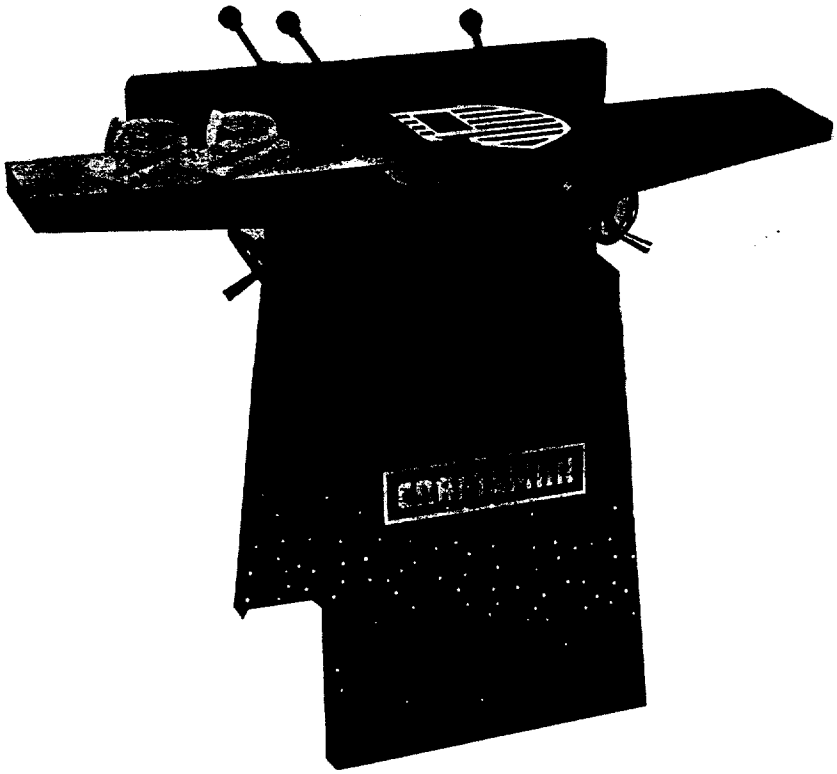
Operator's Manual

CRAFTSMAN®

6⅛"
JOINTER/PLANER

Model No.
351.227240



CAUTION: Read and follow all Safety Rules and Operating Instructions before First Use of this Product.

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

3155.00 Draft (04/03/98)

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WARRANTY

FULL ONE YEAR WARRANTY ON CRAFTSMAN 6⅛" JOINTER/PLANER

If this Craftsman Jointer/Planer fails due to a defect in material or workmanship within one year from the date of purchase, contact the nearest Sears in-home major brand repair service in the United States, and Sears will repair it, free of charge.

If this jointer/planer is used for commercial or rental purposes, this warranty will apply for 90 days from the date of purchase.

This warranty applies only while the product is in 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., Dept. 817WA, Hoffman Estates, IL 60179

SAFETY RULES

WARNING: For your own safety, read all of the rules and precautions before operating tool.

CAUTION: Always follow proper operating procedures as defined in this manual even if you are familiar with use of this or similar tools. Remember that being careless for even a fraction of a second can result in severe personal injury.

BE PREPARED FOR JOB

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of machine.
- Wear protective hair covering to contain long hair.
- Wear safety shoes with non-slip soles.
- Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are **NOT** safety glasses.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medications that cause drowsiness.

PREPARE WORK AREA FOR JOB

- Keep work area clean. Cluttered work areas invite accidents.
- Do not use power tools in dangerous environments.
- Do not use power tools in damp or wet locations. Do not expose power tools to rain.
- Work area should be properly lighted.
- Proper electrical receptacle should be available for tool. Three prong plug should be plugged directly into properly grounded, three-prong receptacle.
- Extension cords should have a grounding prong and the three wires of the extension cord should be of the correct gauge.
- Keep visitors at a safe distance from work area.
- Keep children out of workplace. Make workshop child-proof. Use padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

TOOL SHOULD BE MAINTAINED

- Always unplug tool prior to inspection.
- Consult manual for specific maintaining and adjusting procedures.
- Keep tool lubricated and clean for safest operation.
- Remove adjusting tools. Form habit of checking to see that adjusting tools are removed before switching machine on.
- Keep all parts in working order. Check to determine that the guard or other parts will operate properly and perform their intended function.
- Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may affect a tool's operation.
- A guard or other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs. (Use parts list provided to order replacement parts.)

KNOW HOW TO USE TOOL

- Use right tool for job. Do not force tool or attachment to do a job for which it was not designed.
- Disconnect tool when changing blades.
- Avoid accidental start-up. Make sure that the switch is in the OFF position before plugging in.
- Do not force tool. It will work most efficiently at the rate for which it was designed.
- Keep hands away from moving parts and cutting surfaces.
- Never leave tool running unattended. Turn the power off and do not leave tool until it comes to a complete stop.
- Do not overreach. Keep proper footing and balance.
- Never stand on tool. Serious injury could occur if tool is tipped or if blade is unintentionally contacted.
- Know your tool. Learn the tool's operation, application and specific limitations.

- Use recommended accessories (refer to page 17). Use of improper accessories may cause risk of injury to persons.
- Handle workpiece correctly. Protect hands from possible injury.
- Turn machine off if it jams. Blade jams when it digs too deeply into workpiece. (Motor force keeps it stuck in the work.)
- Always keep drive, cutterhead and blade guards in place and in proper operating condition.
- Feed work into blade or cutter against direction of rotation.

CAUTION: Think safety! Safety is a combination of operator common sense and alertness at all times when tool is being used.

WARNING: Do not attempt to operate tool until it is completely assembled according to the instructions.

UNPACKING

Refer to Figure 1 below.

Check for shipping damage. If damage has occurred, a claim must be filed with carrier. Check for completeness. Immediately report missing parts to dealer.

The jointer/planer is shipped complete in one carton and includes steel legs. Additional parts which need to be fastened to jointer/planer should be located and accounted for before assembling.

NOTE: Although compact, the jointer/planer is heavy. At least two people are required to lift the tool.

A Jointer Bed Assembly
B Fence
C Motor
D Rear Guard
E V-Belt
F Push Blocks (2)
G Top Panel
H Stand Front Panel
I Stand Rear Panel
J Stiffners (2)
K Lower Motor Bracket
L Upper Motor Bracket
M Vertical Motor Bracket
N Knife Guard
O Pulley Guard
P Handwheel (2)
Q Cover (2)

Hardware bag includes:

- Motor Pulley with Set Screws
- Knife gauge (2)
- Knife gauge rod (1)
- Leveling feet (4)
- 3 CMI-10 Retaining ring (4)
- #8 Serrated washer (2)
- 1/4" Flat washer (6)
- 3/8" Lockwasher (3)
- 13/32" Flat washer (34)
- 5/16" Lockwasher (30)
- #8-32 x 5/8 Pan head screw (2)
- 1/4 -20 x 1/2 Pan head screw (6)
- 3/8"-16 Hex nut (8)
- 5/16"-18 Hex nut (30)
- 3/8-16 x 3/4" Hex head bolt (3)
- 5/16-18 x 3/4" Carriage bolt (30)

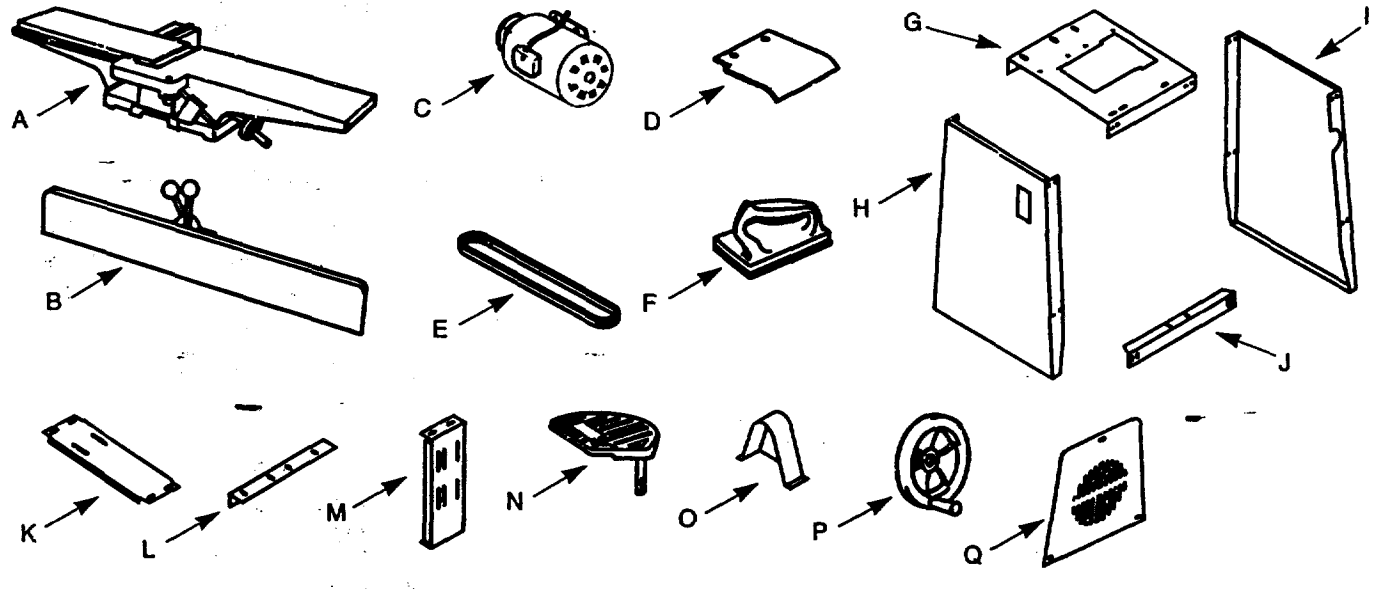


Figure 1 - Unpacking

ASSEMBLY

WARNING: Do not attempt assembly if parts are missing. Use this manual to order replacement parts.

