MOTOR ASSEMBLY PARTS DIAGRAM	53
Drive and Motor Assembly Parts List.....	54
PLANER TABLE ASSEMBLY PARTS DIAGRAM.....	55
Planer Table Assembly Parts List.....	56
WORKING FENCE ASSEMBLY PARTS DIAGRAM.....	58
Working Fence Assembly Parts List	59



THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial. We hope that you find it productive and useful to you for a long time to come.

Inspection & Acceptance. Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any goods to Seller. Goods returned without a RGA will be refused. Seller will not be responsible for any freight costs, damages to goods, or any other costs or liabilities pertaining to goods returned without a RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

Specifications. Seller may, at its option, make changes in the designs, specifications or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

Limited Warranty. Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain a RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without a RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 30 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (e) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

EXCLUSION OF OTHER WARRANTIES. THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

Limitation of Liability. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.



Force Majeure. Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightening, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

Installation. If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

Work By Others; Safety Devices. Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation or provision of Goods. Buyer is solely responsible for furnishing, and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator's manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

Remedies. Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

Attorney's Fees. In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorneys' fees and costs.

Governing Law/Venue. This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowoc County, Wisconsin or the U.S. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

Summary of Return Policy.

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time.
- You must obtain a Baileigh issued RGA number PRIOR to returning any materials.
- Returned materials must be received at Baileigh in new condition and in original packaging.
- Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial makes every effort to ensure that our posted specifications, images, pricing and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

For Customer Service & Technical Support:

Please contact one of our knowledgeable Sales and Service team members at:
(920) 684-4990 or e-mail us at sales@baileighindustrial.com



INTRODUCTION

The quality and reliability of the components assembled on a Baileigh Industrial machine guarantee near perfect functioning, free from problems, even under the most demanding working conditions. However if a situation arises, refer to the manual first. If a solution cannot be found, contact the distributor where you purchased our product. Make sure you have the serial number and production year of the machine (stamped on the nameplate). For replacement parts refer to the assembly numbers on the parts list drawings.

Our technical staff will do their best to help you get your machine back in working order.

In this manual you will find: (when applicable)

- Safety procedures
- Correct installation guidelines
- Description of the functional parts of the machine
- Capacity charts
- Set-up and start-up instructions
- Machine operation
- Scheduled maintenance
- Parts lists

GENERAL NOTES

After receiving your equipment remove the protective container. Do a complete visual inspection, and if damage is noted, **photograph it for insurance claims** and contact your carrier at once, requesting inspection. Also contact Baileigh Industrial and inform them of the unexpected occurrence. Temporarily suspend installation.

Take necessary precautions while loading / unloading or moving the machine to avoid any injuries.

Your machine is designed and manufactured to work smoothly and efficiently. Following proper maintenance instructions will help ensure this. Try and use original spare parts, whenever possible, and most importantly; **DO NOT** overload the machine or make any unauthorized modifications.



Note: This symbol refers to useful information throughout the manual.



IMPORTANT

PLEASE READ THIS OPERATORS MANUAL CAREFULLY

It contains important safety information, instructions, and necessary operating procedures. The continual observance of these procedures will help increase your production and extend the life of the equipment.



SAFETY INSTRUCTIONS

LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, **BE ALERT TO THE POTENTIAL FOR PERSONAL INJURY!**

Follow recommended precautions and safe operating practices.

UNDERSTAND SIGNAL WORDS

A signal word – **DANGER**, **WARNING**, or **CAUTION** is used with the safety alert symbol. **DANGER** identifies a hazard or unsafe practice that will result in severe **Injury or Death**.

Safety signs with signal word **DANGER** or **WARNING** are typically near specific hazards.

General precautions are listed on **CAUTION** safety signs. **CAUTION** also calls attention to safety messages in this manual.



DANGER



WARNING



CAUTION

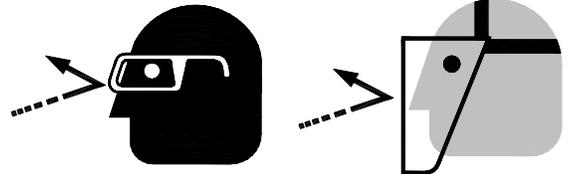


SAVE THESE INSTRUCTIONS.
Refer to them often and use them to instruct others.



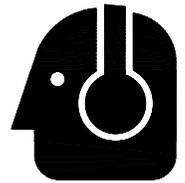
PROTECT EYES

Wear safety glasses or suitable eye protection when working on or around machinery.



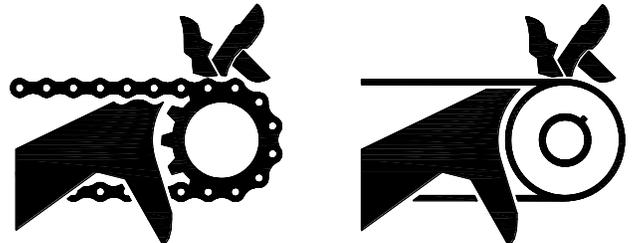
PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protective devices such as ear muffs or earplugs to protect against objectionable or uncomfortable loud noises.



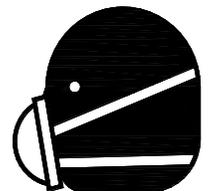
BEWARE OF PINCH POINTS

Keep hands and fingers clear of all potential pinch points. These include sprockets and chains along with belts and pulleys.



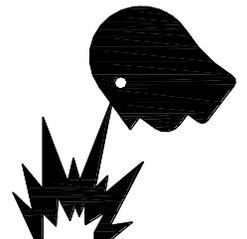
DUST HAZARD

Wear appropriate dust mask. Dust created while using machinery can cause cancer, birth defects, and long term respiratory damage. Be aware of the dust hazards associated with all types of materials.



DUST PARTICLES AND IGNITION SOURCES

DO NOT operate the table saw in areas where explosion risks are high. Such areas include locations near pilot lights, open flames, or other ignition sources.





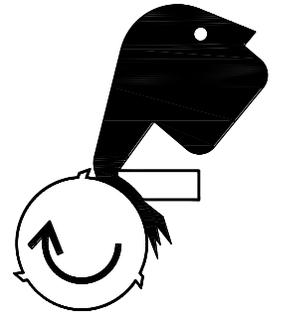
CUTTER HAZARD

Keep hands and fingers away from the rotating cutter blades. These rotating cutters can be extremely dangerous if you do not follow proper safety procedures. **NEVER place hands directly over or in front of the cutter. Keep hand at least 6" (150mm) from the cutter while operating.**



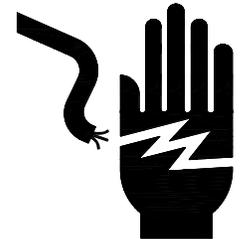
ENTANGLEMENT HAZARD – ROTATING BLADES

Contain long hair, **DO NOT** wear jewelry or loose fitting clothing.



HIGH VOLTAGE

USE CAUTION IN HIGH VOLTAGE AREAS. DO NOT assume the power to be off.
FOLLOW PROPER LOCKOUT PROCEDURES.





SAFETY PRECAUTIONS



Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. **Always use common sense** and exercise **caution** in the workshop. If a procedure feels dangerous, don't try it.

REMEMBER: Your personal safety is your responsibility.



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

Dear Valued Customer:

- All Baileigh woodworking machines should be used only for their intended use.
- Baileigh does not recommend or endorse making any modifications or alterations to a Baileigh machine. Modifications or alterations to a machine may pose a substantial risk of injury to the operator or others and may do substantial damage to the machine.
- Any modifications or alterations to a Baileigh machine will invalidate the machine's warranty.

Please enjoy your Baileigh machine!Please enjoy it SAFELY!

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.** Learn the machine's application and limitations as well as the specific hazards.
2. **Only trained and qualified personnel can operate this machine.**
3. **Make sure guards are in place and in proper working order before operating machinery.**
4. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
5. **Keep work area clean.** Cluttered areas invite injuries.
6. **Overloading machine.** By overloading the machine, you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
7. **DO NOT** bypass or defeat any safety interlock systems.



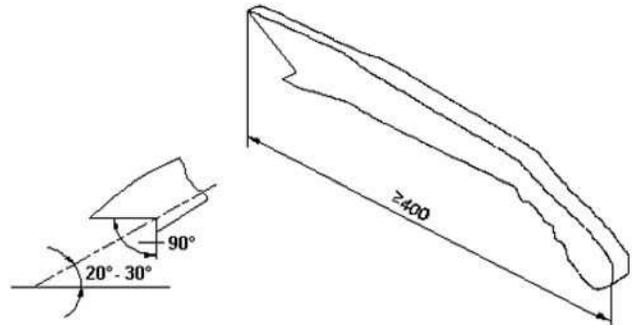
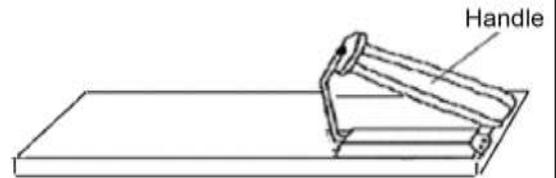
8. Know the location of the **ON - OFF** switch.
9. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
10. **Dress appropriate. DO NOT** wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
11. **Use eye and ear protection.** Always wear ISO approved impact safety goggles.
12. **Respirator Use.** Always use a mask or respirator approved for wood dust when using this machine to reduce the risk of respiratory problems.
13. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
14. **Operator Position.** If kickback occurs, the blade will eject the piece part into the path of the operator. **NEVER** stand in-line with the cutting path of the blade during operation.
15. **Awkward Positions.** Avoid awkward hand and body positions where a sudden slip could cause your hands or body to contact the spinning blade.
16. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
17. Keep visitors a safe distance from the work area.
18. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
19. **DO NOT operate machine if under the influence of alcohol or drugs.** Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
20. **DO NOT** touch live electrical components or parts.
21. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. Bare wiring can kill!
22. **Be Sure** all equipment is properly installed and grounded according to national, state, and local codes. If machine is equipped with a three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground.
23. **Maintain machine in top condition.** Keep clean for best and safest performance. Follow instructions for lubricating and changing accessories.
24. **Reduce the risk of unintentional starting.** Make sure switch is in “**OFF**” position before plugging in power cord.
25. **Never leave machine running unattended. TURN POWER OFF.** Don't leave machine until it comes to a complete stop.



26. **Make sure machine is disconnected from power supply** while motor is being mounted, connected or reconnected.
27. **Using Correct Materials.** Using materials other than natural wood fiber can result in serious personal injury and machine damage.
28. **Warning:** The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.
29. **Kickback.** Become familiar with the term “**Kickback**” before operating this jointer/planer. Kickback occurs when the piece part is thrown off the table by the force of the cutter head. Always use push blocks and wear safety glasses to reduce the likelihood for serious injury.
30. **Kickback Zone.** The path directly behind the end of the in-feed table is referred to as the “Kickback zone”. **NEVER** stand or allow others to stand in this area while the machine is running. Position yourself to one side of the machine while the jointer/planer is running.
31. **Using Quality Stock.** Inspect the stock over carefully that you intend to joint or plane. **NEVER** joint or plane a board that has knots, staples, or nails in it. **DO NOT** joint or plane a piece of stock if you have any doubts about its structural integrity.
32. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
33. **Support the piece part.** Supporting the piece part adequately while cutting, is crucial to making safe cuts and avoiding possible operator injury.
34. **Proper cutting.** While cutting, always keep the piece part moving towards the out-feed table until it has completely passed over the cutterhead. **NEVER** back the piece part toward the in-feed table.
35. **Dull / Damaged Knives.** Use only sharp, undamaged knives to avoid unnecessary kickback of the piece part. Dull and damaged knives will also affect cut quality.
36. **Maximum Cutting Depth.** The maximum cutting depth for one pass is 1/8” (3.2mm). **Never** set the machine to cut deeper than this in one pass.
37. **Grain Direction.** There is an increased chance of kickback when jointing or planing end grain or against the grain. This could also produce chatter and excessive chip out of the material.
38. **Observe work area conditions.** **DO NOT** use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted. **DO NOT** use electrically powered tools in the presence of flammable gases or liquids.
39. **Cutter head Alignment.** Keep the top edge of the out-feed table aligned with the cutterhead knife at top dead center (TDC). This will help to avoid kickback and possible operator injuries.
40. **Clearing Chips and Debris.** Chips and dust build-up can present an injury hazard and affect the cut. Turn the machine OFF, allow the tooling to cool, and vacuum away the debris.



- 41. **Feeding the Piece Part.** **ALWAYS** feed the piece part against the rotation of the cutter. **NEVER** force materials through the shaper. Excessive force against the shaper cutter will cause dangerous kickback conditions and can result in poor cuts.
- 42. **Hand Positioning.** **NEVER** place hands directly over or in front of the cutter. **ALWAYS** keep hand at least 6" (150mm) away from the cutter while operating.
- 43. **Blade Height.** Adjust the blade to the correct height above the piece part so it does not kickback toward the operator causing injury.
- 44. **Supporting Piece Part.** Provide adequate support to the sides and rear of the table for material that is extra wide and long.
- 45. **Push Blocks.** Push blocks or push sticks should be used in situations where it is necessary to push the piece part against the fence. Such as when machining narrow stock, where there is a risk of your hands and fingers contacting the rotating blade, resulting in **serious personal injury**, or when surface planing. **DO NOT** pass your hands directly over the cutter head without using a push block.





TECHNICAL SPECIFICATIONS

Power	220V, 1Ph, 60Hz
Motor	3hp (2.2kw), 220V, 60Hz, 13A
Dimensions (L x W x H)	51.2" x 29.5" x 39.4" (1300 x 750 x 1000mm)
Table Size (L x W)	51.2" x 12" (1300 x 308mm)
Cutter Head	RPM 6600
Fence Size	43.3" x 6" (1100 x 150mm)
Fence Tilt	45°, 90°
Maximum Depth of Cut	1/8" (3.0mm)
Cutter Head Diameter	2.75" (70mm)
Number of Knives	5 Groove Helical with 60pc inserts
Maximum Stock Width	12" (308mm)
Maximum Stock Height	8.9" (226mm)
Minimum Stock Thickness	0.2" (5mm)
Feed Speed	21FPM (6.6mpm)
Table Elevation	Manual
Planer Working Table	12" x 21.5" (308 x 545mm)
Planer Maximum Working Width	12" (308mm)
Thickener Maximum Working Height	8.9" (225mm)
Weight	210kg

TECHNICAL SUPPORT

Our technical support department can be reached at 920.684.4990, and asking for the support desk for purchased machines. Tech Support handles questions on machine setup, schematics, warranty issues, and individual parts needs: (other than die sets and blades).

