

Save This Manual For
Future Reference

SEARS

*owners
manual*

**MODEL NO.
113.226431**

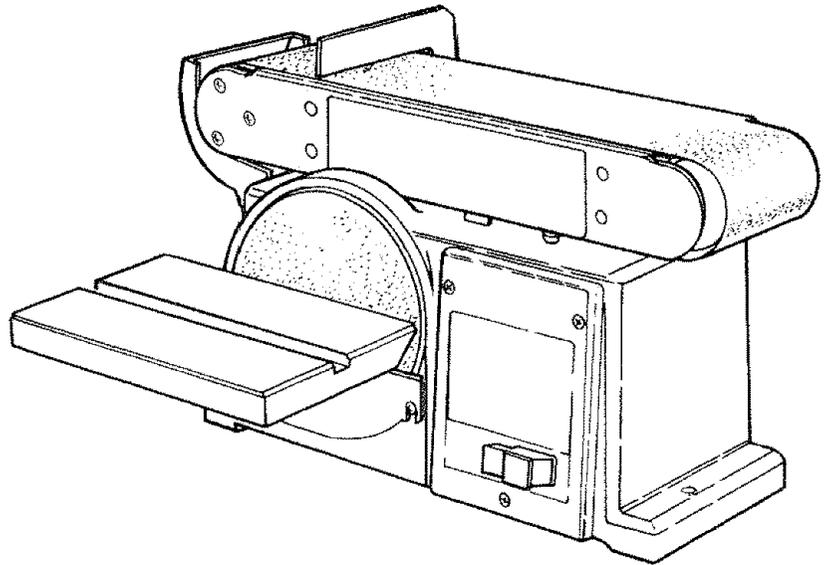
**BELT AND DISC
SANDER**

Serial
Number _____

Model and serial number may be
found on the back side of the base

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

**FOR YOUR
SAFETY:
READ ALL
INSTRUCTIONS
CAREFULLY**



SEARS/CRAFTSMAN

***BELT AND DISC
SANDER***

- assembly
- operating
- repair parts

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

FULL ONE YEAR WARRANTY ON CRAFTSMAN BELT AND DISC SANDER

If within one year from the date of purchase, this Craftsman Belt and Disc Sander 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 SERVICE CENTER/ DEPARTMENT THROUGHOUT THE UNITED STATES.

THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS USED 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., D/817 WA Hoffman Estates, IL. 60195

safety instructions for belt and disc sander

Safety is a combination of common sense, staying alert and knowing how your belt and disc sander works. Read this manual to understand this sander.

BEFORE USING THE SANDER

WARNING: To avoid mistakes that could cause serious, permanent injury, do not plug the sander in until the following steps are completed.

- Assembly and alignment. (See pages 7 - 11)
- Learn the use and function of the ON-OFF switch, backstop, belt tracking knob, belt tension lever, work table and work table tilt lock knob. (See pages 12 - 13)
- Review and understanding of all safety instructions and operating procedures in this manual.
- Review of the maintenance methods for this sander. (See pages 19 - 20)

Read the following WARNING label found on the front of the sander:

WARNING

1. Read manual before using sander.
2. Wear safety goggles that meet ANSI Z87.1.
3. Wear a dust mask.
4. Maintain 1/16" maximum clearance between table and sanding belt and disc.
5. Always support workpiece with "backstop" or "worktable."
6. Avoid "Kickback" (workpiece thrown at you) - use only the left half of the disc.
7. Avoid fire. Clean out all sawdust and disconnect from any vacuum before sanding metals.

MOTOR: 3450 RPM 1 PHASE 120 VOLT
AC ONLY 60 HZ 6.0 AMPS



WHEN INSTALLING OR MOVING THE SANDER

AVOID DANGEROUS ENVIRONMENT. Use the sander in a dry, indoor place protected from rain. Keep work area well lighted.