ASSEMBLE STAND

Refer to Figures 1 and 2, pages 3 and 4.

- Identify and locate the following parts from the hardware bag:
  5/16-18 x 3/4" Carriage bolt (16)
  13/32" Flat washer (16)
  5/16" Lockwasher (16)
  5/16"-18 Hex nut (16)
- Identify and locate the following parts:
  Top panel - G
  Stand front panel - H
  Stand rear panel - I
  Stiffners - J (2)

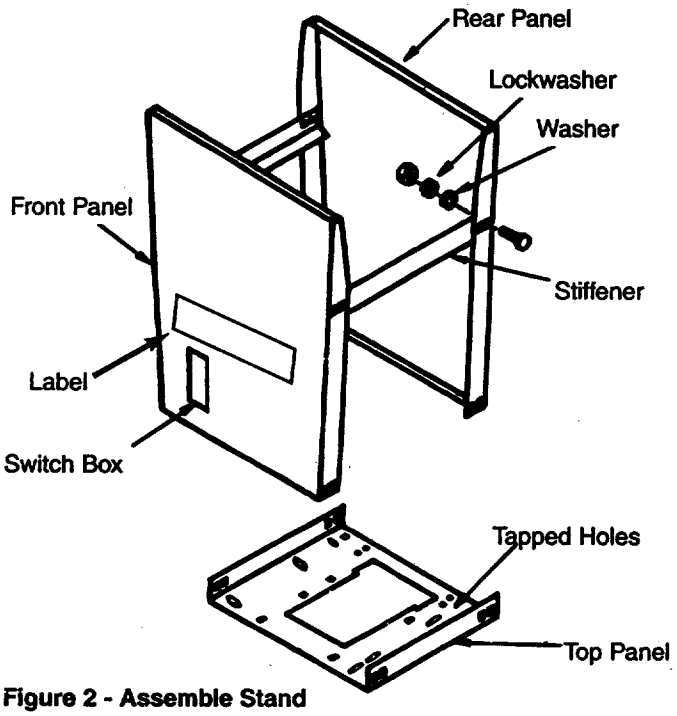


Figure 2 - Assemble Stand

- Place the top panel on the floor upside down
- Attach front and rear panels using the carriage bolts, washers, hex nuts and stiffners (see Figure 2).

NOTE: Make sure that the front panel (with switch box) is mounted opposite to four tapped holes in top panel.

INSTALL LEVELING FEET

Refer to Figure 3.

- Identify and locate the following parts from the hardware bag:
  Leveling Feet (4)
  3/8" Flat washers (4)
  3/8"-16 Hex nuts (8)

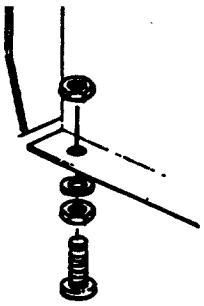


Figure 3
Install Leveling Feet

- Install leveling feet as shown below.

NOTE: You may have to adjust leveling feet prior to installing the completely assembled jointer/planer.

INSTALL MOTOR BRACKETS

Refer to Figures 1, 4, 5 and 6, pages 3, 4 and 5.

- Identify and locate the following parts from the hardware bag:
  5/16 18 x 3/4" Carriage bolt (10)
  13/32" Flat washer (10)
  5/16" Lockwasher (10)
  5/16"-18 Hex nut (10)
- Identify and locate the following parts:
  Lower motor bracket - K
  Upper motor bracket - L
  Vertical motor bracket - M
- Install lower motor bracket across stiffners (Figure 4) using four carriage bolts, 13/32" flat washers, 5/16" lockwashers and 5/16"-18 hex nuts. Hand tighten hex nuts.

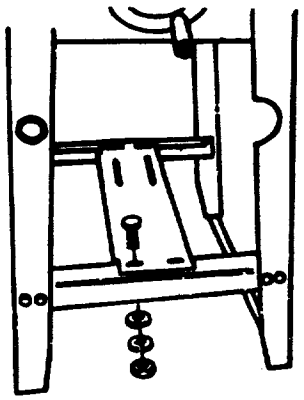


Figure 4 - Install Lower Motor Bracket

- Attach vertical motor bracket to lower motor bracket (Figure 5) using the slots on the lower motor bracket, two carriage bolts, 13/32" flat washers, 5/16" lockwashers and 5/16"-18 hex nuts. Hand tighten hex nuts.

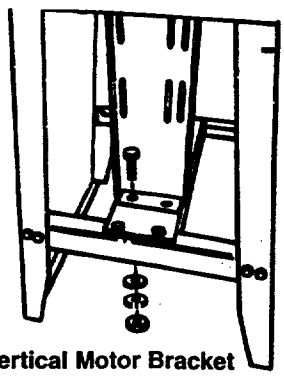


Figure 5 - Install Vertical Motor Bracket

- Install upper motor bracket under flange of vertical motor bracket (Figure 6) and attach it using two carriage bolts, 13/32" flat washers, 5/16" lockwashers and 5/16"-18 hex nuts.
- Attach top panel to upper motor bracket (Figure 6) using two carriage bolts, 13/32" flat washers, 5/16" lockwashers and 5/16"-18 hex nuts.

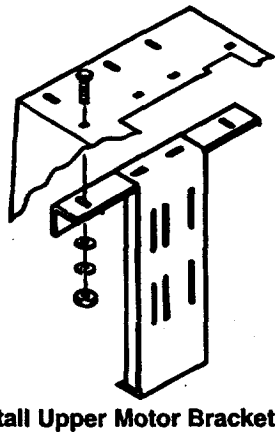


Figure 6 - Install Upper Motor Bracket

- Place stand upright and tighten all leg set hex nuts with open end wrench.

ASSEMBLE MOTOR TO STAND

Refer to Figures 1 and 7, pages 3 and 5.

- Identify and locate the following parts from the hardware bag:
  Motor Pulley
  5/16 18 x 3/4" Carriage bolt (4)
  13/32" Flat washer (4)
  5/16" Lockwasher (4)
  5/16"-18 Hex nut (4)
- Identify and locate the following parts:
  Motor - C
- Remove tape from motor shaft. Make sure the key stays in the slot.
- Slide the motor pulley onto the motor shaft until flat side of pulley hits shoulder on shaft.

NOTE: Make sure hat the hub (shoulder) on the pulley is on the outside.

- Tighten the two setscrews in the pulley using 3mm hex wrench.
- Set the stand assembly on the side.
- Seat the motor on the vertical motor bracket and make sure the slots on the motor base plate are aligned with the slots on the vertical motor bracket (see Figure 7).

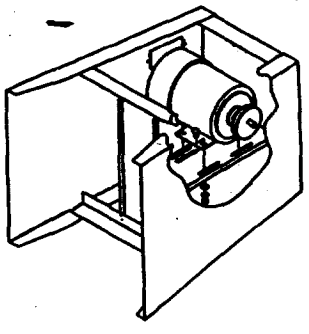


Figure 7 - Assemble Motor to Stand

- Attach motor to bracket using carriage bolts, washers, lockwashers and hex nuts.

NOTE: Hand tighten only. You may have to adjust motor position later when V-belt is installed.

- Slowly set the stand upright.
- Route the cord through the grommet in the stand front panel.

ASSEMBLE SWITCHBOX TO STAND

- Identify and locate the following parts from the hardware bag:
  #8-32 x 5/8" Pan Head Screw (2)
  #8 Serrated Washer (2)
- Slide the switchbox in the slot on the front panel
- Attach switchbox to stand using the pan head screws and serrated washers.

ASSEMBLE BED TO STAND

Refer to Figures 1 and 8, pages 3 and 5.

- Identify and locate the following parts from the hardware bag:
  3/8-16 x 3/4" Hex head bolt (3)
  3/8" Lockwasher (3)
  1/4-20 x 1/2" Pan head screw (2)
  1/4"Flat washer (2)
- Identify and locate the following parts:
  Handwheels-P and V-Belt-E.

WARNING: Although compact, this tool is heavy. At least two people are required to lift the tool.

- Set the jointer bed assembly on top of the stand.
- Align the three holes in the bed with the three slots on the stand.
- Attach the three bolts and lockwashers and tighten.

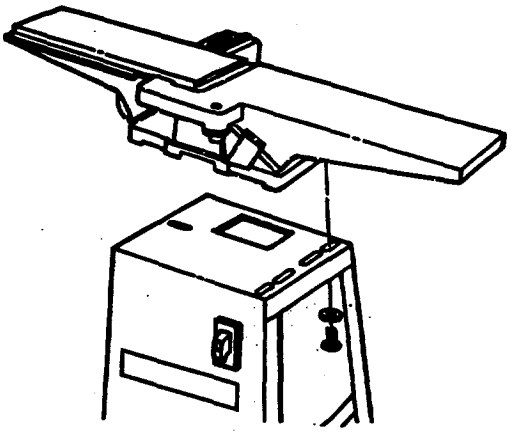


Figure 8 - Assemble Bed to Stand

- Slip the V-belt over the drive pulley.
- Lift the motor and slip the V-belt around the motor pulley.

NOTE: Visually align the motor and drive pulleys and tighten the motor mounting bolts.

- Slide the handwheel onto the elevation screw on the infeed table and secure it using the screw and flat washer. Repeat for attaching the handwheel to the outfeed table.

ASSEMBLE FENCE TO BED

Refer to Figure 9, page 6.

- Remove the two nuts and washer from the bolt on the bottom of fence assembly.
- Carefully lift the fence and place it onto the bed so that the key slot on the fence is aligned with the key in the fence support. The bolt will go through the slot in the fence support.
- Reinstall the washer and two nuts onto the toggle bolt.
- Adjust the fence locking mechanism by tightening the upper locking nut until only about ¼ of a turn of the fence lock knob is possible.

