Wood Planer

PL200A

Instruction Manual

IMPORTANT

For your safety, read instructions carefully before assembling or using this product. Save this manual for future reference.



Version: V.1-201810

HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

WARNING: Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

INDEX

1 1.1 1.2 1.3	
2 2.1 2.2 2.3	RESIDUAL RISKS
3 3.1 3.2 3.3 3.4	SPECIFICATIONS MAIN COMPONENTS TECHNICAL SPECIFICATION NOISE LEVEL DUST EXTRACTION
4. 4.1 4.2 4.3	INSTALLATION
5. 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	DRIVE BELT INSTALLATION DRIVE BELT & PULLEY ALIGNMENT INSTALLING THE FENCE DUST PORT ASSEMBLY INSTALLING THE CUTTERHEAD GUARD INSTALLING THE INFEED TABLE LEVER OUTFEED TABLE ADJUSMENT KNOB
6. 6.1 6.2 6.3 6.4 6.5 6.6 6.7	OPERATION STARTING AND STOPPING JOINTER DIRECTION OF GRAIN JOINTER OPERATION FEEDING THE WORKPIECE SETTING DEPTH OF CUT FENCE ADJUSTMENTS SETTING THE FENCE TO 90° and 135°
7 7.1 7.2 7.3	ADJUSTMENTS ROTATING OR REPLACING KNIFE INSERTS TABLE ADJUSTMENTS CHANGING THE DRIVE BELT
8	MAINTENANCE

- 9 TROUBLESHOOTING
- 10 WIRING DIAGRAM
- 11 ACCESSORIES
- 12 PARTS DIAGRAM

GENERAL INFORMATION

1.1 **FOREWORD**

The present manual is designed for those who will operate the machine. You will find in it the necessary data for commissioning, maintenance and safety operation of the machine. The experience of the company manufacturer and its experts in considered in the preparation of this manual.

We recommend you to consider with responsibility our recommendations concerning the safety of work. The operations requiring disassembly of machine and electrical components should be performed by authorized and qualified personnel only. Repairs and settings not described in the present manual should not be performed. This manual is prepared by the manufacturer and is an integral part of the machine's delivery. The information contained herein is intended for specialists and is compulsory.

The manual defines the machine's field of application and contains all the information necessary for its proper and safety operation. The permanent and exact observation of the instructions contained in this manual ensure safety of personnel and machine, profitable work as well as long life of the machine itself. For better clarity this manual is divided in separate parts in which are contained the more important subjects.

The contents will allow you to find fast the specific subjects. The important text is printed in bold and is marked by the following symbols:



Indicates imminent risks which may cause serious injury to the operator or other persons. Be careful and scrupulously follow the instructions.



A statement advising of the need to take care lest serious consequences result in harm to material items such as the asset or the product.

1.2 MACHINE IDENTIFICATION

There is a identification plate fixed to the machine, containing the manufacturer's data, year of construction, serial number and technical specifications.

1.3 CUSTOMER SERVICE RECOMMENDATIONS

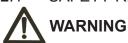
Apply the machine to skilled and authorized technical staff to carry out any operation dealing with parts disassembly. Keep to the instructions contained in this manual for the correct use of the machine.



CAUTION Only skilled and authorized staff shall use and service the machine after reading this manual. Respect the accident prevention regulations and the general safety and industrial medicine rules.

2. SAFETY PRECAUTIONS

2.1 SAFETY REGULATIONS



- Woodworking machine is high speed and high-risk equipment, so operator who is been suitably trained can use the machine for safety production.
- -The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure to comply with the safety regulations.
- -The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure of electrical installation or nonstandard assembly.
- The manufacturer is not responsible for any damage deriving from arbitrary modifications made to the machine.
- It is prohibited to use the machine when under the influence of alcohol, drugs or medication.
- All the operators must be suitably trained for use, adjustment and operation of the machine.
- The operators must carefully read the manual paying particular attention to the warning and safety notes. Furthermore, they must be informed on the dangers associated with use of the machine and the precautions to be taken, and must be instructed to periodically inspect the guards and safety devices.
- Before changing the blade, debugging the trouble, carrying out adjustment, or cleaning work, disconnect the machine from the electric power by setting the main switch to stop to make sure the machine will not being operated wrongly.
- After an initial bedding-in period or many hours of operation, the driving belts may slacken; this causes an increase in the tool stopping time. Immediately tighten them.
- The working area around the machine must be kept always clean and clear, in order to have an immediate and easy access to the switchboard.
- Never insert materials which are different from those which are prescribed for the machine utilization. The material to be machined must not contain any metal parts.
- Never machine pieces which may be too small or too wide ithrespect to the machine capacity.
- Do not work wood which has evident defects (cracks, knots, metal parts, etc.)
- Never place hands among the moving parts and/or materials.
- Keep the tools tidy and far away from those not authorized persons.
- Never employ cracked nor uckled, neither not correctly reground tools. Nonstandard or blunt tools are forbidden, either. Blade with broken edge or out of shape should not be used.
- Never use the tools beyond the speed limit recommended by the producers.
- Carefully clean the rest surfaces of tools and make sure that they find perfectly horizontally positioned, and with no dents at all.
- Always wear gauntlets when handling the tools.
- Mount the tools in the right machining direction.
- Never start the machine before having correctly installed all the protections. The protection device should be installed before starting the machine. The protection device should not be removed.

- Connect the dust suction hoods to an adequate suction system; suction must always be activated when the machine is switched on.
- Never open doors or protections when the machine or the system is operating.
- Please check if the blade lock well and the cutter shaft has the right direction. The rotating should get up to the stable condition before working.
- Many unpleasant experiences have shown that anybody may wear objects which could cause serious accidents. Therefore, before starting working, take any bracelet, watch or ring off.
- Button the working garment sleeve well around the wrists.
- Take any garment off which, by hanging out, may get tangled in the MOVING UNITS.
- -Always wear strong working footwear, as prescribed by the accident-prevention regulations of all countries. Use protection glasses. Use appropriate hearing protection systems (headsets, earplugs, etc.) and dust protection masks.
- Never let unauthorized people repair, service or operate the machine.
- The manufacturer is not responsible for any damage deriving from arbitrary modifications made to the machine.
- Any transport, assembly and dismantling is to be made only by trained staff, who shall have specific skill for the specified operation.
- The operator must never leave the machine unattended during operation.
- During any working cycle break, switch the machine off.
- In case of long working cycle breaks, disconnect the general power supply.
- The operating method to be followed in the event of accident or breakdown, the machine should be turned off immediately and unplug from main power and ask for assistance for the authorized people. If a blockage is likely to occur, the workpiece should be move back a little and enable the equipment to be safely unblocked.
- Please remove unnecessary sweeping, chips, in case of accidents.
- Woodworking machine will produce sparks when using with serious fire risks, so please keep the machine surrounding area clean without inflammables and explosives.

