Sears

owners manual

113: - EMERSON DA

MODEL NO. 113.20680

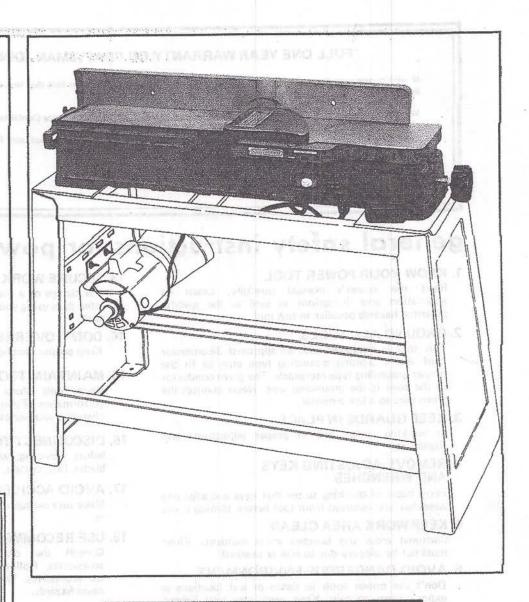
Serial Number

Model and serial number may be found on a plate attached to your infeed table.

You should record both model and serial number in a safe place for future use.

CAUTION:

Read GENERAL and ADDITIONAL SAFETY INSTRUCTIONS carefully





CRAFTSMAN

61/8-INCH JOINTER-PLANER

- assembly
- operating
- repair parts

Sold by SEARS, ROEBUCK AND CO., Chicago, IL. 60684 U.S.A.

FULL ONE YEAR WARRANTY ON CRAFTSMAN JOINTER/PLANER

If within one year from the date of purchase, this Craftsman Jointer/Planer fails due to a defect in material or workmanship, Sears will repair it free of charge.

Warranty service is available by simply contacting the nearest Sears store or Service Center throughout the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO. BSC 41-3 SEARS TOWER CHICAGO, IL 60684

general safety instructions for power tools

1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

2. GROUND ALL TOOLS

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

3. KEEP GUARDS IN PLACE

in working order, and in proper adjustment and alignment.

4. REMOVE ADJUSTING KEYS AND WRENCHES

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

8. MAKE WORKSHOP KID-PROOF

 with padlocks, master switches, or by removing starter keys.

9. DON'T FORCE TOOL

It will do the job better and safer at the rate for which it was designed.

10. USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

11. WEAR PROPER APPAREL

Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

12. USE SAFETY GOGGLES (Head Protection)

Wear Safety goggles (must comply with ANS Z87.1) at all times. Also, use face or dust mask if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.

13. SECURE WORK

Use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

14. DON'T OVERREACH

Keep proper footing and balance at all times.

15. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. DISCONNECT TOOLS

before servicing; when changing accessories such as blades, bits, cutters, etc.

17. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plugging in

18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

19. NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.

20. CHECK DAMAGED PARTS

Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

21. DIRECTION OF FEED

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

22. NEVER LEAVE TOOL RUNNING UNATTENDED

Turn power off. Don't leave tool until it comes to a complete stop.

additional safety instructions for jointer-planer

Safety is a combination of operator common sense and alertness at all times when the Jointer-Planer is being used.

WARNING: FOR YOUR OWN SAFETY, DO NOT ATTEMPT TO OPERATE YOUR JOINTER-PLANER UNTIL IT IS COMPLETELY ASSEMBLED AND INSTALLED ACCORDING TO THE INSTRUCTIONS ... AND UNTIL YOU HAVE READ AND UNDERSTOOD THE FOLLOWING.

If there is any tendency for the Jointer-Planer to tip over or move during certain operations such as when planing or jointing long heavy boards, the Jointer-Planer (stand) should be bolted to the floor.

7. LOCATION

The Jointer-Planer should be positioned so neither the operator nor a casual observer is forced to stand in line with the wood while it is being planed.

This machine is intended for indoor use only. Provide adequate lighting.

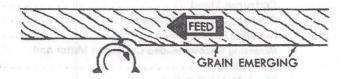
8. KICKBACKS

Kickbacks can cause serious injury. A kickback occurs when the operator looses control of the workpiece causing it to be kicked back toward him.

Kickbacks - and possible injury from them can usually be avoided by:

- a. Holding the workpiece firmly against tables and fence.
- b. Not taking too deep a cut at one time. A deep cut requires more effort to feed the wood while planing and can cause the wood to kickback. A cut between 1/32 and 1/16 of an inch deep will produce the best results.
- c. Not jointing, planing, or beveling pieces of wood smaller than recommended. (See section in this manual, "Basic Jointer-Planer Operations.") Smaller pieces of wood can tip over on the tables, or into the cutter head and can be kicked back toward you.
- d. Keeping blades sharp. Blades that are dull or nicked require more effort while planing and will tend to pound the wood rather than cut it, which can cause the wood to kickback. A nicked blade will cut a ridge in your wood and cause the wood to ride up on the outfeed table. Make sure the cutter blades are installed properly, and cutter blade wedge screws are tight.

- 9. PROTECTION: EYES, HANDS, FACE, EARS, BODY
 - a. If any part of your jointer is malfunctioning, has been damaged or broken . . . such as the motor switch, or other operating control, a safety device or the power cord . . . cease operating immediately until the particular part is properly repaired or replaced.
 - b. Wear safety goggles that comply with ANSZ87. 1-1968, and a face shield if operation is dusty. Wear ear plugs or muffs during extended periods of operation.
 - c. Do not plane, joint, or bevel wood shorter than 12 in. Smaller pieces of wood can tip over on the tables, or into the cutterhead and be kicked back toward you.
 - d. Always use the hold down/push block when jointing or beveling wood narrower than 3 in, but never joint or bevel wood narrower than 3/4 in, under any circumstances.
 - e. Always use the hold down/push blocks when planing wood thinner than 3 in, but never plane wood thinner than 1/2 in, under any circumstances.
 - Avoid awkward hand positions, where a sudden slip could cause a hand to move into the cutters.
 - g. Never turn your Jointer-Planer "ON" before clearing the table(s) of all objects (tools, scraps of wood, etc.) except for the workpiece and related feed or support devices for the operation planned.
 - Make sure the cutterhead revolves in the right direction, (toward the infeed table).
 - KEEP CUTTER GUARD IN PLACE AND OPERAT-ING PROPERLY AT ALL TIMES. Regularly check the tension of the cutter guard spring to assure satisfactory operation. (See Getting To Know Your Jointer-Planer section.)
 - j. Always feed the wood completely through the cutter head and past the cutter guard so that the guard returns to the rest position against the fence. When using only one hold down/push block to feed the wood, do not place your other hand on the Jointer-Planer.
- Warped wood should be surface planed on the concave side for best results.
- To avoid a rough planed surface, determine if possible, which way the grain emerges from the wood and feed the wood accordingly.



 Do not plane edges of plywood, composition materials, or wood that has glue on it or is painted or varnished. Planing these materials will dull the blades quickly.

additional safety instructions for jointer-planer

- 13. To be sure you will make a depth of cut as planned, always lower the infeed table slightly beyond the depth wanted, then raise the table to the desired depth.
- 14. When planing, jointing, or beveling wood over four (4) feet long, make sure it is supported at table height.
- 15. Never leave the Jointer-Planer work area with the power on, before the Jointer-Planer has come to a complete stop, or without removing and storing the switch key.
- 16. Never operate the Jointer-Planer with protective cover on the unused shaft end of the motor removed.

WARNING: THE 2" JOINTER-PLANER PULLEY AND THE 2-1/2" MOTOR PULLEY FURNISHED WILL RUN THE CUTTER HEAD AT APPROXIMATELY 4300 RPM WHEN USED WITH A 3450 RPM MOTOR. NEVER SUBSTITUTE OTHER PULLEYS TO INCREASE THIS SPEED BECAUSE IT COULD BE DANGEROUS.

