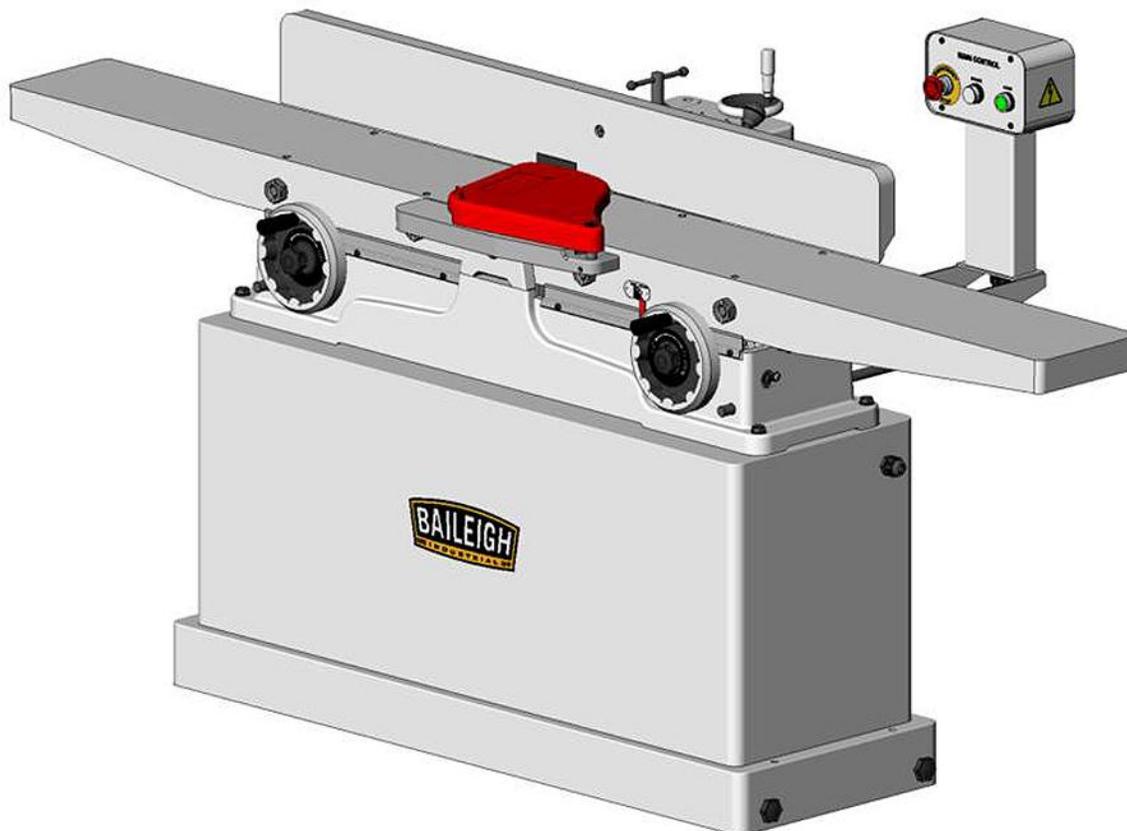




OPERATOR'S MANUAL



8" JOINTER MODEL: IJ-883P

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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

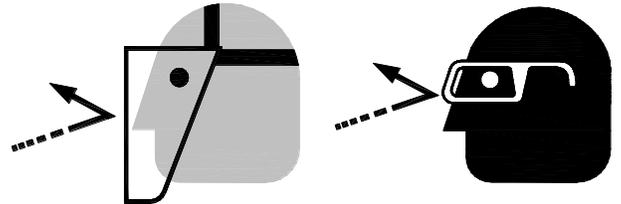


SAVE THESE INSTRUCTIONS.
Refer to them often and use them to instruct others.



PROTECT EYES

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



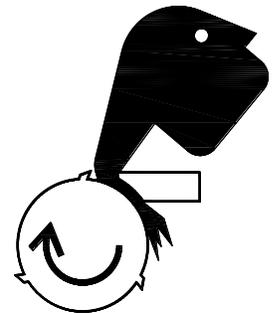
BLADE HAZARD

Keep hands and fingers away from the rotating knife blades. These rotating knives can be extremely dangerous if you do not follow proper safety procedures. **NEVER place hands closer than 3" (76mm) to the rotating cutting knives.**



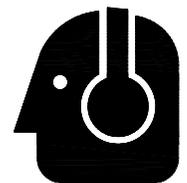
ENTANGLEMENT HAZARD – ROTATING BLADES

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



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.



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

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 should operate this machine.**
3. **Cutter head Guard.** With the exception of rabbeting, all jointer operations must be performed with the cutter head guard in place. **BE SURE** to replace the guard after the rabbeting operation.
4. **Jointer Kickback.** "Kickback" is when the piece part is thrown off the jointer table by the force of the cutter head. Always use push blocks to reduce the likelihood of injury from kickback.
5. **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.
6. **Alignment of the Cutter Head.** Keep the top edge of the out-feed table aligned with the edge of the knife at top dead center (TDC) to help avoid kick back injuries.
7. **Using Quality Stock.** Inspect the stock over carefully that you intend to joint. **NEVER** joint a board that has loose knots, staples, or nails in it. **DO NOT** joint a piece of stock if you have any doubts about its structural integrity.
8. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
9. **Keep work area clean.** Cluttered areas invite injuries.



SAFETY PRECAUTIONS (cont.)



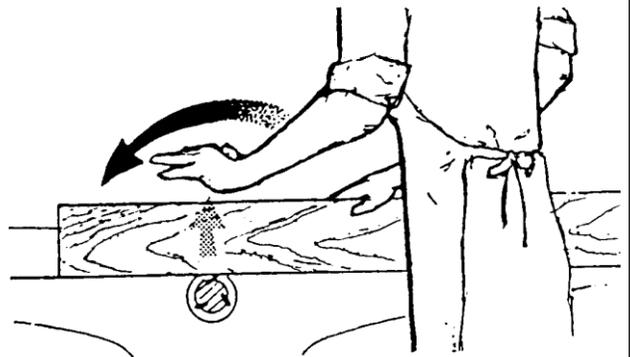
10. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
11. **Push Blocks.** Whenever doing surface planning use push blocks. **NEVER** pass your hands directly over the cutter head.
12. **Dress appropriate. DO 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.
13. **Use eye and ear protection.** Always wear ISO approved impact safety goggles
14. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
15. **Maximum Cutting Depth.** The maximum cutting depth in one pass is 1/8" (3.2mm) **DO NOT** attempt to go any deeper than this per pass.
16. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
17. **Jointing With the Grain.** There is an increased chance of kickback when jointing end grain or against the grain. This could also produce chatter and excessive chip out of the material.
18. **Proper Cutting.** While cutting, always keep the piece part moving toward the out-feed table until it has passed over the cutter head completely. **NEVER** back up the piece toward the in-feed table.
19. **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.
20. **DO NOT** bypass or defeat any safety interlock systems.
21. Know the location of the **ON - OFF** switch and the "**E**"- **STOP** button.
22. Keep visitors a safe distance from the work area.
23. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
24. **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.
25. **DO NOT** touch live electrical components or parts.
26. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**



SAFETY PRECAUTIONS (cont.)



27. **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. Never remove the third prong.
28. **Maintain machine in top condition.** Keep clean for best and safest performance. Follow instructions for lubricating and changing accessories.
29. **Reduce the risk of unintentional starting.** Make sure switch is in “**OFF**” position before plugging in power cord.
30. **Never leave machine running unattended. TURN POWER OFF.** Don't leave machine until it comes to a complete stop.
31. **Make sure machine is disconnected from power supply** while motor is being mounted, connected or reconnected.
32. **Using correct materials.** Jointing materials other than natural wood fiber can result in serious personal injury and machine damage. **NEVER** use this machine for anything except jointing in wood.
33. **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.
34. **Hand safety.** It is good practice to move the hands in an alternate motion from back to front as the work continues through the cut. Never pass the hands directly over the cutter knife. As one hand approaches the knives remove it from the stock in an arc motion and place it back on the stock in a position beyond the cutterknife.
35. **Three inch rule.** When working a piece of wood on the jointer, follow the 3 inch radius rule. The hands must never be closer than 3 inches to the cutter head.





SPECIFICATIONS

Cutterhead Speed	5000 RPM
Number Of Knives	3
Cutterhead Size	3-1/4" (82mm) Diameter
Table	82-7/8" (2103.9mm) Long
Knife Size	8" (203mm)
Motor	3HP (2.24kw), 220V, 1Ph, 60Hz

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@baileighindustrial.com, Phone: 920.684.4990, or Fax: 920.684.3944.



Note: All illustrations are representative 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 CLEANING

Remove jointer and stand from the shipping cartons. Check for damage and ensure all parts are intact. Any damage should be reported immediately to your distributor and shipping agent. Before assembling, read the manual thoroughly, familiarizing yourself with correct assembly and maintenance procedures and proper safety precautions.

Cleaning

Moisten a soft cloth with a degreaser or solvent cleaner and remove the protective coating from all machined surfaces of the jointer. **DO NOT** use an abrasive pad. 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.

Although some users prefer a wax coating for the table surfaces, white talcum powder rubbed in vigorously once a week with a blackboard eraser will fill any casting pores and form a moisture barrier. Talcum powder will not stain wood or mar finishes.

⚠ 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.



Although some users prefer a wax coating for the table surfaces, white talcum powder rubbed in vigorously once a week with a blackboard eraser will fill any casting pores and form a moisture barrier. Talcum powder will not stain wood or mar finishes.