For specific application needs or future machine purchases contact the Sales Department at: sales@baileigh.com, Phone: 920.684.4990, or Fax: 920.684.3944.



Note: *The photos and illustrations used in this manual are representative only and may not depict the actual color, labeling or accessories and may be intended to illustrate technique only.*



Note: *The specifications and dimensions presented here are subject to change without prior notice due to improvements of our products.*



UNPACKING AND CHECKING CONTENTS

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

⚠ WARNING: SUFFOCATION HAZARD! Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.
If any parts are missing, **DO NOT** place the machine into service until the missing parts are obtained and installed correctly.

Cleaning

⚠ WARNING: DO NOT USE gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

⚠ CAUTION: When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.



Important: This waxy coating is **NOT** a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.





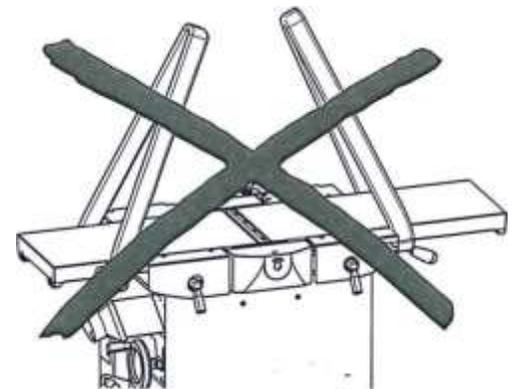
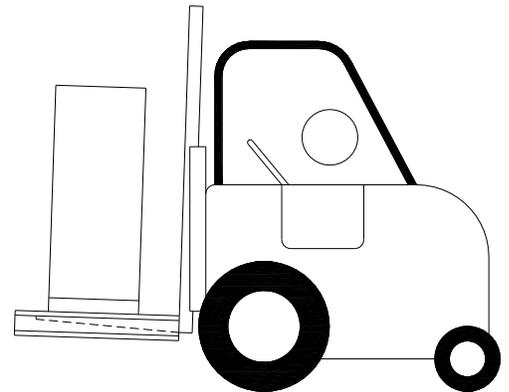
TRANSPORTING AND LIFTING



IMPORTANT: *Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.*

Follow these guidelines when lifting with truck or trolley:

- The lift truck must be able to lift at least 1.5 – 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a fork lift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.



INSTALLATION

IMPORTANT:

Consider the following when looking for a suitable location to place the machine:

- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for safety.



- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- It is important to maintain free area around the machine, which is required for the working place. If any long material is machined, it is necessary to have a sufficient room in front of the machine as well behind it in the places of material input and output.
- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine depends on the precise placement of it to the mounting surface.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.



GETTING TO KNOW YOUR MACHINE



DUST-COLLECTING

This machine is equipped with a dust collection hood with one port. The dust collector is optional and sold separately. Before the machine is used, make sure the dust collector work as designed.

The minimum required air speed at the end of flexible tube is 20 m/sec. The minimum required air volume of the machine is 750 m³/hr. (43,000~49,000 cu. ft./hr.). Use antistatic and electrically conductive hoses only.

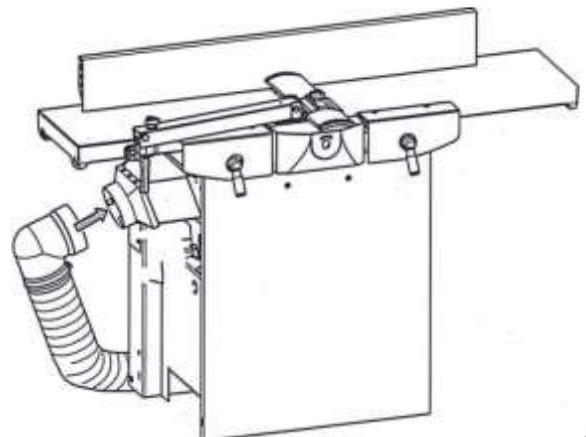


IMPORTANT: Use care and planning when attaching and routing flexible hose for dust collection. DO NOT create a trip hazard or an interference of the work station when routing the hose(s).

The 4" (100mm) dust port is part of and on the end of the dust hood/guard.

When connecting the flexible hose, plan for:

- The hose to travel with the hood when the machine is converted between the jointing and planing operations.
- Positioning so as NOT to interfere with the operator or the work piece.
- Prevention of the hose from creating a trip or entanglement hazard.
- Having the hose secured to the port to prevent accidental detachment during operation.





ELECTRICAL

 **CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!
Check if the available power supply is the same as listed on the machine nameplate.

 **WARNING:** Make sure the grounding wire (green) is properly connected to avoid electric shock. DO NOT switch the position of the green grounding wire if any electrical plug wires are switched during hookup.

Power Specifications

Your tool is wired for 220 volts, 60Hz alternating current. Before connecting the tool to the power source, make sure the machine is cut off from power source.

Before switching on the power, you must check the voltage and frequency of the power to see if they meet with the requirement, the allowed range for the voltage is $\pm 5\%$, and for the frequency is $\pm 1\%$.

Considerations

- Observe local electrical codes when connecting the machine.
- The circuit should be protected with a time delay fuse or circuit breaker with a amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your tools. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the tool.
- All line connections should make good contact. Running on low voltage will damage the motor.
- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

 **WARNING:** In all cases, make certain the receptacle in question is properly grounded. If you are not sure, have a qualified electrician check the receptacle.



- Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Repair or replace damaged or worn cord immediately.

Extension Cord Safety

Extension cord should be in good condition and meet the minimum wire gauge requirements listed below:

AMP RATING	LENGTH		
	25ft	50ft	100ft
1-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No
WIRE GAUGE			

An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords immediately.

Power cord connection:

1. Unwrap the power cord and route the cord away from the machine toward the power supply.
 - a. Route the power cord so that it will NOT become entangled in the machine in any way.
 - b. Route the cord to the power supply is a way that does NOT create a trip hazard.
2. Install an appropriate plug (supplied by customer). Verify the ground wire (typically green) is connected to ground.
3. Check that the power cord has not been damaged during installation.
4. When the machine is clear of any obstruction. The main power switch may be turn ON to test the operation.
5. Start the machine and observe the rotation of the cutter head. When standing at the front of the machine, the cutter head should rotate clockwise.



OPERATING SETUP

⚠ WARNING: Make sure the electrical disconnect is OFF before working on the machine.

Maintenance should be performed on a regular basis by qualified personnel.

Always follow proper safety precautions when working on or around any machinery.

Cutterhead knives are dangerously sharp. Use extreme caution when working around them. Failure to comply may cause serious injury.

Jointer to Planer Setup

To change the machine configuration jointer to planer (refer to Figure 2):

1. Disconnect and lockout power to the machine!
2. Position and secure the bridge guard/guide so that it extends outward of the table.
3. Position the fence assembly so that it covers the complete table.
4. Fully lower the planer table to allow clearance for the dust chute to be rotated.
5. Release both cabinet table locks (A) by rotating the handles toward the operator, then pulling away from the machine.
6. Raise the table (C) using the handle (B).



Figure 2



Figure 3



IMPORTANT: *The table is heavy. Use care and if needed an assistant when raising the table.*

7. When raised, the table should be in the vertical position as shown in C, Fig. 3.
8. The latch (E, Fig. 3) should be engaged, preventing the table from an accidental forward fall.
9. Position the dust chute (D, H Fig. 3) to the right. Use extreme care to avoid contact with cutterhead knives.



Note: The planer table may need to be lowered to allow clearance needed to position the dust chute.

10. Routing the dust collection hose as needed to be clear of the outfeed table and the operator, rotate the hood upward to cover and guard the cutter head. The hood is interlocked with the main motor so that the motor will not run if the hood does not fully cover the cutter head.
11. Verify that the dust hose does not block the outfeed table or interfere with the operator's movement.
12. The machine is ready for planer operation.

Planer to Jointer Setup

Referring to Figure 3: To change the machine configuration from planer to jointer:

1. Pull the release knob (F) and reposition the dust chute (D, G) to the left. It should be positioned as shown in D, Fig. 2.



IMPORTANT: *The table is heavy. Use care and if needed an assistant when lowering the table.*

2. Release the latch (E) and bring the table forward using the tilt handle (B). It should be positioned as shown in C, Fig. 2.
3. Lock the table (C) by pushing the lock handles (A) in toward the machine and rotating down (away from the operator).



Power

1. Once a properly rated plug is connected, plug power cord into outlet. Press the green on button (A, Fig. 4) to start. Press the red off button (B, Fig. 4) to stop.

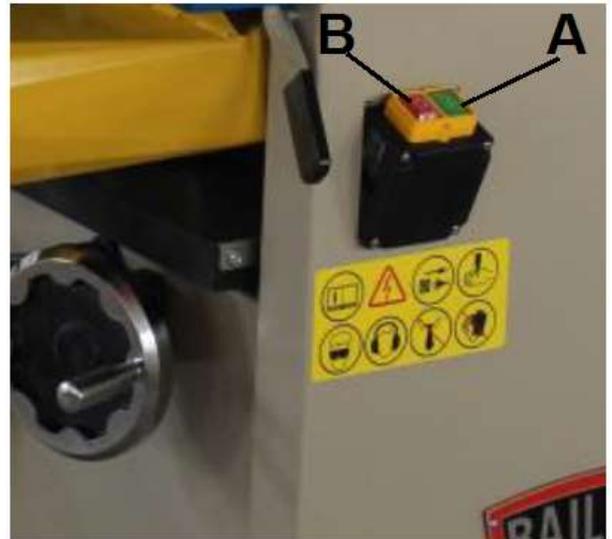


Figure 4

Planer Controls and Adjustments

Referring to Figure 5:

Power Feed

1. Placing the planer power feed handle (D) in the up position turns the planer power feed on (see arrow).
2. Placing the handle in the down position turns the power feed off.

Table Lock

1. Turn the table lock (E) clockwise to lock the height adjustment handwheel (F) and secure the planer table (C) in its selected position.
2. Turn the table lock (E) counterclockwise to release and permit table adjustment.

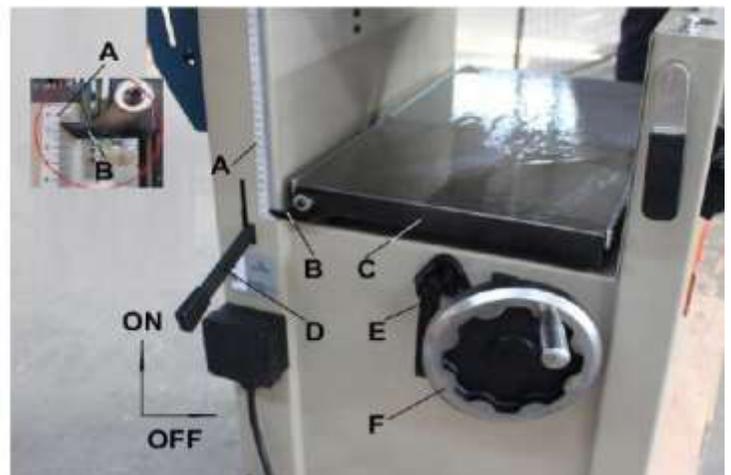


Figure 5

Table Height Adjustment

The planer table height is set as follows:

1. Unlock the table lock (E).
2. Rotate the height adjustment handwheel (F) clockwise to raise the planer table (C), counterclockwise to lower.



3. Lock the table lock (E). Each revolution of the handwheel (F) results in a 4mm up or down movement of the table (C). A scale on the handwheel column indicates the amount of handwheel rotation. A pointer (B) indicates the table position relative to the cutterhead on the scale (A) located on the side of the cabinet.

Jointer Controls and Adjustments

Referring to Figure 6:

Outfeed Table Height Adjustment

1. Lock knob (C) and lifting handle (B) control the height adjustment of the outfeed table (A). The outfeed table is initially adjusted at the factory and should not be repositioned except during certain adjustments.

Infeed Table Height Adjustment

Lock knob (D) and lifting handle (E) control the height adjustment of the infeed table (F).

To adjust:

1. Loosen lock knob (D).
2. Raise the lifting handle (E) to raise the infeed table for a shallow depth of cut. Lower the handle for a deeper cut.
3. Tighten the lock knob (D).

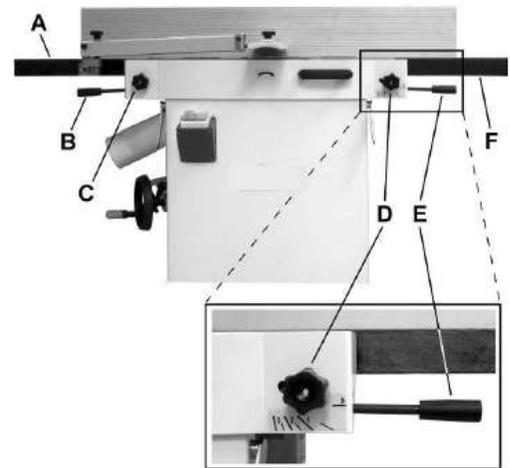


Figure 6



Note: A depth of cut of 0.0625" (1.5mm) or less is recommended.

Cutterhead Guard

1. Properly positioned, the cutterhead guard (H) should rest against the fence (A).

Fence Movement

Referring to Figure 7:

The fence (A) can be moved forward (B) or backward (C) across the width (W) of the table. It also tilts up to 45 degrees backwards (D).

To slide fence forward or backward:



Note: When edge jointing, the fence assembly should periodically be moved to different positions to distribute wear on the cutterhead knives.