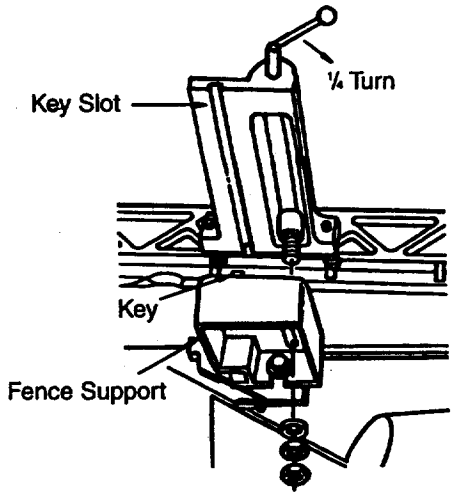


Figure 9 - Assemble Fence to Bed

- Lock the fence in place.
- Snug the lower nut to the upper nut with an adjustable wrench. This will lock adjustment in place.

INSTALL KNIFE GUARD

Refer to Figures 1 and 10, pages 3 and 6.

- Identify and locate Knife guard - N.
- Remove the pan head screw from the bottom of the guard post.
- Turn the spring-loaded knob one turn counterclockwise looking down through the hole in the infeed table.
- Align the slot in the guard post with the pin in the knob.

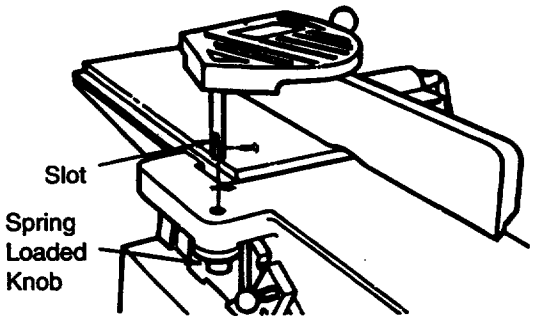


Figure 10 - Install Knife Guard

- Slide the guard post in the hole and over pin in the knob.
- Reinstall the pan head screw in the bottom of the guard post.

KNIFE GUARD INSTALLATION CHECK

WARNING: Always keep knife guard in place and in proper operating condition.

- Turn the switch off and disconnect jointer/planer from power source.
- Position the fence to the rear of the bed for maximum width of cut. Do not position fence beyond rear edge of cutterhead.
- Pass a ¼" thick piece of wood over the cutterhead between the guard and the fence.
- The guard must return automatically to the "reset position" against the fence when the wood piece is removed.
- If guard does not return automatically, the guard spring must be adjusted.

ADJUSTING GUARD SPRING

- Remove the pan head screw from the bottom of the guard post.
- Remove tension from knife guard by turning the knob clockwise.
- Pull and remove knife guard in ½ turn increments by turning the tension knob and reinserting the guard post.
- Repeat knife guard installation check.

NOTE: Do not overtighten the spring. Overtightening may cause premature spring or knife guard breakage. If the guard or spring breaks or malfunctions, do not use the tool. Replace the defective parts before the tool is put back in service.

- Reinstall the pan head screw in the bottom of the guard post.

ATTACH PULLEY GUARD

Refer to Figures 1 and 11, pages 3 and 6.

- Identify and locate the following parts from the hardware bag:
  ¼-20 x ½" Pan head screw (4)
  ¼"Flat washer (4)
- Identify and locate the following parts:
  Pulley guard - O
  Cover - Q (2)
- Attach pulley guard to stand using four screws and washers.
- Install cover to either side of stand with the clips facing towards the outside.

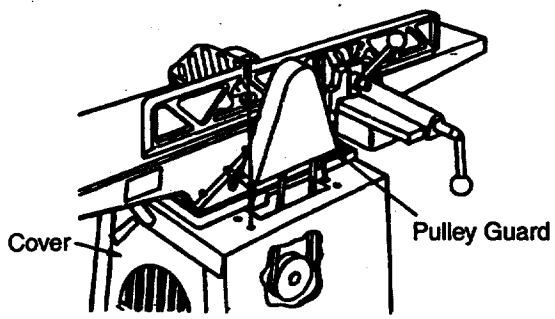


Figure 11 - Attach Pulley Guard and Cover

- Turn clips to lock cover in place.

INSTALL REAR CUTTERHEAD GUARD

Refer to Figures 1 and12, pages 3 and 7.

- Identify and locate the following parts from the hardware bag:
  ¼-20 x ½" Pan head screw (2)
  ¼"Flat washer (2)
- Identify and locate Rear guard - D from the unpacked contents.

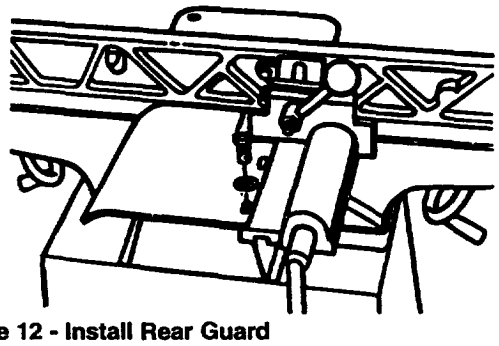


Figure 12 - Install Rear Guard

- Fasten rear guard to jointer/planer fence assembly using two screws and washers.

INSTALLATION

The jointer/planer with stand weighs approximately 200 lbs. when completely assembled. The jointer/planer must be installed in a place with ample lighting and correct power supply.

Make sure there is plenty of room for moving the workpiece through the entire cut. There must be enough room that neither the operators nor the bystanders will have to stand in line with the wood while using the tool.

Bolt or clamp the jointer/planer with stand to a firm level surface. Adjust the leveling feet if necessary. To adjust leveling feet:

- Loosen top nut and turn bottom nut using open wrenches to raise or lower feet.

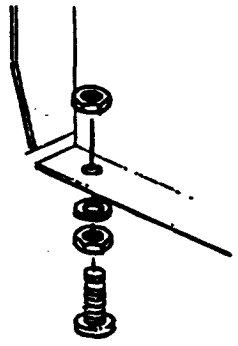


Figure 13 - Adjust Leveling Feet

- Adjust all four leveling feet, if necessary, and tighten the nuts.

NOTE: The leveling feet are not intended for height adjustment, only leveling adjustment.

Make sure the jointer/planer does not rock and the tables are level.

POWER SOURCE

WARNING: Do not connect jointer/planer to the power source until all assembly steps have been completed.

The motor is designed for operation on the voltage and frequency specified. Normal loads will be handled safely on voltages not more than 10% above or below specified voltage. Running the unit on voltages which are not within range may cause overheating and motor burnout. Heavy loads require that voltage at motor terminals be no less than the voltage specified on nameplate.

- Power supply to the motor is controlled by a rocker switch. Removing the key from rocker switch will lock the unit and prevent unauthorized use.

GROUNDING INSTRUCTIONS

WARNING: Improper connection of equipment grounding conductor can result in the risk of electrical shock. Equipment should be grounded while in use to protect operator from electrical shock.

- Check with a qualified electrician if you do not understand grounding instructions or if you are in doubt as to whether the tool is properly grounded.
- This tool is equipped with an approved cord rated at 150V and a 3-prong grounding type plug (see Figure 14) for your protection against shock hazards.
- Grounding plug should be plugged directly into a properly installed and grounded 3-prong grounding-type receptacle, as shown (see Figure 14).

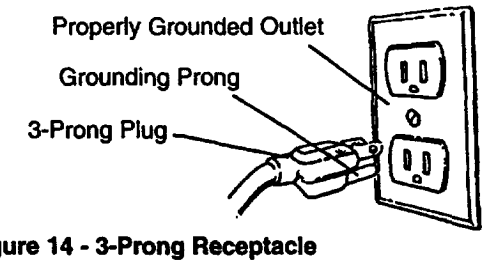


Figure 14 - 3-Prong Receptacle

- Do not remove or alter grounding prong in any manner. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical shock.

WARNING: Do not permit fingers to touch the terminals of plug when installing or removing from outlet.

- Plug must be plugged into matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify plug provided. If it will not fit in outlet, have proper outlet installed by a qualified electrician.
- Inspect tool cords periodically, and if damaged, have repaired by an authorized service facility.
- Green (or green and yellow) conductor in cord is the grounding wire. If repair or replacement of the electric cord or plug is necessary, do not connect the green (or green and yellow) wire to a live terminal.
- A 2-prong wall receptacle must be replaced with a properly grounded 3-prong receptacle installed in accordance with National Electric Code and local codes and ordinances.

WARNING: Any receptacle replacement should be performed by a qualified electrician.

A temporary 3-prong to 2-prong grounding adapter (see Figure 15) is available for connecting plugs to a two pole outlet if it is properly grounded.

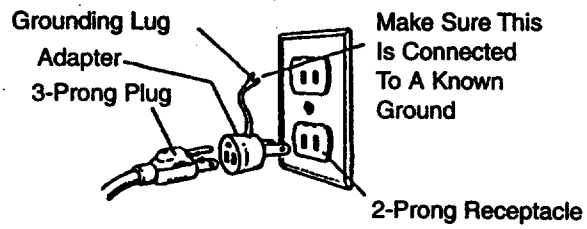


Figure 15 - 2-Prong Receptacle with Adapter

- Do not use a 3-prong to 2-prong grounding adapter unless permitted by local and national codes and ordinances. (A 3-prong to 2-prong grounding adapter is not permitted in Canada.)

  Where a 3-prong to 2-prong grounding adapter is permitted, the rigid green tab or terminal on the side of the adapter must be securely connected to a permanent electrical ground such as a properly grounded water pipe, a properly grounded outlet box or a properly grounded wire system.
- Many cover plate screws, water pipes and outlet boxes are not properly grounded. To ensure proper ground, grounding means must be tested by a qualified electrician.

