# **WOOD JOINTER**

OWNER'S OPERATING MANUAL & SERVICE INSTRUCTIONS

**MODEL: CJP6 / CJP8A** 

CAUTION: Read the instruction manual before using the appliance

5739#

INTRODUCTION

### **Specifications**

Model	CJP6	CJP8A	
Motor	1-1/2 HP	2 HP	
Input Voltage	See name Plate (Volt	age & 50Hz or 60Hz )	
Table Size	1215x183mm	1785x230mm	
	Speed: 4400RPM/50	0Hz, 5200RPM/60Hz	
Cutterhead	Number of knives: 3	Number of knives: 4	
	Diameter: 61mm	Diameter: 72mm	
Fence Size	708x98mm	1010x120mm	
Fence Positive Stops	45°L, 9	0°, 45°R	
	Width: 152mm (6")	Width: 200mm (8")	
Cutting Capacity	Depth: 3.175mm (1/8")	Depth: 3.175mm (1/8")	
	Rabbeting:12.7mm (1/2")	Rabbeting:12.70mm (1/2")	
Weight	76/85kgs	187/203kgs	

### **SECTION 1: SAFETY**

### For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

### **Safety Instructions for Machinery**

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

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof! **DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

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

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

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

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

**WEARING PROPER APPAREL.** Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

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

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

**RÉMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting! **USE CORRECT TOOL FOR THE JOB.** Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

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

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

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

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

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

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

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

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

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

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

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

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine!

### **Additional Safety for Jointers**

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

**KICKBACK.** Occurs when workpiece is ejected from machine at a high rate of speed. To reduce the risk of kickback-related injuries, use quality workpieces, safe feeding techniques, and proper machine setup or maintenance. **GUARD REMOVAL.** Operating jointer without guard exposes operator to knives/inserts. Except when rabbeting, never remove guards for regular operations or while connected to power. Turn jointer **OFF** and disconnect power before clearing any shavings or sawdust from around cutterhead. After rabbeting or maintenance is complete, immediately replace all guards and ensure they are properly adjusted before resuming regular operations. **DULL/DAMAGED KNIVES/INSERTS.** Dull knives/inserts can increase risk of kickback and cause poor workpiece finish. Only use sharp, undamaged knives/inserts.

**OUTFEED TABLE ALIGNMENT.** Setting outfeed table too high can cause workpiece to hit table and get stuck, increasing risk of kickback. Setting outfeed table too low may cause workpiece to become tapered from front to back. Always keep outfeed table even with knives/inserts at top dead center (highest point during rotation).

**INSPECTING STOCK.** Impact injuries or fire may result from using poor workpieces. Thoroughly inspect and prepare workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or other foreign material. Workpieces with minor warping should be surface planed first with cupped side facing infeed table.

**GRAIN DIRECTION.** Jointing against the grain or end grain can increase the risk of kickback. It also requires more cutting force, which produces chatter or excessive chip out. Always joint or surface plane WITH the grain.

MAXIMUM CUTTING DEPTH. To reduce risk of kickback, never cut deeper than 1/8" per pass.

**CUTTING LIMITATIONS.** Cutting a workpiece that does not meet the minimum dimension requirements can result in breakup, kickback, or accidental contact with cutterhead during operation. Never perform jointing, planing, or rabbeting cuts on pieces smaller than 8" long, 3/4" wide, or 1/4" thick.

**PUSH BLOCKS.** Not using push blocks when surface planing may result in accidental cutterhead contact. Always use push blocks when planning materials less than 3" high or wide. Never pass your hands directly over cutterhead without a push block.

**WORKPIECE SUPPORT.** Loss of workpiece control while feeding can increase risk of kickback or accidental contact with cutterhead. Support workpiece continuously during operation. Position and guide workpiece with fence. Support long or wide stock with auxiliary stands.

**FEED WORKPIECE PROPERLY.** Kickback or accidental cutterhead contact may result if workpiece is fed into cutterhead the wrong way. Allow cutterhead to reach full speed before feeding. Never start jointer with workpiece touching cutterhead. Always feed workpiece from infeed side to outfeed side without stopping until cut is complete. Never back work toward infeed table.

**SECURE KNIVES/INSERTS.** Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than 1/8" (0.125") from cutterhead body.

### **SECTION 2: POWER SUPPLY**

#### **Availability**

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

#### Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time.

#### **Grounding Requirements**

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

#### **Extension Cords**

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

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

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle.

### **SECTION 3: SETUP**

#### Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage.