WARNING: DO NOT ALLOW FAMILIARITY (GAINED FROM FREQUENT USE OF YOUR JOINTER-PLANER)

TO BECOME COMMONPLACE. ALWAYS REMEMBER THAT A CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFLICT SEVERE INJURY.

17. Read and follow the instructions appearing on the danger label on the cutter guard.

DANGER FOR YOUR OWN SAFETY

- 1. READ AND FOLLOW SAFETY INSTRUCTIONS IN OWNERS MANUAL BEFORE OPERATING THIS MA-
- 2. NEVER OPERATE THIS MACHINE WITH THE CUT-TER GUARD, SLIDING GUARD OR BELT GUARDS
- 3. NEVER MAKE JOINTING OR PLANING CUTS DEEP-ER THAN 1/16 INCH.
- 4. ALWAYS USE HOLD DOWN/PUSH BLOCKS FOR JOINTING MATERIAL NARROWER THAN 3 INCHES OR PLANING MATERIAL THINNER THAN 3 INCHES.



The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles complying with ANSI Z87.1 (shown on Package) before commencing power tool operation. Safety Goggles are available at Sears retail or catalog stores.

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motor specifications and electrical requirements

This machine is designed to use a 3450 RPM motor only. Do not use any motor that runs faster than 3450 RPM. It is wired for operation on 110-120 volts, 60 Hz., alternating current. IT MUST NOT BE CONVERTED TO OPERATE ON 230 VOLTS. EVEN THOUGH SOME OF THE RECOMMENDED MOTORS ARE DUAL VOLTAGE.

THESE CRAFTSMAN MOTORS HAVE BEEN FOUND TO BE ACCEPTABLE FOR USE ON THIS TOOL.

HP	RPM	VOLTS	CATALOG NO.
1/2	3450	110-120	1216
1/2	3450	110-120	1218
3/4	3450	110-120	1219
3/4	3450	110-120	1226

CAUTION: Do not use blower or washing machine motors or any motor with an automatic reset overload protector as their use may be hazardous.

CONNECTING TO POWER SOURCE OUTLET

This machine must be grounded while in use to protect the operator from electric shock.

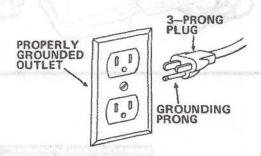
Plug power cord into a 110-120V properly grounded type outlet protected by a 15-amp. time delay or Circuit-Saver fuse or circuit breaker.

If you are not sure that your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: DO NOT PERMIT FINGERS TO TOUCH THE TERMINALS OF PLUGS WHEN INSTALLING OR REMOVING THE PLUG TO OR FROM THE OUTLET.

WARNING: IF NOT PROPERLY GROUNDED THIS POWER TOOL CAN INCUR THE POTENTIAL HAZARD OF ELECTRICAL SHOCK. PARTICULARLY WHEN USED IN DAMP LOCATIONS IN PROXIMITY TO PLUMBING. IF AN ELECTRICAL SHOCK OCCURS THERE IS THE POTENTIAL OF A SECONDARY HAZARD SUCH AS YOUR HANDS CONTACTING THE CUTTING BLADE.

If power cord is worn or cut, or damaged in any way, have it replaced immediately.



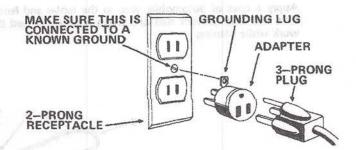
This power tool is equipped with a 3-conductor cord and grounding type plug which has a grounding prong, approved by Underwriters' Laboratories and the Canadian Standards Association. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

This plug requires a mating 3-conductor grounded type outlet as shown.

If the outlet you are planning to use for this power tool is of the two prong type DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter as shown and always connect the grounding lug to known ground.

It is recommended that you have a qualified electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter as shown below is available for connecting plugs to 2-prong receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box.



NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong receptacle. Adapter is not allowed in Canada by the Canadian Electrical Code.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3 wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug.

E	xtension Cord Length	Wire Size A.W.G.
	Up to 100 Ft.	14
	100 - 200 Ft.	12
	200 - 400 Ft.	8

CHECK MOTOR ROTATION

WARNING: FOR YOUR OWN SAFETY, MAKE SURE PLUG IS NOT CONNECTED TO POWER SOURCE OUTLET WHEN CHANGING MOTOR ROTATION.

The motor must rotate COUNTERCLOCKWISE when viewed from the shaft end to which you will mount the pulley, (See page 9). If it does not, change the direction according to the instructions furnished with the motor.

unpacking and checking contents

Your jointer-planer is shipped complete in one carton (without motor or stand).

Separate all parts from packing materials and check each item with illustration and "Table of Loose Parts". Make certain all items are accounted for, before discarding any packing material.

If any parts are missing, do not attempt to assemble the jointer-planer, plug in the power cord or turn the switch on until the missing parts are obtained and installed correctly.

Using a 1/2 inch wrench, remove the wood attached to the machine. Save the nuts, bolts and washers. You will need them for attaching the machine to the stand.

Remove the protective oil that is applied to all unpainted metal surfaces. Be careful when cleaning the cutter head. Use any ordinary household type grease and spot remover.

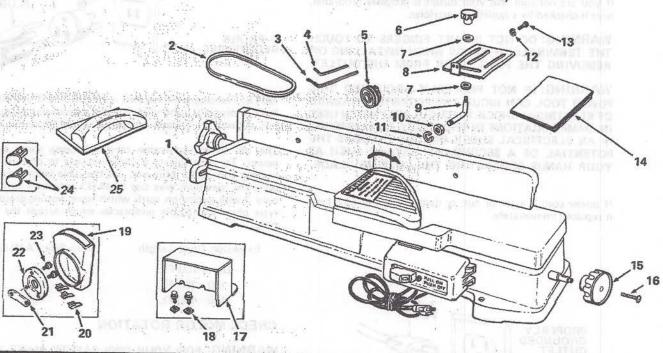
CAUTION: Never use gasoline, naptha or similar highly volatile solvents.

Wipe all parts thoroughly with a clean cloth.

Apply a coat of automobile wax to the tables and fence. This will help prevent rust and make it easier to feed the work while planing.

Key No.	Table of Loose Parts Otty
1	Jointer-Planer
2	V-Belt, 1/2 x 52"
	1 - V - DGI E, 1/2 X 3/
3	5/32 Setscrew Wrench
4	1/8 Setscrew Wrench
5	Motor Pulley, 2-1/2" Dia
6	Sliding Guard Knob
7	Concave Washer
8	Sliding Guard
9	Sliding Guard Rod
10	Nut, 1/2 - 13
11	Lockwasher, 1/2
12	Lockwasher, No. 10
13	Screw, Pan Hd., 10 - 32 x 1/4
14	Owners Manual
15	Depth of Cut Handwheel
16	Screw, Sems, 1/4 - 20 x 1-1/4
17	Jointer-Planer Belt Guard
18	Attaching Hardware (2 Nuts, 2 Bolts)
19	Motor Pulley Belt Guard
20	Belt Guard Clips 3
21	Belt Guard Support Bracket
22	Belt Guard Support
23	2 self tapping screws
24	Switch Key
25	Hold Down/Push Block
The same of	TOTAL DOWN OF LOST DIGON

Supplied in Canada Only



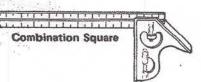
TOOLS NEEDED



7/16" Wrench 3/4" Wrench



Medium Screwdriver



assembly

MOUNTING JOINTER-PLANER ON RECOM-MENDED CRAFTSMAN STAND

(NOT SUPPLIED IN CANADA)

See page 27 for recommended stand.

PARTS NEEDED

Nuts, Bolts and Washers removed when unpacking Jointer.