EXTENSION CORDS

- The use of any extension cord will cause some drop in voltage and loss of power.
- Wires of the extension cord must be of sufficient size to carry the current and maintain adequate voltage.
- Use the table to determine the minimum wire size (A.W.G.) extension cord.
- Use only 3-wire extension cords having 3-prong grounding type plugs and 3-pole receptacles which accept the tool plug.
- If the extension cord is worn, cut or damaged in any way, replace it immediately.

EXTENSION CORD LENGTH

Wire Size	A.W.G.
Up to 50 ft.	16
50-100 ft.	14

NOTE: Using extension cords over 100 ft. long is not recommended.

MOTOR

Jointer/planer is supplied with a 2 HP (max developed) motor.

The 120 Volt AC universal motor has the following specifications:

Horsepower (Maximum Developed)	2
Voltage	120
Amperes	10.8
Hertz	60
Phase	Single
RPM	5000

ELECTRICAL CONNECTIONS

WARNING: Make sure unit is turned off and disconnected from power source before inspecting any wiring.

The unit is wired as illustrated in the wiring schematic (see Figure 16).

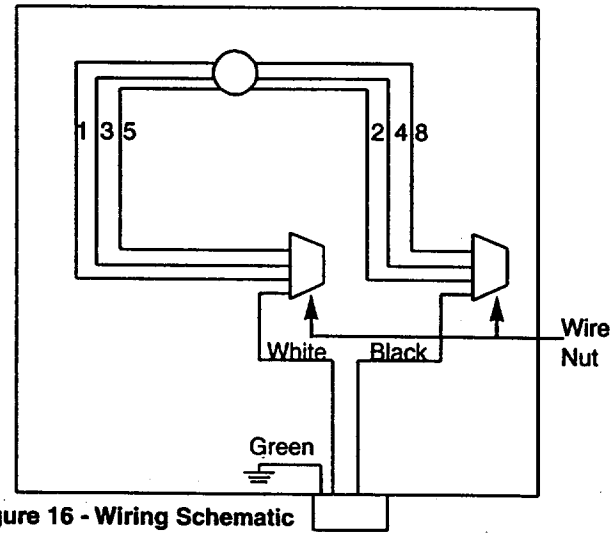


Figure 16 - Wiring Schematic

The motor is assembled with an approved three conductor cord to be used on 120 volts as indicated. The power supply to the motor is controlled by a double pole locking rocker switch.

- Remove the key to prevent unauthorized use.

The power lines are inserted directly onto the switch. The green ground line must remain securely fastened to the frame to properly protect against electrical shock.

OPERATION

DESCRIPTION

Craftsman 6 ⅛" jointer/planer is used to surface the faces and edges of boards, produce a flat surface on warped boards and shape rabbets, bevels, chamfers and tapers. The jointer/planer features heavy cast iron infeed and outfeed tables with precision ground work surfaces and leadscrews for precise table height adjustment. Rigid, center mount guide fence is provided with bevel stops at 90° (from bed) and 45°. Tool comes with locking rocker switch with removable key and push blocks. Jointer/planer easily handles rough-cut lumber, planes hard and soft woods up to 6 ⅛" wide using a three knife cutterhead, and takes cuts up to ⅛", and up to ½" rabbets.

OPERATION SAFETY RULES

Jointing is a surfacing operation in which a small amount of wood is removed from the edges and faces of boards to get smooth, straight and even surfaces such that the two edges that run across the planing blocks would fit together perfectly, forming a seamless joint.

Planing refers to the sizing of lumber to a desired thickness while creating a level surface parallel to the opposite size of the board. Depth of cut is the term used to indicate how deep the knives will cut into the workpiece.

A **rabbet** is a notch cut into the edge of workpiece.

WARNING: Operation of any power tool can result in foreign objects being thrown into eyes which can result in severe eye damage. Always wear safety goggles complying with United States ANSI Z87.1 (shown on package) before commencing power tool operation.

WARNING: For your own safety, read all of the instructions and safety precautions before operating tool.

- Know general power tool safety. Make sure all precautions are understood (see pages 2, 3 and 9).
- Whenever adjusting or replacing any parts on jointer/planer, turn switch off and remove plug from power source.
- Make sure all guards are properly attached and securely fastened.
- Make sure all moving parts are free from interference.
- Always wear eye protection or face shield.
- Make sure blades are aligned and properly attached to cutterhead.
- Do not plug in jointer/planer unless switch is in "off" position. After turning switch on, allow jointer/planer to come to full speed before operating.
- Keep hands clear of all moving parts.
- Do not force cut. Slowing or stalling will overheat motor. Allow automatic feed to function properly.
- Use quality lumber. Blades last longer and cuts are smoother with good quality wood.
- Do not perform jointing/planing operations on material shorter than 8 ⅛", narrower than ¾", or less than ¼" thick
- Never make jointing or rabbeting cut deeper than ⅛".
- Always keep cutterhead and knife guards in proper working condition.
- Maintain the proper relationships of infeed and outfeed table surfaces and cutterhead blade path.
- Do not back the work toward the infeed table.
- Support the workpiece adequately at all times during operation; maintain control of the workpiece.
- Use hold-down/push blocks for jointing material narrower than 3" or planing material thinner than 3".
- Take precautions against kickback. Do not permit anyone to stand or cross in line of cutterhead's rotation. Kickback or thrown debris will travel in this direction.
- Turn switch off and disconnect power whenever jointer/planer is not in use.
- Replace or sharpen knives as they become damaged or dull.
- Do not attempt to perform an abnormal or little used operation without study and the use of adequate hold-down/push blocks, jigs, fixtures, stops and the like.
- Keep jointer/planer maintained. Follow maintenance instructions (see page 13).

DEPTH OF CUT

The depth of cut is adjusted by the relative positioning of the infeed table with respect to the cutterhead. Infeed table can be raised or lowered using the handwheel.

Turning the handwheel counterclockwise will lower the infeed table causing more wood to be removed from workpiece. Turning the handwheel clockwise will raise the infeed table causing less wood to be removed from workpiece.

Do not make jointing, planing or rabbeting cuts deeper than ⅛". A stop pin is supplied to prevent planing or jointing more than ⅛" depth of cut.

POSITIONING FENCE

Refer to Figure 17.

WARNING: Turn jointer/planer off and wait for all parts to stop before adjusting fence.

The fence can be tilted to any desired angle, and slide it back and forth. To tilt fence:

- Loosen tilt knob.
- Move fence to desired angle.
- Tighten knob.

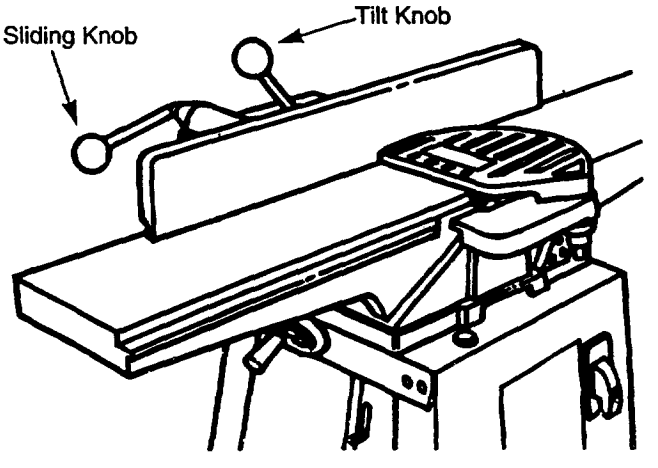


Figure 17 - Positioning Fence

The fence can be slide it across the jointer/planer bed when the workpiece will not be cut across the full width or when there is a need to make use of only a portion of the knives. To slide fence:

- Loosen sliding knob.
- Slide fence to desired position.
- Tighten sliding knob.

When work is completed, restore fence to extreme rear of the outfeed and infeed tables, but not beyond the end of blades.

ADJUSTING FENCE

Refer to Figure 18 and 19.

Jointer/planer has fence bevel stops at 90° (from bed) and 45°. These stops are set at the factory, but may have fallen out of alignment while in transit. To check for squareness:

- Place an accurate square on outfeed table and check fence while locked at 90° position.
- Make sure that the bottom of the outfeed side of the fence rests firmly against the outfeed table and against the head of the two stop screws.

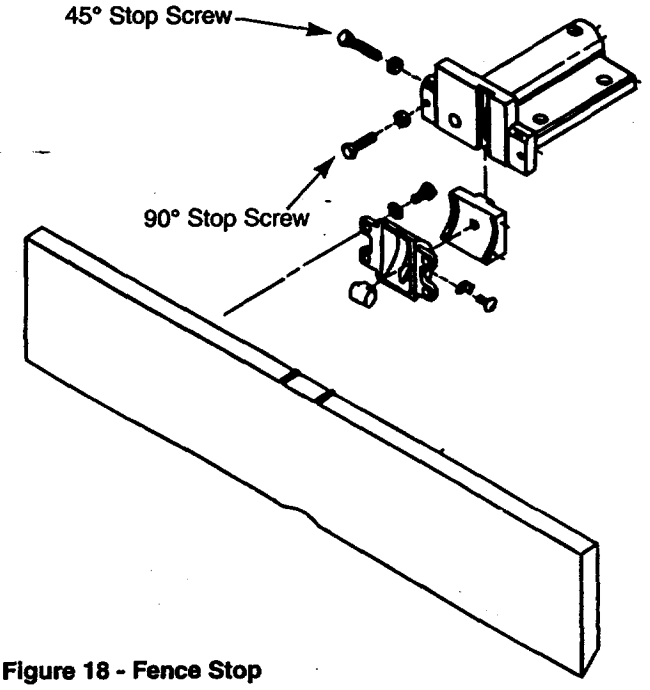


Figure 18 - Fence Stop

- Make sure that the infeed table does not interfere with the accuracy of measurement.
- Lower the infeed table to at least 1/16".
- Check the fence for accuracy using the stops.