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

#### Cleanup

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

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

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

#### Before cleaning, gather the following:

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

#### Basic steps for removing rust preventative:

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

#### Site Considerations

#### Weight Load

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

#### Space Allocation

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

#### **Electrical Installation**

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

#### Lighting

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

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

#### **Assembly**

The machine must be fully assembled before it can be operated. Before beginning the assembly process, refer to Needed for Setup and gather all listed items. To make sure the assembly process goes smoothly, first clean all parts that have any heavy-duty rust preventative applied by the factory (if applicable).

If you notice any transport damage while unpacking, notify your supplier immediately. Do not operate the machine! Dispose of the packing in an environmentally friendly manner.

Clean all rust protected surfaces with a mild solvent.

Place the machine on top of the stand with the pulleys on the same side and secure with the three hex bolts (H, M10x16) and lock washers provided, screwing up from underneath (See Fig 2)

There are alternative methods of supporting the base of the stand:

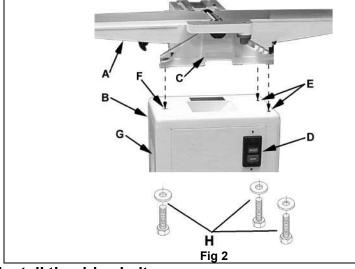
- 1. Using the adjustable feet provided.
- 2. By screwing or bolting the base to the floor using the two lugs at the bottom of the stand.

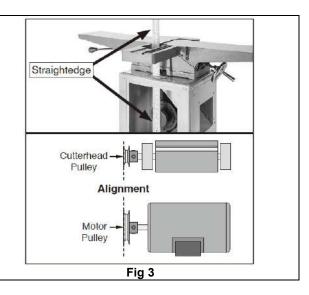
#### Installing Bed to Stand

Referring to Fig.2:

- 1. Place bed assembly (A) on top of stand (B). Be sure the identification label (C) on the bed faces the same direction as the switch (D) on the stand.
- 2. Line up two holes in the stand top (E) with holes in the bed assembly by viewing through the access door in rear side of the stand.
- 3. Attach stand to bed assembly by using two M10x16 lock bolts and lock washers (H, Fig. 2). Hand tighten only at this
- 4. Line up the third hole in the stand (F) with the hole in the bed assembly by viewing through the dust chute (G).
- 5. Install the third M10x16 lock bolt and lock washer through the dust chute (G) to secure the bed to the stand.

6. Tighten all three lock bolts H (Fig. 2) with a 14mm wrench.





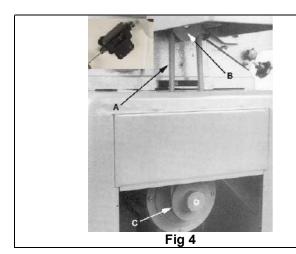
#### Install the drive belt.

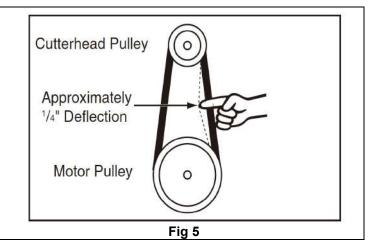
Referring to Fig.3 Fig.4 Fig.5:

- 1. Place straightedge against pulleys to check their alignment.
- 2. Place V-belt (A) onto cutterhead pulley (B) and through opening in stand.
- 3. Pull V-belt down and place onto motor pulley (C).

**Note:** If the belt is difficult to roll on the pulley, loosen the motor mounting screws.

4. Check to make sure that motor pulley and cutterhead pulley are vertically aligned and the V-belt does not contact the sides of the opening in the base. If the pulleys are not aligned, remove belt and adjust the motor pulley in or out on the motor shaft and then reattach the belt.





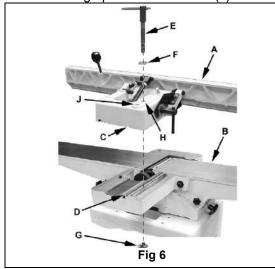
- 5. The V-belt is properly tensioned when finger pressure on the belt half way between the two pulleys causes 6mm(1/4") deflection (Fig. 5). If the belt is too loose, loosen the four motor mount bolts, push down on the motor to tension the Vbelt, and tighten the mounting bolts.
- 6. A new belt may have a tendency to stretch slightly until broken in. After two hours of operation, check belt tension again. Readjust the tension if necessary.

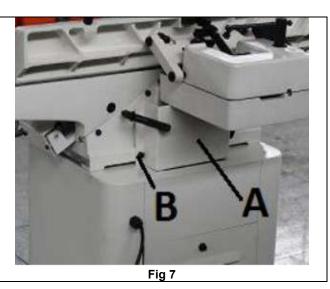
#### Installing Fence to Bed

Referring to Fig.6:

- 1. Take the lock handle (E), flat washer (F), and lock nut (G) from the carton.
- 2. Place the fence assembly (A) onto the table (B). Be sure the key stock (D) on the bed lines up with the channel (C) in the fence casting.
- 3. Place the flat washer (F) on hole(H)\*; insert the lock handle (E) through the fence casting and the table casting.
- 4. Thread the lock nut (G) onto the lock handle (E). Make sure the tab on the nut faces up and engages the slot in the table casting.