INSTALLATION and ASSEMBLY

⚠ WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL THE MACHINE IS COMPLETELY ASSEMBLED AND YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

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.
- If long lengths of material are to be fed into the machine, make sure that they are safely supported and will not extend into any aisles.

⚠ WARNING: Before operating; make sure it is positioned firmly on a solid level floor. If it tips over on you, it could cause severe injury or death.

The machine should be sited on a level, concrete floor. The accuracy of any machine depends on the precise placement of it to the mounting surface. Locate the jointer in an area that is level and provides a solid foundation. Make sure that any potential kickback is not in line with aisles, doorways, wash stations or other work areas.

Place shims under the four feet mounted in the base as required for leveling.



Installing Belt

1. To attach the belt to the cutterhead pulley and motor pulley, first reach into the dust chute with a wrench and loosen the four bolts holding the motor to the mount bracket.
2. Align the pulleys using the slotted holes on the mounting bracket.
3. Raise the motor and mount the belt to both pulleys.
4. Allow the motor to drop and create tension on the belt.
5. Pull down on the motor to achieve the desired belt tension of approximately 1" (25mm) at the center belt span using light finger pressure as shown in (Fig. 1).
6. Snug tight the four bolts

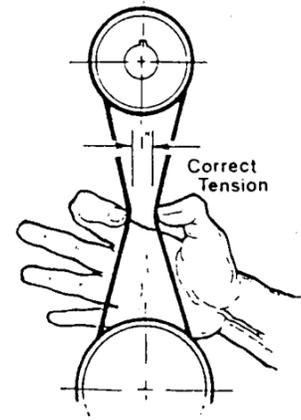


Fig. 1

Installing Pulley Cover

The pulley cover is mounted with knob to the threaded holes in the base, as shown in (Fig. 2).

Cutter Head Guard Installation & Removal

⚠ WARNING: Never operate the jointer without the cutter head guard in place and functioning perfectly. Failure to use the guard may cause severe injury.

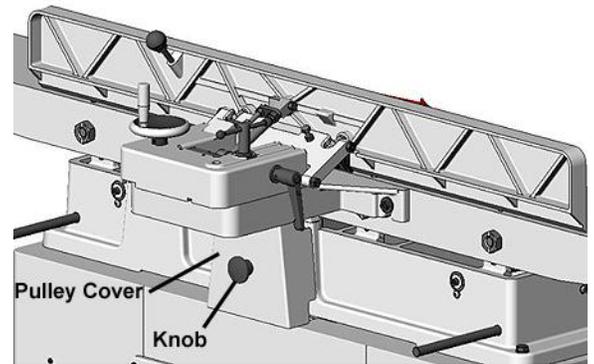


Fig. 2

1. Disconnect jointer from power source.
2. Turn knob (A) counterclockwise (ccw) to create tension on spring, and hold it there. (See Fig. 3).
3. Insert guard post (B) down through hole in front of ledge.
4. Slightly turn knob (A), if necessary, until the guard seats itself, and the spring engages the slot at the end of the guard post.
5. Check the guard for proper tension. If guard does not spring back into place when pulled back from cutterhead, remove guard and adjust spring tension by repeating steps 1-3 until correct tension is achieved. **NEVER** run the jointer without the guard being in place and in perfect working order.

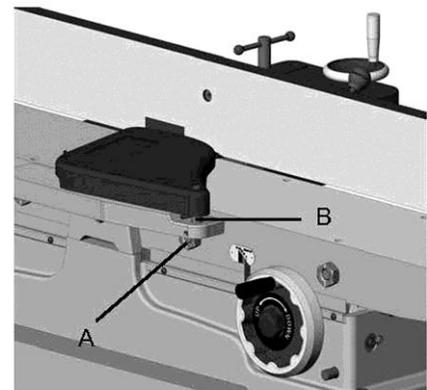


Fig. 3



Installing Dust Chute and Access Cover

1. Mount the dust chute to the pre-tapped holes in the side of the stand with four 1/4-20 x 1/2 handle screws and four flat washers. (Fig. 7).
2. Install access cover by inserting bottom of panel into the stand opening and fastening with four #5-40 x 3/8" pan head screws and four flat washers.

1/4x1/2 screw
Flat washer

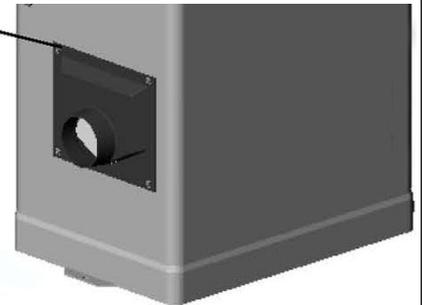


Fig. 4

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.

230 Volt Operation

1. For 230V operation the leads should be as shown in (Fig. 5 B).
2. The electrical connections on this machine must comply with all local and national codes for 230 volt plug.
3. The machine with a 230 volt plug should only be connected to an outlet having the same configuration as shown in (Fig.6 D). No adapter is available nor should be used with the 230 volt plug.

Connections

- A separate electrical circuit should be used for your tools. If an extension cord is used, use only 3-wire extension cords, which have grounding type plugs and receptacles, which accept the tool's plug. 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.

Fig. 5

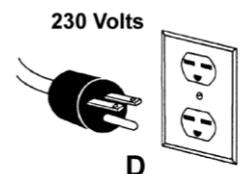
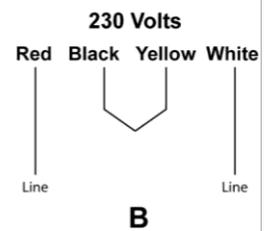


Fig. 6



- 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.
- Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

⚠ 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.
- Use only 3-wire extension cords that have grounding type plugs and receptacles that accept the tool's plug.
- 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
0-6	16	16	16
7-10	16	16	14
11-12	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.



Controls Box

The Shaper is equipped with a control box provided with ON - OFF push buttons (Fig. 7). To lock the switch in the OFF position, remove the switch key from the switch. Place the key in a location that is inaccessible to children and others not qualified to use the tool.

⚠ WARNING: Ensure that your workplace is inaccessible to children by closing. NEVER allow untrained visitors in workplace when assembling, adjusting, or operating equipment.

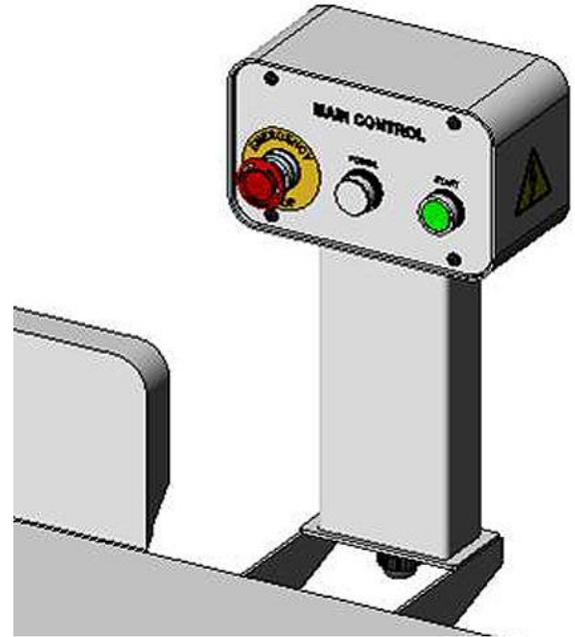


Fig. 7

ADJUSTMENTS

Tools required
8mm, 10mm 12mm, and 19mm wrenches
3mm and 6mm hex wrenches

Raising and Lowering Tables

Figures 8 and 9

To adjust infeed table:

1. Loosen the rear thumb screw (**B**), and the locking handle (**C**).
2. Raise or lower the height adjustment handle (**C**) until the scale (**G**) reads approximately at the correct depth of cut.
3. Turn the locking handle (**B**) until it is snug, and then fine-tune the adjustment with the height adjustment handle (**C**) by rotating it until the scale reads exact. Clockwise (**cw**) raises the table, and counterclockwise (**ccw**) lowers the table.

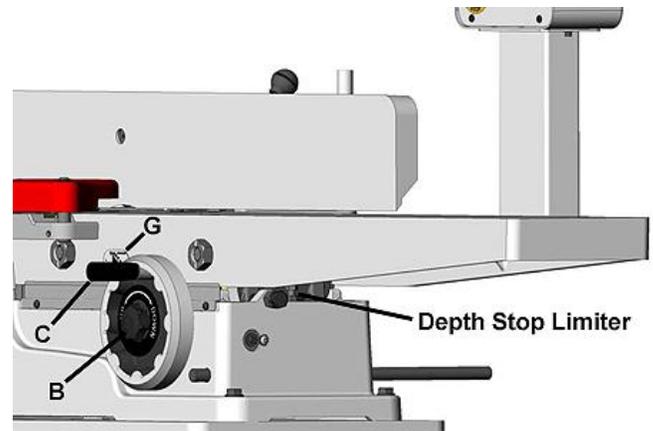


Fig. 8



Note: The fine adjustment handle has 1/16" (1.5mm) travel per rotation.

4. When set, retighten screw (**B**).



To adjust outfeed table:

1. Loosen thumbscrew (B).
2. Turn handwheel (C) located on the underside of the outfeed table.
3. When set, retighten thumbscrew (B).