The fence must be square to the outfeed table at 90° and at 45°. If fence is not square it must be adjusted. To adjust:

- Loosen fence tilt knob.
- Loosen stop screw jam nuts.
- Move stop screws away from the fence.
- Using a square as shown, square the fence to the outfeed table and lock the tilt knob.

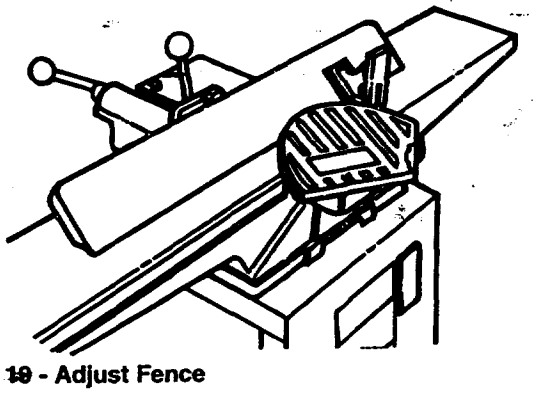


Figure 19 - Adjust Fence

- Turn the stop screws so they touch the fence. Tighten jam nuts.
- Loosen the tilt knob.
- Move the fence to any angle and then return it to the index and check for accuracy.
- Readjust the 90° and 45° stops if necessary until the stop maintains an accurate and repeatable fence setting.

ADJUSTING KNIFE HEIGHT

Refer to Figures 20, 21 and 22, pages 10 and 11.

WARNING: Make sure the switch is in the "OFF" position and the tool is disconnected from the power source before making any adjustment.

CAUTION: The cutterhead knives are extremely sharp. Do not let your fingers contact the cutting edge at any time.

To produce even surface on a workpiece, the knife edge must be at the same distance from the axis of the cutterhead. The knife height comes adjusted from the factory and should require no adjustment. A knife gauge has been provided to make knife height adjustment easy. The knife height setting gauge must be assembled. To assemble:

- Identify and locate the following parts from hardware bag.
  Knife Gauge (2)
  Knife Gauge Rod (1)
  3 CMI-10 Retaining Ring
- Attach the two inside retaining rings to the shaft.

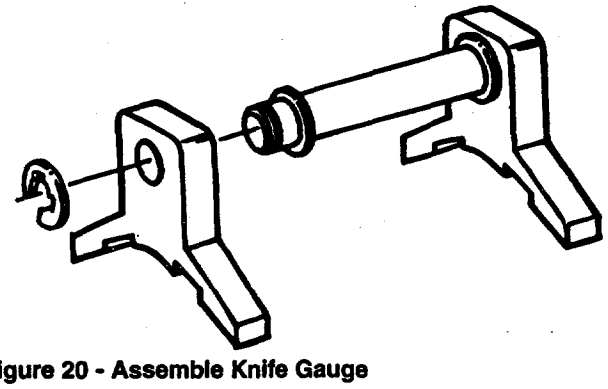


Figure 20 - Assemble Knife Gauge

- Slide one of the gauges onto the shaft and attach the outside retaining ring to hold gauge in place.
- Repeat for the other gauge.

The knife height setting gauge is ready to check knife height. To check knife height:

- Lower infeed table by turning the depth of cut handwheel clockwise.
- Position the fence to the rear of the jointer, approximately 1/4" beyond the cutter knives.
- Lock the fence in this position.
- Remove the knife guard.
- Place the gauge on the cutterhead as shown in Figure 21, page 11.

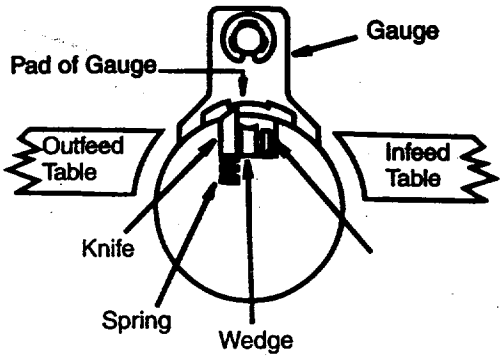


Figure 21 - Checking Knife Height

- The pad of the gauge must be flush with the knife. If not, the knife height must be adjusted. To adjust knife height:
- Loosen lock screws.

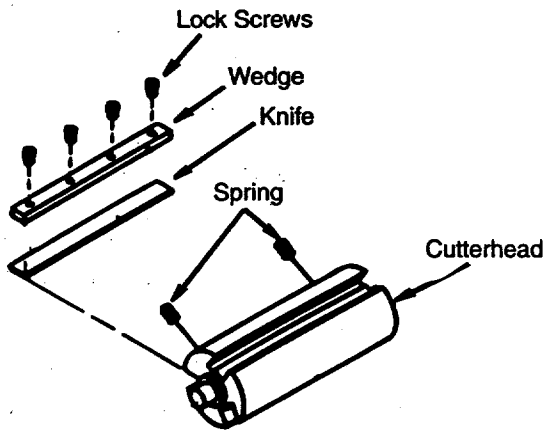


Figure 22 - Adjust Knife Height

- Remove knife.

NOTE: Due to rust or resin buildup, the knife may stick. If this happens, use a flat head screwdriver to pry under knife.

- Remove all parts and clean thoroughly with a gum and pitch remover.
- Reinstall parts.
- Make sure knife extends 1/16" past the cutterhead.
- Slip knife height setting gauge into place.
- Place pads of gauge over knife.
- Push down on gauge and knife until gauge rests firmly on cutterhead.
- Without releasing the gauge, tighten lock screws.
- Release gauge and knife must be held in place.
- Repeat the procedure for other two knives.

ADJUSTING TABLE EXTENSION

Refer to Figure 23.

The table extension is adjusted at the factory and should not require any additional adjustments. In the event that is shifted during shipping, align it to the outfeed table. To align:

- Loosen the two hex head bolts that attach the extension to the outfeed table.

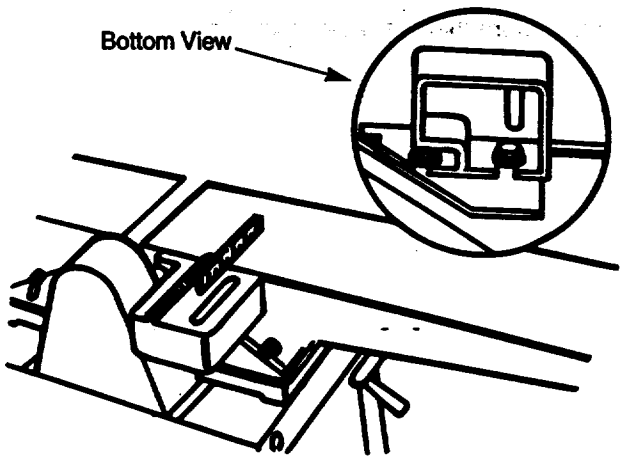


Figure 23 - Adjust Table Extension

- Using a straight edge, align the extension to be flush with the outfeed table.
- Tighten the two bolts and recheck the alignment.

ADJUSTING OUTFEED TABLE

Refer to Figure 24.

WARNING: Make sure that the switch is in the "OFF" position and the tool is disconnected from the power source.

CAUTION: The knife edges are sharp. Do not let fingers contact cutting edge.

- Raise or lower the outfeed table knob, until the outfeed level is exactly level with the highpoint of the knives.
- Place a straightedge on the outfeed table extending over the cutterhead as shown below..

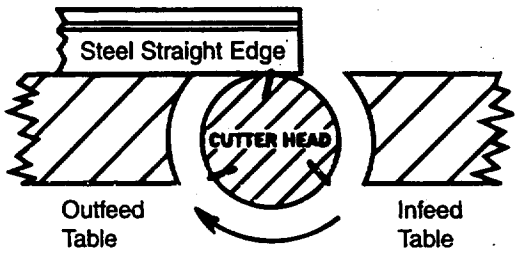


Figure 24 - Checking Outfeed Table Alignment

- Rotate the cutterhead by hand. The knives should just touch the straightedge. If a knife is too low or too high at either end, adjust knife height per "Adjusting Knife Height".
- After the outfeed table has been set at the correct height, lock in place using wing screws.

ADJUSTING TABLE GIBS

Refer to Figure 25, page 12.

Gibs are provided to take up all play between the mating dovetail ways of the base and infeed and outfeed tables. Proper gib adjustment is necessary for operation of the jointer/planer. The gibs are adjusted at the factory and should require no further adjustment. However to adjust the gibs:

- Loosen each of the lock nuts.

- Make sure that the table locks are loose.
- Finger tighten each set screw in turn, until the screw "bottoms out."
- Do not overtighten the screws.

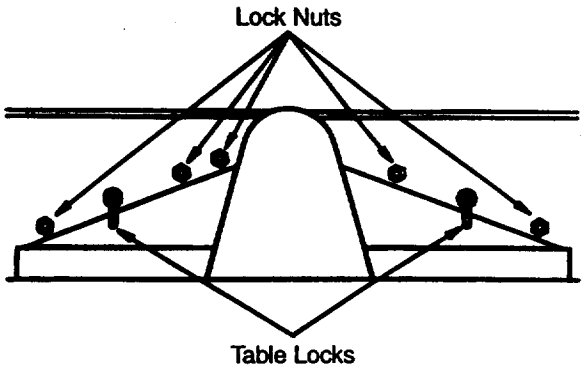


Figure 25 - Adjusting Table Gibs

- Recheck table play. If table is still loose, tighten set screws. If table is snug, tighten lock nuts without allowing set screws to turn.
- Check that the table raises and lowers freely when turning the handwheel. If there is too much resistance, loosen the set screws and repeat adjustment.