Place the sander so neither the user nor bystanders are forced to stand in line with the abrasive belt or disc.

To avoid injury from unexpected sander movement:

- Always unplug the sander before moving it.
- Put the sander on a firm level surface where there is plenty of room for handling and properly supporting the workpiece
- Support the sander so it does not rock.
- Bolt the sander to its work surface. Use the fasteners and method shown in "Assembly and Alignment." (Page 7)
- NEVER STAND ON TOOL. Serious injury could occur if the tool tips. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

To avoid injury or death from electrical shock:

- GROUND THE SANDER. This sander has an approved 3-conductor cord and a 3-prong grounding type plug. Use only 3-wire, grounded outlets rated 120 volts, 15 amperes (amps). The green conductor in the cord is the grounding wire. To avoid electrocution, NEVER connect the green wire to a live terminal.
- Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the sander.

BEFORE EACH USE:

Inspect your sander.

DISCONNECT THE SANDER. To avoid injury from accidental starting, unplug the sander, turn the switch off and remove the switch key before changing the setup, sanding disc or belt or adjusting anything.

CHECK DAMAGED PARTS. Check for:

- alignment of moving parts,
- binding of moving parts,
- broken parts,
- work parts that cause a gap larger than 1/16" between work support and sanding surface,
- sanding belt narrower than 4 inches. Narrower belts uncover parts that could trap your fingers,
- worn or damaged electric cords,
- stable mounting, and
- any other conditions that may affect the way the sander works.

If any part is missing, bent, or broken in any way, or any electrical parts don't work properly, turn the sander off and unplug the sander. **REPLACE** damaged, missing, or failed parts before using the sander again.

MAINTAIN TOOLS WITH CARE. Keep the sander clean for best and safest performance. Follow instructions for lubricating.

REMOVE ADJUSTING KEYS AND WRENCHES from tool before turning it on.

To avoid injury from jams, slips or thrown pieces:

- **USE ONLY RECOMMENDED ACCESSORIES.** (See page 21). Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to person.
- Adjust any work support to clear the sanding surface by no more than 1/16 of an inch. When checking clearance between the belt and work support, press the belt flat against the metal beneath it.
- Make sure all clamps and locks are tight and no parts have excessive play.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

To avoid burns or other fire damage, never use the sander near flammable liquids, vapors or gases.

PLAN AHEAD TO PROTECT YOUR EYES, HANDS, FACE, EARS.

KNOW YOUR SANDER. Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

To avoid injury from accidental contact with moving parts:

- **KEEP GUARDS IN PLACE** and in working order.
- Don't do layout, assembly, or setup work on the sander while any parts are moving.
- **AVOID ACCIDENTAL STARTING.** Make sure switch is "OFF" before plugging sander into a power outlet.

Plan your work.

USE THE RIGHT TOOL. Don't force tool or attachment to do a job it was not designed to do.

CAUTION: This machine is not designed for heavy deburring operations. When finishing metals, sparks or hot fragments could cause a fire. To avoid this:

- **Disconnect any dust collecting hose from the sander.**
- **Remove all traces of wood dust from inside the sander.**
- **Remove all traces of metal dust from inside the sander before sanding wood again.**

Dress for safety.



Any power sander can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.

safety instructions for belt and disc sander

- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using sander for hours at a time.
- Sanding operations are usually dusty. Wear a dust mask along with the safety goggles.

Inspect your workpiece

Make sure there are no nails or foreign objects in the part of the workpiece to be sanded.

Plan your work to avoid THROWBACKS - when the workpiece catches on the sanding belt or disc and is torn from your hands.

- Make sure there's no debris between the workpiece and its supports.
- When sanding irregularly shaped workpieces, plan your work support so it will not slip and be pulled from your hands.
- Use extra caution with large, very small or awkward workpieces.
- Never use this tool to finish pieces too small to hold by hand.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- NEVER use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic sander table, or to help feed, support or pull the workpiece.
- When finishing on the disc, always press the workpiece against the "Down" side of the disc. Sanding against the side coming up from under the table could damage the work by making it "chatter," or tear the work from your hands and throw it.
- Sand only one workpiece at a time.
- Clear everything except the workpiece and related support devices off the table before turning the sander on.