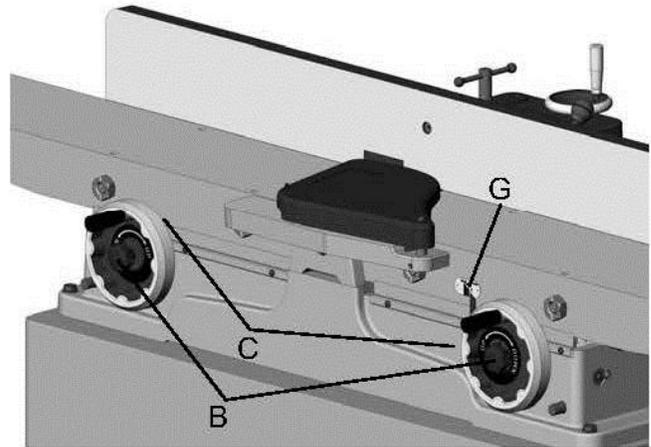


Fig. 9

⚠ WARNING: There is a Depth Stop Limiter on the back side that must be released if cutting a depth greater than 1/8" (3mm). If hand wheel seems jammed, please check and release the Depth Stop Limiter on the back side of the jointer

Cutterhead Removal

⚠ WARNING: Disconnect jointer from power source.

1. Remove the entire fence assembly by releasing lock handle and removing hex nuts (see page 12). Lift the fence off the machine.
2. Loosen the bolts connecting the motor to the motor mount and remove the drive belt from cutterhead pulley (see page 12).
3. Lower both infeed and outfeed tables to expose the cutterhead.
4. Remove the two bolts and spring washers which secure the cutterhead to the base, as shown in (Fig. 10).
5. Remove the cutterhead assembly, with studs attached, by lifting cutterhead straight up from base. The belt pulley may be left on cutterhead to assist in raising the cutterhead.

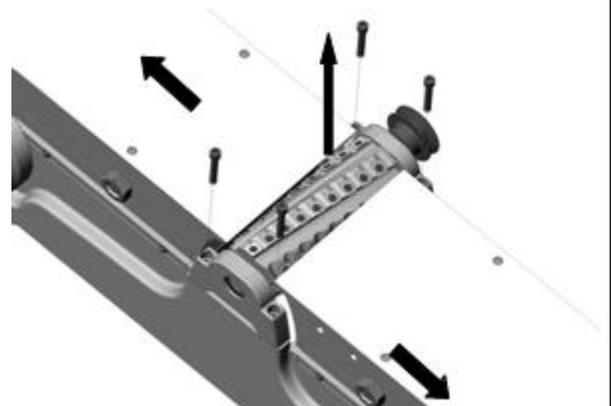


Fig. 10



6. Remove pulley and both bearing housings with attached studs from the cutterhead.



Note: You may wish to keep on hand an extra cutterhead in order to maintain shop productivity.

7. When mounting new cutterhead to base, make sure the curved seats of the base are cleaned and free of dust and grease.

Depth of Cut

Depth of cut is determined by the height of the infeed table relative to the high point of the knives on the cutterhead.

When facing the width of a board (as opposed to the edge of a board), **NEVER** attempt to take off more than 1/64" (0.4mm) with each pass. The depth of cut is indicated by the scale located on the front of the jointer base as shown in (Fig. 11).

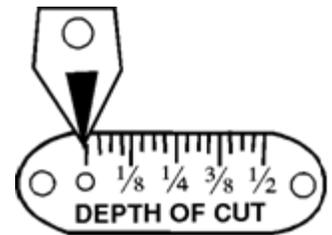


Fig. 11

Jointing Knives

After extended use it will be necessary to sharpen the knives on the cutterhead assembly so that all three knives protrude exactly the same height above the cutterhead.

⚠ WARNING: Disconnect jointer from power source. Use approved eye protection whenever sharpening blades.

1. Remove the cutterhead guard.
2. Place a metal straightedge across both tables as shown in (Fig. 12), and make sure both tables are set to the exact height of the high point of the knives.
3. Clamp a block of wood across the infeed table as shown in (Fig.13) in order to block the end of a fine India stone or oilstone during the jointing operation. This helps to prevent kickback of the stone.
4. Turn machine on.

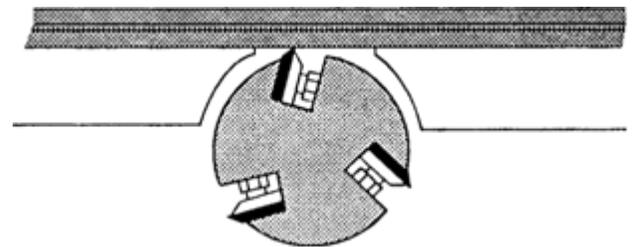


Fig. 12

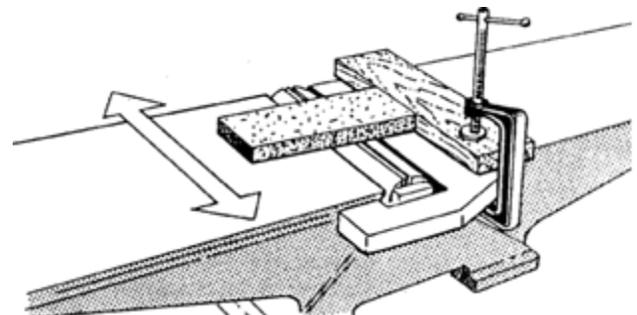


Fig. 13



5. Keeping hands well clear of the cutterhead, place the stone into position as shown in (Fig. 13), and slide the oilstone back and forth across both tables until the knives are lightly jointed.
6. **TURN MACHINE OFF** and visually inspect each knife. If only the high knife has been touched, lower the OUTFEED table .003" (0.07mm) and continue the sharpening process until all three knives have been touched by the stone.
7. Replace cutterhead guard.

Table Gibs and Levelling

The table gibs on your machine are factory adjusted and may never require re-adjustment.

Should any adjustment become necessary, do the following:

1. Lightly loosen the gib adjusting screws (A), (Fig. 14). By loosening the lock nuts first, the set screws should be loose enough to move the table.
2. Support the end of the table and at the same time, raise it up slightly, (it is recommended that another person hold and support the table when performing these adjustments).
3. Snug the gib screws. Any adjustment of the gibs is very minute, perhaps even 0.001" (0.02mm). If the gibs are too tight the adjustment handles will be difficult to turn. If the gibs are too loose, the tables could sag. Keep checking the level of the tables with a straightedge until leveling is achieved.
4. When tables are level, tighten the lock screws.

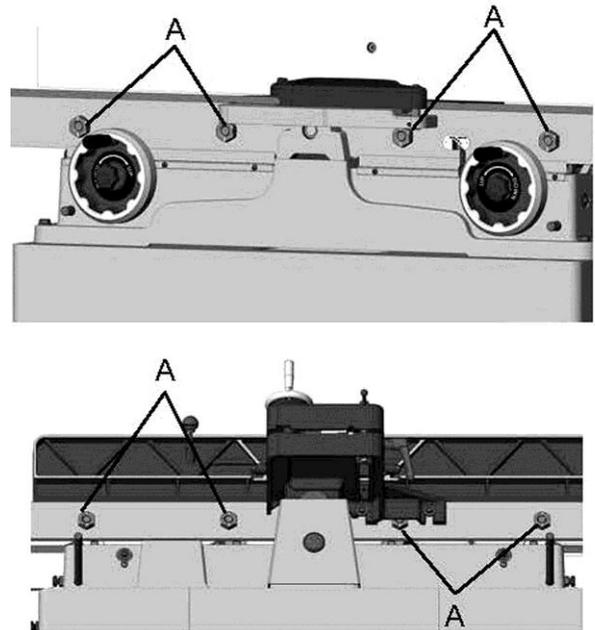


Fig. 14



Fence Adjustments: Tilt

Fence adjustments are made with the lock handles shown in (Fig. 15). To slide the fence forward or back on the table, loosen lock handle (A), slide the fence to the desired position and tighten handle (A) to secure fence.

To tilt the fence forward:

1. Loosen locking bolt (B), (Fig.15).
2. Place a machinist protractor or triangle on the table and against the fence. Adjust the fence to the desired angle and tighten locking bolt (B) to secure the fence.

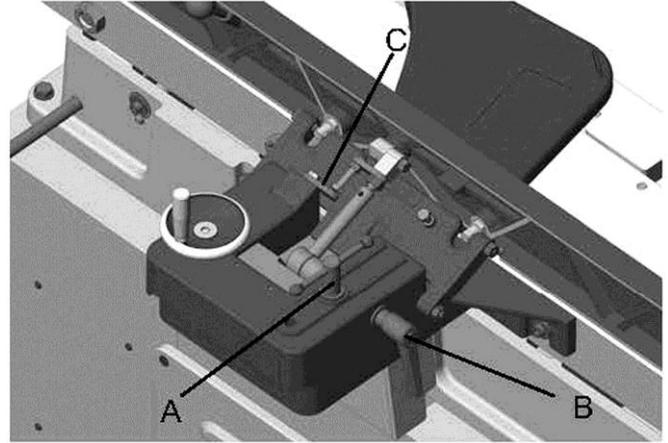


Fig. 15



Note: The handle (A), (Fig.15) can be adjusted to a more convenient position by loosening the nuts on its opposite end, turning the handle to the proper position, and retightening the nuts.



CAUTION: When the jointing operation is finished with the fence tilted back, do not forget to flip the pivot stop block back to its original position.

To tilt the fence back:

1. Loosen locking bolt (B), Fig.15.
2. Flip back the stop block (C).
3. Adjust the fence to the desired angle and tighten locking bolt (B) to secure fence.



Fence Stop Adjustments

Periodically check the 90° and 45° backward (135°) tilt accuracy of the fence with an angle measuring device, such as an adjustable square or machinist's protractor.

90° Fence Adjustment

Refer to Fig.15A):

The 90° stop is controlled by the stop bolt (E) and the stop plate (C).