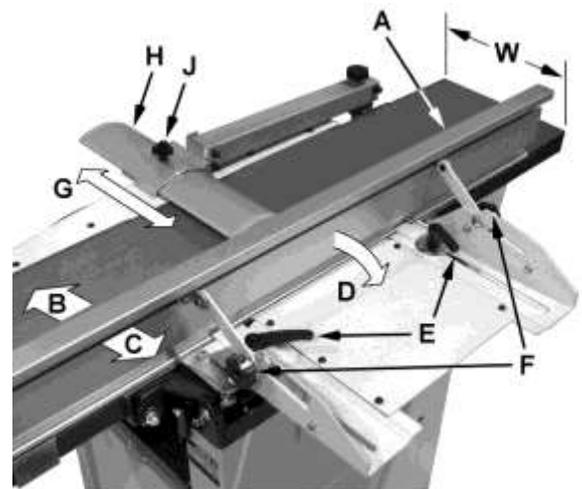


Figure 7



1. Loosen the lock knob (J), slide the cutterhead guard (H) into a position to allow the fence to move, then tighten the lock knob.
2. Loosen two fence assembly locking handles (E).
3. Move the entire fence assembly to the desired position; then re-tighten the handles (E).
4. Readjust and secure the cutterhead guard (H).

To tilt fence backward:

5. Loosen locking handles (F).
6. Tilt the fence back (A, C) to the desired angle up to 135 degrees. Or you can place your beveled reference piece on the table and against the fence, adjusting the fence until the angle of the fence matches the bevel of your gauge piece.
7. Tighten the locking handles (F).
8. Readjust and secure the cutterhead guard (H).

MACHINE ADJUSTMENT

Replacing or rotating knife inserts



WARNING: Make sure the electrical disconnect is OFF before working on the machine. Blades are extremely sharp! Use caution when cleaning or changing. Failure to comply may cause serious injury!

The knife inserts on this jointer/planer are four-sided. When dull, simply remove each insert, rotate it 90° for a fresh edge, and re-install it.

1. Use the provided star point screwdriver to remove the knife insert screw. See Figure 8. It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts affected.

Each knife insert has an etched reference mark to keep track of the rotations.

An extra set of 10 knife inserts and knife insert screws are included.

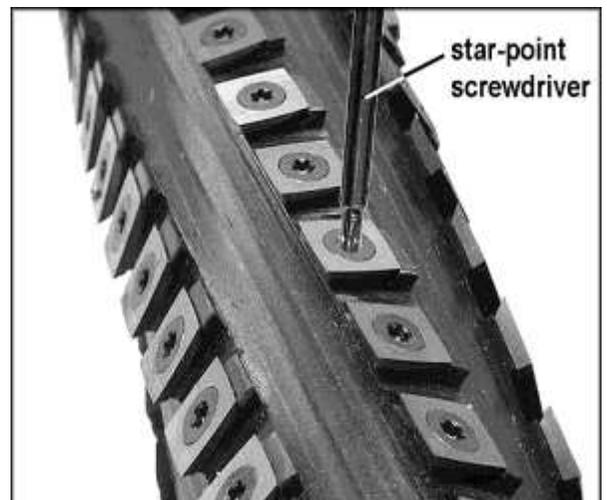


Figure 8



IMPORTANT: When removing or rotating inserts, clean saw dust from the screw, the insert, and the cutterhead platform. Dust accumulation between these elements can prevent the insert from seating properly, and may affect the quality of the cut.

2. Before installing each screw, lightly coat the screw threads with machine oil and wipe off any excess.
3. Securely tighten each screw which holds the knife inserts before operating the planer. Knife inserts should be torqued to approximately 50 to 55 inch pounds.



WARNING: Make sure all knife insert screws are tightened securely. Loose inserts can be propelled at high speed from a rotating cutterhead, causing injury.

Jointer Table Lock Handle Adjustment

For best performance, the jointer table lock handles (A2) should be approximately in the fully down position when in the locked position. If adjustment is required:

1. Disconnect machine from power source.
2. Unlock the lock handle (A2) and raise the table to the upright position.
3. Loosen locking nut (C2) with an 18mm wrench.
4. Adjust the table locking shaft (C1) in increments of 1/4 turns or less. Turn clockwise to tighten the lock handle performance and counterclockwise to loosen.
5. Tighten the locking nut (C2).
6. Test the locking function and repeat if necessary.

Belt Replacement



WARNING: Make sure the electrical disconnect is OFF before working on the machine. Blades are extremely sharp! Use caution when cleaning or changing. Failure to comply may cause serious injury!

To replace the cutterhead drive belt and/or the planer feed-roller belt, the jointer fence assembly and two back panels must first be removed as described below. A 4mm hex wrench and two 13mm wrenches are required.



1. Remove the jointer fence assembly (A Fig.9) by first loosening and removing two lock handle assemblies (B). A 4mm hex wrench is helpful, but not necessary.
2. Remove two button head socket screws (C) and upper back panel (D).
3. Remove four button head socket screws (O) and lower back panel (P).
4. Loosen four motor mount screws (L). Lift the motor and rest it in the horizontal slot side of the motor mount opening. This will create a slack in the cutterhead drive belt (F).
5. Remove the cutterhead drive belt (F) from around the cutterhead pulley (E) and motor pulley (M).
6. If the feed-roller belt (K) is to be replaced, continue. Otherwise proceed to step 10.

Feed-roller Belt Replacement



Note: If the feed-roller belt is to be replaced, steps 1–5 must be performed to remove the cutterhead drive belt before the feed-roller belt can be replaced.

7. Place the power feed handle (J) in the down (off/disengaged) position, which provides belt slack for the next step.
8. Remove the feed-roller belt (G) from around the feed-roller pulley (K) and motor pulley (M).
9. Loop the new belt around the smaller (inner) motor pulley (M) and feed-roller pulley (K).



Note: The lower stretch of the feed-roller pulley must be positioned between the belt brake plates (N).

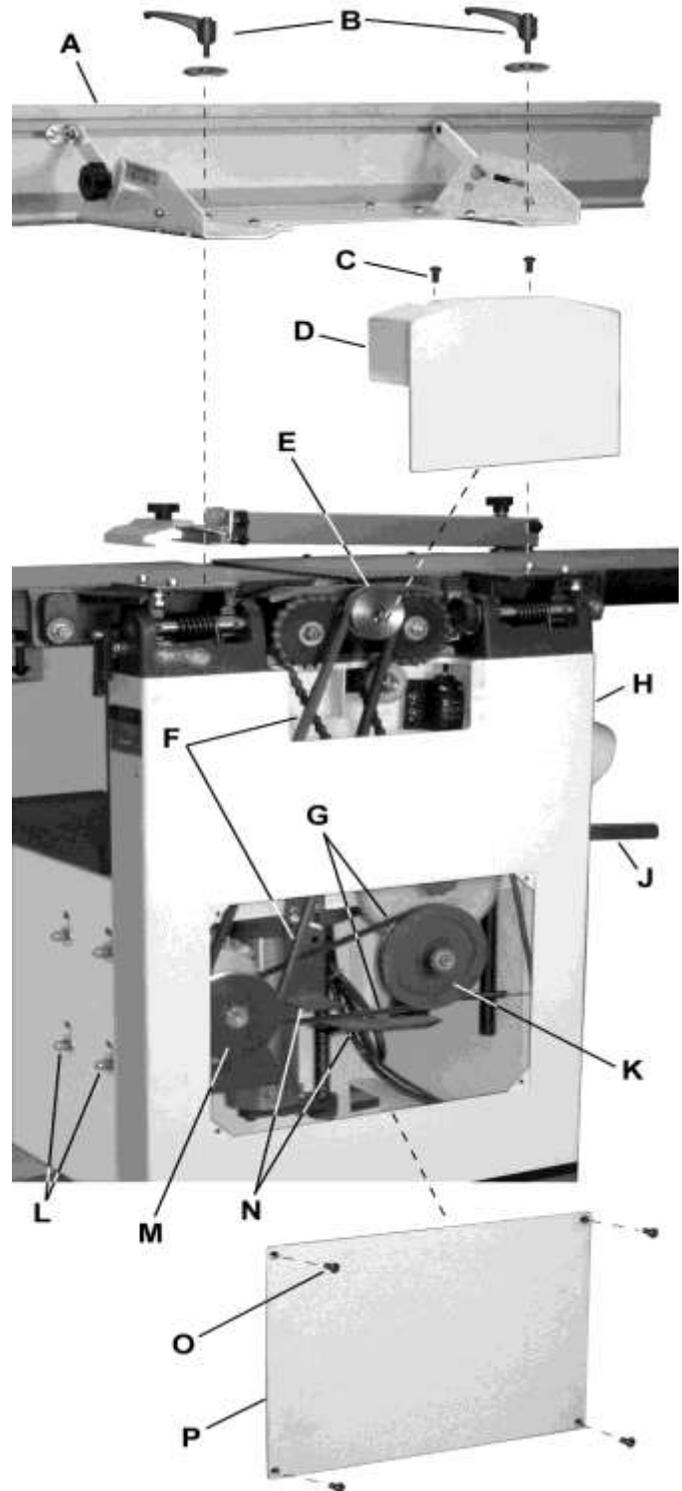


Figure 9



10. Replace the cutterhead drive belt (F) by looping it around the cutterhead pulley (E), then the larger (outside) motor pulley (M).
11. Slide the motor so the mounting screws (L) rest back in the vertical slot openings, then tighten the mounting screws.
12. Replace the lower back panel (P) and secure with four button head socket screws (O).
13. Replace the upper back panel (D) and secure with two button head socket screws (C).
14. Replace the jointer fence assembly (A) and secure with two lock handle assemblies (B).

Feed Roller Height Adjustment

The height of the infeed and outfeed rollers has been set by the manufacturer for planing operations. If this setting should ever need adjustment, it is done using the screw and nut (A1, A2, Figure 10) at each end of the rollers.

1. Disconnect machine from power source.
2. Remove the covers from front and back of the machine.
3. At the back, remove the chain and sprockets from their shafts.
4. Loosen the hex nut (A1) and rotate the screw (A2) as needed to raise or lower that end of the roller.

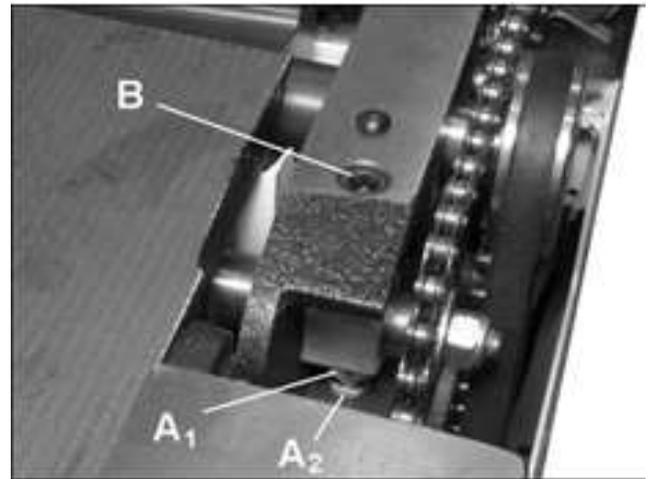


Figure 10



Note: Feed rollers must remain parallel to the table, and about 1/32" below the cutting arc of the knives or knife inserts.

5. Adjust any of the four screw/nut assemblies as needed.
6. Use a gauge on the planer table to verify the height of the rollers in relation to the cutterhead.
7. When settings are correct, tighten the hex nuts (A1) up against the casting.
8. Make test cuts to verify the setting.



Feed Roller Pressure Adjustment

The pressure of the feed rollers against the workpiece during planing operations is maintained by spring tension. To adjust this tension, turn the socket head screw (B, Figure 15), clockwise to increase pressure, counterclockwise to decrease pressure.

Table and Knife Adjustments

For accurate jointing, these items must be true:

- Infeed and outfeed tables must be coplanar.
- Knife inserts must be set in the cutterhead so that the highest point of their arc is level with the outfeed table.

These alignments are explained below.

Disconnect machine from power source before making any adjustments. Failure to comply may cause serious injury.

Coplanar Alignment

Definition of coplanar

When the infeed table is set to the same level as the outfeed table and together both tables form a "perfect" flat surface, the tables are said to be coplanar.

For optimum performance of the jointer, the infeed and outfeed tables must be coplanar. If they are not, the finished workpiece may have a slight taper or twist across its jointed width or length.

Determining if tables are coplanar

The tables have been set coplanar at the factory, but they should be double-checked by the operator. Also, as the machine undergoes use, the tables should be checked occasionally and adjusted if necessary.

The procedure described below uses a steel straight edge to set the tables, which should be accurate enough for most purposes.



Important: The tables must be locked in position when performing the following test.

Referring to Figures 11 and 12:

1. Disconnect jointer from power source.
2. Loosen the lock knob (A) and slide the cutterhead guard (B, C) to clear the table.
3. Slide the fence assembly back (H, E) as far as it will go, or remove it from the machine entirely.
4. Rotate the cutterhead to avoid knife interference.

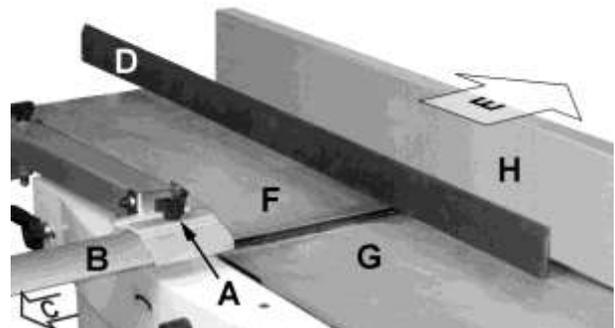


Figure 11



5. Place a straight edge (D) across the front of the outfeed table (F) and extending over the infeed table (G). Note the position of the infeed table (G).



Note: The position of the straight edge as shown in figure 12 with respect to the fence (H).

6. Raise the infeed table (G) until it contacts the straight edge (D).

The straight edge should lie level across both tables. Move the straight edge to the back of the outfeed table as shown in Figure 12 and perform the same test.

If the straight edge does not lie level, the front or back of one of the tables must be adjusted to make the tables coplanar.