2.2 RESIDUAL RISKS

Despite observance of all the safety regulations, and use according to the rules described in this manual, residual risks may still be present, among which the most recurring are:

- contact with tool
- contact with moving parts (belts, pulleys, etc..)
- recoil of the piece or part of it
- accidents due to wood splinters or fragments
- tool insert ejection
- electrocution from contact with live parts
- danger due to incorrect tool installation
- inverse tool rotation due to incorrect electrical connection
- danger due to dust inhalation in case of working without vacuum cleaner.

2.3 SAFETY AND INFORMATION SIGNALS

This signals may be applied on the machine; in some cases they indicate possible danger conditions, in others they serve as indication.

Always take the utmost care.

SAFETY SIGNALS:



Risk of eye injury. Wear eye protection.



Wear hearing protection systems.



Danger of electric shock. Do not access the area when the machine is powered.



Carefully read and understand the manual before using the machine.

INFORMATION SIGNALS:

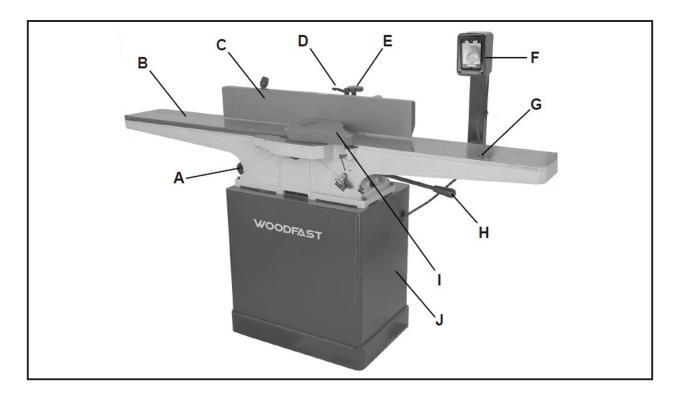
Indicate the technical characteristics, direction of rotation and inclination, block and release, etc.

Carefully following the directions to simply the use and adjustment of the machine.

The signals are graphically described and do not require further explanation.

3. SPECIFICATIONS

3.1 MAIN COMPONENTS



- A Outfeed Table Adjustment Knob B Outfeed Table
- C Fence

- D Fence Lock
- E Fence Adjustment Knob
- F On / Off Switch
- G Infeed Table
- H Infeed Table Adjustment Lever
- I Cutterhead Guard
- J Cabinet Standl

TECHNICAL SPECIFICATION 3.2

Items	Parameters
Cutterblock Speed	4400RPM
Cutterblock Diameter	76mm
Max Cutting Width	200mm
Max Cutting Depth	3mm
Max. Rabbeting Cat	13mm
Number of Tips	40pcs
Tips Size	14mm x 14mm x 2mm
Table Size	1865x238mm
Extractor Port Dia.	100mm
Motor Power	2HP
Volt	19mm
Net/Gross Weight	220-240V/50Hz
Package Size	1920x440x300mm/660x660x420mm

3.3 NOISE LEVEL

Sound Pressure Level < 80dB(A) < 90dB(A) < 90dB(A) < 100dB(A)

The noise levels measured are emission levels and not necessarily the safe working level. Although there is a correlation between the emission levels and the exposure levels, this cannot be used reliably to determine whether or not further precautions are required. The factors which affect the actual level of operator exposure include the duration of exposure, the ambient characteristics and other sources of emission, for example, the number of machines and other adjacent machining. The permitted exposure values may also vary from country to country. Nevertheless, this information allows the user of the machine to better evaluate the dangers and risks.

Other factors which reduce exposure to noise are:

- correct tool choice
- tool and machine maintenance
- use of hearing protection systems (e.g. headsets, earplugs,...)



WARNING Please always use the hearing protection systems.

3.4 DUST EXTRACTION

The chip and dust aspiration device must ensure a minimal rate of air delivery of 1800 m3/h at a speed of 25-30 m/sec.

The machine is equipped with a shavings collector, which has an end sleeve for connection to the aspirator for the sawdust and the shavings.

Connect the shavings collector with a tubing of Ø 100 mm to the aspirator for saw-dust and shavings.



WARNING

The dust and chips collection device must be switched on simultaneously with the motor of the machine.

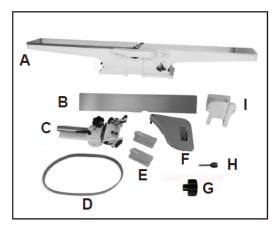
4. INSTALLATION



CAUTION Assembly need to be done by an experienced and trained person.

4.1 CONTENTS OF PACKAGE

LOOSE PARTS IN CARTON 1



LOOSE PARTS IN CARTON 2



HARDWARE

M P Q O Q O R O S

- A. Jointer Top
- B. Fence
- C. Fence Slide Bracket Assembly
- D. Drive Belt
- E. Push Blocks (2)
- F. Cutterhead Guard
- G. Outfeed Table Knob

- H. Fence Tilt Handle
- I. Fence Mounting Bracket
- J. Jointer Stand & Motor Assembly
- K. Dust Port
- L. Switch & Switch Post Assembly
- M. M8 x 45 Allen Bolt (x4)
- N. M8 x 40 Allen Bolt (x4)

- O. M5 x 10 Phillips Screw (x4)
- P. M8 Flat Washer (x8)
- Q. M8 Lock Washer (x8)
- R. M5 Flat Washer (x4)
- S. Fence Angle Gauge
- T. Wrenches (not shown)

4.2 INSTALLATION



When moving the jointer, lift the unit from under the cabinet base. Refrain from using the infeed and outfeed tables, as they are factory set and should not be disturbed. DO NOT carry or move the machine using the fence assembly, safety guard, dust chute or hand wheels.

- The machine should be firmly bolted to the floor or mobile base (not included) to avoid any movement of the machine during use. The jointer's base has holes in each of the four corners for this purpose (hardware is not included).
- Position the machine on a solid, level surface that is located in an area that ample space in front and in back of the jointer for the moving of lumber to be milled. Align the machine so that during use, any kickback will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions.