\*Note: For rabbeting operations use hole (J).





#### **Installing Belt Guard**

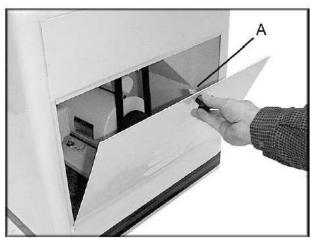
Install the belt cover (A, Fig 7) with 4 screws and 4 washers (B, Fig 7).

#### **Installing Access Cover**

Install access door by placing bottom of panel into access in stand and fastening by turning latch (Fig. 8).

#### If the access door latch needs adjustment:

- 1. Remove the access door from the stand.
- 2. Loosen the hex lock nut (A, Fig.8). Rotate the latch a quarter turn clockwise to tighten and counterclockwise to loosen.
- 3. Tighten the lock nut (A, Fig. 8).
- 4. Re-install the access door.



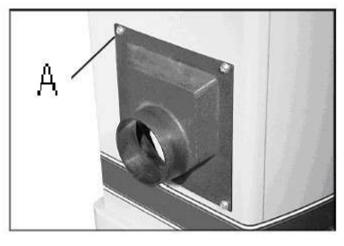


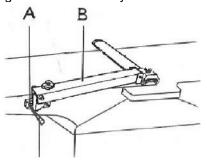
Fig 8 Fig 9

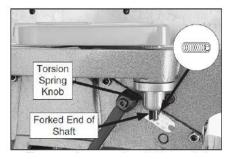
#### **Installing Dust Chute**

Attach the dust chute (Fig. 9) to the stand with four screws and four flat washers, through the pre-tapped holes in the stand. (A, Fig 9).

#### **Installing Cutterhead Guard**

**Mount the cutter block guard** (B, Fig.10) with handle (A, Fig.10). The maximum. clearance between cutter block guard and table may be no more than 75mm





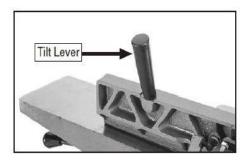


Fig 10 Fig 10A Fig 11

#### Mount the cutter block guard (Fig. 10A)

1. Remove set screw from forked end of cutterhead guard shaft, wind torsion spring knob 1/2-turn counterclockwise (viewed from top), then slide shaft down through mounting hole on table.

Note: The guard may not fully seat in hole initially; however, rotating guard will allow shaft to fully seat in hole.

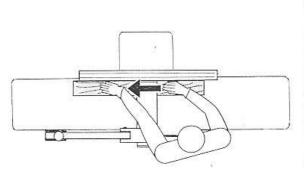
- 2. Thread set screw through forked end of cutterhead guard shaft, as shown in Fig 10A. When properly installed, guard is positioned 3/8" above table for safety during operations. Installing fence tilt lever
- 3. Test operation of guard by pulling it back. Guard should spring back over cutterhead and stop against fence.
- If guard does not snap back, or snaps back slowly, remove guard and repeat Steps 1-3.

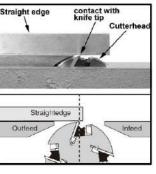
#### **Installing fence tilt lever** Referring to Fig.11:

### **SECTION 4: OPERATIONS**

#### **Correct operating position:**

Position yourselves offset to the infeed table (Fig 12).





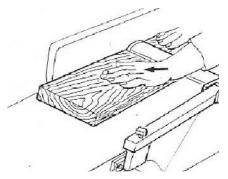


Fig 12

Fig 13

Fig 14

#### Workpiece handling:

Feed the workpiece straight across the infeed table, holding your fingers close together, guiding the workpiece with the palm of your hands.

**Note:** Never put your hands under the cutter block cover. Always keep your hands well clear of the cutter block. Do not pull the workpiece back over the unguarded cutter block. Always plane the workpiece over its entire length.

#### Adjust depth of cut with handwheel

Fit the two table adjustment handwheels to their respective spindles(Fig 13). For the planing operations the outfeed table (the left hand one when facing the machine) is set to be level with the knives at the highest point in their revolution. As shown in Fig 13, this is achieved by placing a straight edge on the outfeed table and adjusting the height of the outfeed table until the blades just touch the straight edge when the block is rotated by hand. Support long workpieces with helping roller stands or table extension.