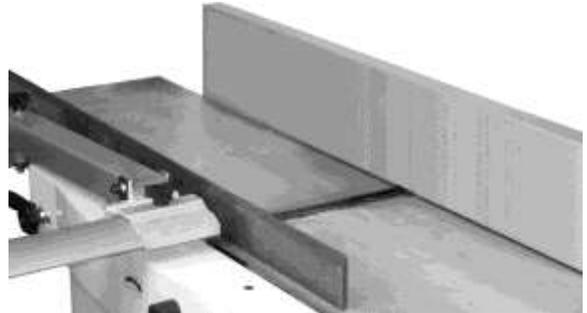


Figure 12

Performing the Coplanar Alignment

If alignment is required as determined in the previous section, proceed as follows:



WARNING: Make sure the electrical disconnect is OFF before working on the machine.

Blades are extremely sharp! Use caution when cleaning or changing. Failure to comply may cause serious injury!

1. Disconnect power from machine.
2. Unlock both cabinet lock handles (A2 Fig.13).
3. Raise the table (D) fully upright. Adjustment is performed by means of four setscrews (B2) that adjusts the table pitch and tilt at the back (towards the fence) and two hex cap screws (A1) that adjusts the table toward the front.

Adjustment can consist of a front adjustment, rear adjustment or (more probable) a combination of both.



Rear adjustment

Tools required – 13mm wrench, 4mm hex wrench

1. With a 13mm wrench, loosen the hex cap screws (B1).
2. Using a 4mm hex wrench, make very slight adjustments of 1/8 to 1/4 turns to setscrews (B2) as required. A clockwise turn will raise the table; a counterclockwise turn will lower the table. Adjusting the two right setscrews will have greatest adjustment impact to the table's right side; adjusting the two left setscrews will have greatest adjustment impact to the table's left side.
3. When adjustment is complete, tighten the hex cap screws (B1)

Front adjustment

Tools required – two 13mm wrenches

1. Hold the hex cap screws (A1) in place with one wrench while using the other to loosen the locking hex nuts.
2. Adjust the screws (A1) slightly from 1/8 to 1/4 turn. A counterclockwise turn will raise the table; a clockwise turn will lower the table. Adjusting the right screw will have greatest adjustment impact to the table's right side; adjusting the left screws will have greatest adjustment impact to the table's left side.
3. When adjustment is complete, secure by tightening the hex nut while maintaining the position of the screw with the second wrench. It may be necessary to repeat the exercise in this section more than once to achieve co-planar alignment.



Note: If the tables do not lock properly after the adjustment, see *Jointer Table Lock Handle Adjustment* on page next.

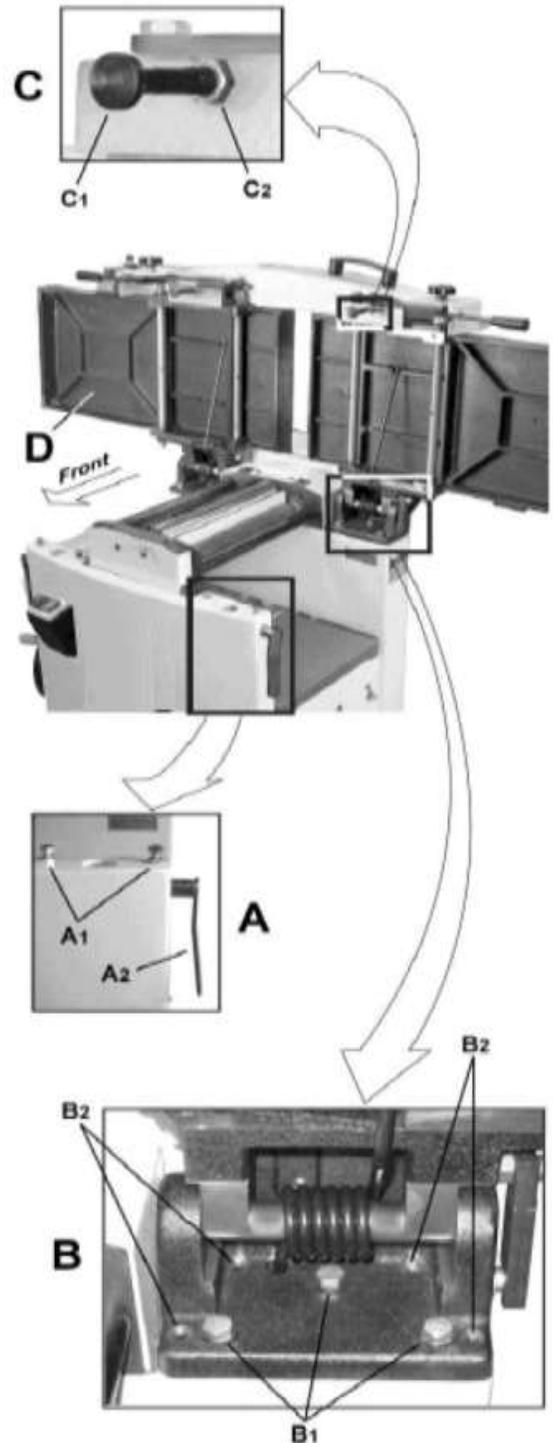


Figure 13



Planer Table Adjustment



WARNING: Make sure the electrical disconnect is OFF before working on the machine.

Blades are extremely sharp! Use caution when cleaning or changing. Failure to comply may cause serious injury!

Checking Planer Table Parallel to Cutterhead

The planer table is set parallel to the cutterhead by the manufacturer and no further adjustment is typically necessary. If your machine is planing a taper, adjust if needed.

After the inserts are confirmed to be properly set, check to see if the work table is set parallel to the cutterhead as follows.

1. Disconnect machine from power source.
2. Place a gauge block (B) or another measuring device on the work table (C) at one edge (D) directly under the cutterhead.
3. Unlock the table lock handle (F).
4. With the handwheel (G), gently raise the table (C) until the gauge block (B) makes slight contact with the tip of the knife blade, then lock the table.
5. Move the gauge block (B) to opposite end of table (E).
6. If the distance from the table to tip of the knife blade is the same at both ends, the table is parallel to the cutterhead.

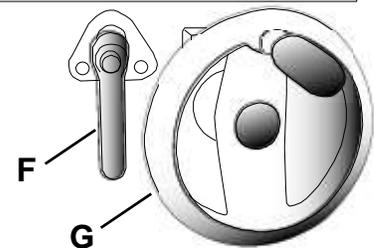
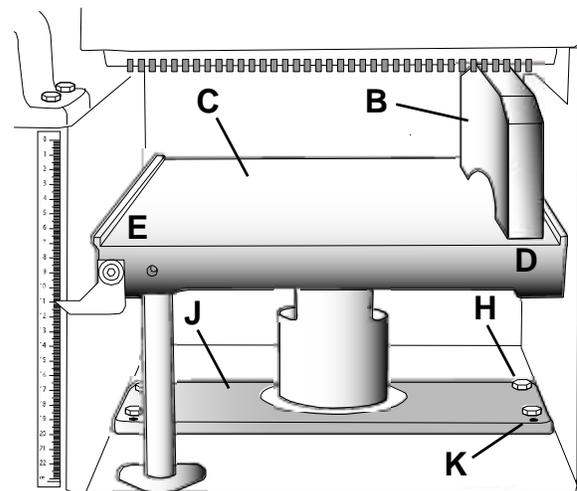


Figure 14

Adjusting Work Table Parallel to Cutterhead

If the work table is not parallel to the cutterhead, perform the adjustment procedure as follows:

7. With a 13mm wrench, loosen four hex cap screws (H) located at each corner of the column support (J).
8. Bring the table parallel to the cutterhead by adjusting four setscrews (K) located at each corner of the column support (J) next to the hex cap screws (H).
9. Repeat steps 3 – 6, and if further adjustment is necessary, repeat steps 8, 9.

When the table is determined to be parallel to the cutterhead, tighten the hex cap screws (H).



OPERATION

⚠ CAUTION: Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges. When handling large heavy material make sure they are properly supported.

Initial Start-up

After the assembly and adjustments are complete the planer is ready to be tested. Turn on the power supply at the main panel. Press the Start button. Keep your finger on the Stop button in case of a problem. The planer should run smoothly with little or no vibration or rubbing noises. Investigate and correct the source of any problems before further operation. DO NOT attempt to investigate or adjust the planer while it is running. Wait until the planer is turned off, unplugged and all working parts have come to a complete standstill.

Changing Mode of Operation

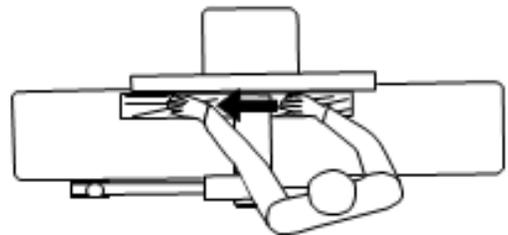
When changing the operating mode (planer to jointer and back) the machine must be turned off and at a complete standstill. To change the mode of operation, see sections Jointer to Planer Setup and Planer to Jointer Setup.

Jointer Operations

Correct operating position

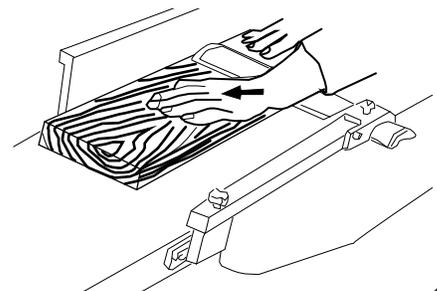
The operator must be positioned offset to the infeed table (Figure 15).

At the start of the cut, the left hand holds the workpiece firmly against the infeed table and fence while the right hand pushes the workpiece in a smooth, even motion toward the cutterhead. After the cut is under way, the new surface rests firmly on the outfeed table. The left hand is transferred to the outfeed side (Figure 15) and presses down on this part of the workpiece, at the same time maintaining flat contact with the fence. The right hand presses the workpiece forward and before the right hand reaches the cutterhead it should be moved to the work on the outfeed table.



Surfacing

The purpose of planing on a jointer is to produce one flat surface (Figure 16). The other side can then be milled to precise, final dimensions on a thickness planer resulting in a board that is smooth and flat on both sides and each side parallel to the other.

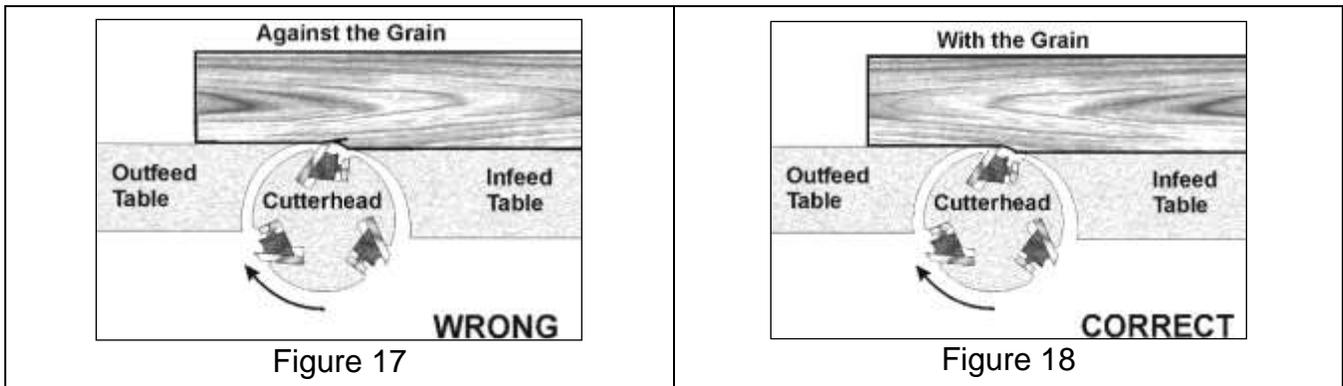




- If the wood to be jointed is cupped or bowed, place the concave side down, and take light cuts until the surface is flat.
- Never surface pieces shorter than 16 inches or thinner than 3/8 inch without the use of a special work holding fixture.
- Never surface pieces thinner than 3 inches without the use of a push block.
- Cuts of approximately 1/16" at a time are recommended, which provides for better control over the material being surfaced. More passes can then be made to reach the desired depth.

Direction of Grain

Avoid feeding work into the jointer against the grain (Figure 17). This may result in chipped and splintered edges. Feed with the grain to obtain a smooth surface, as shown in Figure 17.



Jointing

Jointing (or edging) is the process of creating a finished, flat edge surface that is suitable for joinery or finishing (Figure 18). It is also a necessary step prior to ripping stock to width on a table saw.

- Never edge a board that is less than 3 inches wide, less than 1/4inch thick, or 12 inches long, without using a push block.
- When edging wood wider than 3 inches lap the fingers over the top of the wood, extending them back over the fence such that they will act as a stop for the hands in the event of a kickback.
- Position the fence (move forward) to expose only the amount of cutterhead required.

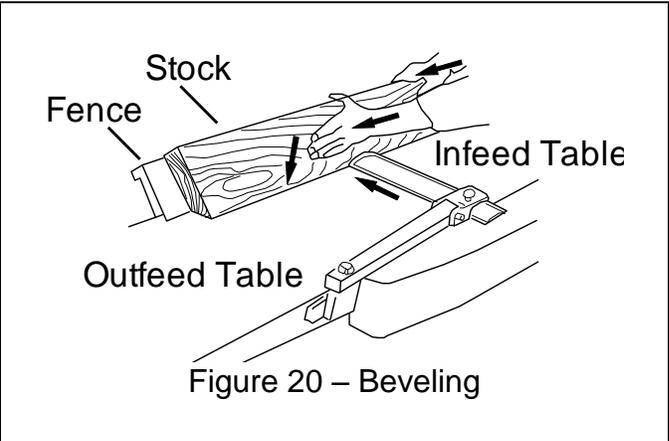
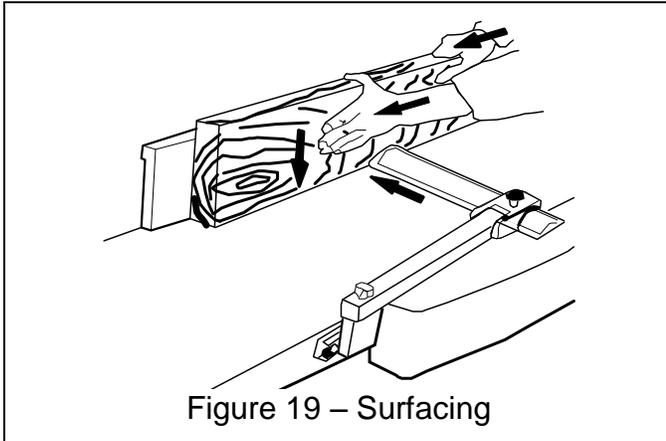
When workpiece is twice the length of the jointer infeed or outfeed table use an infeed or outfeed support.