- Round Hd. Mach. Screw 1/4-20 x 1-1/4 in. with Ext. Tooth Lockwasher attached
- 1 Depth of Cut Handwheel

TOOLS NEEDED

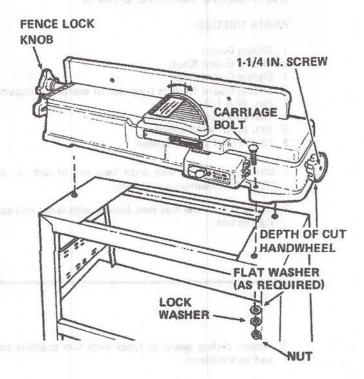
1/2 in. Wrench

Medium Screwdriver

- Loosen FENCE LOCK KNOB. Tilt fence upward and slide it toward the pulley.
- Place the machine on the stand as shown, and align mounting holes.
- Place a flat washer, a lock washer and a nut on each bolt from underneath the stand and tighten.

NOTE: The length of threads may vary on some bolts and it may be necessary to add extra flat washers in order to tighten the nuts securely.

4. Place handwheel on shaft aligning flat surfaces on shaft with flat surfaces on handwheel . . . attach with 1-1/4 in. screw.



CHECKING CUTTER BLADES AND SCREWS

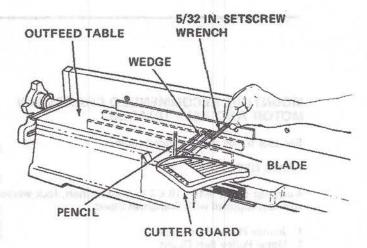
TOOLS NEEDED

5/32" and 1/8" Setscrew Wrenches (furnished with Jointer).

Lead Pencil

Short straight edge (or head of combination square)

- Insert pencil in space at end of cutterhead to hold cutterhead guard open.
- Lower the infeed table with the Depth of Cut Handwheel.
- Rest the straight edge on edge on the surface of outfeed table so it extends across the opening between the tables, at three positions: near each end and at the middle of the cutter blade.
- Rotate the cutterhead by grasping the 2" dia. driven pulley and make sure each knife ticks (touches) the straight edge at all three positions. If not, follow procedure under "REPLACING CUTTER BLADES" on ppg. 22 & 23.

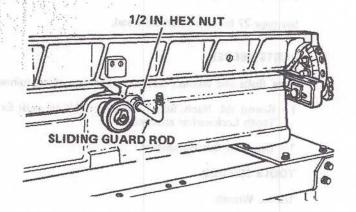


5. If a cutter blade adjustment is not required, check each locking screw of each wedge (5/32" setscrew wrench) and tighten if necessary. Hold the pulley while tightening screws and be careful that your fingers do not slip off the wrench."

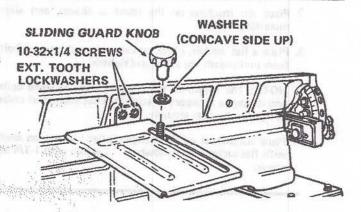
INSTALLING SLIDING GUARD

PARTS NEEDED

- Sliding Guard
- Sliding Guard Knob Sliding Guard Rod
- 2 Sliding Guard Washers (one side of washer is concave)
- Hex. Nut 1/2 in. 13
- Split lockwasher 1/2 in.
- Ext. tooth lockwashers
- 2 10-32x1/4 Pan Hd. Screws
- 1. Screw nut all the way onto long end of rod . . . place 1/2 in. lockwasher next to nut.
- 2. Screw rod all the way into Jointer with short end up . . . tighten nut.



- 3. Attach sliding guard to fence with two machine screws and lockwashers.
- 4. Place one Sliding Guard Washer, concave side DOWN on support rod.
- 5. Drop sliding guard onto rod . . . place other washer, concave side UP on rod . . . screw on Sliding Guard Knob.



MOUNTING RECOMMENDED CRAFTSMAN MOTOR AND BELT GUARDS

See page 5 for recommended motors.

PARTS NEEDED

4 carriage bolts, 5/16 - 18 x 1 in., flat washers, lock washers and nuts supplied with Craftsman Stand.

- Jointer Planer Belt Guard
- Motor Pulley Belt Guard
- Belt Guard Support
- Belt Guard Support Bracket
- 3 Belt Guard Clips
- 1 Motor Pulley, 2-1/2 in. dia.
- 1 V-Belt
- 2 Pan Head Screws 10 32 x 1/2 in.

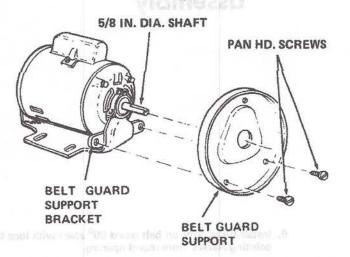
- 2 Hex. Hd. Screws 1/4 20 x 1/2 in.
- 2 Hex. Nuts 1/4 20

TOOLS NEEDED

Medium Screwdriver 5/32 in, Setscrew Wrench (furnished with Jointer) 1/2 and 7/16 in. Wrenches

- Place motor on your workbench with 5/8 in. dia. shaft (with key way) facing you.
- 2. Attach guard support to bracket with two screws.

NOTE: The holes in the bracket are not threaded, but the screws are "thread cutting screws" and will cut a thread as they are tightened.



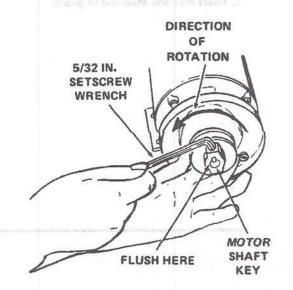
Loosen setscrew in motor pulley and place pulley on shaft with hub flush with end of shaft, insert motor shaft key and tighten setscrew.

CHECK MOTOR ROTATION

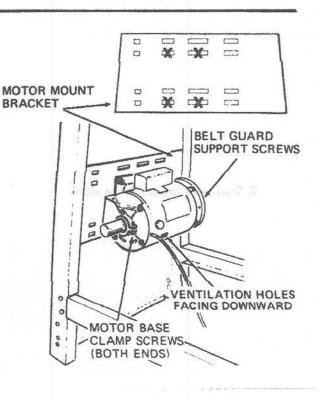
The motor must rotate COUNTERCLOCKWISE when viewed from PULLEY end,

- 1. Place motor on your workbench or on floor.
- Stand clear of motor and plug cord into a properly grounded outlet (See page 5). Notice rotation of pulley. If it is not turning COUNTERCLOCKWISE, REMOVE plug from outlet, and change rotation of motor according to instructions furnished with motor.

WARNING: FOR YOUR OWN SAFETY, MAKE SURE PLUG IS NOT CONNECTED TO POWER SOURCE OUT-LET WHEN CHANGING ROTATION.



- Insert carriage bolts through holes marked "X" from behind motor mount bracket.
- Attach motor . . . place a flat washer and a lock washer on each bolt . . . screw on nuts but DON'T TIGHTEN them.
- 3. Loosen the two BELT GUARD SUPPORT SCREWS.
- Loosen the two MOTOR BASE CLAMP SCREWS and rotate the motor so that the ventilation holes are facing downward...tighten the screws.
- 5. Tighten the BELT GUARD SUPPORT SCREWS.



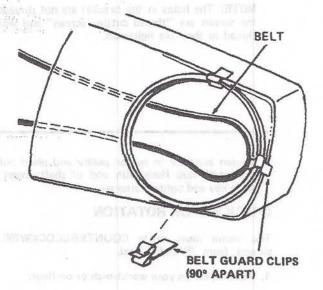
assembly

 Install three clips on belt guard 90° apart with long tabs pointing AWAY from round opening.

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7. Insert belt into open end of guard.

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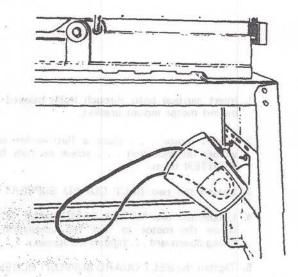
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8. Snap guard into position as shown.