CHECKING FOR WORN KNIVES

Condition of knives will affect precision of cut. If blade wear is not observed when checking the knife height, the quality of cut will indicate the knife condition. Dull knives will tear rather than sever wood fiber. A raised grain will occur when dull knives pound on wood where there is difference in density. A raised ridge will be produced where the knives have been nicked.

SHARPENING KNIVES

Refer to Figure 26.

The knives can be honed individually by whetting them with a fine sharpening stone. Make sure oilstone is flat and is not worn. To sharpen knives:

- Partially cover the stone with paper to protect the table top.
- Position infeed table so stone will contact blade along its beveled surface.
- Stroke the stone across knife from one side to other while stone is also moved slightly in the direction of feed.
- Make sure to do the same number of strokes on each place.

If the knives are nicked they must be replaced or reground. They can be reground several times until they become 9/16" wide.

NOTE: Many shops do not have capabilities to resurface blades. Yellow pages should list "Sharpening Services" or "Tool Grinding."

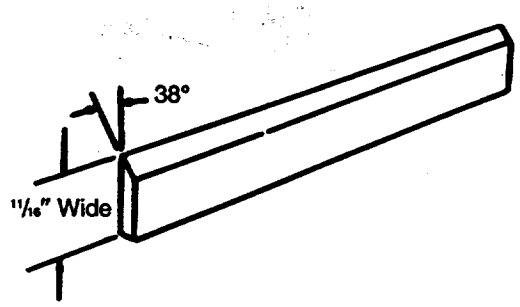


Figure 26 - Sharpening Knives

Never install unbalanced knives or reground knives less than 9/16" wide.

AVOID DAMAGE TO KNIVES

Jointer/planer is a precision woodworking machine and should only be used on quality lumber. Using bad lumber could result in a poor quality cut on subsequent pieces.

- Do not use dirty boards. Dirt and stones are abrasive and will wear blade.
- Remove nails and staples. Jointer should only cut wood.
- Avoid knots. Heavy cross-grain makes knots hard and they can come loose and jam the jointer.
- Assess value of badly warped boards. Operator can be tempted to use too deep of cut to square boards quickly. Use several passes to maintain a level surface.

FEEDING WORKPIECE

Refer to Figures 27, 28 and 29, pages 12 and 13.

Feed rate refers to rate at which wood is passed over knives. An even feed will produce a uniform service. To feed workpiece:

- Hold the board firmly down on both tables and against the fence.
- Keep fingers close together.

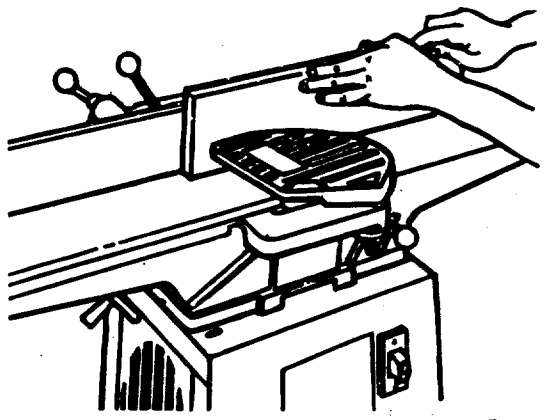


Figure 27 - Feeding Workpiece

- Feed the board at a continuous even rate of speed. Any hesitation or stopping could cause a "step" to be cut on the edge of the board.
- As the trailing hand passes over the cutterhead, remove the leading hand.
- Continue feeding while placing the leading hand behind the trailing hand until the entire length of the board is cut.

- **Feed with the grain whenever possible.**

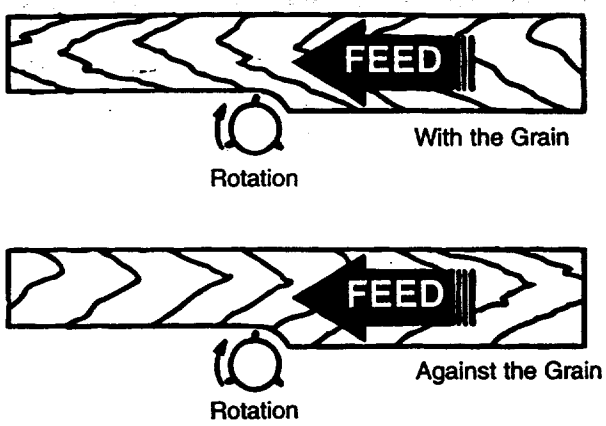


Figure 28 - Direction of Feed

- If the nature of the workpiece is such that it must be fed against the grain, take very light cuts and feed slowly.
- When using long workpieces, to avoid injury from slips or kickbacks and to exert even pressure on the cutterhead, use extra supports (see Recommended Accessories, page 17) at both infeed and outfeed ends.
- Always use hold-down/push-blocks when jointing, or rabbeting wood that is narrower than 3", planing wood thinner than 3".
- Grasp the hold-down/push-blocks firmly.
- Position the push-blocks flat on top of workpiece and push the workpiece down against the table.
- Use a hand-over-hand motion to maintain control over the workpiece at all times.

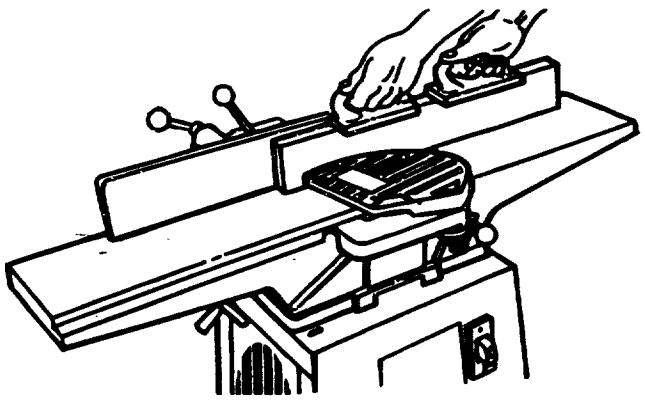


Figure 29 - Feeding with Push-blocks

- When planing workpiece between ½ - ¾" and narrower than the push-blocks, tilt the push-blocks so that it clears the cutterhead guard while feeding.

MAINTENANCE

Jointer/planer will operate best if it is kept in good operating condition. Keep unit adjusted as described in "Operation."

- Do not allow gum and pitch to accumulate on the tables, fence, knives and knife guard.
- Apply a thin coat of paste type wax to the tables and the fence so that the wood slides easily while feeding.
- Do not allow chips to accumulate on the underside of the jointer/planer.
- Keep knives sharp (see "Sharpening Knives," page 12). Sometimes replacing knives is less expensive than resurfacing them. Keeping a spare set of knives on hand is recommended. Knives should always be sharpened or replaced in sets of three.

LUBRICATION

WARNING: Make sure the switch is in the "OFF" position and the tool is disconnected from the power source.

- Motor and cutterhead bearings are sealed and need no lubrication.
- Fence guide and elevation screws should be cleaned of debris and greased as needed.
- Occasionally apply a few drops of light machine oil to gibs to keep tables sliding free in relation to base.

MACHINED SURFACES

- Surface of tables and fence must be kept smooth and clean for easy work feed.
- Apply a paste wax to surfaces to keep them slick and prevent corrosion.