To edge:

1. Make sure the fence is set to 90°. Double check it with a square.
2. Inspect stock for soundness and grain direction (refer to Direction of Grain).
3. If the board is bowed (curved), place the concave edge down on the infeed table.



4. Set the infeed table for a cut of approximately 1.5mm.
5. Hold the stock firmly against the fence and table, feed the stock slowly and evenly over the cutterhead.



Beveling

Beveling an edge is the same operation as edge jointing, except that the fence is tilted to a specified angle.

- Make certain material being beveled is over 12 inches long, more than 1/4inch thick and 1 inch wide.

To bevel:

6. Use a bevel gauge to determine the desired angle. Then set the fence to the same angle.
7. Inspect stock for soundness and grain direction (refer to Direction of Grain on previous page).
8. Set the infeed table for a cut of approximately 1.5mm.
9. If the board is bowed (curved), place the concave edge down on the infeed table.
10. Feed the stock through the cutterhead, making sure the face of the stock is completely flat against the fence and the edge is making solid contact on the infeed and outfeed tables (Figure 20).

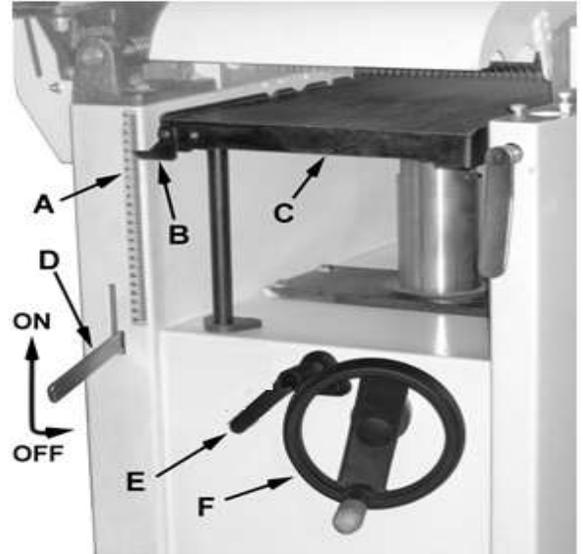
For wood wider than 3 inches – hold with fingers close together near the top of the stock, lapping over the board and extending over the fence. For wood less than 3 inches wide – use beveled push blocks and apply pressure toward the fence. Keep fingers near top of push block. Several passes may be required to achieve the full bevel will probably take several passes.



Planer Operations

Depth of Cut

Thickness planing refers to the sizing of lumber to a desired thickness while creating a level surface parallel to the opposite side of the board. Board thickness that the planer will produce is indicated by the scale and the depth-of-cut gauge. Preset the planer to the desired thickness of the finished workpiece using the gauge. The depth-of-cut is adjusted by raising or lowering the planer table (C, Fig. 21) using the handwheel (F, Fig. 21).



- The quality of thickness planning depends on the operator's judgment about the depth of cut.
- The depth of cut depends on the width, hardness, dampness, grain direction and grain structure of the wood.
- The maximum thickness of wood that can be removed in one pass is 1/8" for planning operations on workpieces up to 5-1/2" wide. The workpiece must be positioned away from the center tab on the roller case to cut 1/8".
- The maximum thickness of wood that can be removed in one pass is 1/16" for planning operations on workpieces from 5-1/2" up to 12" wide.
- For optimum planning performance, the depth of cut should be less than 1/16".
- The board should be planed with shallow cuts until the work has a level side. Once a level surface has been created, flip the lumber and create parallel sides.
- Plane alternate sides until the desired thickness is obtained. When half of the total cut has been taken from each side, the board will have a uniform, moisture content and additional drying will not cause it to warp.
- The depth of cut should be shallower when the workpiece is wider.
- When planning hardwood, take light cuts or plane the wood in thin widths.
- Make a test cut with a test piece and verify the thickness produced.
- Check the accuracy of the test cut before working on the finished product.

Precautions

- A thickness planer is a precision woodworking machine and should be used on quality lumber only.
- Do not plane dirty boards; dirt and small stones are abrasive and will wear out the blade.
- Remove nails and staples. Use the planer to cut wood only.



- Avoid knots. Heavily cross-grained wood makes knots hard. Knots can come loose and jam the blade. Any article that encounters planer blades may be forcibly ejected from the planer creating a risk of injury.

Preparing the Work

- A thickness planer works best when the lumber has at least one flat surface. Use a jointer to create a flat surface.
- Twisted or severely warped boards can jam the planer. Rip the lumber in half to reduce the magnitude of the warp.
- The work should be fed into the planer in the same direction as the grain of the wood. Sometimes the wood will change directions in the middle of the board. In such cases, if possible, cut the board in the middle so the grain direction is correct.
- Do not plane a board that is less than 6" long. It is recommended that when planing short boards, you butt them end to end to avoid kickback and reduce snipe.

Feeding the Work

The planer is supplied with planer blades mounted in the cutterhead and infeed and outfeed rollers adjusted to the correct height. The planer feed is automatic; it will vary slightly depending on the type of wood.

Preparation:

- Feed rate refers to the rate at which the lumber travels through the planer.
- The operator is responsible for aligning the work so it will feed properly.
- Raise or lower the roller case to get the depth of cut desired.
- The surface that the planer produces will be smoother if a shallower depth of cut is used.
- Stand on the side that the handle is attached.
- Boards longer than 24" should have additional support from free standing material stands.

Planing:

1. Position the workpiece with the face to be planed on top.
2. Turn the planer on.
3. Turn the power feed on.
4. Rest the board end on the infeed roller plate and direct the board into the planer.
5. Slide the workpiece into the infeed side of the planer until the infeed roller begins to advance the workpiece.
6. Let go of the workpiece and allow the automatic feed to advance the workpiece.



7. Do not push or pull on the workpiece. Move to the rear and receive the planed lumber by grasping it in the same manner that it was fed. To avoid the risk of injury due to kickbacks, do not stand directly in line with the front or rear of the planer.
8. Do not grasp any portion of the board that has not gone past the outfeed roller.
9. Repeat this operation on all of the boards that need to be the same thickness.

Avoiding Snipe

Snipe refers to a depression at either end of the board caused by an uneven force on the cutterhead when the work is entering or leaving the planer.

Snipe will occur when the boards are not supported properly or when only one feed roller is in contact with the work at the beginning or end of the cut.

Precautions for avoiding snipe:

- Push the board up while feeding the work until the outfeed roller starts advancing it.
- Move to the rear and receive the planed board by pushing it up when the infeed roller loses contact with the board.
- When planing more than one board of the same thickness, butt the boards together to avoid snipe.
- Make shallow cuts. Snipe is more apparent when deeper cuts are taken.
- Feed the work in the direction of the grain. Work fed against the grain will have chipped, splintered edges.



LUBRICATION AND MAINTENANCE



WARNING: Make sure the electrical disconnect is OFF before working on the machine.

Maintenance should be performed on a regular basis by qualified personnel.

Always follow proper safety precautions when working on or around any machinery.

Daily Maintenance

- Do a general cleaning by removing dust and chips from the machine.
- Check and tighten any loose mounting bolts.
- Sharpen or replace any worn or damaged tooling.
- Inspect the power plug and cord.
- Keep area around machine clear of debris.
- Check for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.



Note: When cleaning chips and debris from the machine, use a brush and a shop vacuum. **DO NOT** blow off the machine with compressed air. The force of the compressed air may force chips into critical mechanisms or may inflict injury to yourself or others.

Monthly Maintenance

- Check that all screws and bolts are tight and secure.
- Check for worn or damaged electrical cables.



Note: Proper maintenance can increase the life expectancy of your machine.



Blade Care

 **WARNING:** Make sure the electrical disconnect is OFF before working on the machine.
Blades are extremely sharp! Use caution when cleaning or changing. Failure to comply may cause serious injury!

- The condition of the blades will affect the precision of the cut. Observe the quality of the cut that the planer produces to check the condition of the blades.
- Dull blades will tear, rather than cut the wood fibers and produce a fuzzy appearance.
- Raised grain will occur when dull blades pound on wood that has varying density. A raised edge will also be produced where the blades have been nicked. When gum and pitch collect on the blades, carefully remove with a strong solvent. Failure to remove gum and pitch build up may result in excessive friction, blade wear and overheating. When blades become dull, rotate or replace the blades.

Lubrication

- Use a good grade of light grease on the steel adjusting screws located in the raising and lowering mechanisms of the work tables.
- The cutterhead ball bearings are lifetime lubricated and need no further care.



TROUBLESHOOTING

⚠ WARNING: Make sure the electrical disconnect is **OFF** before working on the machine.

Performance Troubleshooting – Jointer

Trouble	Probable Cause	Remedy
Finished stock is concave on back end.	Knife is higher than outfeed table.	Align cutterhead knives with outfeed table. Setting cutterhead knives.
Finished stock is concave on front end.	Outfeed table is higher than knife.	Align cutterhead knives with outfeed table. Setting cutterhead knives.
Chip out.	Cutting against the grain.	Cut with the grain whenever possible.
	Dull knives.	Rotate knife inserts or replace inserts.
	Feeding workpiece too fast.	Use slower rate of feed.
	Cutting too deeply.	Make shallower cuts.
	Knots, imperfections in wood.	Inspect wood closely for imperfections; use different stock if necessary.
Fuzzy grain.	Wood has high moisture content.	Allow wood to dry or use different stock.
	Dull knives.	Rotate knife inserts or replace inserts.
Cutterhead slows while operating.	Feeding workpiece too quickly, or applying too much pressure to workpiece.	Feed more slowly, or apply less pressure to workpiece.
“Chatter” marks on workpiece.	Knives incorrectly set.	Setting cutterhead knives. Check that knife slots are clean and free of dust or debris.
	Feeding workpiece too fast.	Feed workpiece slowly and consistently.
Uneven knife marks on workpiece.	Knives are nicked, or out of alignment.	Align knives, Setting cutterhead knives. Rotate knife inserts or replace inserts.



Performance Troubleshooting – Planer

Trouble	Probable Cause	Remedy
Snipe Note: Snipe cannot be eliminated, but can be so minimized as to become negligible.	Table rollers not set properly.	Adjust rollers to proper height
	Inadequate support of long boards.	Support long boards with extension rollers.
	Uneven feed roller pressure front to back.	Adjust feed roller tension.
	Dull knives.	Rotate knife inserts or replace inserts.
	Lumber not butted properly.	Butt end to end each piece of stock as they pass through.
Fuzzy Grain	Planing wood with high moisture content.	Remove high moisture content from wood by drying.
	Dull knives.	Rotate knife inserts or replace inserts.
Torn Grain	Too heavy a cut.	Adjust proper depth of cut.
	Knives cutting against grain.	Cut along the grain.
	Dull knives.	Rotate knife inserts or replace inserts.
Rough/Raised Grain	Dull knives.	Rotate knife inserts or replace inserts.
	Too heavy a cut.	Adjust proper depth.
	Moisture content too high.	Remove high moisture content from wood by drying.
Rounded, glossy surface	Dull knives.	Rotate knife inserts or replace inserts.
	Feed speed too slow.	Increase speed.
	Cutting depth too shallow.	Increase depth.
Poor feeding of lumber.	Inadequate feed roller pressure.	Adjust feed roller tension. If proper tension cannot be achieved, replace feed rollers
	Planer bed rough or dirty.	Clean pitch and residue, and wax planer table.
	Transmission v-belt slipping.	Tighten transmission v-belt.
	Surface of feed rollers clogged.	Clear pitch and residue out of teeth.
Uneven depth of cut side to side.	Knife projection.	Adjust knife projection.
	Cutterhead not level with bed.	Level bed.
Board thickness does not match depth of cut scale.	Depth of cut scale incorrect.	Adjust depth of cut scale.