Plan the way you will hold the workpiece from start to finish.

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into a sanding surface. Keep fingers away from where the belt goes into the dust trap.

DON'T OVERREACH. Keep good footing and balance.

Keep your face and body to one side, out of line with a possible throwback.

WHENEVER SANDER IS RUNNING

WARNING: Don't let familiarity (gained from frequent use of your belt and disc sander) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your work, watch the sander while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the sander off. Unplug the sander. Do not restart until finding and correcting the problem.

Make sure the sanding disc turns counterclockwise before using the sander.

KEEP CHILDREN AWAY. Keep all visitors a safe distance from the sander. Make sure bystanders are clear of the sander and workpiece.

DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Press the workpiece against the sanding material only hard enough to let it sand without bogging down or binding.

Before freeing any jammed material:

- Turn switch "OFF."
- Unplug the sander.
- Wait for all moving parts to stop.

BEFORE LEAVING THE SANDER:

NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

MAKE WORKSHOP CHILD-PROOF. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

motor specifications and electrical requirements

This machine is designed to use, and is equipped with, a 3450 RPM motor. It is wired for operation on 120 volts, 60 Hz., alternating current.

WARNING: To avoid electrocution or fire, tool must not be converted to operate on 240 volts.

For replacement motor, refer to parts list in this manual.

CONNECTING TO POWER SUPPLY OUTLET

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

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

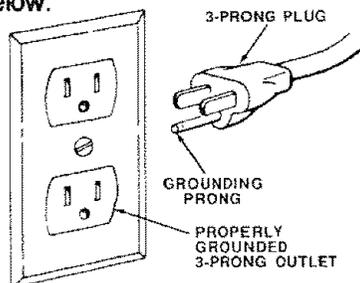
Plug power cord into a 120V properly grounded type outlet protected by a 15 amp fuse or circuit breaker.

WARNING: To avoid electrocution: Do not let fingers 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 cause an electrical shock, particularly when used in damp locations close to plumbing. If an electrical shock occurs there is the potential of a secondary hazard, such as your hands contacting the sanding surface.

WARNING: To avoid electrocution or fire, if power cord is worn or cut, or damaged in any way, have it replaced immediately.

Your unit is for use on 120 volts, and has a plug that looks like the one below.



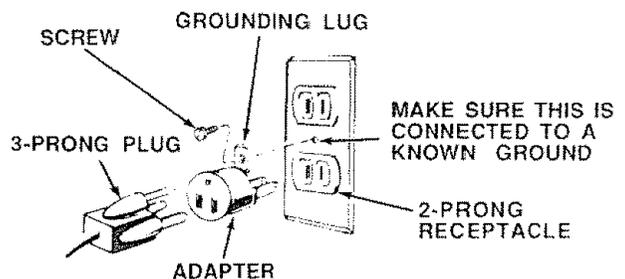
This power tool is equipped with a 3-conductor cord and grounding type plug listed by Underwriters' Laboratories. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal.

This plug requires a mating 3-conductor grounding type outlet as shown. This outlet must be installed and

grounded in accordance with all local codes and ordinances.

WARNING: To avoid electrocution, 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 below and always connect the grounding lug to a 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 illustrated, is available for connecting plugs to 2-prong receptacles.

WARNING: The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box. Not all outlet boxes are properly grounded.

If the grounding instructions are not completely understood or if you are not sure that your tool or outlet box is properly grounded, check with a qualified electrician.

NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong receptacle.

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-prong receptacles which accept the tool's plug.