1. Set the infeed table to approximately the same height as the outfeed table.
2. Move the fence by releasing lock handle (D) and pushing the fence assembly until it overlaps the tables (B).
3. Tighten lock handle (D).
4. Adjust the fence to a 90° angle by releasing lock handle (J), pulling up on the fence handle (A), and tightening the lock handle (J).



Note: The stop bolt (E) should be resting against the stop plate (C).

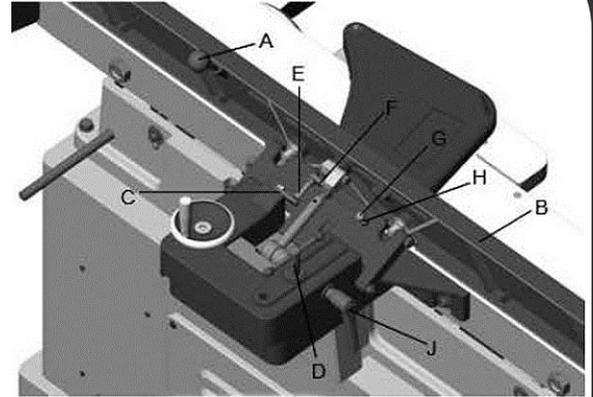


Fig. 15a

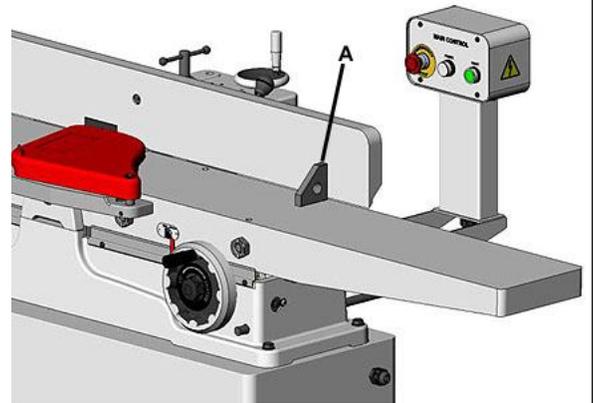


Fig. 16

5. Place an angle measuring device on the table and against the fence to confirm a 90° setting (A) Fig. 16.
6. If the fence is not square to the table, release the lock handle (J), loosen the hex nut (F), and turn the stop bolt (E) until the fence is square to the table.
7. Tighten the lock nut (F) to retain the setting.
8. Tighten the lock handle (J).



45° Fence Backward Stop Adjustment

Refer to (Fig.17):

The 45° fence backward stop (fence positioned away from the operator) is controlled by the stop bolt (E).

1. Loosen the lock handle (A). Move the stop plate (D) out of the way and position the fence at the 135° angle. Make sure the fence sits against the stop bolt (E).
2. Tighten the lock handle (A)
3. Place an angle measuring device on the table and against the fence to confirm a 135° setting (A. Fig. 17).
4. To adjust, loosen the lock nut (F), turn the stop bolt (E) until a 135° angle is obtained.
5. Tighten the lock nut (F).

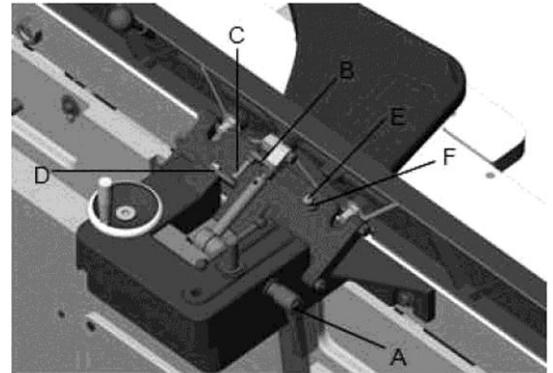


Fig. 17

BASIC OPERATIONS

Before making any cuts on the stock, make a few practice cuts by raising the infeed table to “0” and with the power disconnected. In this manner you will acquaint yourself with the feel of jointer operations.

⚠ WARNING:

- Read, Understand and Follow all safety instructions listed in the front of this manual.
- Always wear proper safety equipment such as safety glasses and face shield.
- Keep hands, fingers and all body parts away from the cutting blades and all rotating parts.
- Use push blocks to feed material across the cutting blades Never allow your hands closer than 3” (76.2mm) to the cutting blades.
- Never operate the jointer without the cutter head guard in place and functioning perfectly.

FAILURE TO FOLLOW ALL SAFETY INSTRUCTION MAY CAUSE SEVERE INJURY.



SURFACING

Two Handed Push Block

Adjust depth of cut. It is better to make cuts of approximately 1/64" (0.4mm). This will enable you to have better control over the material being surfaced. Make several passes if necessary to obtain proper stock removal.

Never surface pieces shorter than 12" (305mm) or thinner than 3/8" (9.5mm) without the use of a special work holding fixture. Never surface pieces thinner than 3" (76mm) without the use of a push block. On stock 8" (203mm) to 12" (305mm) long use a single two-handed push block (Fig. 18). On stock longer than 12" (305mm) use two push blocks (Fig. 19). With narrow stock use an "L" type push block as shown in Fig. 20. When surfacing short stock over 4" (101mm) wide, use two (2) push blocks to guide material over cutterhead (Fig. 21).

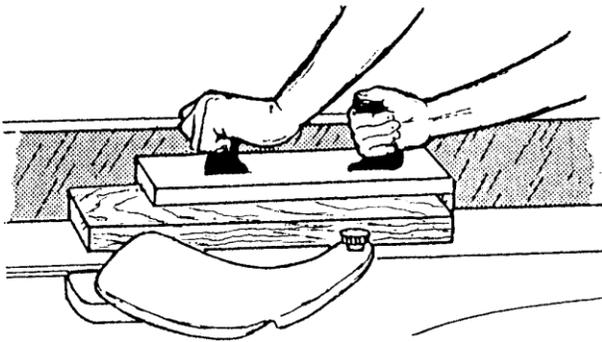


Fig. 18: Two handed push block.

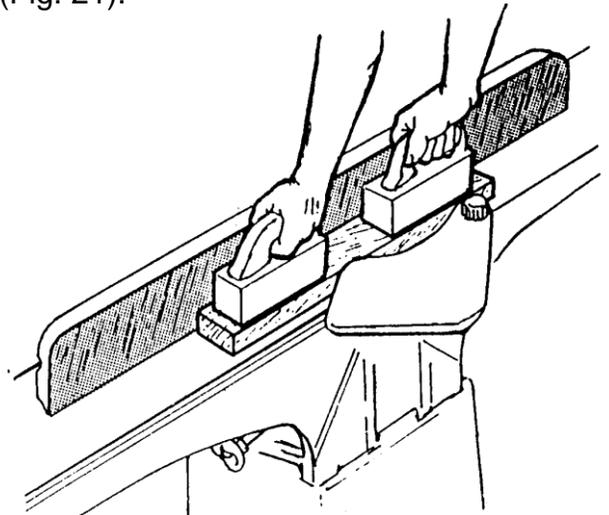


Fig. 19: Two push blocks for stock longer than 12 inches.

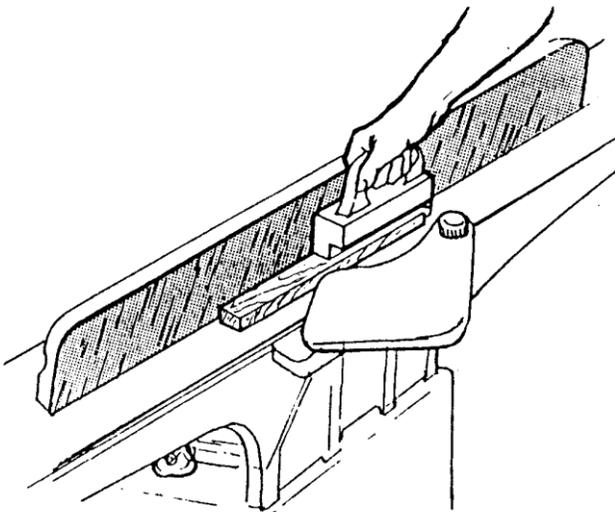


Fig. 20: L-shaped push block for narrow stock.

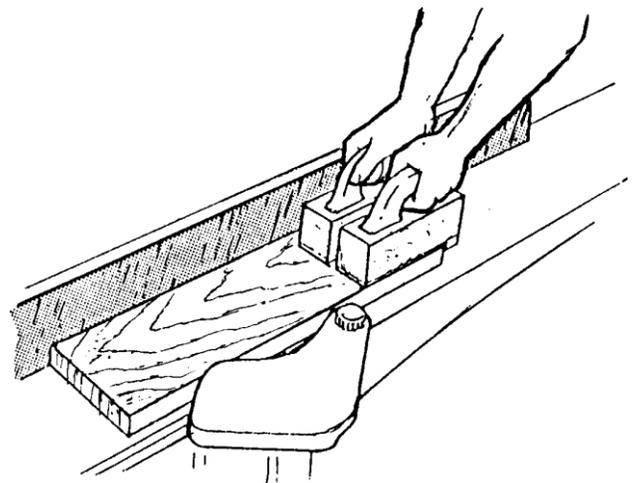


Fig. 21: Two push blocks with dowels for short stock over 4 inches wide.



SURFACING: LONG BOARDS

The use of push blocks will help to insure against hands coming in contact with cutterhead in the event of a kickback and as trailing end of board passes over cutterhead.

When surfacing long stock, place push block near the front of piece and start feeding wood with the right hand until guard has opened and cut is started (Fig. 22). Place second push block near the rear of infeed table and continue feeding stock using the hand over hand method (Fig. 23). Before the left hand is in the 3" (76mm) area of the cutterhead move it over to the outfeed side (Fig. 24). As soon as possible follow with the right hand over to the outfeed side and continue through with cut (Fig. 25).