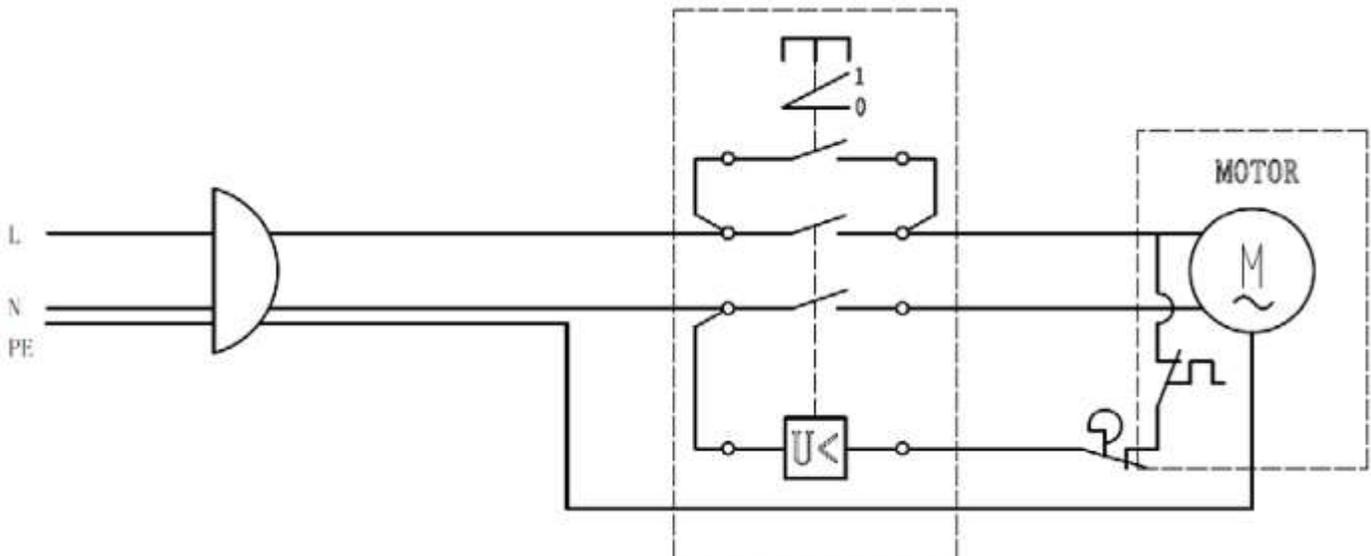
Mechanical Troubleshooting – Planer/Joiner

Trouble	Probable Cause	Remedy
Chain jumping.	Inadequate tension.	Adjust chain tension.
	Sprockets misaligned.	Align sprockets.
	Sprockets worn.	Replace sprockets.
Machine will not start/ restart or repeatedly trips circuit breaker or blows fuses.	No incoming power.	Verify unit is connected to power, on-button is pushed in completely, and stop-button is disengaged.
	Overload automatic reset has not reset	When planer overloads on the circuit breaker built into the motor starter, it takes time for the machine to cool down before restart. Allow unit to adequately cool before attempting restart.
	Planer frequently trips.	One cause of overloading trips, which are not electrical in nature, is too heavy a cut. The solution is to take a lighter cut. If too deep a cut is not the problem, then check the amp setting on the overload relay. Match the full load amps on the motor as noted on the motor plate. If the amp setting is correct then there is probably a loose electrical lead. Check amp setting on motor starter.
	Building circuit breaker trips or fuse blows.	Verify that planer is on a circuit of correct size. If circuit size is correct, there is probably a loose electrical lead. Check amp setting on motor starter.
	Loose electrical connections.	Go through all the electrical on the planer including motor connections, verifying the tightness of each. Look for any signs of electrical arcing which is a sure indicator of loose connections or circuit overload.
	Motor starter failure.	Examine motor starter for burned or failed components. If damage is found, replace motor starter. If motor starter looks okay but is still suspect, you have two options: have a qualified electrician test the motor starter for function, or purchase a new starter and establish if that was the problem on change out
	Switch or Motor failure – how to distinguish.	If you have access to a voltmeter, you can separate a starter failure from a motor failure by first, verifying incoming voltage at 220+/-15



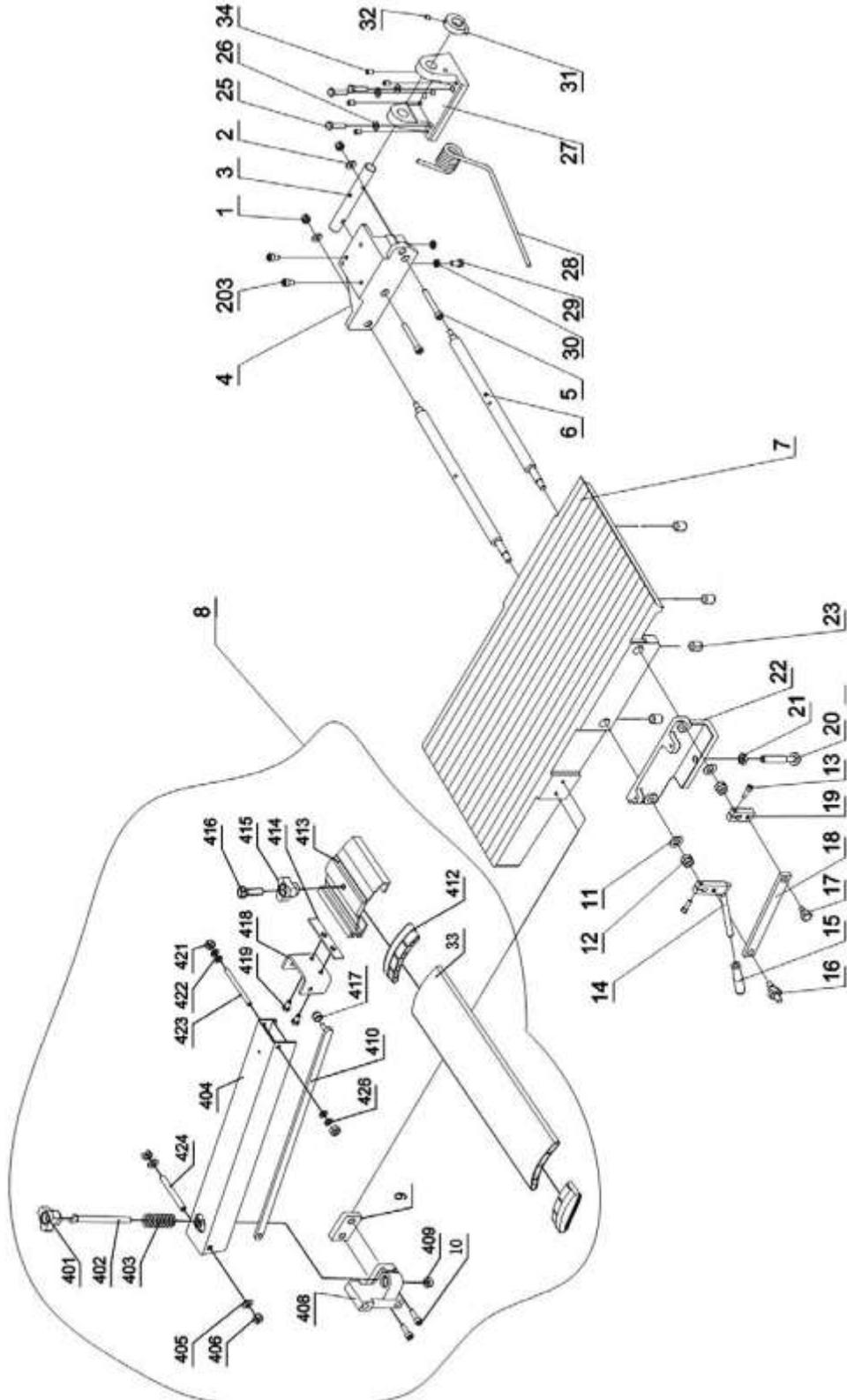
		and second, checking the voltage between starter and motor at 220+/-15. If incoming voltage is incorrect, you have a power supply problem. If voltage between starter and motor is incorrect, you have a starter problem. If voltage between starter and motor is correct, you have a motor problem.
	Motor failure.	If electric motor is suspect, you have two options: Have a qualified electrician test the motor for function or remove the motor and take it to a quality electric motor repair shop and have it tested.
	Miswiring of the unit.	Double check to confirm all electrical connections are correct and properly tight. The electrical connections other than the motor are pre-assembled and tested at the factory. Therefore, the motor connections should be double checked as the highest probability for error. If problems persist, double-check the factory wiring.

ELECTRICAL DIAGRAM





CUTTER BLOCK GUARD AND OUTFEED ASSEMBLY PARTS DIAGRAM





Cutter Block Guard and Outfeed Assembly Parts List

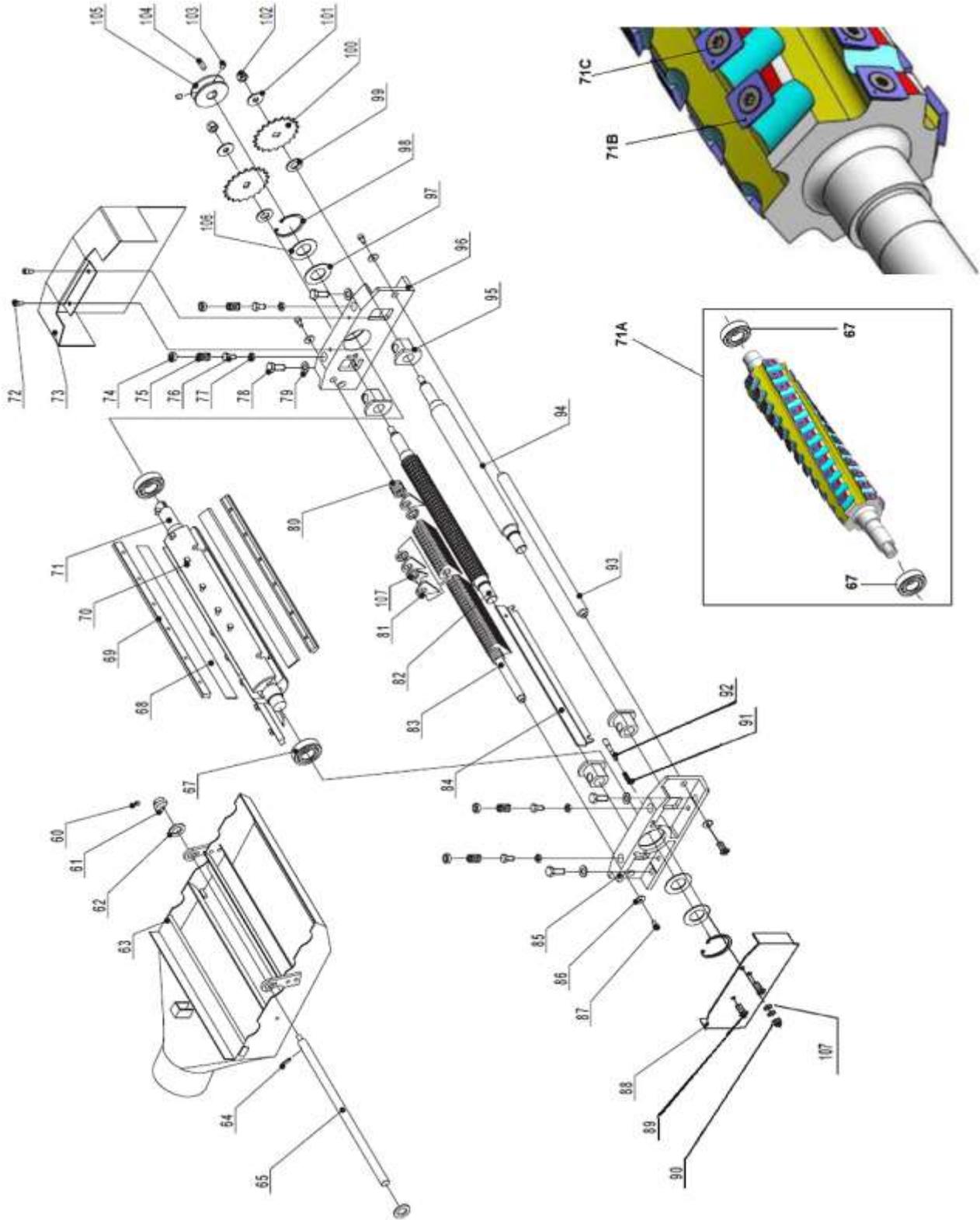
Item	Part No.	Description	Specification	Qty.
1	JP1686V2-001	Lock Nut	M8	4
2	JP1686V2-002	Washer	M8	4
3	JP1686V2-003	Outfeed Table Bracket Shaft		1
4	JP1250-1.0-004	Outfeed Table Bracket Right		1
5	JP1686V2-005	Hex. Socket Cap Screw	M8x60	4
6	JP1250-1.0-006	Eccentric Shaft		4
7	JP1250-1.0-007	Outfeed/Infeed Table		2
8	JP1686V2-008	Cutterblock Guard Assembly (#401~#426, #9, #10, #33)		1
9	JP1686V2-009	Cutterblock Guard Bracket		1
10	JP1686V2-010	Hex. Socket Cap Screw	M6x30	2
11	JP1686V2-011	Washer	H12	4
12	JP1686V2-012	Lock Nut	M12	4
13	JP1686V2-013	Hex. Socket Cap Screw	M6x20	4
14	JP1686V2-014	Adjusting Handle		2
15	JP1686V2-015	Knob		2
16	JP1686V2-016	Special Screw		2
17	JP1686V2-017	Special Screw		2
18	JP1686V2-018	Eccentric Shaft Bracket		2
19	JP1686V2-019	Eccentric Shaft Clamp		2
20	JP1686V2-020	Table Locking Shaft		2
21	JP1686V2-021	Hex. Nut	M12	2
22	JP1686V2-022	Outfeed Table Bracket Left		1
23	JP1686V2-023	Hex. Socket Set Screw	M8x10	8
25	JP1686V2-025	Hex. Bolt	M8x30	6
26	JP1686V2-026	Washer	H8	6
27	JP1686V2-027	Outfeed Table Support		2
28	JP1686V2-028	Spring		2
29	JP1686V2-029	Hex. Bolt	M8x16	2
30	JP1686V2-030	Hex. Nut	M8	5
31	JP1686V2-031	Big Cam Wheel for Safety Switch		1
32	JP1686V2-032	Hex. Socket Set Screw	M6x8	2
33	JP1250-1.0-033	Cutterblock Guard Profile W/Cap		1



Item	Part No.	Description	Specification	Qty.
34	JP1686V2-034	Hex. Socket Set Screw		8
401	JP1686V2-401	Lock Knob		1
402	JP1686V2-402	Lead Screw		1
403	JP1686V2-403	Spring		1
404	JP1250-1.0-404	Bracket for Guard		1
405	JP1686V2-405	Washer	5	2
406	JP1686V2-406	Lock Nut	M5	2
408	JP1686V2-408	Locking Support		1
409	JP1686V2-409	Hex. Nut	M8	1
410	JP1250-1.0-410	Long Shaft		1
412	JP1686V2-412	Fixed Press Paw		2
413	JP1686V2-413	Guard Plate Cover		1
414	JP1686V2-414	Lock Plate		1
415	JP1686V2-415	Knob		1
416	JP1686V2-416	Nylon Bolt		1
417	JP1686V2-417	Lock Nut	M6	1
418	JP1686V2-418	Bracket		1
419	JP1686V2-419	Hex. Nut	M5	2
421	JP1686V2-421	Lock Nut	M6	2
422	JP1686V2-422	Nylon Washer	6	2
423	JP1686V2-423	Shaft	M6	1
424	JP1686V2-424	Shaft	M8	1
426	JP1686V2-426	Washer	6	2