Length of the Conductor	Wire Sizes Required
	(American Wire Gauge Number) 120V Lines
0 - 25 Feet	No. 16
26 - 50 Feet	No. 16
51 - 100 Feet	No. 14

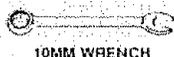
contents

POWER TOOL WARRANTY	2
SAFETY INSTRUCTIONS FOR BELT DISC SANDER	2
MOTOR SPECIFICATIONS AND ELECTRICAL REQUIREMENTS	5
UNPACKING AND CHECKING CONTENTS	6
ASSEMBLY	7
Mounting Belt and Disc Sander to Workbench	7
Clamping Belt and Disc Sander to Workbench	7
Installing Sanding Disc and Guard	8
Installing Backstop	8
Installing Table Assembly	8
Auxilliary Mounting for Vertical Sanding	10
Squaring Table Assembly	10
Installing the Sanding Belt - Tensioning and Tracking	10

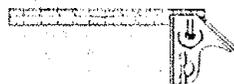
GETTING TO KNOW YOUR BELT AND DISC SANDER	12
On-Off Switch	13
BASIC OPERATION	14
Bevel Sanding	16
Positioning Belt Table	16
Surface Sanding on Sanding Belt	17
End Sanding on the Sanding Belt	17
Sanding Curved Edges	17
Sanding Small End Surfaces	18
MAINTENANCE	19
Lubrication	19
Removing Pulley Cover and Installing Timing Belt	19
Installing Pulley Cover	20
TROUBLESHOOTING	21
RECOMMENDED ACCESSORIES	21
REPAIR PARTS	22

unpacking and checking contents

TOOLS NEEDED



10MM WRENCH



COMBINATION SQUARE



PHILLIPS TYPE
SCREWDRIVER

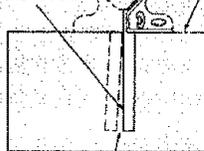


6MM HEX "L" WRENCH

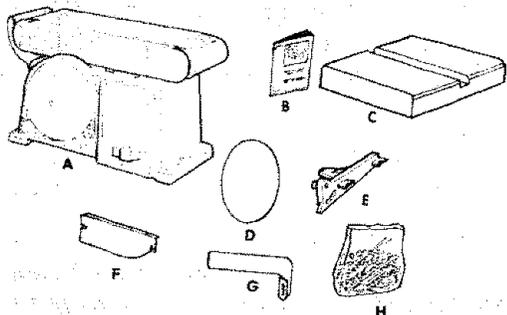


STANDARD
SCREWDRIVER

COMBINATION SQUARE MUST BE TRUE
STRAIGHT EDGE OF BOARD
3/4" THICK. THIS EDGE MUST
BE PERFECTLY STRAIGHT.
DRAW LIGHT LINE ON
BOARD ALONG THIS EDGE



SHOULD BE NO GAP OR OVERLAP
HERE WHEN SQUARE IS FLIPPED
OVER IN DOTTED POSITION.



Separate all parts from packing materials and check each item with illustration and "Table of Loose Parts."

NOTE: Make certain all items are accounted for, before discarding any packing material.

WARNING: To avoid injury, if any parts are missing, do not attempt to assemble the Belt and Disc Sander, plug in the power cord, or turn the switch on until the missing parts are obtained and installed correctly.

WARNING: For your own safety, never connect plug to power source outlet, or insert switch key until all assembly steps are complete and until you have read and understood the entire owners manual.

ITEM	TABLE OF LOOSE PARTS	QTY.
A	Belt and Disc Sander Assembly	1
B	Owner's Manual	1
C	Table	1
D	Sanding Disc	1
E	Table Support	1
F	Guard Disc	1
G	Work Support	1
H	Bag Assembly	1
	Containing the following parts:	
	Knob	1
	Washer, 6.5 x 17.8 x 1.6	5
	Screw, Pan Hd. TY "AB" M4.2 x 1.9-12	2
	Switch Key	1
	Lockwasher, Ext. M6	4
	Scale Label	1
	Screw, Hex Hd. M6 x 1.0-14	4

Model 113.22643 Belt and Disc Sander is shipped complete in one carton.