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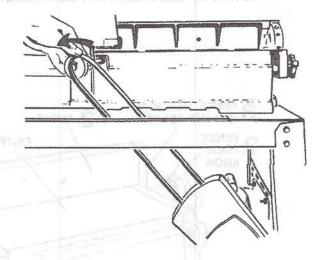


- 9. Remove knob and washer . . . lift guard up.
- Place belt onto Jointer pulley by rotating the pulley.
 MAKE SURE BELT HAS NOT SLIPPED OFF OF MOTOR PULLEY.
- 11. Move motor sideways so that both pulleys are in line.
- PUSH downward on motor to apply tension to belt and tighten nuts on motor mounting bolts.

NOTE: It is only necessary to tension the belt so that it does not slip while running.

13. If you cannot obtain sufficient tension with motor pushed all the way down, remove the four motor bolts and insert them in LOWER set of holes.

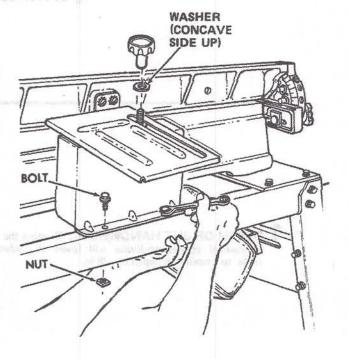
NOTE: To remove guard, lift up on LONG TABS of clips . . . pull guard outward. The clips should remain on BELT GUARD SUPPORT.



getting to know your jointer-planer

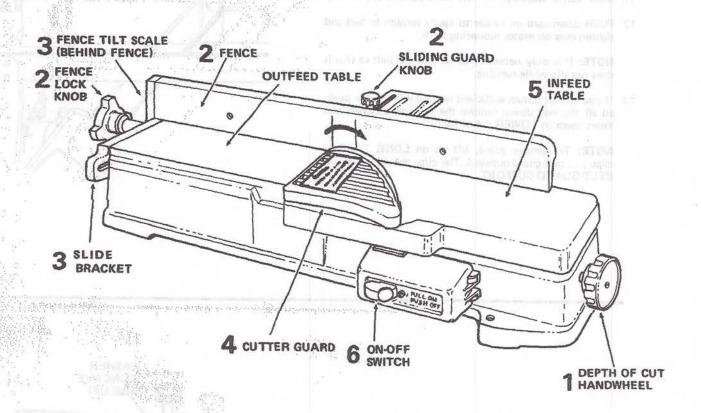
JOINTER-PULLEY BELT GUARD INSTALLATION

- Attach guard to stand with Hex. Hd. screws and nuts.
 Make sure belt does not scrape on guard.
- 2. Replace washer CONCAVE side up . . . screw on knob.

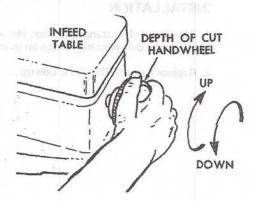


getting to know your jointer-planer

WARNING: FOR YOUR OWN SAFETY TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE MAKING ANY ADJUSTMENTS.



 DEPTH OF CUT HANDWHEEL. Turning the handwheel counterclockwise will lower the infeed table to maximum depth of 1/8 in.



2. FENCE LOCKS AND STOPS. The fence can be moved across the Jointer to take full advantage of the "sharpness" of the blades.

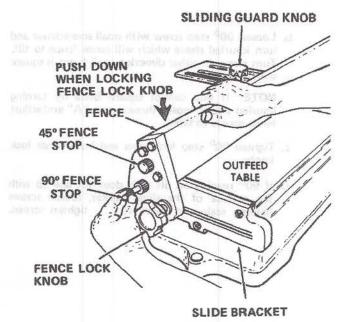
The fence should be positioned to the extreme right (toward pulley) but not beyond the end of the blades.

Most of the cutting (usually jointing) will be done with the fence in this position. As the blades become dull, the fence can be moved toward the left where the blades are sharper.

To move the fence, loosen the Fence Lock Knob and the Sliding Guard Knob and slide to desired position.

Make sure SLIDE BRACKET is even with surface of OUTFEED TABLE. If it is above or below the surface, loosen screws and adjust it.

- a. Always tighten fence lock knob first to align fence, then tighten sliding guard knob.
 - b. Before tightening fence lock knob, hold fence down on outfeed table so it does not rock.
- c. 90° Fence Stop positions fence square to tables. To tilt fence, loosen the two knobs and pull the stop out. Tilt to desired angle and tighten both knobs.
- d. To set fence at 90° to tables, loosen the two knobs, tilt fence so the stop springs back into place. Tilt fence back so the stop rests on the table and tighten both knobs.
 - e. 450 Fence Stop positions the fence at 450 to the tables.
 - f. To tilt fence to 450 loosen the two knobs, pull 90° stop out, tilt fence so the 45° stop rests on the
 - g. Hold fence down on outfeed table and tighten the two knobs.



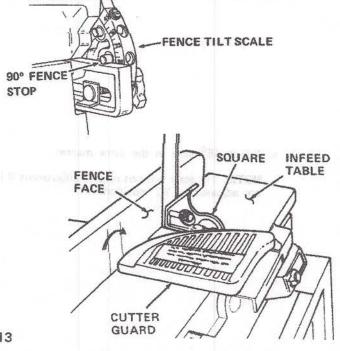
setting to know your jointer-prener

FENCE TILT SCALE, Indicates the angle of the fence to the tables. When the 900 fence stop is correctly adjusted, the fence will be 90° to the table and the scale will read 90°.

To check for squareness, place an accurate square on infeed table and check fence while locked at 90° position. MAKE SURE 90° STOP IS AGAINST SLIDE BRACKET.

If fence is not square to table;

a. Slightly loosen fence lock knob and guard lock knob.

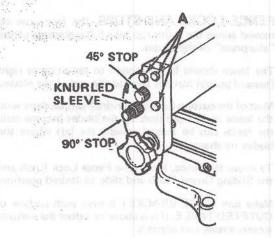


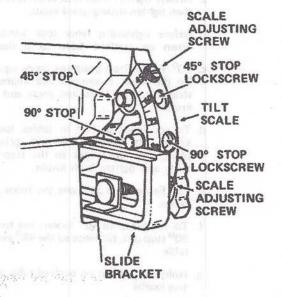
getting to know your jointer-planer

b. Loosen 90° stop screw with small screwdriver and turn knurled sleeve which will cause fence to tilt. Turn sleeve in either direction until fence is square with infeed table.

NOTE: If you cannot square fence by turning knurled sleeve, loosen three screws "A" and adjust fence square to table.

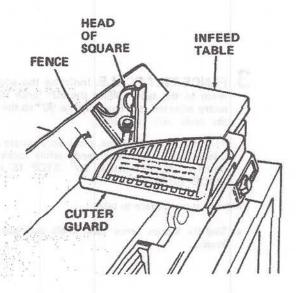
- Tighten 90° stop lockscrew and both fence lock knobs.
- d. If 90° reading on tilt scale does not line up with top surface of the slide bracket, loosen screws holding scale and move it . . . tighten screws.





e. Adjust 450 stop in the same manner.

NOTE: Tilt scale will not require adjustment if it was adjusted for 90° position.



setting to know your jointer-blaner

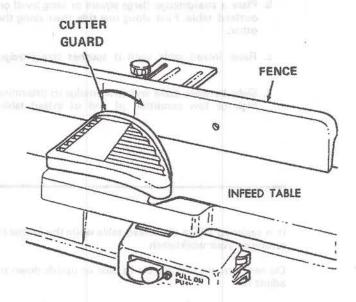
 CUTTER GUARD. Provides protection over the cutter head. It must always be in place and functioning properly.

Check the guard to make sure it is functioning properly.

- a. Position fence to right for maximum width of cut.
- Pass a 1/4 in. thick piece of wood over cutterhead between guard and fence.

Guard must return automatically to "rest position" against fence when free of the wood.

If guard does not return automatically, see Trouble Shooting and Maintenance Sections.