CUTTER BLOCK ASSEMBLY PARTS DIAGRAM





Cutter Block Assembly Parts List

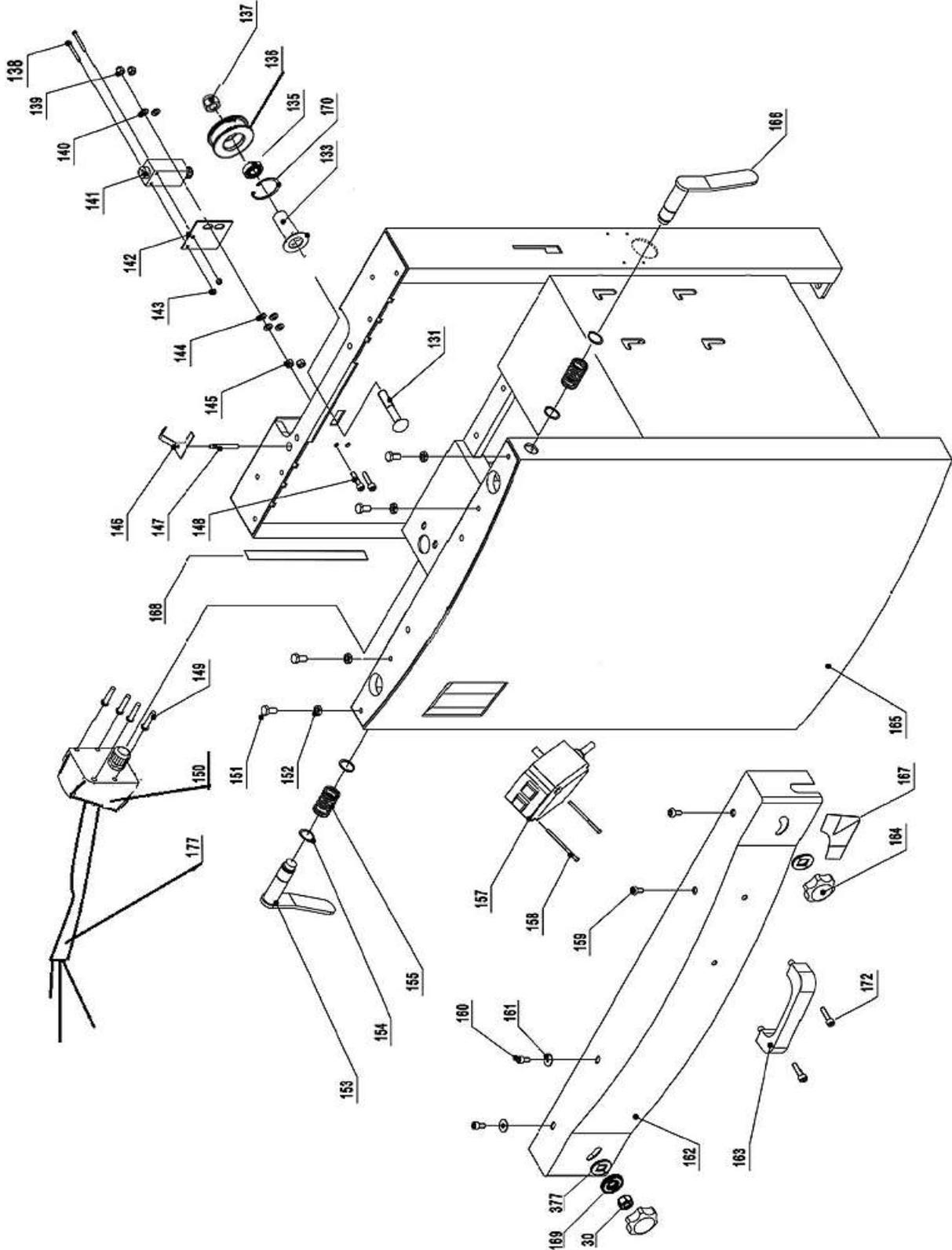
Item	Part No.	Description	Specification	Qty.
60	JP1686V2-060	Hex. Socket Set Screw	M6x8	1
61	JP1686V2-061	Small Cam Wheel for Safety Switch		1
62	JP1686V2-062	Washer	H14	2
63	JP1250-1.0-063	Dust Collector Assembly		1
64	JP1686V2-064	Pin Roll	N5x18	1
65	JP1250-1.0-065	Shaft		1
67	JP1686V2-067	Bearing	6205-2Z	2
71A	JP1250-1.0HH-071A	Cutterhead, Helical with Inserts (#67, #71A Thru #71D)		1
71B	JP1686V2HH-071B	Knife Insert (set of 5)		60
71C	JP1686V2HH-071C	Knife Insert Screw		60
71D	JP1686V2HH-071D	Start Point Screwdriver (not shown)		2
72	JP1686V2-072	Pan Head Screw	M6x12	4
73	JP1686V2-073	Belt Cover		1
74	JP1686V2-074	Screw		4
75	JP1686V2-075	Spring		4
76	JP1686V2-076	Hex. Bolt	M8x16	4
77	JP1686V2-077	Hex. Nut	M8	4
78	JP1686V2-078	Hex. Bolt	M10x25	4
79	JP1686V2-079	Washer	H10	4
80	JP1686V2-080	Adjusting Washer		27
81	JP1686V2-081A	Anti-Kickback Finger		18
82	JP1250-1.0-082	Infeed Roller		1
83	JP1250-1.0-083	Anti-Kickback Shaft		1
84	JP1250-1.0-084	Cutterblock Cover		1
85	JP1686V2-085	Cutterblock Bracket-Right		1
86	JP1686V2-086	Washer	M6	4
87	JP1686V2-087	Hex. Socket Cap Screw	M6x12	4
88	JP1686V2-088	Cutterblock Bracket Cover		1
89	JP1686V2-089	Pan Head Screw	M6x12	2
90	JP1686V2-090	Cap Nut	M6	1
91	JP1686V2-091	Spring		1
92	JP1686V2-092	Pin Stop for Dust Collector		1



Item	Part No.	Description	Specification	Qty.
93	JP1250-1.0-093	Support Rod		1
94	JP1250-1.0-094	Outfeed Roller (Rubber)		1
95	JP1686V2-095	Tube (Powder Metal Bushing)		4
96	JP1686V2-096	Cutterblock Bracket-Left		1
97	JP1686V2-097	Wave Washer	D52	2
98	JP1686V2-098	Retaining Ring	CLP52	2
99	JP1686V2-099	Washer		2
100	JP1686V2-100	Drive Chain Sprocket		2
101	JP1686V2-101	Washer	WSH10	2
102	JP1686V2-102	Lock Nut	M10	2
103	JP1686V2-103	Hex. Socket Set Screw	M8x6	2
104	JP1686V2-104	Key	PLN6x16	1
105	JP1686V2-105	Spindle Pulley		1
106	JP1686V2-106	Washer	D52	4
107	JP1686V2-107	Hex. Nut	M6	2



BASE ASSEMBLY PART DIAGRAM





Base Assembly Parts List

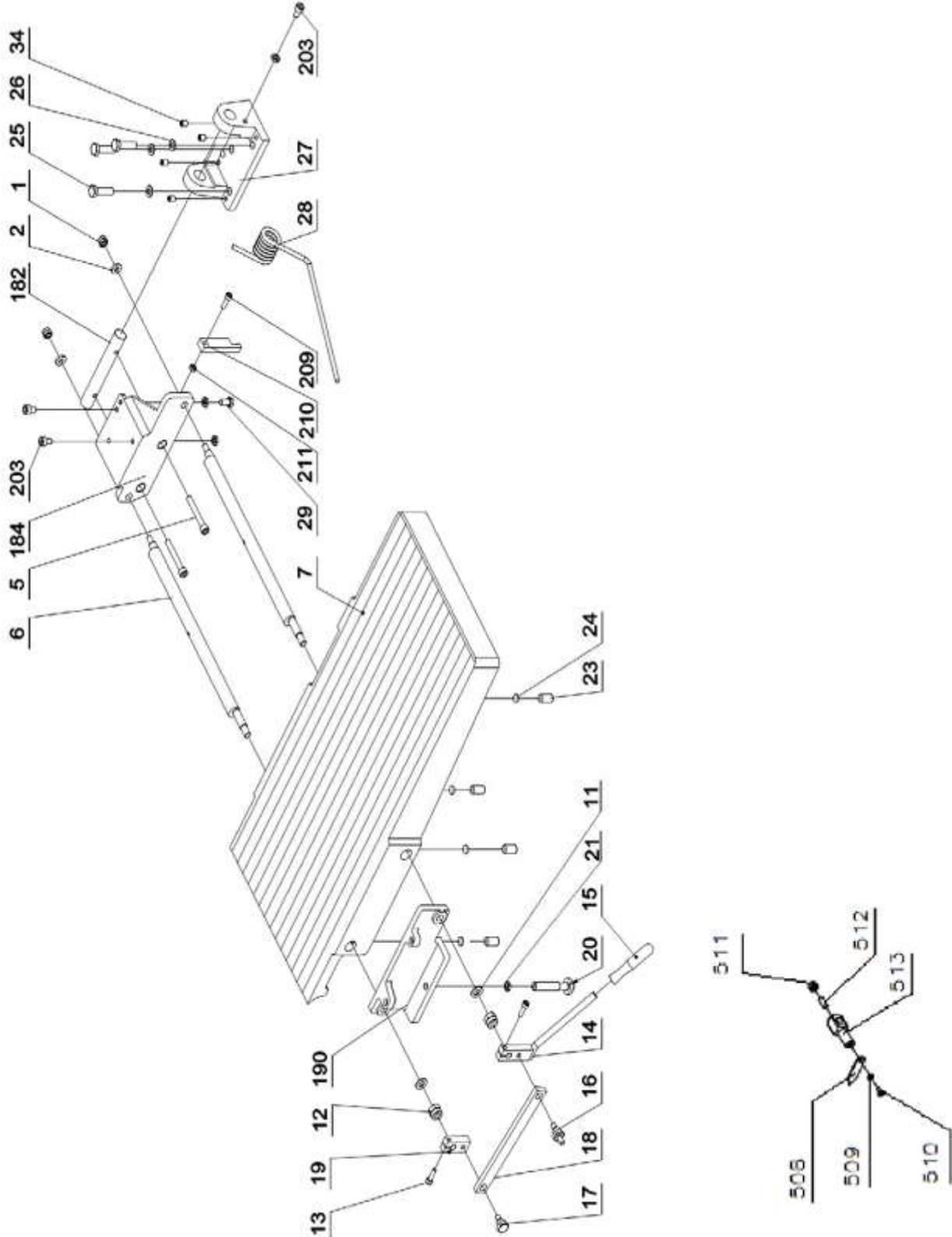
Item	Part No.	Description	Specification	Qty.
131	JP1686V2-131	Carriage Bolt	M12x65	1
133	JP1686V2-133	Tube		1
135	JP1686V2-135	Bearing	6001-2Z	1
136	JP1250-1.0-136P	Pulley		1
137	JP1686V2-137	Lock Nut	M12	1
138	JP1686V2-138	Pan Head Screw	M4x30	2
139	JP1686V2-139	Lock Nut	M6	2
140	JP1686V2-140	Washer	H6	10
141	JP1686V2-141	Safety Switch		1
142	JP1686V2-142	Safety Switch Bracket		1
143	JP1686V2-143	Lock Nut	M4	2
144	JP1686V2-144	Washer	H6	4
145	JP1686V2-145	Hex. Nut	M6	2
146	JP1686V2-146	Safety Switch Rocker		1
147	JP1686V2-147	Safety Switch Rocker Shaft		1
148	JP1686V2-148	Hex. Socket Cap Screw	M6x25	2
149	JP1686V2-149	Pan Head Screw	M4x16	4
150	JP1686V2-150E	Electrical connection box		1
151	JP1686V2-151	Special Bolt		4
152	JP1686V2-152	Hex. Nut	M8	4
153	JP1686V2-153	Lock Handle For Outfeed Table		1
154	JP1686V2-154	Retaining Ring	CLP20	4
155	JP1686V2-155	Spring		2
156	JP1686V2-156	Direction Label (Not Shown)		1
157	JP1250-1.0-157E	Switch 220/1	220V 1PH	1
158	JP1686V2-158	Self-Tapping Screw	M3.8x10	2
159	JP1686V2-159	Pan Head Screw	M6x16	2
160	JP1686V2-160	Pan Head Screw	M6x12	2
161	JP1686V2-161	Washer	H6	7
162	JP1686V2-162	Front Cover		1
163	JP1686V2-163	Handle		1
164	JP1686V2-164	Lock Knob		4
165	JP1250-1.0-165	Cabinet		1



Item	Part No.	Description	Specification	Qty.
	JP1250-1.0-165CC	Cabinet Cover (Not Shown)		1
166	JP1686V2-166	Lock Handle for Infeed Table		1
167	JP1686V2-167	Infeed Scale		1
168	JP1686V2-168	Thickness Scale		1
169	JP1686V2-169	Washer	H8	2
170	JP1686V2-170	Retaining Ring		1
172	JP1686V2-172	Hex Socket Head Screw	M8x20	2
177	JP1250-1.0-177	Cord		1



INFEEED TABLE ASSEMBLY PARTS DIAGRAM





Infeed Table Assembly Parts List

Item	Part No.	Description	Specification	Qty.
182	JP1686V2-182	Outfeed Table Bracket Shaft		1
184	JP1250-1.0-184	Infeed Table Bracket Right	M8x60	2
190	JP1686V2-190	Infeed Table Bracket Left		1
203	JP1686V2-203	Hex. Socket Cap Screw	M8x10	1
209	JP1686V2-209	Hex. Socket Cap Screw	M8x35	1
210	JP1250-1.0-210	Table Stopper		1
211	JP1686V2-211	Hex. Nut	M8	3
508	PT310-508	Pointer		1
509	PT310-509	Spring washer	4	1
510	PT310-510	Screw	M4x8	1
511	PT310-511	Hex. Nut	M6	1
512	PT310-512	Set Screw	M6x16	1
513	PT310-513	Support pole		1