#### Planing the face of a workpiece up to 75mm thick:

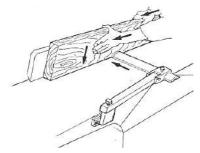
Place the workpiece against the jointer fence.

Adjust the cutter block guard to the height of the workpiece. When guiding the workpiece, the hands slide over the cutter block guard (Fig 14)

#### Planing the edge of a workpiece (jointing) or workpieces more than 75mm thick:

Place the workpiece against the jointer fence.

Adapt the cutter block guard to the width of the workpiece (Fig 15).



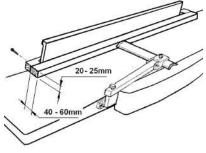


Fig 15

Fig 16

Fig 17

#### Chamfering a work piece:

Place the work piece against the jointer fence.

Adapt the cutter block guard to the width of the work piece (Fig 16).

#### Planing of narrow work pieces:

Add an auxiliary fence to safely guide narrow workpieces (see Fig 17).

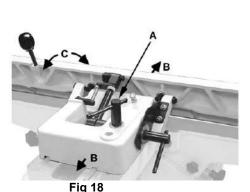
#### **Fence Movement**

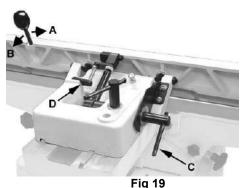
The fence can be moved forward or backward across the width of the table (B, Fig. 18). It also tilts up to 45 degrees forward and has a positive stop at 90 degrees.

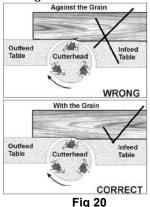
#### To slide fence forward or backward

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

- 1. Loosen the locking handle (A, Fig. 18).
- 2. Push the entire fence assembly (B, Fig. 18) to the desired position, and tighten the locking handle.







To tilt fence forward

The fence can be tilted forward to any angle down to 45 degrees.

- 1. Loosen locking handle (C, Figure 19).
- 2. Move the lever forward (A, Figure 19) to the desired angle down to 45 degrees. Or you can place your reference piece on the table and against the fence, and adjust the fence until the angle of the fence matches the bevel of your gauge piece.
- 3. Tighten locking handle (C, Figure 19).

#### To tilt fence backward

- 1. The fence can be tilted backward up to 45° (that is, for a total included angle of 135° from table surface).
- 2. Loosen locking handle (C, Fig. 19).
- 3. Flip the 90° stop block (D, Fig. 19) out of the way.
- 4. Move the lever (B, Fig. 19) back 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.
- 5. Tighten locking handle (C, Fig 19). Important: When the tilted operation is finished and the fence is returned to 90°, do not forget to flip the 90° stop block (D, Fig. 19) back to its original position.

#### Operating notes:

Always use sharp cutter knives!

The jointer fence must securely be locked before machine use.

Check workpiece for foreign objects (nails, screws) and for loose knots.

Feed with thicker workpiece end at the front, hollow side downward.

Plane the stock with the grain, if possible (Fig 20)

You get a better surface when planning several passes with less chip removal.

Switch machine off if no further planing is to be done immediately afterwards. Cover the cutter block with the cutter block guard.

Jointing and planing of short workpieces may only be performed with the help of tailor made push woods and templates.

### **SECTION 5: ADJUSTMENTS**

#### General note:

Setup and adjustment work may only be carried out after the machine is protected against accidental starting.

#### Pull the mains plug!

#### Changing cutterblock knives

The cutter knives may only be changed when the mains plug is pulled!

Risk of personal injury by cuts from the cutter knives. Wear suitable gloves when changing cutter knives.

Move cutter block cover to front and fence to back.

Turn the four square-hear bolts of the cutter knife lock bar all the way in (wear gloves!).

At first remove cutter knife, then cutter knife lock bar from the cutter block.

Clean all surfaces of cutter block and cutter knife lock bar with a suitable solvent (do not use cleaning agents that could corrode the light metal components).

Use only suitable cutter knives conforming the technical specification and EN 847-1 Unsuitable, incorrectly mounted, dull, cracked of bent cutter knives can work loose or increase the risk of kickback considerably.

Always replace all three cutter knives at once.

The cutter knife lock bars are balanced to each other and thus can randomly be placed.

Only cutter knives marked "HSS" or "HS" can be resharpened!

When resharpening, remove the same amount of material from all three cutter knives, otherwise a balancing error may cause damage to the bearings.

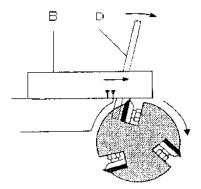
Cutter knives can only be resharpened down to a minimum width of 12 mm.

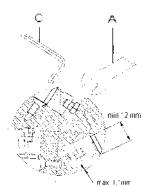
Knives may not exceed the cutterblock body by 1,1mm in radius.