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

4.3 INSTALLATION TIP

The use of mobile bases to increase portability are common for stationary jointers. Consider starting your assembly with the mobile base of your choice; building the jointer within the base. This will make it easier to install now rather than lifting a fully assembled jointer later.

TOOLS REQUIRED FOR ASSEMBLY

Phillips Head Screwdriver, 4mm Allen Wrench, 13mm or an Adjustable Wrench

5. FITTING AND OPERATING OF MACHINE

5.1. JOINTER TOP ASSEMBLY

- Remove rear door of the jointer stand.
- Place jointer top assembly on top of stand, making sure the pulleys face the rear of the cabinet. Ask a friend for assistance with this step.
- Line up the four holes in stand top with holesin the bed assembly. Fig. 5.1.1.
- Install the jointer top to the stand by using four M8 x 40mm Allen bolts, four lock washers and four flat washers. Fig. 5.1.2.

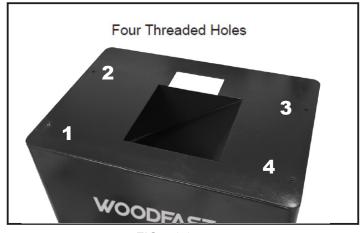


FIG.5.1.1



FIG.5.1.2

5.2 DRIVE BELT INSTALLATION

- Loosen the four 13mm motor mounting bolts and nuts on the outer slide rail.
- Thread the drive belts through the opening in the stand and hang it on the spindle pulley.
- Lift up the motor and center the drive belts on the motor pulley. Fig. 5.2.1
- Allow the weight of the motor to determine the proper belt tension. The drive belts should be set between 3/8" and 1/2" deflection when side pressure is applied. Fig. 5.2.2.
- Tighten the four 13mm motor mounting bolts and nuts on the outer slide rail.



FIG.5.2.1

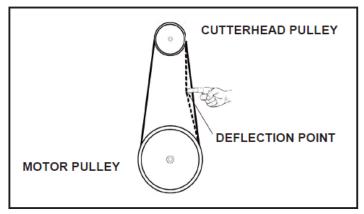


FIG.5.2.2

5.3 DRIVE BELT & PULLEY ALIGNMENT



WARNING

The procedure below will ensure drive belt longevity and reduce vibration. If the pulleys are not set correctly, excess wear to the belts and power transfer may be reduced.

- Loosen the four 13mm motor mounting nuts holding the motor onto the inner slide rail. Fig. 5.3.1.
- Using a straight edge (Fig.5.3.2.) align the face of the cutterhead pulley to the motor pulley by sliding the motor in the appropriate direction.
- After the pulleys are properly aligned, tighten the four 13mm motor mounting nuts holding the motor onto the inner slide rail. Fig. 5.3.1
- Install the rear door of the jointer stand which was removed in section "Jointer Top Assembly", 5.1.

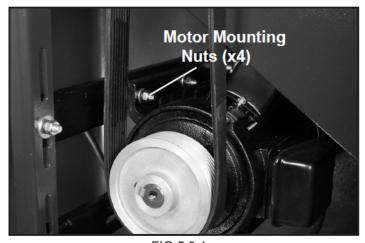


FIG.5.3.1

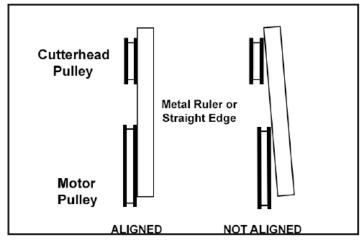


FIG.5.3.2

5.4 INSTALLING THE FENCE

Locate the Fence Mounting Bracket and four M8 x 45mm Allen bolts.

The Fence Mounting Bracket attaches over the cutterhead pulley at the rear of the jointer top.

- Hold the Fence Mounting Bracket (A) over the cutterhead pulley and align the mounting holes (B) to the jointer base. FIG. 5.4.1
- Attach the Fence Mounting Bracket to the rear of the jointer body by using the four M8 x 45mm Allen bolts. FIG.5.4.2.
- Next locate the Fence Slide Bracket Assembly and rest it on top of the Fence Mounting Bracket.
 Secure using two M8 x 20mm Allen bolts and two 8mm flat washers. FIG. 5.4.3
- Mount the Fence Angle Bracket (A- Fig. 5.4.3) to the Fence Slide Bracket Assembly by using two M8 x 25mm Allen bolts and two 8mm flat washers (B-Fig. 5.4.3).



CAUTION

The two M8 x 25mm Allen bolts and two 8mm flat washers are pre-installed in the Fence Angle Bracket.

- Mount the Fence to the Fence Angle Bracket Assembly by using two M6 x 20mm Allen bolts. FIG. 5.4.4
- Thread the Fence Tilt Handle on the rear of the Fence. FIG. 5.4.5.



CAUTION

There are two threaded holes on the rear of the Fence. Install the Fence Tilt Handle in the threaded hole that is most comfortable and convenient for you.

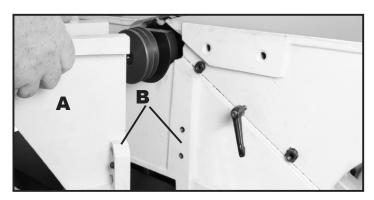


FIG.5.4.1



FIG.5.4.2

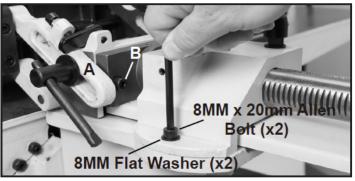


FIG.5.4.3

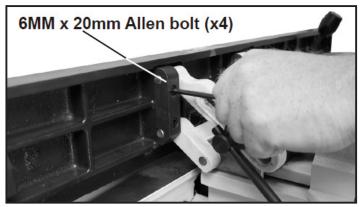


FIG.5.4.4

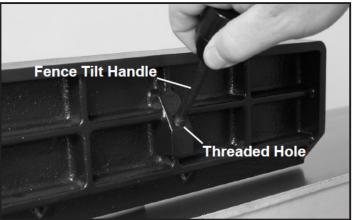


FIG.5.4.5

5.5 DUST PORT ASSEMBLY

A Dust Port (A) is supplied with the jointer to help connect it to a standard 4 inch vacuum hose.