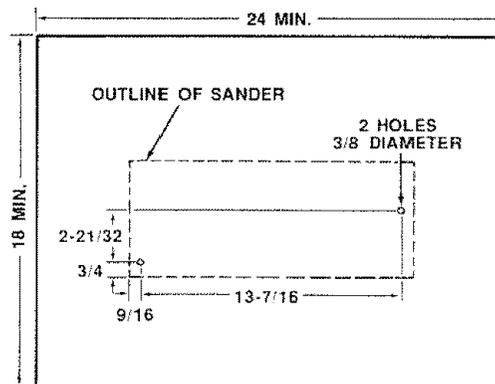
assembly

MOUNTING BELT AND DISC SANDER TO WORKBENCH

If belt and disc sander is to be used in a permanent location, it should be fastened securely to a firm supporting surface such as a workbench.

If mounting to a workbench, holes should be drilled through supporting surface of the workbench using dimensions illustrated.

1. The unit should be bolted securely using 5/16" screws and hex nuts (not included). Screw length should be 1-1/2" plus the thickness of the bench top.
2. Locate and mark the holes where belt and disc sander is to be mounted.
3. Drill (2) 3/8" diameter holes through workbench.
4. Place belt and disc sander on workbench aligning holes on base with holes drilled in workbench.
5. Insert two 5/16" screws and tighten hex nuts.



ALL MEASUREMENTS ARE INCHES UNLESS OTHERWISE NOTED.

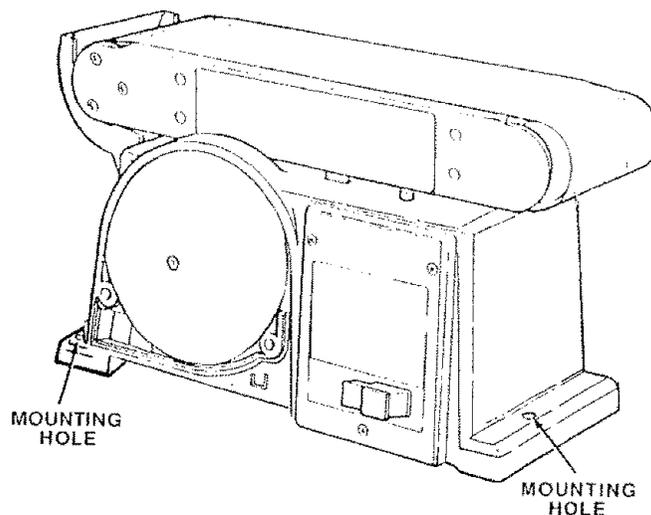
An alternate method of mounting is to fasten belt and disc sander to a mounting board. The board should be of sufficient size to avoid tipping of sander while in use. Any good grade of plywood or chipboard with a 3/4" minimum thickness is recommended. (Thinner chipboard can break.)

CAUTION: To avoid injury from tool movement, use 5/16" or larger screws and nuts.

1. Follow instructions for mounting to workbench, substituting a board 18" x 24" minimum size and using 5/16 inch flat head screws, lockwashers, and hex nuts (not included). Screw length should be 1-1/2" plus the thickness of the mounting board.

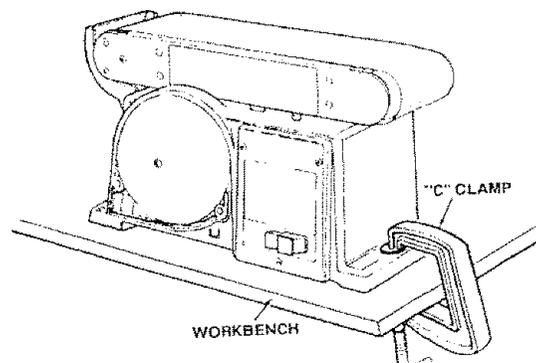
NOTE: For proper stability, holes must be counter sunk so screw heads are flush with the bottom surface of supporting board.