Begin by feeding stock with right hand and apply pressure to front of stock with push block. When the stock is longer than twice the length of the infeed and outfeed tables, another helper or support table must be used to support the stock.

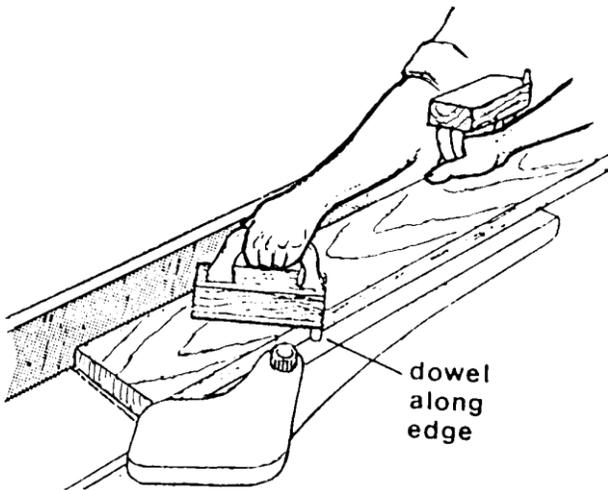


Fig. 22: Left hand pushes down toward fence as right hand starts feed.

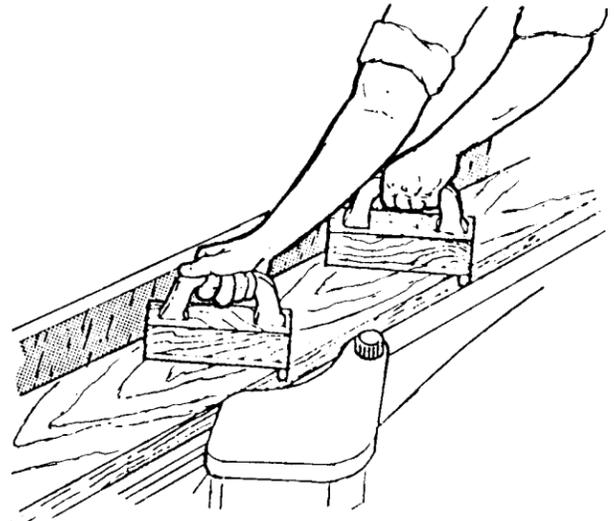


Fig. 23: Near cutter, feed hand over hand.

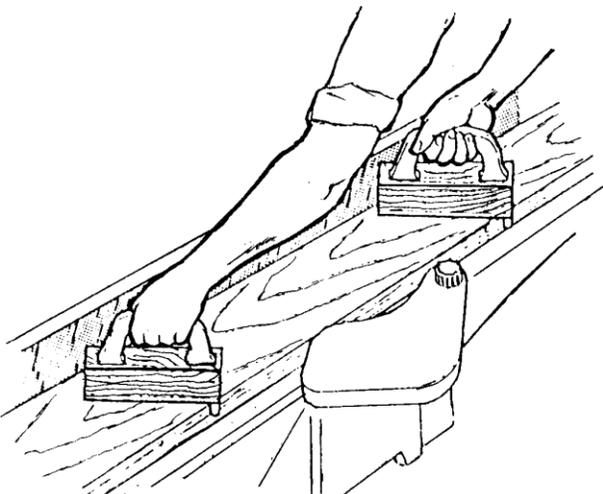


Fig. 24: Left hand is moved to outfeed side.

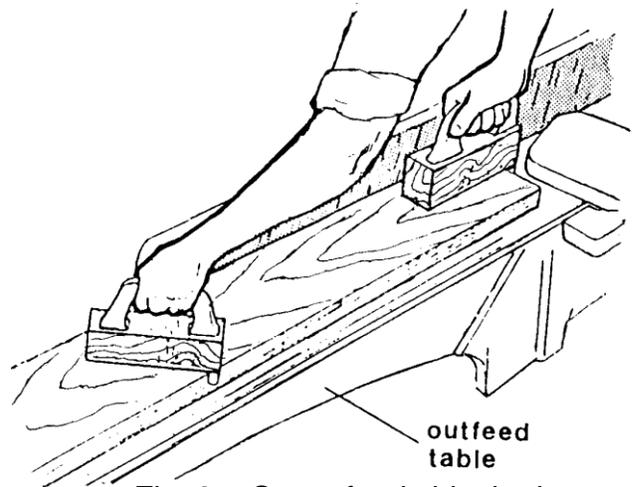


Fig. 25: On outfeed side, both hands pull stock through.



JOINTING (or EDGING)

⚠ CAUTION:

- Never edge a board that is less than 3 inches wide, less than 1/4 inch thick, or 12 inches long, without using a push block.
- When workpiece is twice the length of the jointer infeed or outfeed table use an infeed or outfeed support.

1. Begin by feeding stock with right hand and apply pressure to front of stock with push block.
2. When edging, make cuts of approximately 1/16" (1.6mm) for hardwood and 1/8" (3.1mm) for softwood.
3. When edging wood wider than 3" (76mm) 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.
4. Keep stock against the fence (Fig. 26).

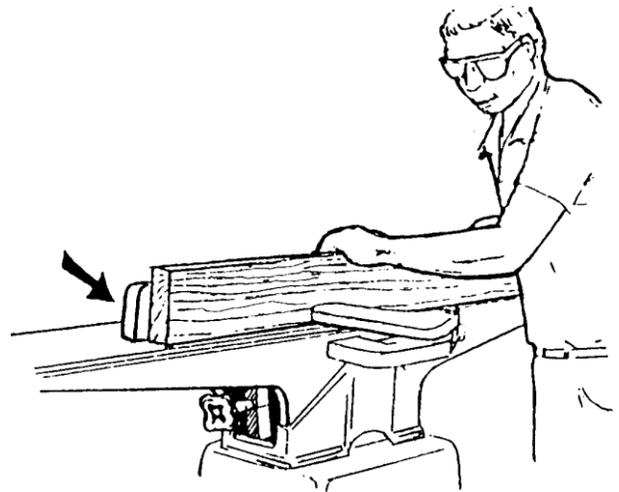


Fig. 26: Move fence forward to expose only the amount of cutterhead required.

BEVELING

Although fence may be tilted in or out for bevel cut, for safety reasons it is recommended that the fence be tilted in, if possible, making a cradled cut (Fig. 27).

5. When beveling never make cut deeper than 1/16" (1.6mm).
6. Make certain material being beveled is over 12" (305mm) long, more than 1/4" (6.3mm) thick and 1" (25.4mm) wide.
7. Set fence to desired angle.
8. For wood wider than 3" (76mm), hold material with fingers close together near the top of the stock, lapping over the board and extending over the fence.
9. When beveling material less than 3" (76mm) wide, use beveled push blocks and apply pressure toward the fence. Keep fingers near top of push block (Fig. 28).
10. When beveling short material use one bevel push block to hold down and apply pressure toward the fence.
11. Keep thumb above the ledge on hold down block (Fig. 29).

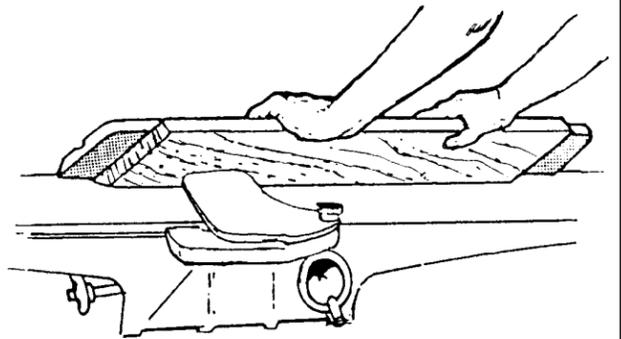


Fig. 27

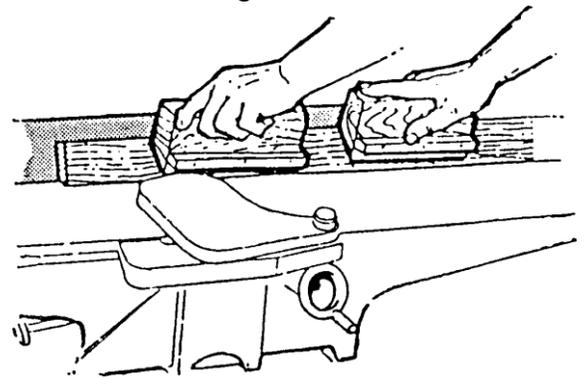


Fig. 28

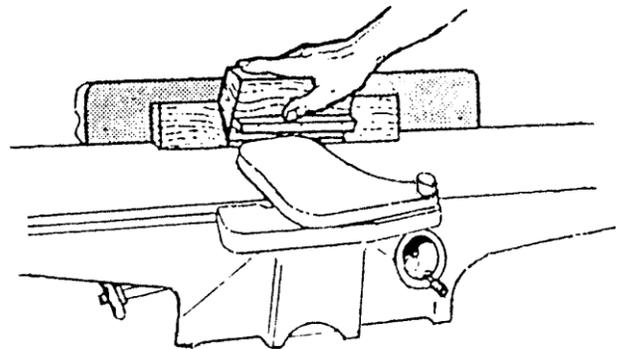


Fig. 29

CROSS GRAIN



Note: When beveling around four edges of a workpiece, make cross grain cuts first. This will help clean up any chipping or splintering when beveling the end grain. For long boards, follow the same hand-over-hand procedure used for surfacing long boards.