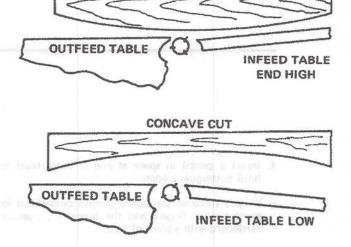


5. INFEED TABLE: MUST ALWAYS BE PARAL-LEL TO THE OUTFEED TABLE.

If the cut edge or surface of the workpiece is CROWNED, it is an indication that the OUTWARD END of the INFEED table is HIGH and must be adjusted.

If the cut edge or surface of the workpiece is CON-CAVE, it is an indication that the OUTWARD END of the INFEED table is LOW and must be adjusted.

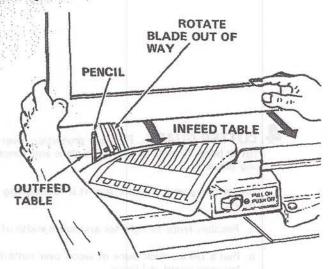
Check the infeed table to determine the "out of parallel" condition.



CROWNED CUT

getting to know your jointer-planer

- a. Insert a pencil in space at end of cutterhead to hold cutterguard open.
- Place a straightedge (large square or long level) on outfeed table. First along one side than along the other.
- c. Raise infeed table until it touches straightedge.
- Sight between table and straightedge to determine high or low condition of end of infeed table.

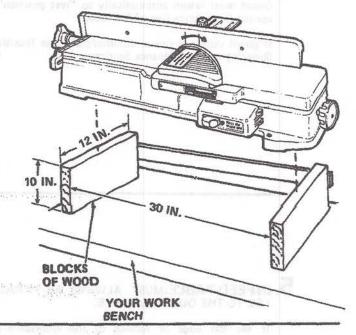


It is easier to adjust the infeed table while the Jointer is setting on your workbench.

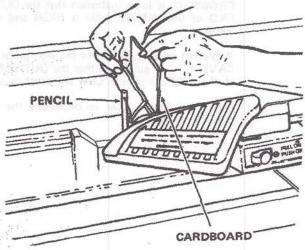
Do not turn the Jointer on its side or upside down to adjust it.

Attach a strip of wood to two blocks of wood 10 in. high. Drive enough nails into the strip so that Jointer does not tip over while resting on blocks.

- a. Remove motor cord from outlet in switch box.
- b. Remove Jointer pulley guard and V-belt.
- c. Remove Jointer from stand.
- d. Lower the infeed table.
- e. Place Jointer on blocks.

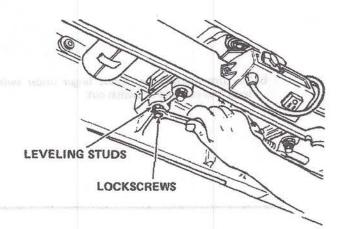


- Insert a pencil in space at end of cutterhead to hold cutterguard open.
- g. Wrap a piece of cardboard around cutterhead to protect your fingers and the blades . . . secure cardboard with a piece of tape.



getting to largy your jointer-planer.

 Loosen four lock screws 2 or 3 turns with 1/2 in. wrench.

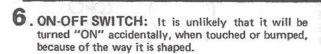


VIEW LOOKING UP FOR PARTS IDENTIFICATION

Turning the LEVELING STUDS will RAISE or LOWER the infeed table.

SCREWING in the studs will RAISE the table . . . UNSCREWING them will LOWER the table.

- With a 3/4 in, wrench turn leveling studs until infeed table is parallel with straightedge.
- b. While holding studs with wrench, TIGHTEN all four LOCKSCREWS ... tighten each screw a little bit at a time until all four screws are tight.
- Recheck with straightedge to make sure infeed table is parallel to outfeed table.



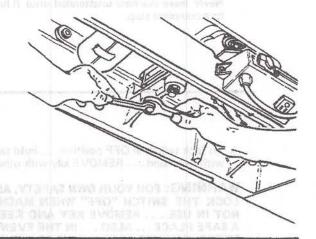
In an emergency, it can be turned "OFF" by striking it with the palm of the hand.

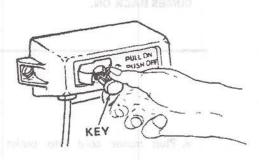
The "yellow button" is a key. When inserted in the switch lever, the power may be turned ON and OFF. When it is removed, the power cannot be turned ON.

THIS FEATURE IS INTENDED TO PREVENT UNAUTHORIZED AND POSSIBLE HAZARDOUS USE BY CHILDREN AND OTHERS.

a. Insert Key into switch.

NOTE: Key is made of yellow plastic.

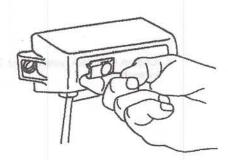




CORNECT, CLE PAGE DE

getting to know your jointer-planer

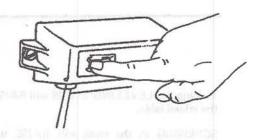
b. To turn machine on, insert finger under switch lever and pull end of switch out.



c. To turn machine OFF. . . PUSH lever in.

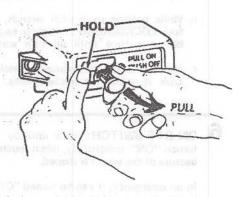
giki 19 wan en ewas naesan deser bose againging yan.

Never leave machine unattended until it has come to a complete stop.



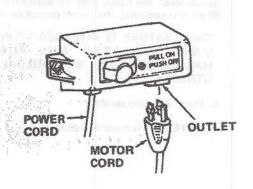
d. To lock switch in OFF position . . . hold switch IN with one hand . . . REMOVE key with other hand.

WARNING: FOR YOUR OWN SAFETY, ALWAYS LOCK THE SWITCH "OFF" WHEN MACHINE IS NOT IN USE ... REMOVE KEY AND KEEP IT IN A SAFE PLACE ... ALSO ... IN THE EVENT OF A POWER FAILURE (ALL OF YOUR LIGHTS GO OUT) TURN SWITCH OFF ... AND REMOVE THE KEY. THIS WILL PREVENT THE MACHINE FROM STARTING UP AGAIN WHEN THE POWER COMES BACK ON.



e. Plug motor cord into outlet in switch box.

WARNING: DON'T CONNECT POWER CORD TO ELECTRICAL OUTLET IN YOUR SHOP UNTIL YOU ARE SURE THAT MOTOR ROTATION IS CORRECT. (SEE PAGE 9).



basic jointer-planer operation

For your own safety, ALWAYS use the hold down/push blocks when JOINTING wood that is NARROWER than 3 in... or when PLANING wood that is THINNER than 3 in.

Do not plane, joint or bevel wood shorter than 12 in. Material this short is more difficult to control while

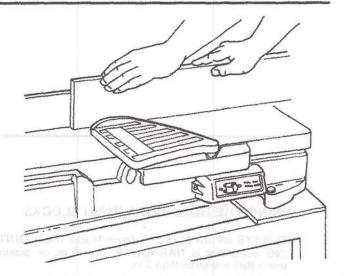
being cut. Small pieces of wood can tip over on the tables or into the cutterhead and can be kicked back toward you.

For best results, take light cuts. For average planing, jointing, or beveling, a cut between 1/32 and 1/16 in. deep will produce the best results.

FEEDING THE WORKPIECE

Hold the board firmly DOWN on both tables and AGAINST the fence . . . keep fingers close together.

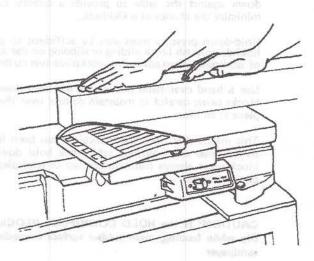
Feed the board at a continuous even rate of speed until the cut is made along the entire length of the board. Any hesitation or stopping could cause a "step" to be cut on the edge of the board which would cause the board to ride up on the outfeed table resulting in a "crooked" edge on the board.