Hardware needed: M5 x 10 Phillips Head Screw (x4) M5 Flat Washer (x4)

- Tighten the two upper Screws (B) with a Phillips screwdriver, and tighten the two lower Screws (C) with a Phillips screwdriver when the dust port is in proper location. FIG. 5.5.



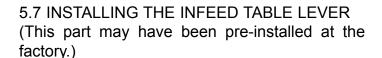
CAUTION

It is extremely important that a dust collection system is used with this jointer to eliminate harmful airborne dust, prevent the build-up of chips that may jam the cutterhead, and to keep the working area clean of debris. Make sure all connections are secure and your dust collector is turned on before any milling of lumber is done.

However, if you do not plan to use a dust collector, then there is no need to attach this dust port to the jointer. Chips ejected from the operating machine should be collected and disposed of immediately to keep the area clean and to avoid accidents.



- Turn spring pin (A) approximately one-half revolution clockwise and hold.
- Insert guard post into hole in table. Make sure spring pin rests and places pressure against the table casting. FIG. 5.6.



- Locate the Infeed Table Lever and install into the threaded hole of the Lifting Assembly under the Infeed Table.
- Once the Infeed Table Lever is fully threaded into the Lifting Assembly tighten the 19MM locking nut to secure into position. FIG. 5.7.

5.8 OUTFEED TABLE ADJUSMENT KNOB

- Locate the Outfeed Table Adjustment Knob, Allen Cap Screw M6 x 12mm and 6mm Flat Washer.
- Insert the Outfeed Table Adjustment Knob onto the square receiver of the Table Adjustment Screw Shaft located under the Outfeed Table. Secure using the Allen Cap Screw M6 x 12mm and 6mm Flat Washer. FIG. 5.8

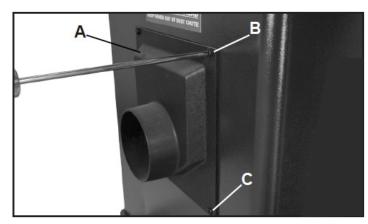


FIG.5.5

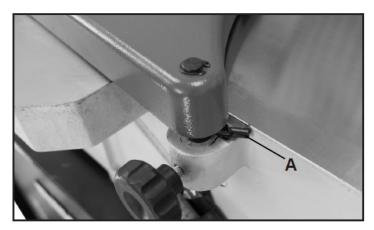


FIG.5.6

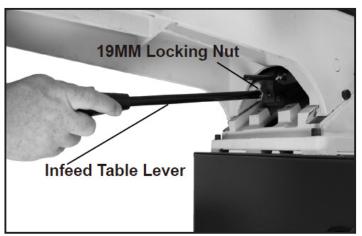


FIG.5.7

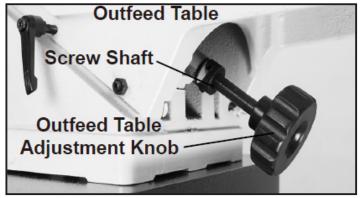


FIG.5.8

5.9 SWITCH POST INSTALLATION



CAUTION

The switch is prewired to the motor. No additional wiring is needed at this point.

- Locate the Switch Post and position it to the rear on the infeed table.



CAUTION

The two M8 x 20mm Allen bolts and two 8mm flat washers are pre-installed in the rear of Infeed Table casting.

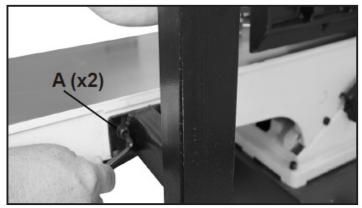


FIG.5.9

- Install the Switch Post to the rear of the infeed table and secure using two M8 x 20mm Allen bolts and two 8mm flat washers, A-FIG.5.9.

6. OPERATION



WARNING

This operations section was designed to give instructions on the basic operations of this jointer. How-ever, it is in no way comprehensive of every jointer operation. It is strongly recommended that you read books, trade magazines, or get formal training to maximize the potential of your jointer while minimizing the risks.



WARNING

This jointer is designed to surface natural wood ONLY.



WARNING

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

6.1 STARTING AND STOPPING JOINTER

- 8" Jointer is equipped with the switch with emergency stop cover, waterproof and dustproof, and wrong touch switch lock, which can prevent accidents.
- The start button is located under the emergency stop cover. After opening the emergency stop cover, press the green "I" to start the machine.
- To turn off the machine, directly hit the emergency stop cover with force, and the equipment can be stopped.



Feed the wood into the jointer with the grain to obtain a smooth surface. FIG 6.2. Avoid feeding work into the jointer against the grain. The result will be chipped and splintered edges



WARNING

on the wood surface.

Rotation OUTFEED TABLE
With The Grain

Rotation FEED
Rotation FEED

FIG.6.2

INFEED TABLE

Against The Grain

DO NOT continuously use the jointer at the maximum depth of cut, 1/8 in. (3mm), as it will put exces-sive stress on the motor which will damage it.

OUTFEED TABLE



6.3 JOINTER OPERATION

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

1. Connect your Dust Collector Hose to the Dust Port.

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

Workpiece dimensions for jointing:

- Length: use a push block or stick to feed boards shorter than 12"; use support rollers for long boards for safe control and accurate planing.
- Width: maximum 6".
- Thickness: minimum 1/2". The use of push blocks is necessary when face planing thin material.
- Depth of Cut: maximum 1/8". Multiple cuts of 1/16" or less, produce better finish results.

6.4 FEEDING THE WORKPIECE

Place the workpiece on top of the right, infeed table. The workpiece will be cut on its underside by the rotating cutterhead knives. When jointing, the feeding direction of the workpiece is right-to-left over the cutterhead. FIG.6.4.1

- Assume the proper operating position: stand to the side of the infeed table with feet apart for stability through the whole cutting process. FIG. 6.4.1.
- Set the jointer fence position and angle as required.
- Set the depth of cut / thickness (See below).
- Place the workpiece against the jointer fence for support through the cutting action. FIG. 6.4.2.
- Make sure that the cutterhead guard is against the workpiece for user protection.



WARNING

For jointing the edge of a board, set the workpiece against the fence. The spring action blade guard should be touching the workpiece, covering the cutterhead knives. Push the workpiece slowly and steady over the cutterhead. Ensure that the fence is set at true 90° (or any other angle required and the workpiece is kept flush against the fence.

For planing the face of a board or workpiece, follow the same procedure as above.