CAUTION: To avoid injury from tool movement, supporting surface where belt and disc sander is mounted should be examined carefully after mounting to insure that no movement during use can result. If any tipping or walking is noted, secure workbench or supporting surface before operating belt and disc sander.



CLAMPING BELT AND DISC SANDER TO WORKBENCH

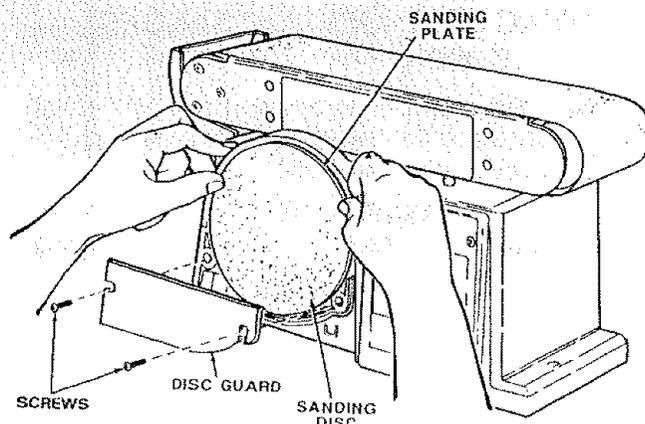
The belt and disc sander can be clamped directly to a workbench using two (2) or more "C" clamps on base of unit (one clamp on each end of unit).



assembly

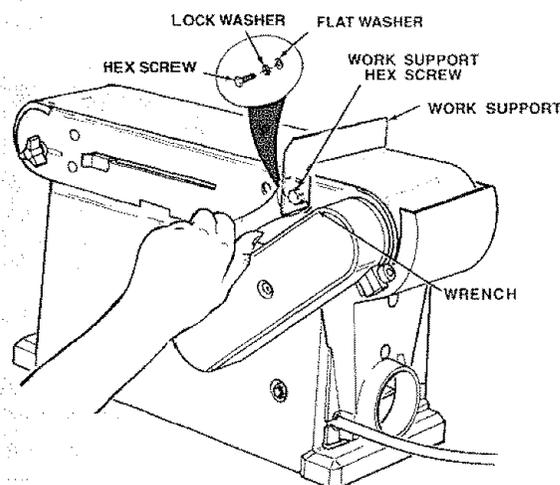
INSTALLING SANDING DISC AND GUARD

1. Locate sanding disc and peel backing from disc. Align perimeter of disc with plate and press disc firmly into position all the way around.
2. Locate disc guard and two pan head screws, M4.2 x 1.4-12, from loose parts bag.
3. Position disc guard against lower 1/3 of disc aligning holes as shown.
4. Using phillips type screwdriver, fasten the pan head screws securely applying slight pressure to thread the holes.



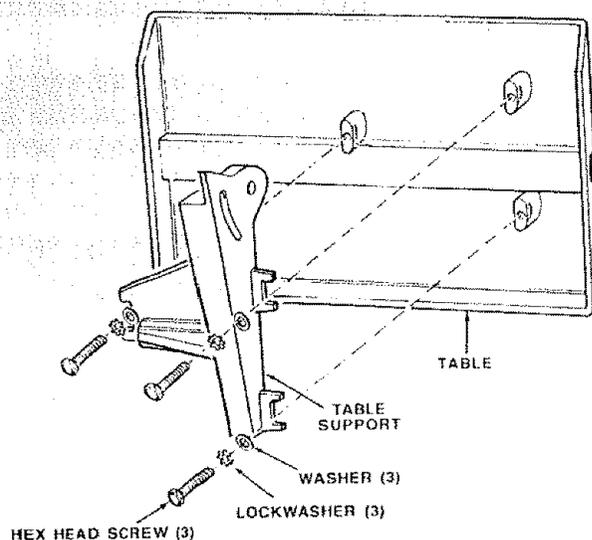
INSTALLING WORK SUPPORT

1. Locate work support and hex screw M6 x 1.0-14, washer and lockwasher.
2. Hold work support into position and fasten as shown. Do not overtighten.