JOINTING WOOD THAT IS WIDER THAN 3 IN.

As the RIGHT hand passes over the cutterhead, remove the LEFT hand . . . CONTINUE feeding while placing the LEFT hand behind the RIGHT. Continue feeding in this manner "hand over hand", until the entire length of the board is cut.

DO NOT FEED TOO FAST. A slow steady rate of feed produces a smooth accurate cut. Feeding too fast causes a "rippled" cut . . . makes it difficult to guide the workpiece accurately and could be hazardous.



PLANING WOOD THAT IS THICKER THAN 3 IN.

basic jointer-planer operation

Always feed WITH THE GRAIN whenever possible. If the nature of the workpiece is such that it must be fed AGAINST THE GRAIN, take very light cuts and feed slowly.





USING THE HOLD DOWN/PUSH BLOCKS

ALWAYS use the hold down/push blocks when JOINT-ING wood that is NARROWER than 3 in. or planing wood that is thinner than 3 in.

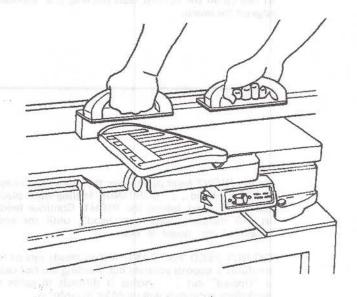
Grasp the hold down/push blocks firmly with the fingers close together and wrapped around the handle. Position them flat on top of workpiece, and push the workpiece down against the table to provide a quality cut and minimize the chance of a kickback.

Hold-down pressure must also be sufficient to prevent hold-down/push block sliding or slipping on the top face of workpiece when advancing workpiece over cutter head.

Use a hand over hand motion of the hold down/push blocks being careful to maintain control over the work-piece at all times.

This means that once the workpiece has been fed past cutter head onto outfeed table, one hold down/push block must always maintain contact of workpiece with outfeed table.

CAUTION: If the HOLD DOWN/PUSH BLOCKS tend to slip while feeding, clean rubber surface immediately with sandpaper.

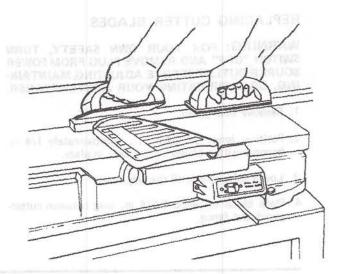


maintenance

When planing wood 3/4 in. thick and NARROWER than the hold down/push block, tilt the hold down/push block so that it clears the top of the cutterguard while feeding.

DESTRUCTION ROSE

Never plane wood that is thinner than 1/2 in.... because it is apt to split or shatter and thus has a greater tendency to kickback.



BEVELING

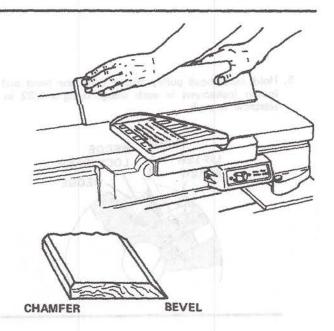
Adjust the fence to the desired angle . . . tighten fence and guard lock knobs.

Follow the same procedure for jointing or planing.

NOTE: Removing only the corner on the edge of a board is known as CHAMFERING.

Normally a chamfer is made with one cut . . . therefore, a cut deeper than 1/16 in. may be made.

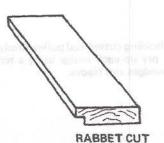
Use hold down/push blocks for wood under 3 in. wide. Position them so you have control of the workpiece at all times and so they do not contact the guard or the cutter head.



NOTE: Rabbeting on a Jointer is considered to be a dangerous operation because it requires removal of the cutter guard and increases the potential of kickback because of excessive depth of cut.

Never attempt to perform a rabbeting operation on this Jointer.

Rabbet cuts should be made on the Radial Saw or Table Saw by making two cuts with the sawblade or by using the Dado Head or Molding Head. Rabbet cuts can also be made using the Shaper or Portable Router.

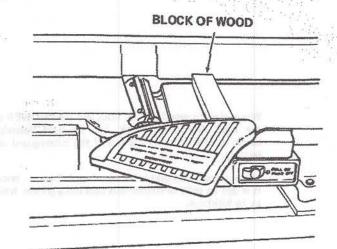


maintenance

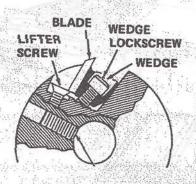
REPLACING CUTTER BLADES

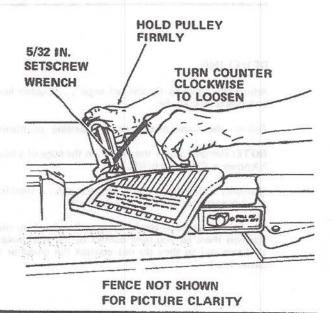
WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE ADJUSTING, MAINTAINING, OR LUBRICATING YOUR JOINTER-PLANER.

- 1. Remove belt guard.
- Position fence to right . . . approximately 1/4 in. beyond cutter blades . . . lock it in place.
- 3. Lower infeed table all the way down.
- 4. Place block of wood 6-3/4 in. long between cutterguard and fence.

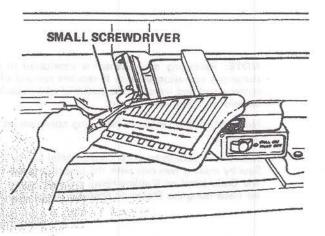


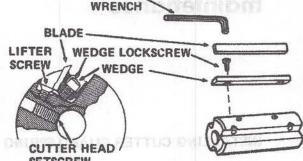
 Hold cutterhead pulley firmly with one hand and loosen lockscrews in each wedge using a 5/32 in. setscrew wrench.





While holding cutterhead pulley firmly with one hand, gently pry up each wedge using a screwdriver . . . remove wedges and blades.





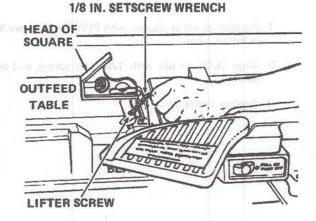
5/32 IN. SETSCREW

- MARK SLOTS
 1, 2 AND 3

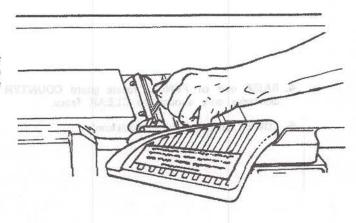
 1/8 IN. SETSCREW
 WRENCH
- 7. Remove the six lifter screws. (Two under each blade.)
- Clean cutterhead, wedges and screws thoroughly with Craftsman Gum and Pitch Remover. Also remove the oil from new blades.
- Replace the six lifter screws and screw them in all the way, but do not tighten. Mark each slot 1, 2, and 3. This will help you in setting the blades.

- Insert a blade in slot marked 1 . . . so it projects 1/16 in, beyond end of the cutterhead.
- 11. "Insert a wedge next to blade so the flat side of the wedge is against the blade. Push wedge in manually do not install two locking setscrews at this time."
- 12. Place head of square on outfeed table. Loosen lifter screws to raise blade until it just touches square and slightly raises it. Gently turn cutter head back and forth with the pulley while raising blade. The blades should be adjusted just slightly above the outfeed table, by approximately .003 in. (thickness of an average piece of paper).

NOTE: Sears has a knife setting gauge for this purpose. Cat. # 9-2647



- 13. "Now install both locking setscrews and tighten (with the 5/32" setscrew wrench) alternately a little at a time. Tighten both screws securely. Recheck the blade to make sure it did not change position."
 - 14. Install other two blades the same way.