- Turn the machine on and place the workpiece on the infeed table. Feed the workpiece toward the cutterhead, FIG. 6.4.3, exerting downward pressure until the workpiece clears the cutterhead on the outfeed table side. Always keep your hands away from the cutterhead to avoid any accidents.

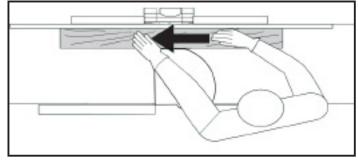


FIG.6.4.1



FIG.6.4.2



FIG.6.4.3



CAUTION

The use of push blocks is recommended

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

6.5 SETTING DEPTH OF CUT

The jointer can be set to cut any depth from a very thin shaving to 1/8" deep. The pointer (A) on the scale (B) is to indicate the depth of cut. FIG.6.5.

6.6 FENCE ADJUSTMENTS

- To move the fence across the table, loosen the lock lever (A), then turn the knob (B) until the fence is in the desired position on the table and then retighten the lock lever. FIG. 6.6.1.



CAUTION

The handle direction of the lock lever (A) can be repositioned by pulling up the lever and repositioning it on the nut located underneath the lever.

- To tilt the fence, loosen the lock lever (A), and tilt the fence to the desired angle. Then retighten the lock lever. FIG. 6.6.2.
- The fence has adjustable positive stops at the most used fence positions of 90 degrees and 135 degrees.



To check and adjust the positive stops to the 90 and 135 degree settings:

- Put a square on the table with one end against the fence and adjust the fence until it is exactly 90 degrees to the table.

FIG. 6.7.1.

- Loosen the locking nut with a 13mm hex wrench and adjust the Allen screw (A) until a 90 degree setting is reached. Tighten the locking nut to retain the adjustment. FIG. 6.7.1.
- To check the 135 degree setting flip the 90 degree stop tab away from the 90 degree stop bolt. Put a square on the table with one end against the fence and adjust the fence until it is exactly 135 degrees to the table. FIG. 6.7.2.



CAUTION

With the fence set at 135°, the jointer will produce a 45° bevel on your workpiece.

- Loosen the locking nut with a 13mm hex wrench and adjust the stop bolt (A) until a 135 degree setting is reached. Tighten the locking nut to retain the adjustment. FIG. 6.7.2.

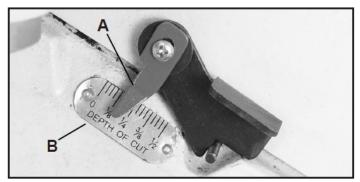


FIG.6.5

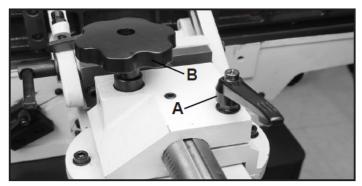


FIG.6.6.1

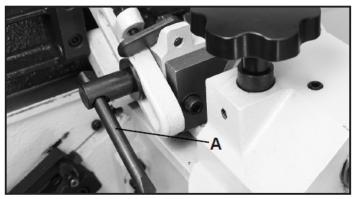


FIG.6.6.2

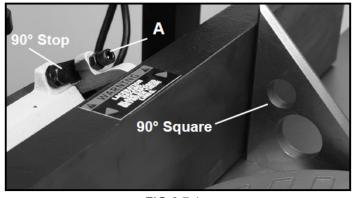


FIG.6.7.1

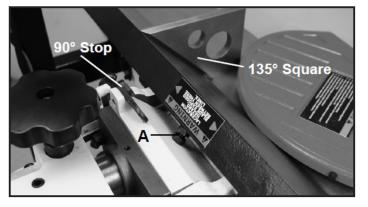


FIG.6.7.2

7 ADJUSTMENTS

7.1 ROTATING OR REPLACING KNIFE INSERTS

This machine has a helical cutterhead with four rows of carbide knife inserts. Each of the 40 inserts on the cutterhead are indexed and have four sharpened sides. If the knives become dull, or one becomes nicked, simply loosen the retaining screws with the supplied star head screwdriver, lift up and rotate the inserts to a new sharpened edge. No setting is required, as the cutterhead has been machined to automatically index and set the inserts in proper position for use. When all four sides of an insert are dull, the insert can be easily removed and a new carbide insert placed in the location.

To rotate or remove a carbide insert knife:

- Unplug power cable.
- Remove the screw (#203), that holds the Insert in the cutterhead, and the insert cutter (#202). FIG. 7.1.2
- While the insert is removed, clean any resin buildup or trapped dust from the surfaces of the cutterhead with a suitable solvent. A tooth brush works well for safe cleaning around the sharp inserts. Any accumulated dust can affect the seating of the insert in the cutterhead.
- Rotate the insert so that a new sharpened edge is in position. The inserts have a indication mark on their top surface corner, so that you can reference the positioning of the dulled or sharpened edges of the insert. FIG. 7.1.1-7.1.5.
- Tighten the insert's set screw to lock the insert back in position. DO NOT overtighten the screw or damage to the insert may result. Torque to 50-55 in/lbs.
- Plug in the power cable when you are ready to resume jointing.



CAUTION

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

7.2 TABLE ADJUSTMENTS

The infeed and outfeed tables are preset at the factory to be aligned with the cutterhead. To ensure that both tables are aligned, check both table settings and adjust as necessary.

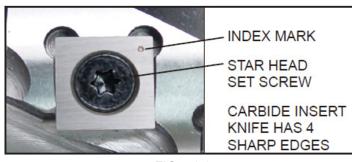


FIG.7.1.1



FIG.7.1.2

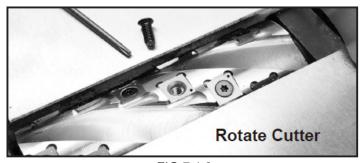


FIG.7.1.3

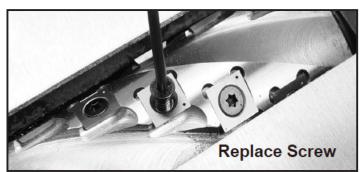


FIG.7.1.4

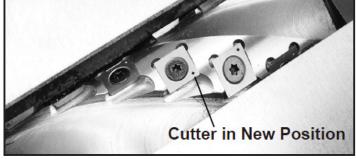


FIG.7.1.5



CAUTION

This procedure involves close contact with the jointer knife inserts. Wear gloves to prevent injury to the hands. Make sure that the machine is disconnected from the power supply.