Use genuine Jet replacement parts only.

Place the cutter knife lock bar in the cutterblock's groove. Turn the four square-head bolts so far that the cutter knife will just slide in.

Insert a sharp cutter knife and adjust position with the cutter knife lock bar, so that neither protrudes over the edge of the cutter block.





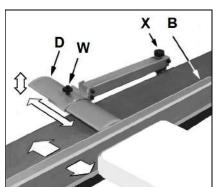


Fig 21 Fig 22 Fig 23

Adjust the knives according to the knife setting gauge (B, Fig 21) resting on the outfeed table.

When turning the cutter block, the adjustment gauge must move with the cutter block knife to the second arrow. To turn the cutter block use the pin (D, Fig 21) supplied with the machine.

Micro adjust the jack screws with a 3mm alan key (C, Fig22).

To tighten the cutter knife, start tightening with the two outer bolts. Do not extend the tool (A, Fig22) when tightening the bolts, do not tighten bolts by striking the wrench.

Reset fence and cutter block guard.

#### **Cutterblock guard adjustment**

The cutterblock guard must be set against the fence and down to the table, as much as is possible by the individual machining operation (see Fig 14, 15, 16).

Loose the lock knob (W, Fig 23) to adjust the cutterblock guard (D) against the fence (B). Rotate the knob (X) to adjust the cutterblock guard up and down, support by pushing the guard down to the table or workpiece.

#### **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.

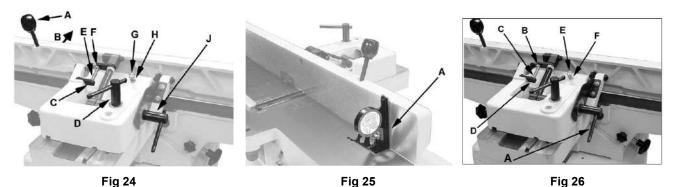
#### 90° Fence Adjustment

Referring to Fig 24:

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).



- 5. Place an angle measuring device on the table and against the fence to confirm a 90° setting (A, Fig. 25).
- 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. Tighten the lock handle (J).

#### 45° Fence Backward Stop Adjustment

Referring to Fig 26:

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. 27).
- 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).

#### **Outfeed Table Adjustment**

When you receive the Planer, the knives have been pre-set at the factory. However, the height and parallelism of the knives with the outfeed table should be checked, and any needed adjustments made, before putting the jointer into operation.

Adjust the height of the outfeed table as follows:

- 1. Disconnect jointer from power source.
- 2. Carefully number each blade with a marker to make them easier to differentiate.

3. Place a straightedge upon the outfeed table and extend it over the cutterhead (Fig 28).

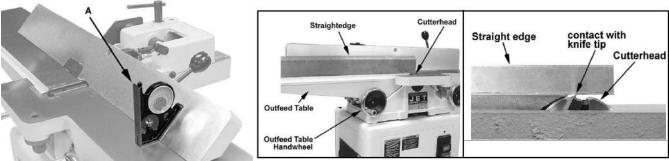


Fig 27 Fig 28

4. Rotate the *cutterhead*, using the drive belt or pulley, until *knife number one* is at its highest point. The apex of the knife should just barely come in contact with the straightedge.

If the apex of the *knife number one* just makes contact with the straightedge, no adjustment is required for the outfeed table. Proceed to the *Setting Cutterhead Knives* section.

If the apex of the *knife number* one comes below the straightedge (a gap exists) or pushes the straightedge up, proceed with the following steps:

- 5. Loosen both side gib lock screws (B, Fig. 29).
- 6. Raise or lower the *outfeed table* until the *straight edge* contacts the *knife tip*, as shown in Fig 28. Using the drive belt or pulley, rock the cutterhead slightly to make sure the apex of the knife is just barely contacting the *straight edge*.

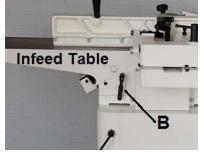
When adjustment is complete:

7. Lock the *outfeed table* at that setting by tightening the *gib lock screws* (B, Fig. 29). The outfeed table adjustment is complete.

The outfeed table adjustment is only made against one knife (blade number one was arbitrarily selected here). After the outfeed table has been set at the correct height, do not change it except for special operations or after replacing knives.

After this adjustment is completed, it is necessary to proceed to the Setting Cutterhead Knives section to verify that all three knives are at the correct height and parallel to the outfeed table.





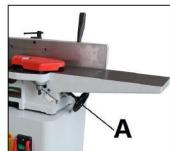


Fig. 29 Fig 30 Fig 31

#### Infeed Table Adjustment

To adjust the infeed table height, loosen the infeed table lock (B, Fig 30), adjust the infeed table handwheels (A, Fig 31), then tighten the lock (B, Fig 30) to secure the setting.