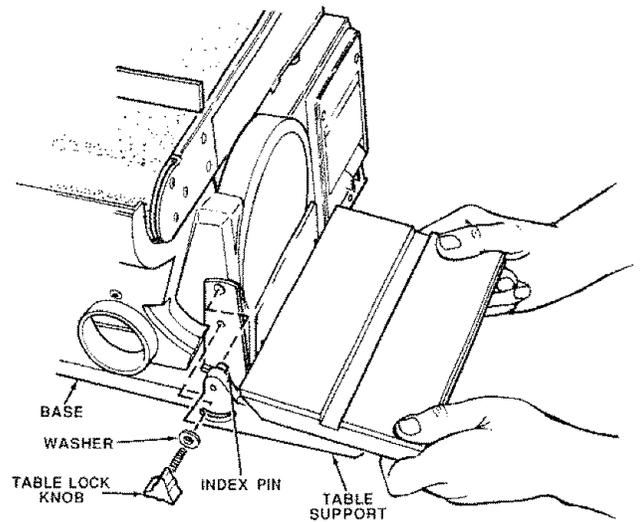


INSTALLING TABLE ASSEMBLY

1. Locate table support and (3) hex head screws, M6 x 1.0-14, washer and lockwashers among loose parts.
2. Position table support against table, aligning holes as shown.
3. Fasten table support to table as shown.

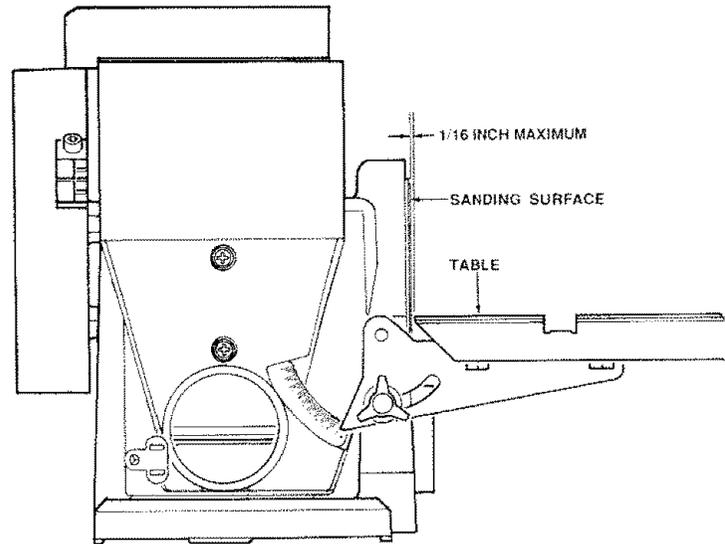


4. Locate washer 6.5 x 17.8 x 1.6 and knob among loose parts.
5. Position table support in corresponding holes on side of base as shown. Make sure the 9.5mm diameter index pin aligns with upper hole.
6. Place washer on threaded shaft of knob and insert through slot into threaded holes of base