- Remove rear door of the jointer stand.
- Set the infeed table to the '0' setting on its depth of cut scale. FIG. 7.2.1.
- Rotate the cutterhead so that the knife inserts are at their highest point by pulling on the drive belt until the desired position is set.
- With a long metal straight edge, place it length-wise along the outfeed table so that it extends onto the insert cutter at its highest rotation point. Check the measurement on the insert cutter to the far right and then far left on the cutterhead. FIG. 7.2.2.
- If the straight edge does not touch the insert cutter(s), the outfeed table will need to be adjusted.
- Release the locking lever (A) at the rear of the outfeed table. FIG. 7.2.3.
- Turn the handwheel (B) to adjust the outfeed table until it is parallel with the edge of the cutter(s). FIG. 7.2.3.



CAUTION

Turning the handwheel clockwise will lift up the table, turning counterclockwise will lower the table.

- Once the table is set, tighten the locking lever (A) to secure the table in its new setting. FIG. 7.2.3.
- Do the same measurement with the straight edge from the infeed table, to the same insert cutters that were used to measure the outfeed table.
- Once the infeed and outfeed tables are aligned with the cutterhead, the tables need to be checked to confirm that their surfaces are parallel with each other ends not tilting or angling down or up from the cutterhead.
- Lie the straight edge across BOTH tables. FIG. 7.2.4. They should be set at the same height and perfectly level to each other.
- If it does, the tables are true to each other.
- If the straight edge does not lie flat across both tables, then the tables must be adjusted. Tune the infeed table to the outfeed table.
- Loosen the locking lever (A-FIG. 7.2.5) at the rear of the infeed table.

Raise or lower the table adjustment handle (not shown) and check the clearance between the straight edge and infeed table as shown in FIG. 7.2.4.

Adjust the upper positive stop by unlocking the 10mm lock nut and turning the Allen bolt until the desired result is achieved. Retain the adjustment by tightening the 10mm lock nut.

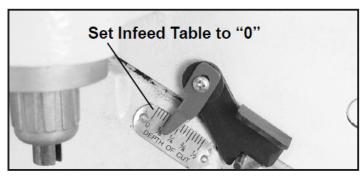


FIG.7.2.1

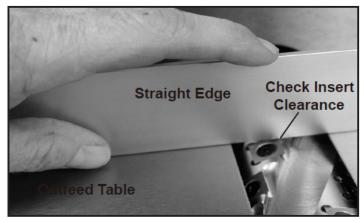


FIG.7.2.2

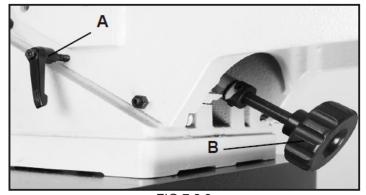


FIG.7.2.3

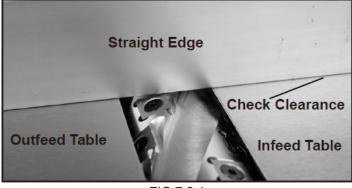


FIG.7.2.4



FIG.7.2.5

7.3 CHANGING THE DRIVE BELT

- Remove rear stand panel door.
- Loosen the the four 13mm mounting bolts and nuts on the outer slide rail.
- Thread the drive belt through the opening in the stand and hang it on the spindle pulley.
- Lift up the motor and center the drive belt on the motor pulley. Fig. 7.3.1.
- Allow the weight of the motor to determine the proper belt tension. The drive belt should be set between 3/8" and 1/2" deflection when side pressure is applied. Fig. 7.3.2.
- Tighten the the four 13mm mounting bolts and nuts on the outer slide rail.
- Install rear stand panel door.

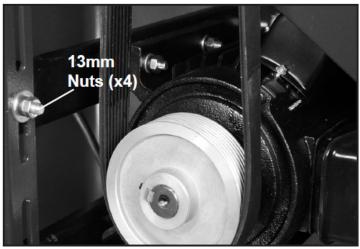


FIG.7.3.1

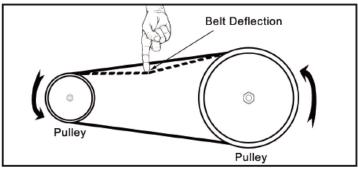


FIG.7.3.2

8 MAINTENANCE



WARNING

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

- Before each use:
 - Check the power cord and plug for any wear or damage.
 - Check for any loose screws or hardware.
- Check the area to make sure it is clear of any misplaced tools, lumber, cleaning supplies, etc. that could hamper the safe operation of the jointer.
- To avoid a build-up of wood dust, regularly clean all parts of the machine using a soft cloth, brush or compressed air. A general cleaning should be done after every use to avoid future problems and ensure the machine is in ready condition for the next time it is used.



CAUTION

If blowing sawdust, wear proper eye protection to prevent debris from blowing into eyes. Air pressure above 50 PSI should not be used as high-pressured air may damage insulation, etc.

- Check the knife inserts to make sure that they are not loose from the cutterhead, dull or nicked. Making sure that they are in proper operating condition will ensure that the quality of your surfaced lumber will be the best possible.
- Lubricate all bearing points regularly with a few drops of light motor oil. Cutterhead ball bearings are lifetime lubricated, sealed, and do not need any fur-ther care. Keep the drive belt free of oil and grease.
- Keep the jointer tables free of resin and rust. Clean them regularly with a non-flammable solvent, then coat with a light film of dry lubricant spray, or wax, to enhance passage of work piece on/over the tables. Never use solvents to clean plastic parts, as they could dissolve or damage the material.



CAUTION

When cleaning or working on the tables, avoid the risk of personal injury by cuts that may result from touching the knife inserts' sharp edges!

- Check the drive belt tension after the first 3-5 hrs. of operation to ensure that the belts have not become stretched and loose from their 'breaking in' use. See page 19 for instructions.