### **SECTION 6: MAINTENANCE**

#### V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to the instructions on Page 20).

#### Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

Table ways and the fence assembly should not be lubricated. If the tables appear to be stuck, disassemble and clean any foreign materials from the ways. Re-assemble and reset the gibs.

### **SECTION 7: TROUBLESHOOTING**

**Motor & Machine Operation** 

Symptom	Possible Cause	Possible Solution
	Emergency stop button depressed.	Lift the cover on the emergency stop button to allow it to pop out.
Motor will not start.	Low voltage.	Check power line for proper voltage.
	Open circuit in motor or loose connections.	Inspect all lead connections on motor for loose or open connections.
Fuses or circuit breakers blow.	Short circuit in line cord or plug.	Repair or replace cord or plug for damaged insulation and shorted wires.
	Motor overloaded during operation.	Reduce load on motor; take lighter cuts.
Motor stalls or shuts off during a cut.	Short circuit in motor or loose connections.	Repair or replace connections on motor for loose or shorted terminals or worn insulation.
-	Circuit breaker tripped.	Install correct circuit breaker; reduce # of machines running on that circuit.
Blade slows when cutting or makes a squealing noise, especially on	V-belt loose.	Tighten V-belt
start-up.	V-belt worn out.	Replace V-belt
Loud name titious mais a coming from	Pulley setscrews or keys are missing or loose.	Inspect keys and setscrews. Replace or tighten if necessary.
Loud repetitious noise coming from machine.	Motor fan is hitting the cover.	Adjust fan cover mounting position, tighten fan, or shim fan cover.
	V-belts are damaged.	Replace V-belts
	Loose or damaged blade.	Tighten or replace blade.
Vibration when running or cutting.	Damaged V-belt.	Replace.
	Worn cutterhead bearings.	Check/replace cutterhead bearings.

#### **Table**

Symptom	Possible Cause	Possible Solution
Tables are bard to adjust	Table lock is engaged or partially engaged.	Completely loosen the table lock.
Tables are hard to adjust.	Table gibs are too tight.	Re-adjust the table gibs.
Excessive play in table movement.	Table gibs are too loose.	Re-adjust the table gibs

Cuttina

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge in the end of the board that is uneven	Outfeed table is set too low.	Align outfeed table with cutterhead knife at top dead center
with the rest of the cut).	Operator pushing down on end of workpiece.	Reduce/eliminate downward pressure on that end of workpiece.
Workpiece stops in the middle of the cut.	Outfeed table is set too high.	Align outfeed table with cutterhead knife at top dead center
	Knots or conflicting grain direction in wood.	Inspect workpiece for knots and grain; only use clean stock.
Chinning	Nicked or chipped blades.	Adjust one of the nicked knives sideways; or replace knives
Chipping.	Feeding workpiece too fast.	Slow down the feed rate.
	Taking too deep of a cut.	Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)
Long lines or ridges that run along the length of the board.	Nicked or chipped knives.	Adjust one of the nicked knives sideways; or replace knives
Uneven cutter marks, wavy	Feeding workpiece too fast.	Slow down the feed rate.

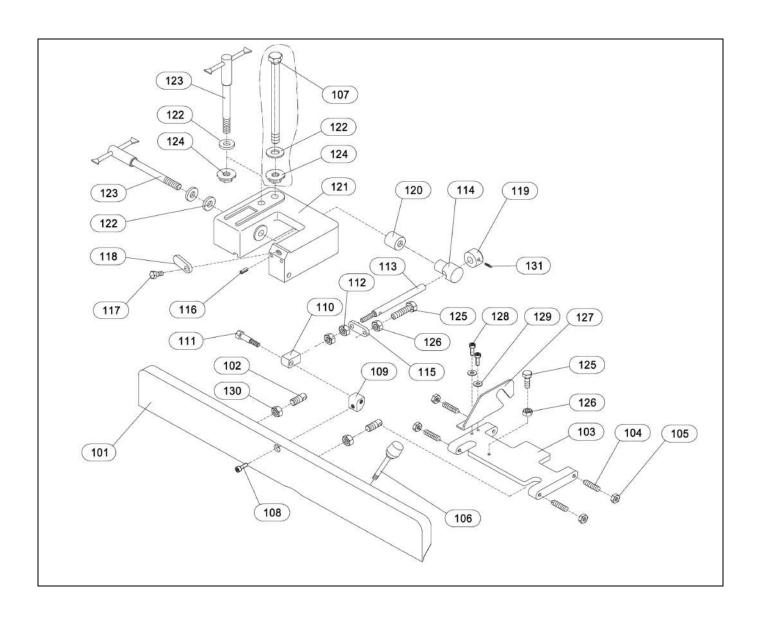
surface, or chatter marks across the face of the board.	Knives not adjusted at even heights in the cutterhead.	Adjust the knives so they are set up evenly in the cutterhead
	Board not held with even pressure on infeed and outfeed table during cut.	Hold board with even pressure as it moves over the cutterhead.
Roard adda is concavo or convoy	Board started too uneven.	Take partial cuts to remove the extreme high spots before doing a full pass.
Board edge is concave or convex after jointing.	Board has excessive bow or twist along its length.	Surface plane one face so there is a good surface to position against the fence.
	Insufficient number of passes.	It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.
	Uneven feed rate.	Feed the board evenly and smoothly during the cut.
Uneven cut or breakout when	Depth of cut too deep.	Raise the infeed table to take a smaller depth of cut. Never exceed 1/16" per pass when rabbeting.
rabbeting.	Knives not adjusted evenly with each other in the cutterhead.	Adjust the knives so they are set up evenly in the cutterhead
	Nicked or chipped knives.	Adjust one of the nicked knives sideways; replace knives