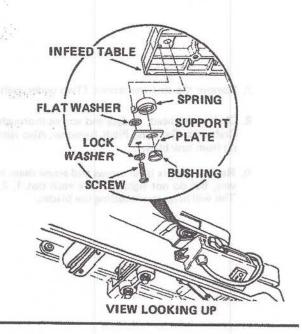


maintenance

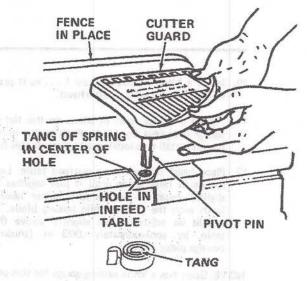
INSTALLING CUTTER GUARD SPRING

 Remove cotter pin from pivot pin in cutter guard and remove guard (located underneath infeed table.)

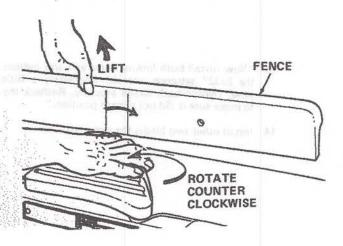
Spring must appear as in sketch from underside of infeed table, it will not perform properly if installed upside down.



- Position guard as shown, with PIVOT PIN above hole in infeed table.
- Align SLOT in pin with TANG in spring, and press down.
- 3. Replace cotter pin.



- RAISE end of FENCE, rotate guard COUNTER clockwise only enough to CLEAR fence.
- 5. LOWER fence and tighten both knobs.

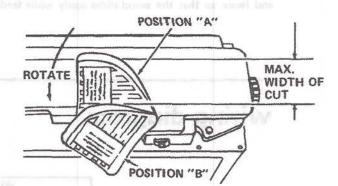


The normal position of guard (at REST) when fence is stationed at MAXIMUM WIDTH OF CUT, is shown as "position "A" NEVER ROTATE GUARD BEYOND POSITION "B" BECAUSE THIS WOULD EXERT EXCESSIVE TENSION ON SPRING WHICH COULD WEAKEN OR BREAK IT.

Check operation of GUARD and SPRING.

- With fence in MAXIMUM WIDTH OF CUT position, pass a piece of 1/4 in. thick wood on edge (jointing position) over cutterhead.
- The guard should return automatically to its REST position against the fence when free of the wood.
- If guard does not return to its REST position, remove cotter pin from pivot pin and remove guard. Check pivot pin and hole . . . make sure there are no burrs, rust, or other foreign matter.
- Apply a few drops of SAE No. 20 or No. 30 engine oil to pivot pin.
- 5. Replace guard and cotter pin.

If guard still does not return to its REST position, consult your local Sears Retail Store before using the jointer-planer.

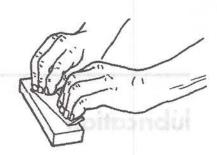


SHARPENING CUTTER BLADES

The blades can be honed individually with an ordinary oilstone.

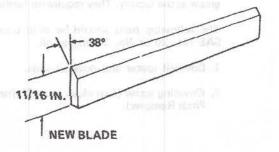
Make sure your oilstone is not worn in the center. It must be flat.

Be sure to remove the burr on the flat side.



If the blades are nicked, they must be replaced or reground. They can be reground several times until they become 9/16 in. wide. Never install reground blades less than 9/16 in. wide.

Have your knives reground by someone who is competent. Look in the "Yellow Pages" of your telephone directory ... see "Sharpening Services".



general maintenance

Keep your jointer-planer clean. Put a carton or some kind of a container underneath your jointer-planer to catch the chips. The container should reach above the top of the motor.

Do not allow pitch to accumulate on the tables, the fence, the cutter guard, the cutter head or the knives. Clean them with Craftsman Gum and Pitch Remover.

Apply a thin coat of automobile-type wax to the tables and fence so that the wood slides easily while feeding.

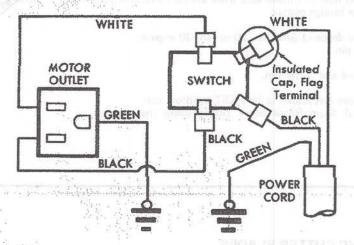
Do not allow chips to accumulate on the underside of the jointer-planer.

Frequently blow out any dust that may accumulate inside the motor.

For motor maintenance, follow instructions furnished with motor.

If power cord is worn or cut, or damaged in any way, have it replaced immediately.

wiring diagram

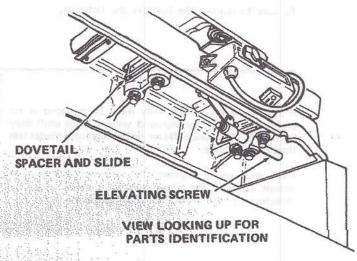


lubrication

The BALL BEARINGS in this machine are packed with grease at the factory. They require no further lubrication.

The following parts should be oiled occasionally with SAE No. 20 or No. 30 engine oil.

- 1. Dovetail spacer and dovetail slide.
- Elevating screw (first clean with Craftsman Gum and Pitch Remover).



trouble shooting

WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE TROUBLE SHOOTING YOUR JOINTER-PLANER.

TROUBLE SHOOTING CHART

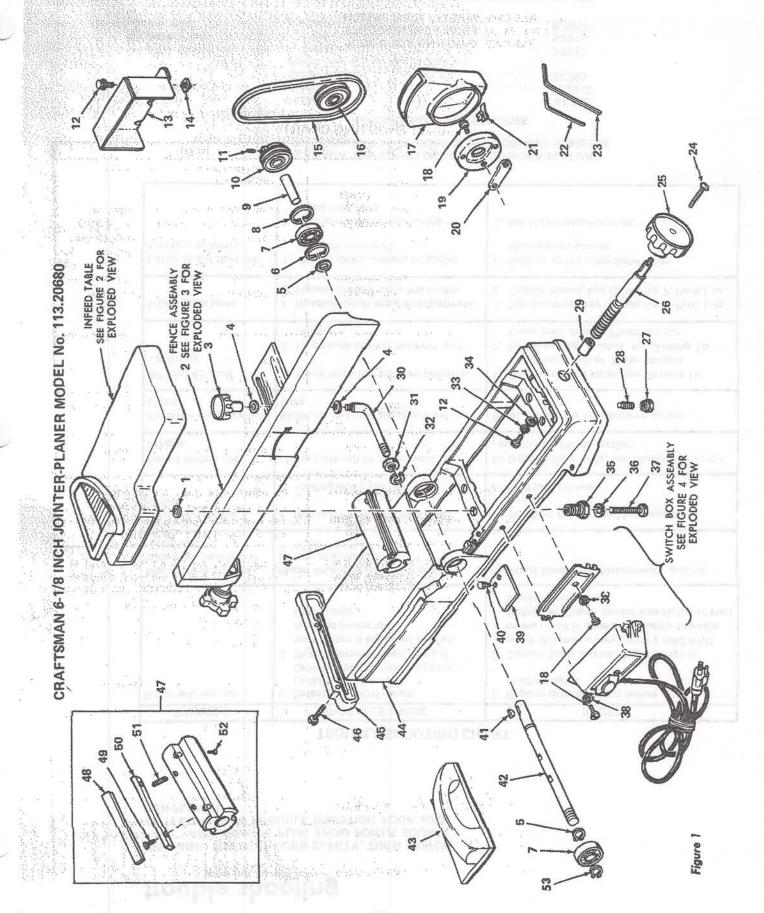
TROUBLE	PROBABLE CAUSE	REMEDY
Motor will not run.	1. Defective On-Off switch. Defective switch cord. Defective switch box receptacle. 2. Motor protector open, (only if your motor is equipped with an overload protector). Other cause	Replace defective parts before using machine again. Consult Sears Service. Any attempt to repair this motor may create a HAZARD unless repair is done by a qualified service technician. Repair service is available at you nearest Sears Store.
Wood strikes outfeed table after passing over cutter head.	Blades improperly adjusted below surface of outfeed table.	Re-adjust blades, see Maintenance section.
Ripples on planed surface.	One blade set higher than other. Feeding wood too fast.	Re-adjust blades, see Maintenance section. Feed wood slower.
Planed surface not straight.	Infeed table out of adjustment.	Re-adjust infeed table, see Getting To Know your Jointer Planer section.
Excessive gouging at end of cut.	Blades set too high above outfeed table.	Reset blades, see Maintenance section.
90 ⁰ and 45 ⁰ cuts inaccurate,	Fence stops not adjusted properly. Fence slide bracket not even with table.	1. Re-adjust fence stops, see Getting To Know your Jointer Planer section. 2. Re-adjust slide bracket, see Getting To Know your Jointer Planer section.
Infeed table loose.	Dovetail spacer requires adjustment. Female dovetail loose from table.	Tighten screw, key 10, see fig. 2, Parts List. Tighten screws, key 18, see fig. 2, Parts List.
Cutter guard does not function properly.	Return spring broken, or spring has been weakened. Improper assembly of spring or guard mounting.	Replace spring immediately. See Maintenance section. See Maintenance section.