9 TROUBLESHOOTING



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

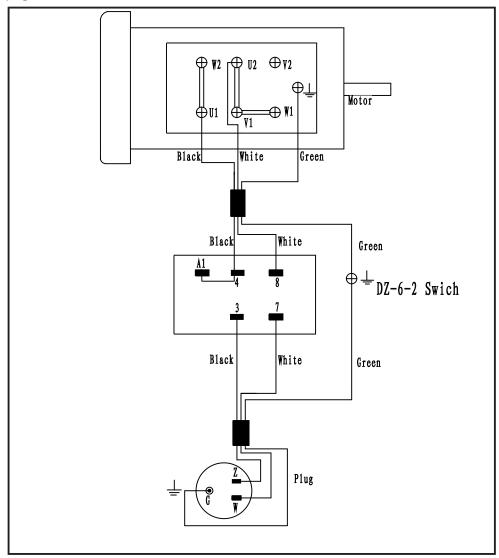
SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
Machine will not start.	1.No power 2.Tripped circuit breaker 3.ON / OFF switch not functioning 4.Motor failure	1.Check power source, plug and wiring. 2.Check and reset circuit breaker. 3.Check position of the switch. Contact local dealer for repair or replacement. 4.Inspect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

10 WIRING DIAGRAM



WARNING

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



11 ACCESSORIES

25-699 Replacement Carbide Inserts - PK 10

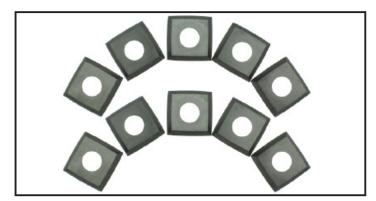
4-Sided, pre-sharpened carbide insert knives measure 14mm x 14mm x 2mm (0.55" x 0.55" x 0.078"). Pack of 10.

25-694 Mounting Screws for Inserts - PK 10

Special flat head, T20 Star drive screws for mounting insert cutters onto cutterheads.

23-959 Mobility Kit

Safely move your jointer around the shop with this quality optional mobility kit.



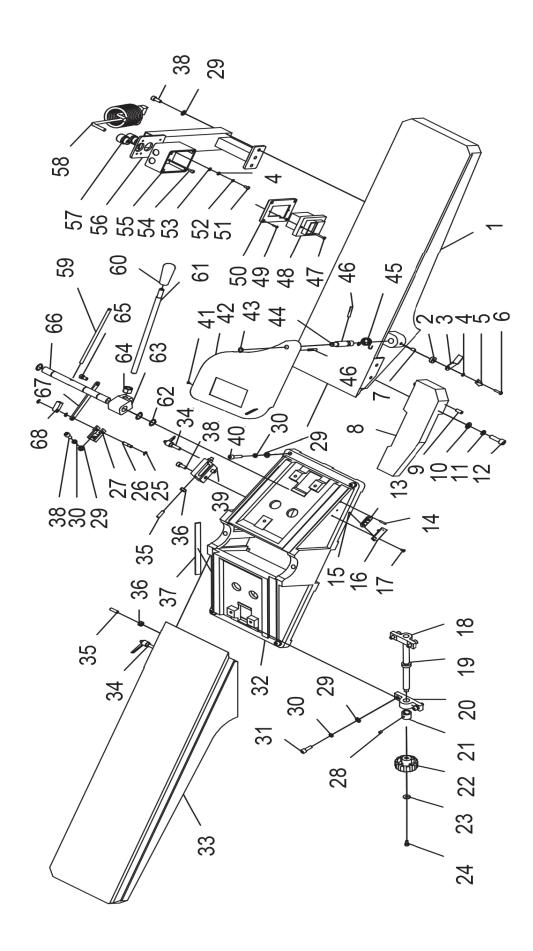
12 PARTS DIAGRAM



WARNING

Please reference the Manufacturer's Part Number when calling for Replacement Parts. For Parts under Warranty, the Serial Number of your machine is required.

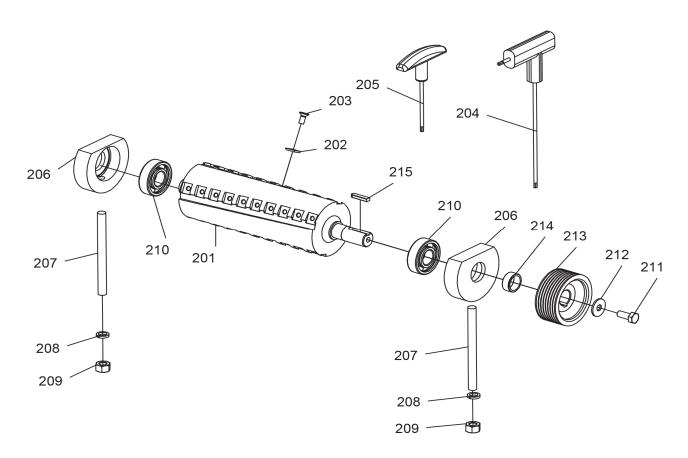
PL200A 8" JOINTER TABLE ASSEMBLY



PL200A 8" JOINTER TABLE ASSEMBLY PARTS LIST

KEY		I	KEY			
NO	. DESCRIPTION	QTY.		NO	. DESCRIPTION	QTY.
1	INFEED TABLE	1		35	SET SCREW M8x25	7
2	SPECIAL WASHER	1		36	NUT M8	7
3	1/8 PLATE	1		37	GIB	2
4	WASHER 5MM	3		38	CAP SCREW M8x20	5
5	POINTER	1		39	BLOCK	1
6	SCREW M5x20	1		40	CAP SCREW M8x40	4
7	SET SCREW M8x12	1		41	RUBBER WASHER	1
8	RABBETARM	1		42	CUTTERHEAD GUARD	1
9	SET SCREW M8x20	1		43	RING M12	1
10	FLAT WASHER 10MM	2		44	GUARD PIVOT SHAFT	1
11	LOCK WASHER 10MM	2		45	SPRING	1
12	SCREW M10x35	2		46	ROLL PIN M6x40	2
13	SCALE	1		47	TAP SCREW ST4.2x30	2
14	PIN M4x20	1		48	SWITCH	1
15	RIVET M4x20	2		49	TAP SCREW ST3.5x16	4
16	LABEL PLATE	1		50	SWITCH PLATE	1
17	DEPTH SCALE	2		51	PAN HEAD SCREW M5x10	2
18	PAN HEAD SCREW M4x8	1		52	LOCK WASHER M5	2
19	TABLE ADJUST NUT	1		53	SERRATED SPACER M5	2
20	BRACKET	1		54	CAP SCREW M5x12	4
21	RING	1		55	SWITCH BOX	1
22	HANDWHEEL	1		56	SWITCH MOUNT BRACKET	1
23	FENDER WASHER M6	1		57	STRAIN RELIEF M20x1.5	2
24	CAP SCREW M6x12	1		58	POWER CORD	1
25	E-CLIP M6	3		59	SCREW	1
26	CAPTIVE PIN	1		60	HANDLE KNOB M20	1
27	PIVOT ARM BRACKET	1		61	LEVER	1
28	SET SCREW M6x8	2		62	RING M10	3
29	FLAT WASHER 8MM	11		63	LEVER HUB	1
30	LOCK WASHER 8MM	9		64	NUT M14	1
31	CAP SCREW M8x25	4		65	PIVOT LINK STEP BOLT	1
32	BASE	1		66	INFEED PIVOT SHAFT	1
33	OUTFEED TABLE	1		67	PIVOT LINK	1
34	KNOB M6x30	2		68	NUT	1