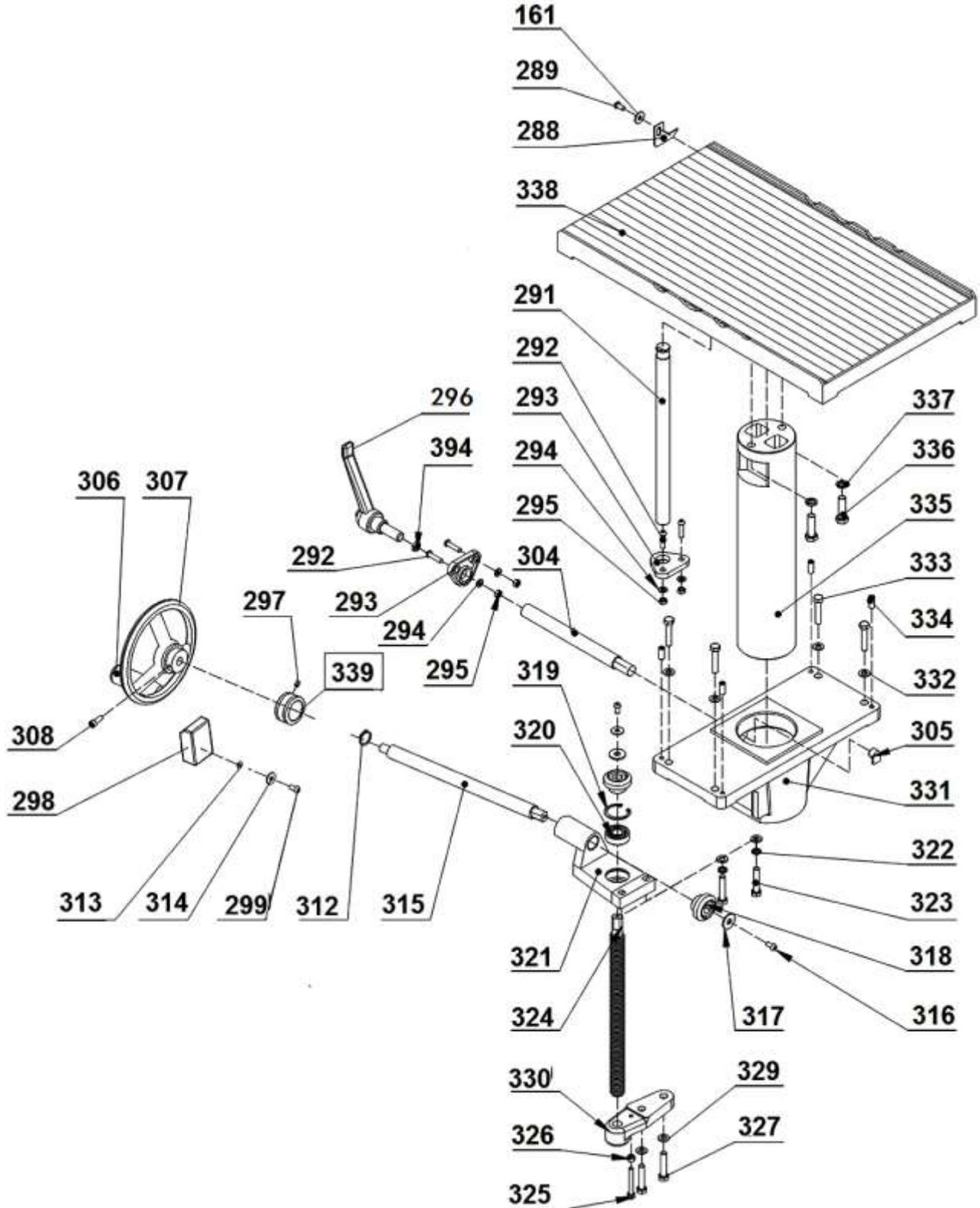


Drive and Motor Assembly Parts List

Item	Part No.	Description	Specification	Qty.
221	JP1686V2-221	V-Belt for Cutterblock	A1194	1
222	JP1686V2-222	Drive Chain		1
223	JP1250-1.0-223	Cam Wheel Bracket		1
224	JP1686V2-224	Cam Wheel Shaft		1
225	JP1686V2-225A	Plastic Gear Wheel Assembly		1
226	JP1686V2-226	Bearing	61902	2
229	JP1686V2-229	Washer		1
230	JP1686V2-230	Retaining Ring	CLP15	1
231	JP1686V2-231	Retaining Ring	CLP10	2
232	JP1686V2-232	Hex. Socket Set Screw	M5x10	2
233	JP1686V2-233	V-Belt Pulley for Feed Roller		1
234	JP1686V2-234	Cam Wheel		1
235	JP1686V2-235	Bearing	6000-2Z	2
236	JP1686V2-236	Spacer Bearing		1
238	JP1686V2-238	Hex. Socket Set Screw	M8x12	2
239	JP1686V2-239	Motor Pulley 220V 1PH	1	
240	JP1686V2-240	V-Belt for Feed Roller	310J	1
241	JP1686V2-241	Hex. Bolt	M8x25	4
242	JP1686V2-242	Washer	H8	4
243	JP1250-1.0-010E	Motor 220/1	220V 1PH	1
244	JP1686V2-244	Washer	H8	4
245	JP1686V2-245	Spring Washer	H8	4
246	JP1686V2-246	Cap Hex. Nut	M8	4
247	JP1686V2-247	Capacitor (Not Shown)		1
248	JP1686V2-248	Shaft		1
249	JP1686V2-249	Spring Washer	H10	1
250	JP1686V2-250	Hex Nut	M10	1



PLANER TABLE ASSEMBLY PARTS DIAGRAM





Planer Table Assembly Parts List

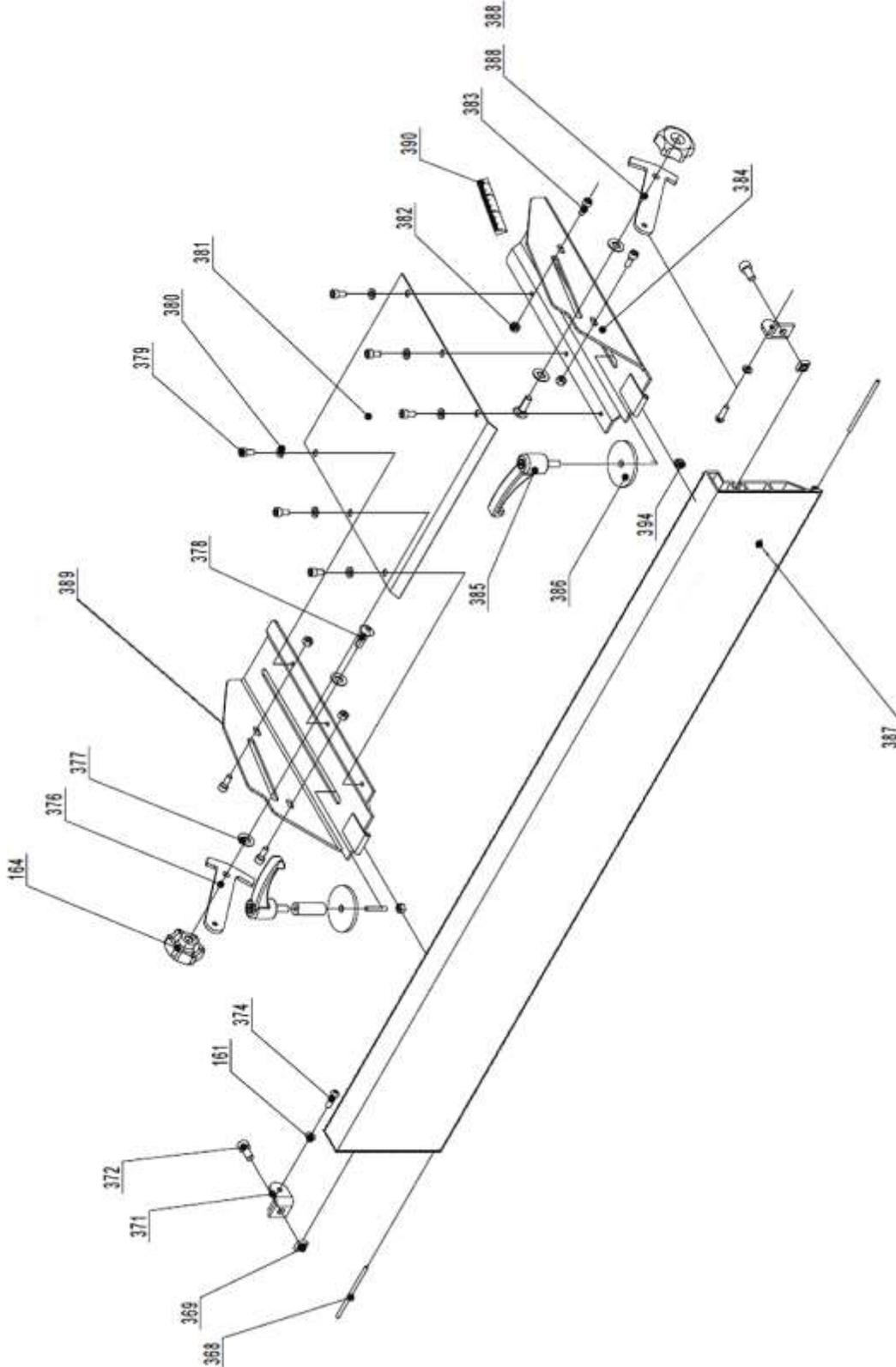
Item	Part No.	Description	Specification	Qty.
288	JP1686V2-288	Indicator		1
289	JP1686V2-289	Screw	M6x12	1
291	JP1686V2-291	Thickness Table Guide Bar		1
292	JP1686V2-292	Hex. Socket Cap Screw	M6x20	2
293	JP1686V2-293	Guide Bar Bracket		2
294	JP1686V2-294	Washer	H6	2
295	JP1686V2-295	Hex. Nut	M6	2
297	JP1686V2-297	Set Screw	M8x12	1
298	JP1686V2-298	Indicator Seat		1
299	JP1686V2-299	Screw	M6x20	2
304	JP1686V2-304	Locking Bar		1
305	JP1686V2-305	Locking Shoe		1
306	JP1686V2-306	Crank Handle		1
307	JP1686V2-307	Crank Handwheel		1
308	JP1686V2-308	Hex. Socket Cap Screw	M8x16	1
312	JP1686V2-312	Retaining Ring	CLP20	1
313	JP1686V2-313	Retaining Ring	CLP35	1
314	JP1686V2-314	Washer		1
315	JP1686V2-315	Crank Bar		1
316	JP1686V2-316	Pan Head Screw	M6x12	2
317	JP1686V2-317	Washer	M6	2
318	JP1686V2-318	Bevel Gear		2
319	JP1686V2-319	Retaining Ring	CLP35	1
320	JP1686V2-320	Bearing	6202-2Z	1
321	JP1686V2-321	Bevel Gear Bracket		1
322	JP1686V2-322	Washer	H8	8
323	JP1686V2-323	Hex. Bolt	M8x35	8
324	JP1686V2-324	Thread Rod		1
325	JP1686V2-325	Hex. Bolt	M6x45	1
326	JP1686V2-326	Hex. Nut	M6	1
327	JP1686V2-327	Hex. Bolt	M8x35	2
329	JP1686V2-329	Washer	H8	2
330	JP1686V2-330	Thread Rob Bracket		1



Item	Part No.	Description	Specification	Qty.
331	JP1686V2-331	Column Support		1
333	JP1686V2-333	Hex. Socket Set Screw	M8x20	5
335	JP1686V2-335	Column		1
336	JP1686V2-336	Hex. Bolt	M10x35	2
337	JP1686V2-337	Spring Washer	H10	2
338	JP1250-1.0-338	Thickness Table		1
339	JP1686V2-339	Loop Counter		1



WORKING FENCE ASSEMBLY PARTS DIAGRAM





Working Fence Assembly Parts List

Item	Part No.	Description	Specification	Qty.
368	JP1686V2-368	Pin for Hinge		1
369	JP1686V2-369	Square Nut	M8	2
370	JP1686V2-370	Lock Nut	M6	6
371	JP1686V2-371	Fence Mounting Bracket		2
372	JP1686V2-372	Hex. Bolt	M8x16	2
374	JP1686V2-374	Hex. Socket Cap Screw	M6x16	2
376	JP1686V2-376	Fence Support-Right		1
377	JP1686V2-377	Nylon Washer		10
378	JP1686V2-378	Carriage Bolt	M8x25	2
379	JP1686V2-379	Pan Head Screw	M6x12	6
380	JP1686V2-380	Washer	H6	6
381	JP1250-1.0-381	Cutterblock Cover		1
382	JP1686V2-382	Lock Nut	M6	4
383	JP1686V2-383	Hex. Socket Cap Screw	M6x10	4
384	JP1250-1.0-384	Fence Bracket-Left		1
385	JP1686V2-385	Lock Handle		3
386	JP1686V2-386	Special Washer		2
387	JP1686V2-387	Fence		1
388	JP1686V2-388	Fence Support-Left		1
389	JP1250-1.0-389	Fence Bracket-Right		1
390	JP1686V2-390	Fence Scale		1
	JP1686V2-395	Complete Fence Assembly (#368 Thru #390)		1



NOTES



BAILEIGH INDUSTRIAL, INC. 1625 DUFEEK DRIVE MANITOWOC, WI 54220

PHONE: 920. 684. 4990 FAX: 920. 684. 3944

WWW.BAILEIGH.COM

BAILEIGH INDUSTRIAL, INC. 1455 S. CAMPUS AVENUE ONTARIO, CA 91761

PHONE: 920. 684. 4990 FAX: 920. 684. 3944

BAILEIGH INDUSTRIAL LTD. UNIT 1 FULLWOOD CLOSE

SWIFT VALLEY INDUSTRIAL ESTATE, RUGBY

WEST MIDLANDS, CV21 1QH UNITED KINGDOM

PHONE: +44 (0)24 7661 9267 FAX: +44 (0)24 7661 9276

WWW.BAILEIGH.CO.UK

BAILEIGH INDUSTRIAL PTY. LTD.

P.O Box 1573, 126 MELROSE DRIVE TULLAMARINE,

VIC 3043 AUSTRALIA

PHONE: 61.383.743.888

WWW.BAILEIGH.COM.AU