IN CANADA, SEE YOUR LOCAL SIMPSONS-SEARS STORE OR CATALOG FOR ACCESSORY SELECTION AND NUMBERS

RECOMMENDED ACCESSORIES

Floor Stand	
Radial Saw	. 9-2917
Table Saw	. 9-2918

The above recommended accessories are current and were available at the time this manual was printed.



CRAFTSMAN 6-1/8 INCH JOINTER-PLANER MODEL No. 113,20680

All parts illustrated in Figures 1 through 4 and listed under part numbers may be ordered through any Sears Retail Store or Catalog Order House. Order parts by mail from the Catalog Order House that serves the territory in which you live. In several instances, part numbers are listed for COMPLETE ASSEMBLIES. All parts are shipped prepaid within the limits of the Continental United States.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN ON THIS LIST

1. THE PART NUMBER 2. THE PART NAME

4. THE NAME OF ITEM - 6-1/8 INCH JOINTER-PLANER 3. THE MODEL NUMBER - 113.20680

Always order by Part Number - not by Key Number

FIGURE 1 PARTS LIST

V-Groove, 5/8" Bore, Keyed *Screw, Set, 5/16-8 x 5/16, Soc. Hd. *Screw, Hex. Hd. 1/4-20 x 1/2 Belt Guard, Pulley includes Key no.s12&14 *Nut, Hex. 1/4-20 Belt, "V" 1/2 x 52 •Belt, "V" 1/2 x 37
Pulley with Set Screw, 2-1/2 Dia. x 1/2" V-Groove, 5/8" Bore, Keyed Guard-Belt, Motor *Screw, Ty 23 Pan 10-32 x 1/2" Support-Belt Guard Bracket-Support Clip "S" *Wrench Hex., 1/8 *Wrench Hex., 5/32 Screw Mach., 1/4-20 x 1-1/4 Truss Hd. w/Lockwasher Knob, 3-1/4 Shaft, Elevating

*Standard Hardware Item -- May Be Purchased Locally,

1Stock Item - May be secured through the Hardware Department of most Sears or Simpsons-Sears Retail Stores or Catalog Order Houses. Supplied In Canada Only

NOTE: Shipping and handling charges for standard hardware items (Identification as nuts, screws, washers, etc., make buying these items by mail uneconomical. To avoid shipping and handling charges, y such as nuts, screws, washers, etc., make buying these items by mail

repair parts

CRAFTSMAN 6-1/8 INCH JOINTER-PLANER MODEL No. 113.20680 INFEED TABLE

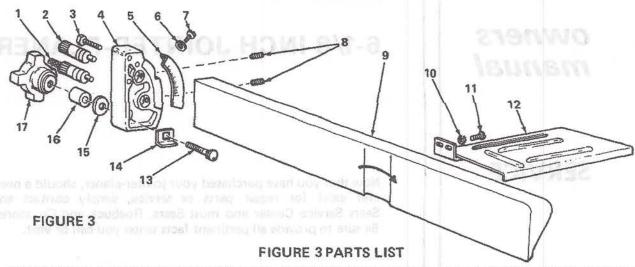
FIGURE 2 PARTS LIST

Key No.	Part No.	Description
1	STD561210	Pin, Cotter, 1/8 x 1
2	67015	Guard
3	67014	Table (with Name Plate)
4	STD511107	Screw Pan Hd. 10-32 x 7/8
5	STD551210	Lockwasher No. 10
6	STD551010	Washer, No. 10
7	38779	Spring, Guard
8	67011	Plate Support
9	67012	Bushing
10	STD522505	*Screw, Cap, 1/4-20 x 1/2, Hex. Hd.
11	STD551025	*Washer, Plain, 17/64
12	21812	Plate, Tension

Key No.	Part No.	Description
13	21422	Spacer, Dovetail
14	21219	Dovetail, Male
15	21218	Dovetail, Female
16	STD551131	*Washer, Split Lock, 5/16
	21635	Screw, Spl.
17 18	STD523112	*Screw, Cap, 5/16-18 x 1-1/4 Hex. Hd.
19	STD551031	Washer, 5/16
20	21204	Linkage Assembly
21	STD541025	*Nut, Hex., 1/4-20
22	STD551125	*Washer, Split Lock, 1/4
23	STD522510	*Screw, Cap, 1/4-20 x 1, Hex. Hd.

^{*}Standard Hardware items -- May Be Purchased Locally.

CRAFTSMAN 6-1/8 INCH JOINTER-PLANER MODEL No. 113.20680 21013 FENCE ASSEMBLY



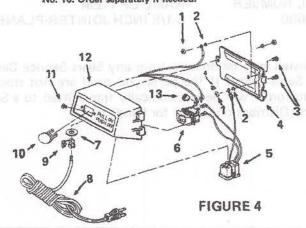
Key No.		Description
	21013	Fence Assembly
1	21440	Plunger Assembly
2 3	21430	Pin Assembly, Stop
3	STD 522512	*Screw, Hex Hd., 1/4-20 x 1-1/4,
4	21232	Plate, Fence End
5	21736	Scale, Fence Tilt
6	STD551010	*Washer, Plain, 13/64
7	STD510802	*Screw, Mach., No. 8-32 x 1/4, Bind Hd., Slotted
8	102817	Screw, Set, 1/4-20 x 1/2", Full Dog Pt., Slotted

Key No.	Part No.	Description
9	21229	Body, Fence Incl. Key No's. 10 & 11
10	STD551210	*Washer, Lock, Ext. Tooth
11	STD511102	*Screw, Mach., No. 10-32 x 1/4, Pan Hd., Slotted
12	67009	Guard, Cutter
13	STD 533725	*Bolt, Carriage, 3/8-16 x 2-1/2 Round Head
14	21738	Retainer, Bolt
15	STD551037	Washer 35/64 I.D.
16	47624	Spacer
17	62331	Knob Assembly, Lock

67024 SWITCH BOX ASM. (DOMESTIC)

67025 SWITCH BOX ASM. (CANADIAN)

NOTE: Above assemblies do not include Key No. 10. Order separately if needed.



SEE WIRING DIAGRAM ON PAGE 30

FIGURE 4 PARTS LIST

Key No.	Part No.	Description
1	STD541110	*Nut Hex. 10-32 x 3/8 x 1/8
2	STD551210	*Lockwasher, No. 10 Int. Tooth
2 3 4	STD601103	*Screw, Ty 23, 10-32 x 3/8 Pan Hd.
4	60269	Bracket, Housing
5	62376	Outlet
6	60267	Switch, Locking
7	60317	*Washer, 21/32 x 1 x 1/64
7	60271	Cord With Plug
9	37818	Relief, Strain
	*67023	Relief, Strain
10	60256	Key, Switch
11	60287	Screw, Nylon, 6-32 x 1/4
	•STD510603	Screw, Pan Hd, 6-32 x 3/8
12	60316	Box, Switch
	•67022	Box, Switch
13	63467	Cap, Flag Terminal, Insulated

^{*}Standard Hardware Item - May Be Purchased Locally. Canadian Models Only