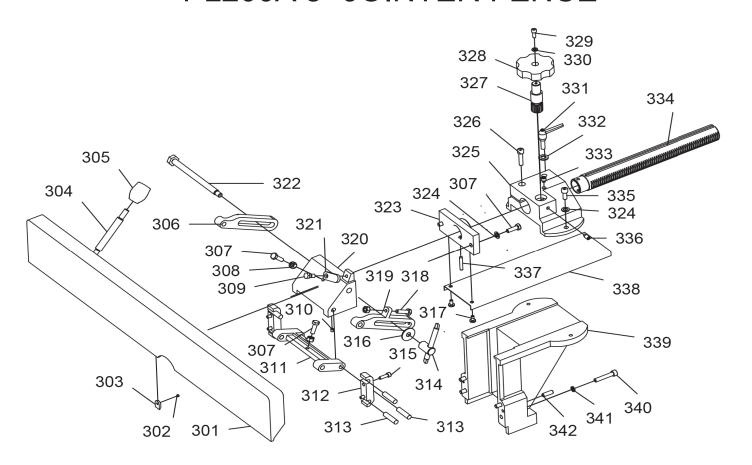
PL200A 8" JOINTER CUTTERHEAD



PL200A 8" JOINTER CUTTERHEAD PARTS LIST

KEY NO.	DESCRIPTION	QTY.
201	CUTTER HEAD	1
202	INDEXABLE INSERT	40
203	FLAT CAP SCREW M5x12	40
204	L-WRENCH TORX	1
205	DRIVER BIT TORX	1
206	BEARING BLOCK	2
207	STUD	2
208	LOCK WASHER 10MM	2
209	HEX NUT M10	2
210	BALL BEARING 6204	2
211	HEX BOLT M8x20	1
212	FLAT WASHER M8x28	1
213	CUTTER HEAD PULLEY	1
214	COLLAR	1
215	KEY M6x25	1

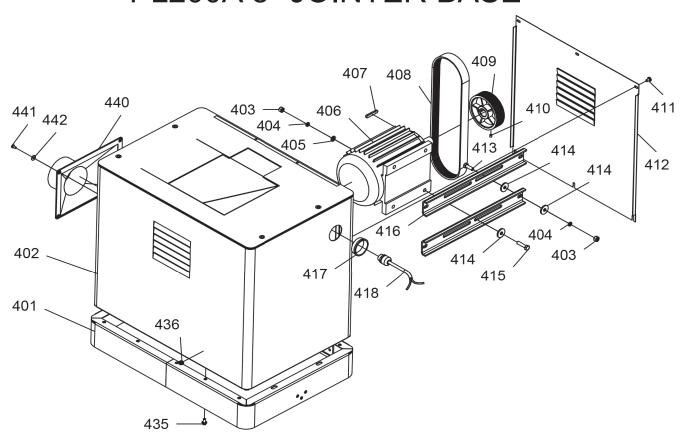
PL200A 8" JOINTER FENCE



PL200A 8" JOINTER FENCE PARTS LIST

KEY				KEY		
NO	. DESCRIPTION	QTY.		NO		QTY.
		Ψ			. DEGGIAN HOR	٠
301	FENCE	1		322	LOCK SHAFT	1
302	SET SCREW M5x4	2		323	FENCE RAM SUPPORT	1
303	BLOCK	2		324	FLAT WASHER M8	4
304	STUD M10	1		325	FENCE RAM BRACKET	1
305	KNOB M10	1		326	CAP SCREW M8x20	1
306	FENCE TILT ARM (LEFT)	1		327	GEAR	1
307	HEX BOLT M8x25	4		328	STAR KNOB	1
308	HEX NUT M8	3		329	CAP SCREW M6x16	1
309	SHOULDER BOLT	1		330	FLAT WASHER M6	1
310	SET SCREW M6x8	2		331	LOCK LEVER M10x50	1
311	FENCE TILT SUPPORT	1		332	FLAT WASHER M10	1
312	FENCE TILT BRACKET	2		333	SET SCREW M10x16	1
313	DOWEL PIN M10x40	6		334	FENCE RAM	1
314	FENCE TILT LOCK LEVER	1		335	CAP SCREW M8x20	2
315	CAP SCREW M6x20	4		336	SET SCREW M8x16	1
316	BIG WASHER	1		337	ROLL PIN M6x50	1
317	PAN HEAD SCREW M6x10	2		338	BELT GUARD	1
318	HEX BOLT M8x30	1		339	CARRIAGE MOUNT	1
319	FENCE TILT ARM (RIGHT)	1		340	CAP SCREW M8x45	4
320	FENCE ANGLE BRACKET	1		341	LOCK WASHER M8	4
321	STOP	1		342	SET SCREW M8x25	2
			-24	4-		

PL200A 8" JOINTER BASE



PL200A 8" JOINTER BASE PARTS LIST

KEY				KEY			
NO	. DESCRIPTION	QTY.		NO	. DESCRIPTION	QTY.	
401	STAND BASE	1		413	HEX BOLT M8x25	4	
402	STAND BODY	1		414	FENDER WASHER 8MM	12	
403	HEX NUT M8	8		415	HEX BOLT M8x35	4	
404	LOCK WASHER 8MM	8		416	MOTOR MOUNT PLATE	2	
405	FLAT WASHER 8MM	4		417	PLASTIC GROMMET	1	
406	MOTOR	1		418	MOTOR CORD	1	
407	KEY 8x40	1		435	FLANGE BOLT M6x12	14	
408	BELT PK1180	1		436	FLANGE NUT M6	14	
409	SET SCREW M6x8	1		440	DUST PORT	1	
410	MOTOR PULLEY	1		441	PAN HEAD SCREW M5x10	4	
411	PAN HEAD SCREW M6x10	6		442	FENDER WASHER 5MM	4	
412	BACK COVER	1					