SKEWING (SHEAR CUTTING)

When edging or facing burl or birds-eye maple, it is not unusual to deface or mar the surface being finished. This is caused by the cutterhead blades at times cutting against the grain. In order to prevent the defacing or marring of this type wood, it is necessary to skew, or angle finish, the material being worked. (See Fig. 30).

1. Release the fence locking handle and remove the two hex nuts and flat washer holding the fence to the fence support. Remove the fence.
2. Remove the key from the fence slide base.
3. Replace the fence assembly at the desired angle across the cutterhead. Secure the fence to the support with the two hex nuts and flat washer, and then tighten the fence locking handle.

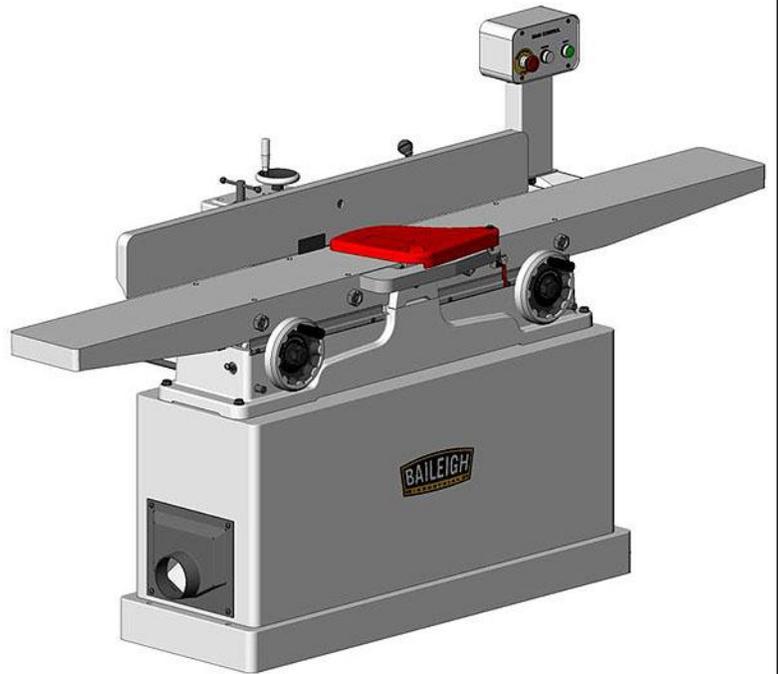


Fig. 30



PUSH BLOCKS

Push blocks are simple, yet necessary tools to assist the operator especially when jointing thin or short stock.

Illustrated in Figure 31 are three types of push blocks commonly used in jointing. Push blocks may be obtained commercially or easily constructed.



Note: *The Jointer is supplied with two hold-downs for feeding stock.*

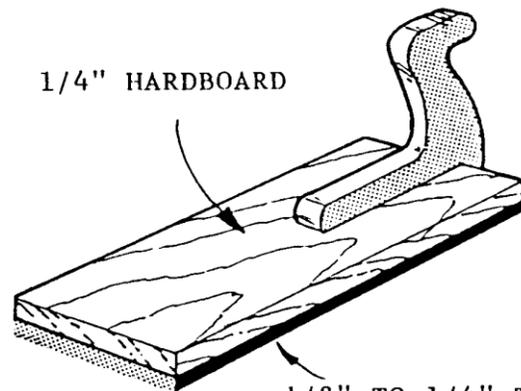
Push blocks are intended to keep hands and fingers away from cutting blade(s) while providing the ability to feed material through the cutting blade(s).

These two items are of equal and important consideration when building or buying push blocks.

Push Blocks should:

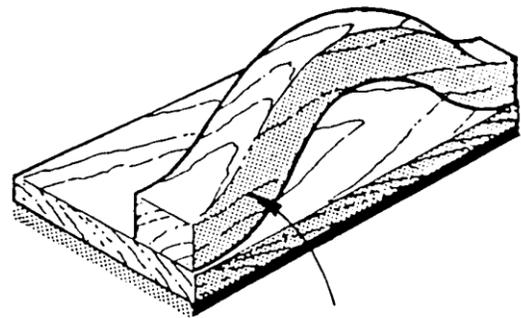
- Maintain the 3" (76.2mm) rule by keeping hands at least 3" (76.2mm) from the cutting Blade(s).
- Provide stops for fingers should they slip during use.
- Feel comfortable in your hand(s).
- Have a notch or dowels to assist in holding the material to prevent kick-back.
- Provide enough surface to hold the material against the cutting blade(s).
- Be made of quality material that will not crack or splinter when it contacts the cutting blade(s).
- Be made of material that will not mar or scratch work material.
- Make the overall use of your machine safer.

Because applications vary and push blocks are intended to come in contact with the cutting blade on occasion, have several push blocks available for your application(s).



1/4" HARDBOARD

1/8" TO 1/4" THICK
SOFT RUBBER
KEEP SURFACE CLEAN
AND FREE OF GRIT.