## **SECTION 8: PARTS**

Parts Breakdown for Surface Planer--Part A (Fence – Assembly)

Part #	Description	Qty.	Part #	Description	Qty.
101	Fence Body	1	117	Hex Cap Bolt	1
102	Fence Link	2	118	Plate B	1
103	Tilt Plate	1	119	Sleeve	1
104	Threaded Stud M10x40	4	120	Bushing	1
105	Hex Nut M10	4	121	Fence Bracket	1
106	Handle	1	122	Flat Washer 12	3
107	Long Bolt (for Packing) M12x100	1	123	Lock Handle	2
108	Socket Head Cap Screw M8x25	1	124	Lock Nut	1
109	Block A	1	125	Hex Cap Screw	2
110	Block B	1	126	Hex Nut	1
111	Bolt	1	127	Plate	1
112	Hex Nut M12	2	128	Socket Head Cap Screw M8x35	2
113	Hex Nut	1	129	Flat Washer M8	2
114	Swivel Block	1	130	Hex Nut M12x1	2
115	Plate A	1	131	Set Screw	1
116	Spring Pin	2			

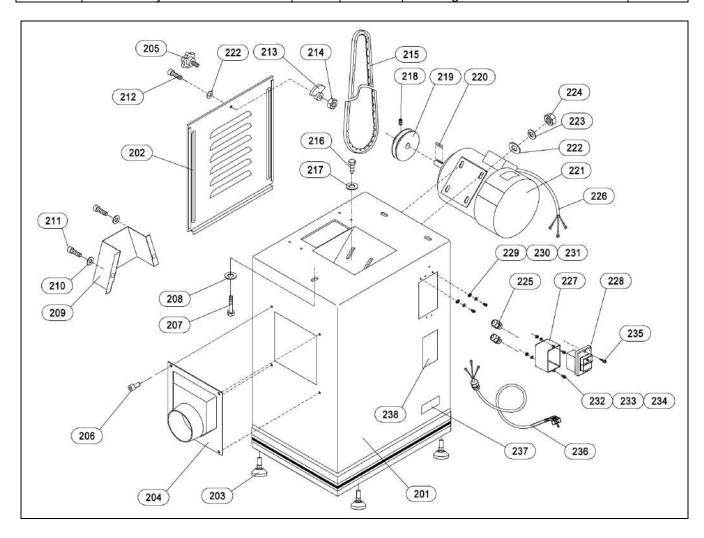
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Parts Breakdown for Surface Planer ----- Part B (Stand - Parts)

Part #	Description	Qty.	Part #	Description	Qty.
201	Stand Body	1	220	Key	1
202	Access Cover	1	221	Motor	1
203	Bolt With Leveling Pad	4	222	Flat Washer	5
204	Dust Chute	1	223	Spring Washer	4
205	Door Handle	1	224	Hex Nut	4
206	Socket Head Cap Screw	4	225	Strain Relief	3
207	Hex Cap Bolt	3	226	Cord for Motor	1
208	Flat Washer	3	227	Switch Box	1
209	Belt Guard	1	228	Switch 230V	1
210	Flat Washer	2	229	Star Washer	2
211	Socket Head Cap Screw	2	230	Flat Washer	2
212	Socket Head Cap Screw	1	231	Screw	2
213	Door Latch	1	232	Screw	2
214	Lock Nut	1	233	Flat Washer	2
215	V-Belt	1	234	Hex Nut	2
216	Hex Cap Bolt	4	235	Screw	2