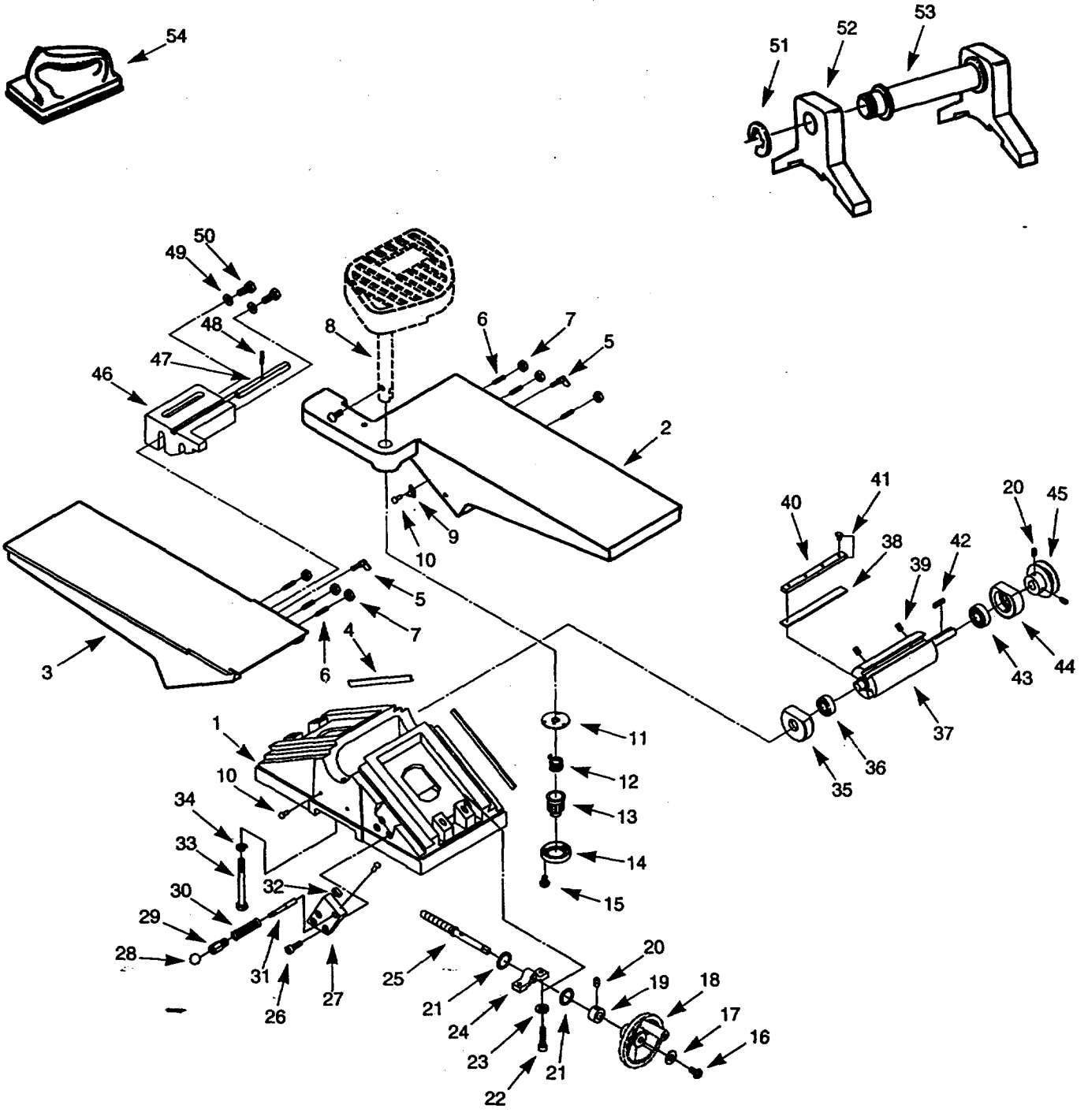
TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor does not start	1. Defective switch 2. Defective capacitor 3. Defective motor 4. Low line voltage 5. Belt tension too high	1. Have switch replaced. 2. Have capacitor replaced. 3. Have motor replaced/repaired. **NOTE:** 1, 2, 3 must be done by a qualified service technician; Consult Sears service. 4. Correct low line voltage condition. 5. Adjust belt tension.
Motor stalls (resulting in blown fuses or tripped circuit breakers)	1. Circuit overloaded 2. Low line voltage 3. Motor overloaded 4. Incorrect fuses on circuit breakers 5. Short circuit in motor; loose connections or worn insulation on lead wires	1. Reduce circuit load (turn off other appliances). 2. Correct low line voltage conditions. 3. Reduce load on motor. 4. Have correct fuses on circuit breakers installed. 5. Inspect terminals in motor for damaged insulation and shorted wires and have them replaced.
Motor starts slowly or fails to come to full speed	1. Defective motor windings 2. Drive belt tension too high 3. Defective capacitor	1. Have motor replaced/repaired. 2. Adjust belt tension. 3. Have capacitor replaced.
Motor running too hot	1. Motor overloaded 2. Restricted air circulation due to dust accumulation 3. Belt tension too high	1. Reduce load on motor. 2. Clean dust and restore normal air circulation. 3. Adjust belt tension
Frequent opening of fuses or circuit breakers	1. Motor overloaded 2. Fuses or circuit breakers do not have sufficient capacity 3. Circuit overloaded	1. Reduce load on motor 2. Have correct fuses or circuit breakers installed. 3. Reduce circuit load (turn off other appliances).
Wood strikes outfeed table after passing over cutterhead	Outfeed table is above cutterhead knives.	Adjust outfeed table level. See "Adjusting Outfeed Table," page 11
Snipe (gouging at end of boards)	1. Dull knives 2. Inadequate support of long boards 3. Uneven feed 4. Outfeed table not aligned 5. Table extension misaligned	1. Replace or sharpen knives. See "Sharpening Knives," page 12. 2. Support long boards. See "Recommended Accessories," page 17. 3. See "Feeding Workpiece," page 12. 4. Adjust outfeed table level. See "Adjusting Outfeed Table," page 11. 5. See "Adjusting Table Extension," page 11.
Uneven depth of cut	1. Knife height not uniform 2. Fence not perpendicular to jointer bed 3. Feeding wood too fast	1. Adjust knife height. See "Adjusting Knife Height," page 10. 2. See "Adjusting Fence," page 10. 3. Feed wood slower.

TROUBLESHOOTING (CONTINUED)

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Depth of cut does not match depth of scale	1. Indicator not set correctly 2. Knife projection incorrect	1. Adjust indicator, securely tighten. 2. See "Adjusting Knife Height," page 10.
90° and 45° cuts inaccurate	1. Fence stops not adjusted properly 2. Fence bottom not even with outfeed table due to wood chips under fence	1. Adjust fence stops. See "Adjusting Fence." 2. Clean wood chips from underside of fence.
Table elevation adjusts with difficulty	1. Gibs not adjusted 2. Elevations screws dirty 3. Elevation screws worn 4. Friction between base and tables	1. Adjust gibs. 2. Clean and lubricate elevation screws. 3. Replace elevation screws. 4. Clean, lubricate.
Fuzzy grain	Planing wood with high moisture	Remove high moisture content from wood by drying.
Torn grain	1. Too heavy a cut 2. Knives cutting against grain 3. Dull knives	1. Reduce depth of cut. 2. Feed work along grain. 3. Replace or sharpen knives.

Figure 30 - Replacement Parts Illustration for Jointer/Planer



REPLACEMENT PARTS LIST FOR JOINTER/PLANER

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	2929.00	Base	1
2	2930.00	Infeed Table	1
3	2931.00	Outfeed Table	1
4	2932.00	Wear Plate	2
5	2933.00	¼-20 x 1" Wing Screw	2
6	1395.00	¼-20 x 1" Set Screw	6
7	STD541025	¼-20 Hex Nut*	6
8	2934.00	Guard	1
9	2748.01	Pointer	1
10	1286.00	Rivet	3
11	2935.00	Plate	1
12	2941.00	Spring	1
13	2942.00	Spring Housing	1
14	2943.00	Seat	1
15	2944.00	#8-32 x 5/8" Pan Head Screw	3
16	STD512505	¼-20 x ½" Pan Head Screw*	2
17	STD551025	¼" Flat Washer*	2
18	2945.00	Handwheel	2
19	2946.00	Collar	2
20	STD502503	¼-20 x 3/8" Set Screw*	4
21	2947.00	Brass Washer	4
22	5616.00	5/16-18 x 2" Socket Head Bolt	4
23	STD551131	5/16" Lockwasher*	4
24	2948.00	Bracket	2
25	2949.00	Elevation Screw	2
26	1390.00	5/16-18 x ¾" Socket Head Bolt	3
27	2950.00	Stop Bracket	1
28	2847.00	Knob	1

KEY NO.	PART NO.	DESCRIPTION	QTY.
29	2951.00	Plunger Housing	1
30	2952.00	Spring	1
31	2953.00	Plunger	1
32	2954.00	Scale	1
33	2955.00	3/8-24 x 3½" Hex Head Bolt	2
34	STD551137	3/8" Lock Washer*	2
35	2956.00	Bearing Housing	1
36	STD315225	6202 Bearing*	1
37	2957.00	Cutterhead	1
38	92293	Knife (Set)	1
39	9638.00	Spring	6
40	2958.00	Gib	3
41	2706.00	Knife Locking Bolt	12
42	8438.00	5 x 5 x 30mm Key	1
43	STD315235	6203 Bearing*	1
44	2959.00	Bearing Housing	1
45	2960.00	Drive Pulley	1
46	2961.00	Guide Bracket	1
47	2962.00	Guide Bar	1
48	2817.00	4 x 20mm Spring Pin	1
49	STD551037	3/8" Flat Washer*	2
50	STD523712	3/8-16 x ¼" Hex Head Bolt*	2
51	6555.00	3CM-11 E-Ring	4
52	2998.00	Knife Gauge	2
53	2963.00	Rod	1
54	92299	Push Block	2
Δ	3155.00	Owner's Manual	1

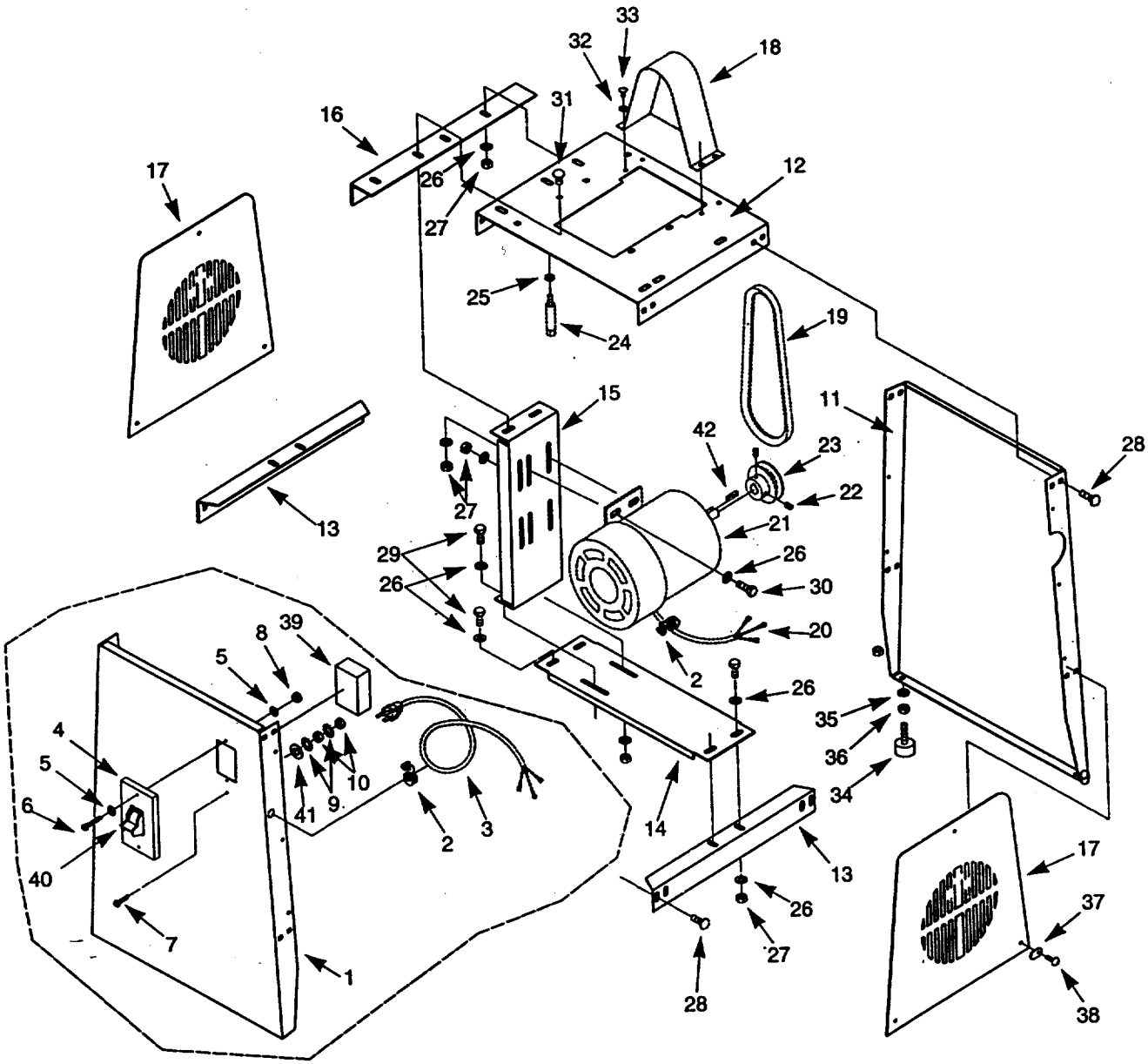
* Standard hardware item available locally