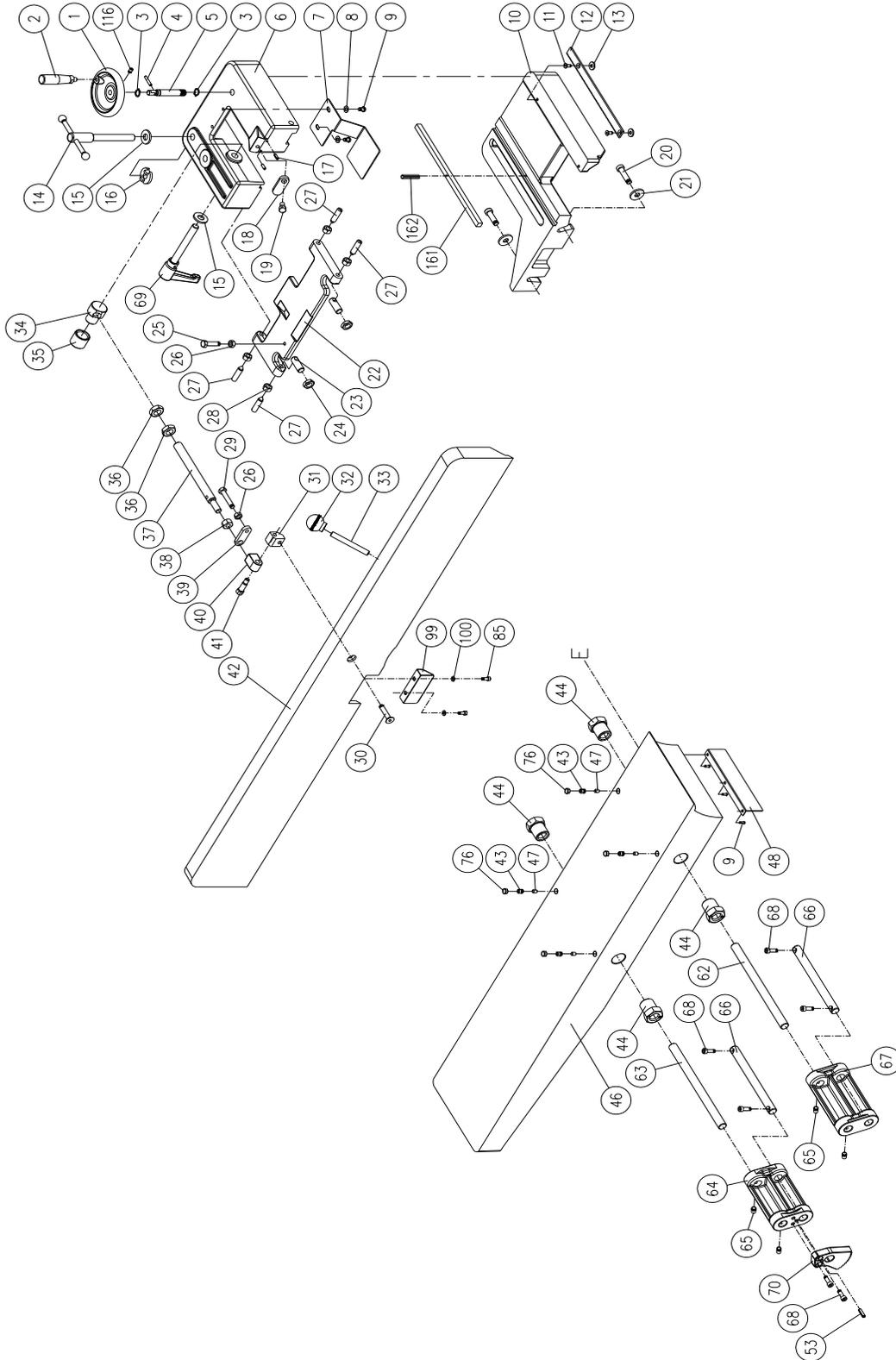


WOOD DOOR HANDLE OR
SHAPE FROM 1-1/4" STOCK

Fig. 31

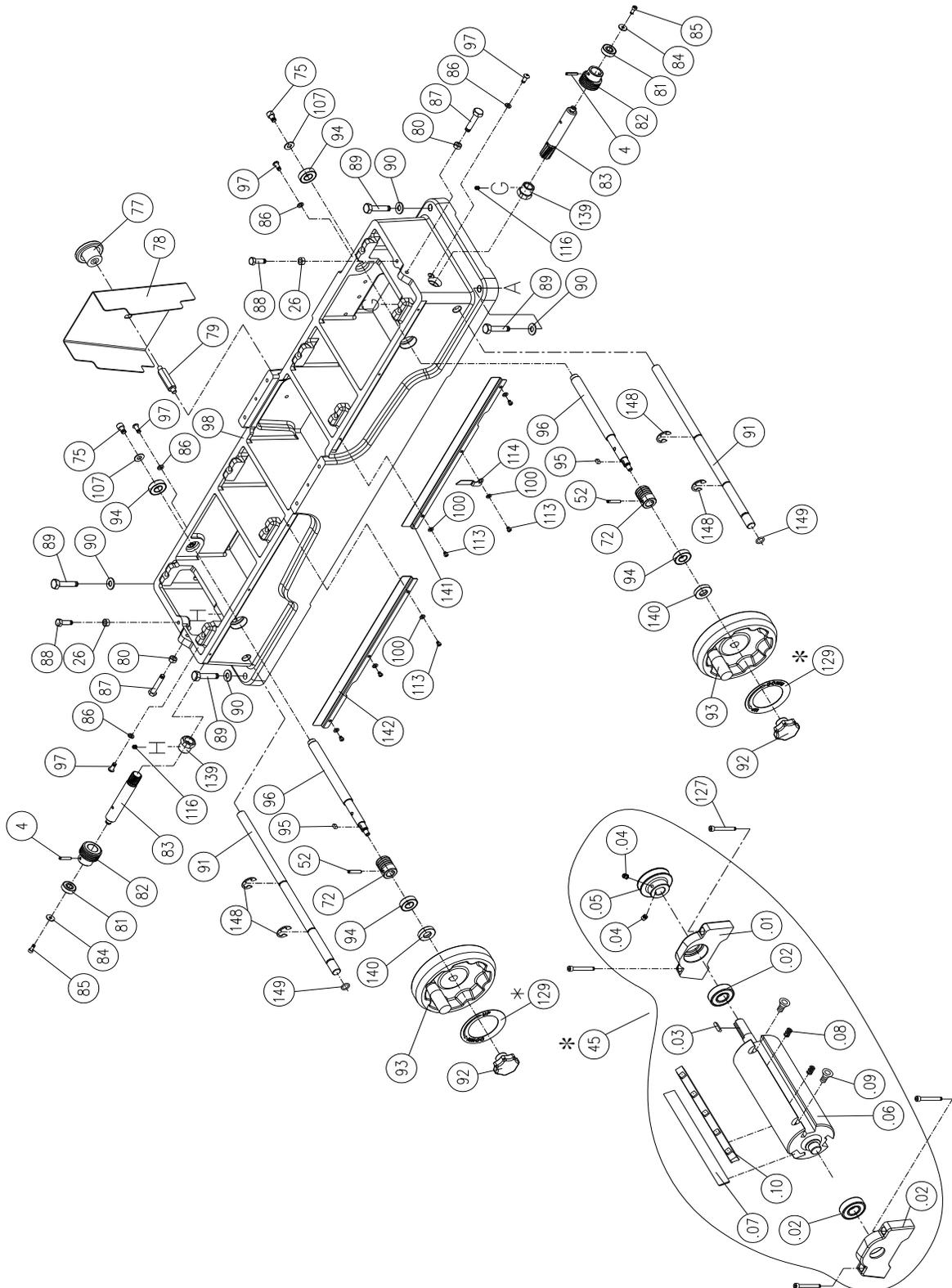


PARTS DIAGRAM SHEET 1



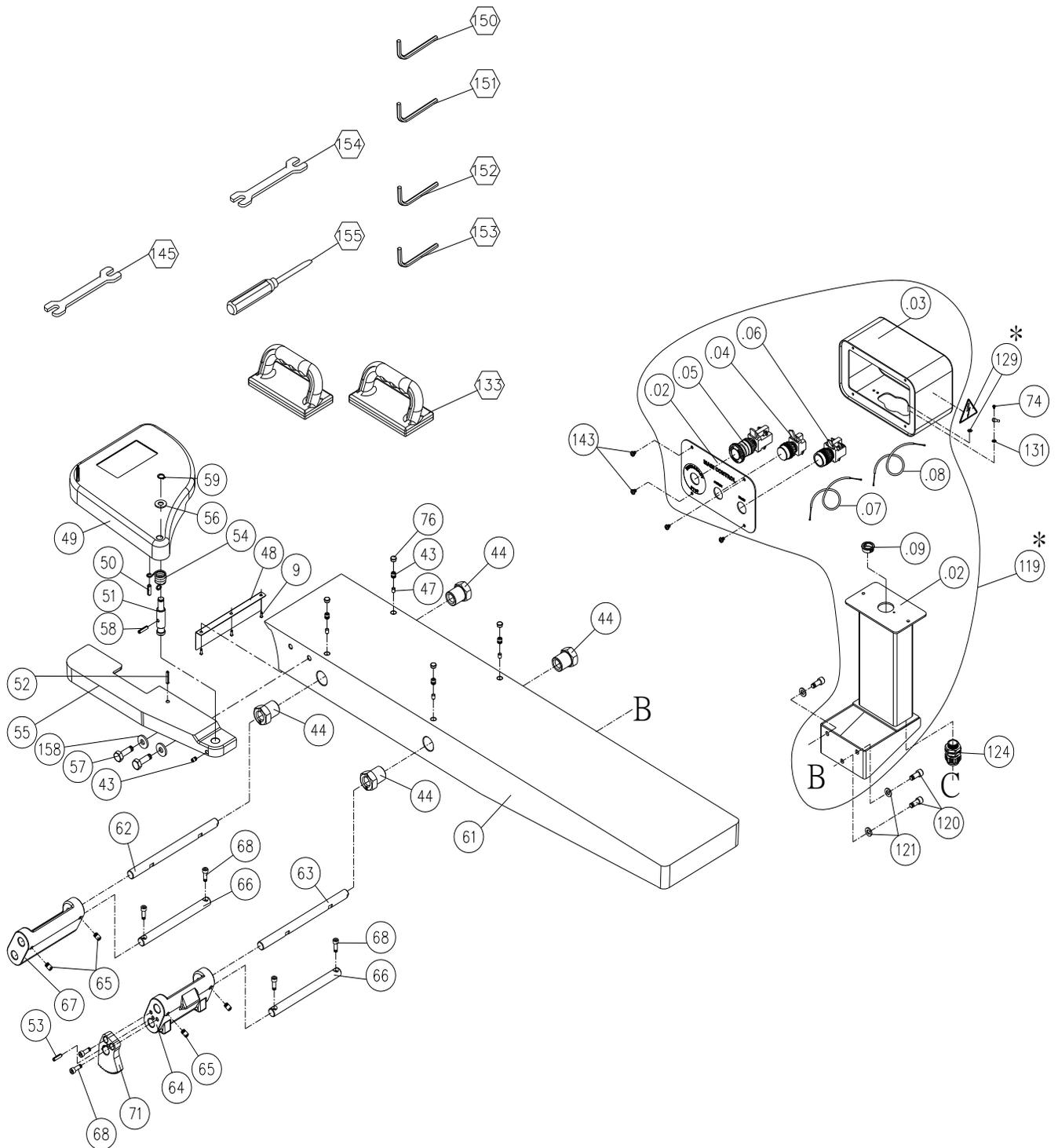


PARTS DIAGRAM SHEET 2

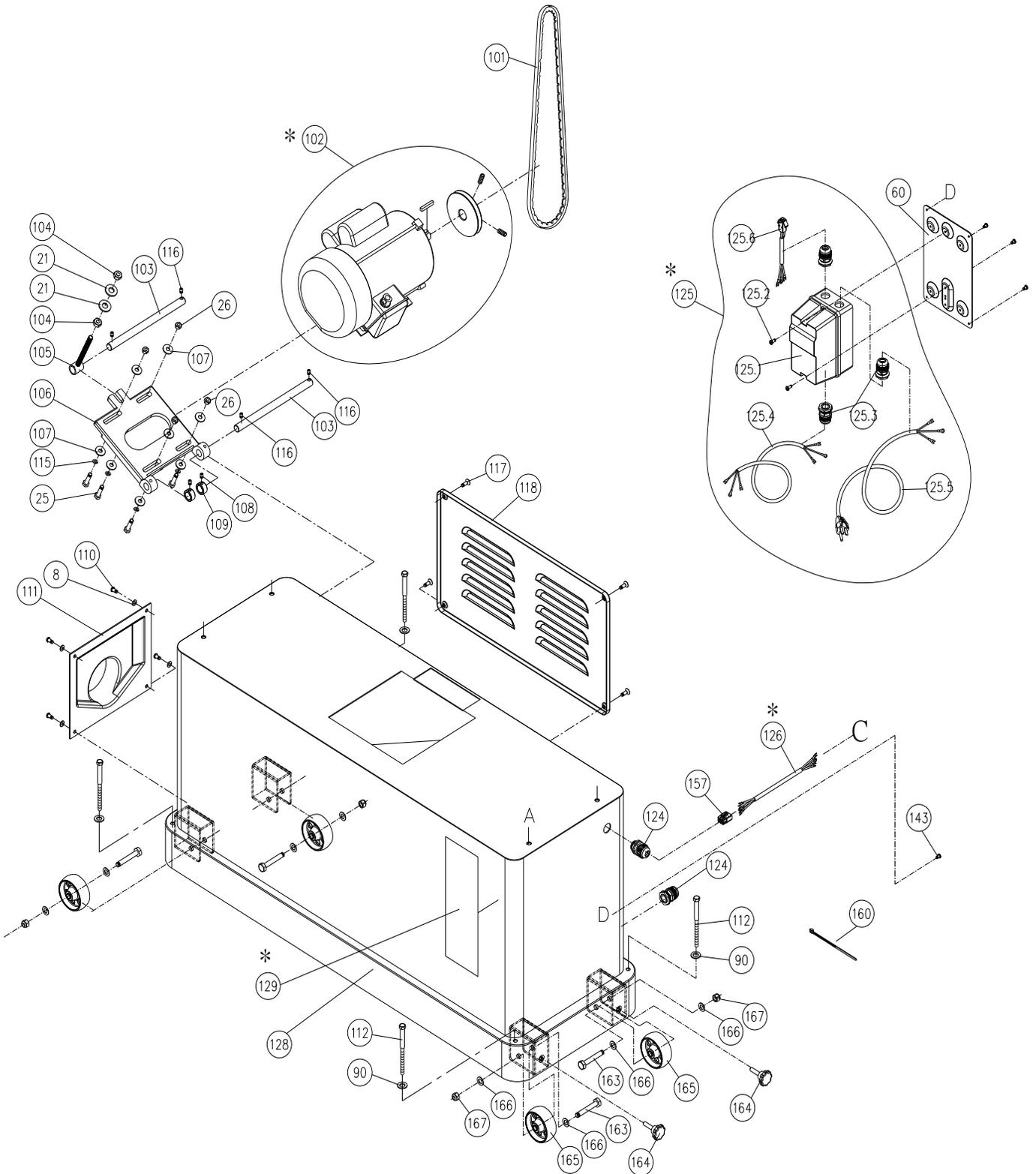




PARTS DIAGRAM SHEET 3



PARTS DIAGRAM SHEET 4





PARTS LIST

Item	Descriptions	Specification	Qty.
1	Handle Wheel		1
2	Knob Fence Tilt		1
3	Retaining Ring	STW-12	2
4	Spring Pin	4 x 25	3
5	Shaft		1
6	Holder Fence		1
7	Plate		1
8	Flat Washer	6.6 x 13 x 1.0T	6
9	Pan Hd Screw	1/4"-20NC x 3/8"	8
10	Clamp		1
11	Flat Hd Soc. Screw	M5 x 0.8P x 12	2
12	Lead Screw		1
13	Flat Washer	6.7 x 16 x 2.0T	2
14	Knob Assembly		1
15	Flat Washer	13 x 28 x 3.0T	2
16	T-Nut		1
17	Spring Pin	4 x 12mm	2
18	Plate Stop		1
19	Bolt Shoulder		1
20	Cap Screw	3/8"-16NC x 1-1/4"	2
21	Flat Washer	10.2 x 25 x 4.0T	4
22	Tilt Plate		1
23	Stud Pivot		2
24	Hex Nut	1/2"-20NF (19.05B x 6.35H)	2
25	Hex Screw	5/16"-18NC x 1-1/4"	5
26	Hex Nut	5/16"-18NC (12.7B x 6.75H)	8
27	Stud Pivot		4
28	Hex Nut	3/8"-16NC (13.83B x 6.68H)	4
29	Hex Screw	5/16"-18NC x 1-3/4"	1
30	Flat Hd Soc. Screw	5/16"-18NC x 1-5/8"	1
31	Joint Seat		1
32	Knob Fence Tilt		1
33	Handle Shaft		1



Item	Descriptions	Specification	Qty.
34	Block Assembly Depth		1
35	Sleeve Fence		1
36	Hex Nut	5/8"-18NF (23.81B x 8H)	2
37	Shaft Lock		1
38	Hex Nut	7/16"-14NC (17.4B x 9.52H)	1
39	Stop Fence		1
40	Nut Pivot		1
41	Bolt		1
42	Fence		1
43	Set Screw	5/16"-18NC x 1/2"	9
44	Bushing		8
45	4 Standard Blades Cutterhead Assemblies		1
45.1	Bracket		2
45.2	Bearing Ball	6204	2
45.3	Key	5 x 5 x 22mm	1
45.4	Set Screw	5/16"-18NC x 3/8"	2
45.5	Pulley		1
45.6	Cutter Head		1
45.7	Knife		4
45.8	Spring		8
45.9	Flat Hd Soc. Screw	M5 x 0.8P x 12	8
45.10	Knife Lock Bar Assembly		4
46	Table Outfeed		1
47	Washer		8
48	Plate		2
49	Cutterhead Guard		1
50	Spring Pin	6 x 20mm	1
51	Blade Guard Shaft		1
52	Spring Pin	5 x 28mm	3
53	Spring Pin	5 x 20mm	2
54	Spring Pin		1
55	Ribbet	CSA/UL	1
56	Flat Washer	12 x 20 x 0.8T	1
57	Hex Screw	3/8"-16NC x 1-1/4"	2



Item	Descriptions	Specification	Qty.
58	Spring Pin	5 x 25mm	1
59	Retaining Ring	STW-11	1
60	Plate Switch Bezel		1
61	Table Infeed		1
62	Fixed Rod		2
63	Fixed Rod		2
64	Bracket		2
65	Set Lock Screw	5/16"-18NC x 1/2"	8
66	Rod		4
67	Bracket		2
68	Cap Screw	1/4"-20NC x 3/4"	12
69	Lock Handle		1
70	Rod-Left		1
71	Rod-Right		1
72	Worm Shaft		2
74	Pan Hd Screw	M4 x 0.7P x 8T	1
75	Cap Lock Screw	5/16"-18NC x 1/2"	2
76	Pin		8
77	T-Nut		1
78	Belt Guard		1
79	Stud Pivot		1
80	Hex Nut	1/2"-12NC (19.05B x 11.11H)	2
81	Ball Bearing	6000	2
82	Worm Shaft		2