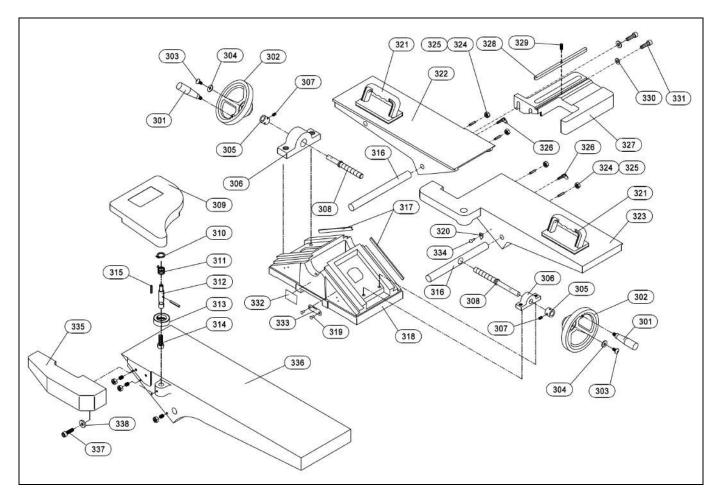
217	Flat Washer	4	236	Power Cord	1
218	Set Screw	2	237	LOGO	1
219	Motor Pulley	1	238	Warning Label	1



### Parts List for Surface Planer ----- Part C (Bed - Parts)

Part #	Description	Qty.	Part #	Description	Qty.
301	Wheel Handle	2	319	Rivet	2
302	Wheel	2	320	Pointer	1
303	Screw	2	321	Push Block	2
304	Washer	2	322	Outfeed Table	1
305	Brush	2	323	Infeed Table	1
306	Lead Screw Bracket	2	324	Hex Nut	4
307	Set Screw	2	325	Set Screw	4
308	Lead Screw	2	326	Lock Screw	2
309	Cutter Head Guard	1	327	Fence Base	1
310	Retainer Washer	1	328	Spring Pin	1
311	Spring	1	329	Key	2
312	Shaft	1	330	Flat Washer	2
313	Spring House	1	331	Socket Head Cap Screw	2

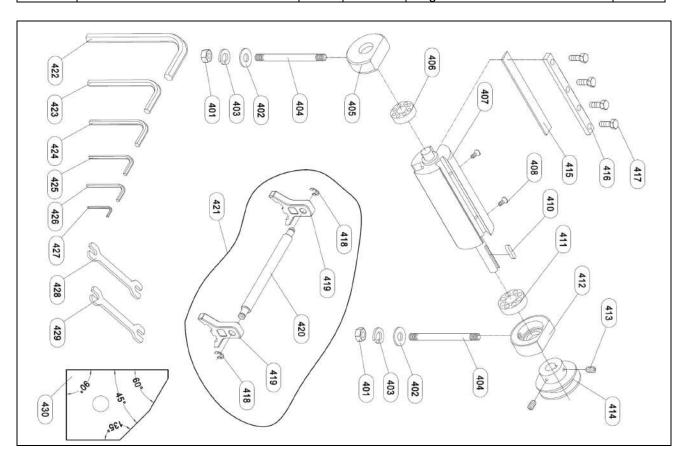
314	Screw	1	332	JET ID Label	1
315	Pin	1	333	Depth Scale	1
316	Table Adjust Rod	2	334	Pan Screw	1
317	Gib	2	335	Rear Table (CJP8A)	1
318	Base	1	336	Infeed Table (CJP8A)	1



#### Parts Breakdown for Surface Planer Part D (Cutterhead – Parts and Assembly)

Part #	Description	Qty.	Part #	Description	Qty.
401	Hex Nut	2	416	Knife Lock Bar	3
402	Flat Washer	2	417	Hex Screw	12
403	Spring Washer	2	418	C-Ring	2
404	Stud	2	419	Knife Gauge	2
405	Left Bearing Housing	1	420	Knife Gauge Bar	1
406	Ball Bearing	1	421	Knife Gauge Assembly	1
407	Cutterhead	1	422	Hex Wrench S8	1
408	Flat Head Socket Screw	6	423	Hex Wrench S6	1
409	Key	1	424	Hex Wrench S5	1
410	Ball Bearing	1	425	Hex Wrench S4	1
411	Right Bearing Housing	1	426	Hex Wrench S3	1
412	Set Screw	2	427	Hex Wrench S2.5	1
413	Cutterhead Pulley	1	428	Wrench S12-14	1

414	Knife	3	429	Wrench S 8-10	1
415	Hex Nut	2	430	Angular Dimension	1



# Wiring Diagram for Surface Planer 110v&230v

#### Electromagnetic Switch