Δ Not Shown

Recommended Accessories		
Δ	Horizontal Roller Stand	351.21417
Δ	Knife (set)	351.2293

PARTS LIST

Figure 31 - Replacement Parts Illustration for Stand



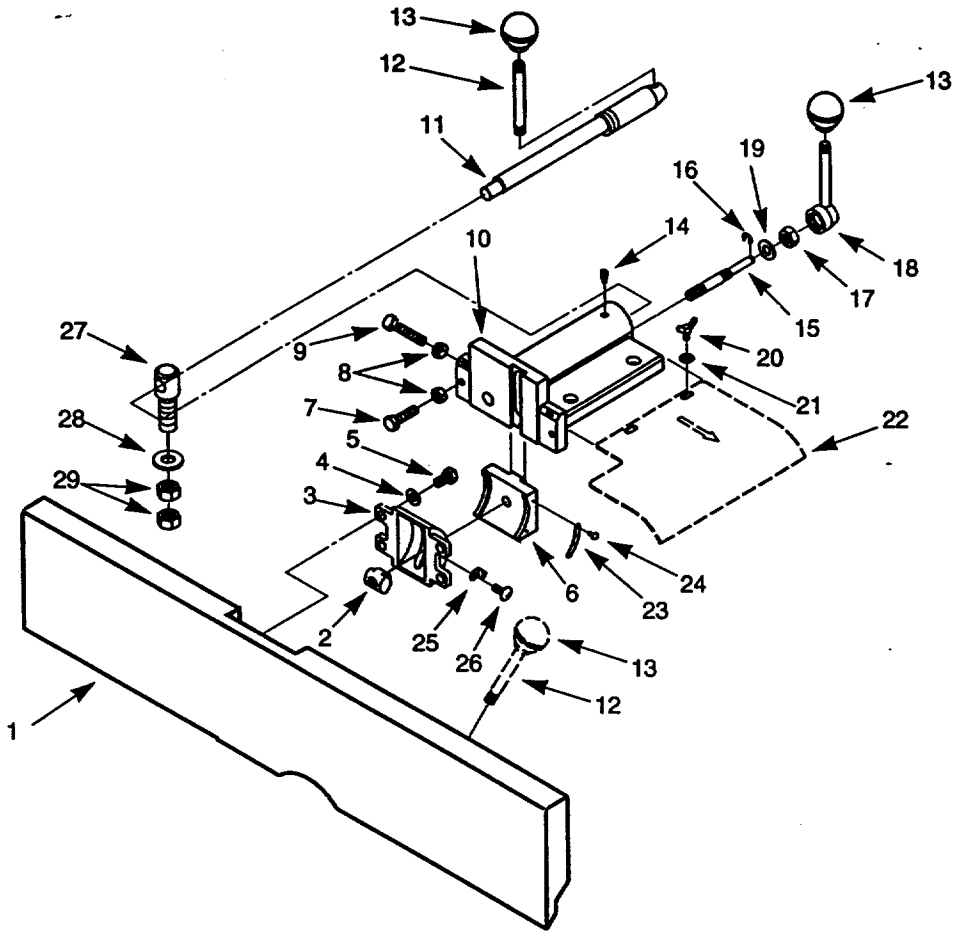
REPLACEMENT PARTS LIST FOR STAND

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	2979.00	Front Panel	1
2	2980.00	Strain Relief	2
3	0615.00	Line Cord	1
4	2981.00	Switch Plate	1
5	STD551006	#6 Flat Washer*	4
6	2982.00	#6-40 x ¾" Pan Head Screw	2
7	2983.00	#8-32 x ⅝" Pan Head Screw	1
8	2984.00	#6-40 Hex Nut	2
9	STD551208	#8 Serrated Washer*	2
10	STD541008	#8-32 Hex Nut*	2
11	2985.00	Back Panel	1
12	2986.00	Top	1
13	2987.00	Support	2
14	2988.00	Lower Bracket	1
15	2989.00	Motor Mounting Bracket	1
16	2990.00	Upper Bracket	1
17	2991.00	Side Panel	2
18	2992.00	Guard	1
19	STD304320	V-Belt*	1
20	2993.00	Motor Cord	1
21	2994.00	Motor with Key	1
22	STD502503	¼-20 x ⅜" Set Screw*	2

KEY NO.	PART NO.	DESCRIPTION	QTY.
23	2995.00	Motor Pulley	1
24	2717.00	Locking Stud	3
25	STD551137	⅜" Lock Washer*	3
26	STD551031	5/16" Flat Washer*	40
27	STD541031	5/16"-18 Hex Nut*	30
28	STD533105	5/16-18 x ½" Carriage Bolt*	16
29	STD523107	5/16-18 x ¾" Hex Head Bolt*	6
30	STD523110	5/16-18 x 1" Hex Head Bolt*	4
31	STD533107	5/16-18 x ¾" Carriage Bolt*	4
32	STD551025	¼" Flat Washer*	4
33	STD512507	¼-20 x ¾" Pan Head Screw*	4
34	2996.00	Leveler	4
35	STD551037	⅜" Flat Washer*	4
36	STD541037	⅜"-16 Hex Nut*	8
37	2997.00	Clip	6
38	6366.01	#8-16 x 7/16" Thread Forming Screw	6
39	0618.00	Switch Box	1
40	0423.00	Switch with Key	1
41	STD551008	#8 Flat Washer*	1
42	8438.00	5 x 5 x 30mm Key	1

* Standard hardware item available locally
Δ Not Shown

Figure 32 - Replacement Parts Illustration for Fence



REPLACEMENT PARTS LIST FOR FENCE

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	2964.00	Fence	1
2	2965.00	Lock Nut	1
3	2966.00	Trunnion	1
4	STD551031	5/16" Flat Washer*	4
5	STD523106	5/16-18 x 5/8" Hex Head Bolt*	4
6	2967.00	Trunnion Bracket	1
7	STD523110	5/16-18 x 1" Hex Head Bolt*	2
8	STD541031	5/16"-18 Hex Nut*	4
9	STD523117	5/16-18 x 1 3/4" Hex Head Bolt	2
10	2968.00	Fence Guide	1
11	2969.00	Eccentric Shaft	1
12	2758.00	Handle	2
13	2970.00	Knob	3
14	1123.01	1/4-20 x 1/2" Dog Point Set Screw	1

KEY NO.	PART NO.	DESCRIPTION	QTY.
15	2971.00	Shaft	1
16	1329.00	3CMI-7 E-Ring	1
17	STD541037	3/8"-16 Hex Nut	1
18	2972.00	Handle	1
19	2973.00	10 x 20 x 3mm Spacer	1
20	2974.00	1/4-20 x 9/16" Wing Bolt	2
21	STD551025	5/16" Flat Washer	2
22	2975.00	Guard	1
23	2976.00	Scale	1
24	1286.00	Rivet	2
25	2977.00	Pointer	1
26	STD511002	#10-24 x 1/4" Pan Head Screw	1
27	2978.00	Locking Stud	1
28	STD551050	1/2" Flat Washer	1
29	STD541150	1/2"-20 Hex Nut	2

* Standard hardware item available locally

NOTES

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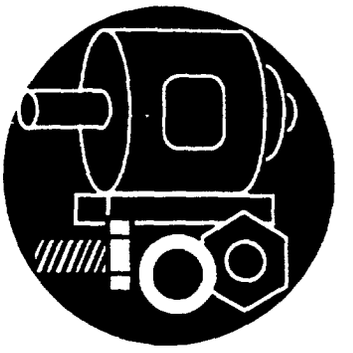
NOTES

For the repair or replacement parts you need delivered directly to your home
Call 7 am - 7 pm, 7 days a week

1-800-366-PART
(1-800-366-7278)

Para ordenar piezas con entrega a domicilio – 1-800-659-7084



For in-home major brand repair service
Call 24 hours a day, 7 days a week

1-800-4-REPAIR
(1-800-473-7247)

Para pedir servicio de reparación a domicilio – 1-800-659-7084

For the location of a Sears Parts and Repair Center in your area
Call 24 hours a day, 7 days a week

1-800-488-1222

When requesting service or ordering parts, always provide the following information:

- **Product Type**
- **Model Number**
- **Part Number**
- **Part Description**

SEARS
REPAIR SERVICES
America's Repair Specialists