83	Worm Shaft		2
84	Flat Washer	5.3 x 16 x 1.5T	2
85	Cap Screw	3/16"-24NC x 1/2"	4
86	Flat Washer	6.4 x 11.5 x 1.6T	4
87	Hex Screw	1/2"-12NC x 2"	2
88	Hex Screw	5/16"-18NC x 1"	2
89	Hex Screw	3/8"-16NC x 1-3/4"	4
90	Flat Washer	10.3 x 22 x 2.0T	10
91	Rod		2
92	Nut		2
93	Handwheel	#008	2



Item	Descriptions	Specification	Qty.
94	Ball Bearing	6002	4
95	Key	5 x 5 x 10mm	2
96	Shaft		2
97	Round Head Hex Screw	1/4"-20NC x 5/8"	4
98	Base		1
99	Angle Foot Spacer		1
100	Flat Washer	5.2 x 10 x 1.0T	8
101	V-Belt	A52	1
102	Motor Assembly	3HP, 220V, 60HZ, 1PH, 2P	1
103	Shaft		2
104	Hex Nut	M10 x 1.25P (17B x 8H)	2
105	Adjustment Rod		1
106	Motor Plate		1
107	Flat Washer	8.5 x 23 x 2.0T	10
108	Set Screw	M6 x 1.0P x 8	2
109	Spacer		2
110	Pan Hd Screw	1/4"-20NC x 1/2"	4
111	Dust Chute		1
112	Wood Screw	3/8"-16NC x 6"	4
113	Pan Hd Screw	3/16"-24NC x 1/4"	6
114	Pointer Indicator		1
115	Lock Washer	8.2 x 15.4mm	4
116	Set Screw	1/4"-20NC x 1/4"	7
117	Pan Head Screw	1/4"-20NC x 3/4"	4
118	Cover		1
119	Switch Board Assembly		1
119	Control Box Assembly		1
119	Switch Board		1
119	Switch Box		1
119	Indicator	φ25 x 250V x 1.2W	1
120	Stop Switch		1
120	Start Switch		1
120	Connect Wire	SJT18AWG, 1C x 85mm	1
120	Connect Wire	SJT14AWG, 1C x 140mm	1
120	Strain Relief	NB-2430	1



Item	Descriptions	Specification	Qty.
120	Cap Screw	5/16"-18NC x 3/4"	3
121	Flat Washer	8.5 x 16 x 2.0T	3
123	Hex Wrench	3mm	1
124	Strain Relief	MG20A-10B	3
125	Magnetic Switch Assembly	3HP, 220-240V, 1PH-CSA	1
125	Magnetic Switch	3HP, 220-240V, 1PH	1
125	Pan Hd Screw	M5 x 0.8P x 15	2
125	Strain Relief	PGA13.5-11B	3
125	Connect Wire	SJT14AWG, 3C x 850mm	1
126	Power Cord	SJT14AWG, 3C x 2400mm	1
126	Power Cord Sets	2000W-06-CSA-SJT16AWG x 5C	1
126	Connect Wire	SJT16AWG, 5C x 1400mm	1
127	Cap Screw	5/16"-18NC x 2"	4
128	Stand		1
131	Tooth Washer	4.3 x 8.5 (BW-4)	1
133	Push Block		2
138	Plastic Sheet	2500 x 1100 x 0.1T	1
139	Bushing		2
140	Bushing		2
141	Cover-Right		1
142	Cover-Left		1
143	Pan Hd Screw	M5 x 0.8P x 8	4
145	Open Wrench	11 x 13mm	1
148	Retaining Ring	ETW-15	4
149	O-Ring	P12	2
150	Hex Wrench	4mm	1
151	Hex Wrench	5mm	1
152	Hex Wrench	6mm	1
153	Hex Wrench	8mm	1
154	Open Wrench	17 x 19mm	1
155	Screw Driver	1 x 75mm	1
157	Connector	2000H-06	1
158	Flat Washer	10 x 20 x 3.0T	2
160	Wire Clip	ALC-110S	1
161	Key		1



Item	Descriptions	Specification	Qty.
162	Spring Pin	4 x 14mm	1
163	Hex Screw	3/8"-16NC x 2-1/2"	4
164	Lock Knob	5/16"-18NC x 3/4"	2
165	Wheel		4
166	Flat Washer	10.5 x 19 x 1.0T	8
167	Hex Nut	3/8"-16NC (14.2B x 11.5H)	4

NOTES



NOTES

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