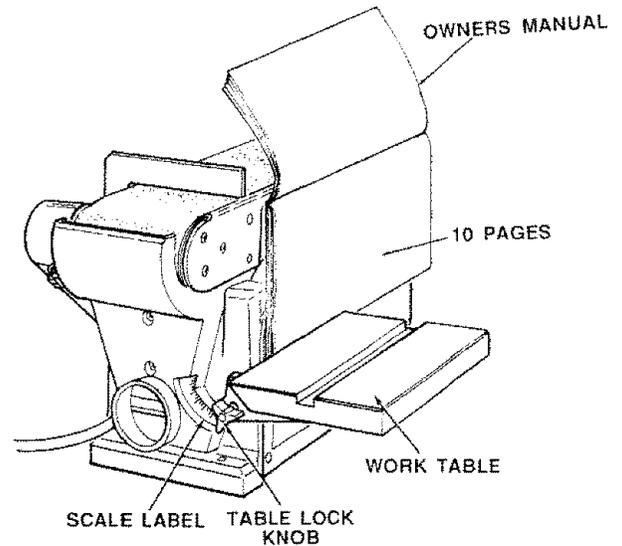


WARNING: To avoid trapping the work or fingers between the table and sanding surface, the table edge should be a maximum of 1/16 inch from sanding surface.

7. Loosen the (3) hex head screws and adjust table.



8. Use your Owner's Manual as a spacer. Place ten pages of the Owner's Manual between the Disc and the front edge of the table. Hold the table against the manual and tighten the three (3) Hex Washer Head screws.



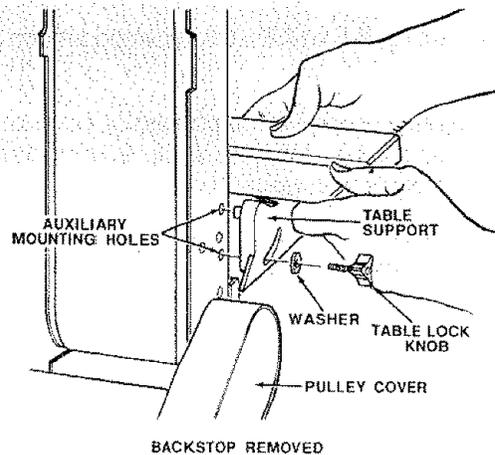
assembly

AUXILIARY MOUNTING FOR VERTICAL SANDING

1. Remove backstop lock bolt and remove work support.
2. Remove table assembly by removing table lock knob and washer.

NOTE: Belt bed may be raised to vertical position by loosening hex socket screw and raising bed. See "Positioning Belt Bed" on page 16.

3. Attach table assembly to auxiliary holes in belt bed. Make sure index pin is in the upper hole when sanding table is in the vertical position.



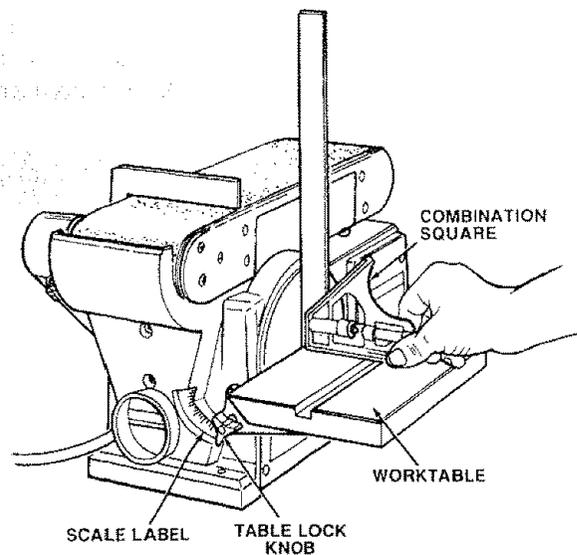
SQUARING TABLE ASSEMBLY

WARNING: To avoid injury from accidental start, make sure tool is unplugged before aligning.

1. Using a combination square, check the angle of the worktable with the disc.

NOTE: The combination square must be "true" - See "Unpacking - Tools Needed" section on page 6 for checking method.

2. If the table is not 90° with the disc, loosen table lock knob screw and tilt table.
3. Adjust worktable square to the disc and retighten table lock knob.
4. Attach scale label to 0° mark on dust guard.

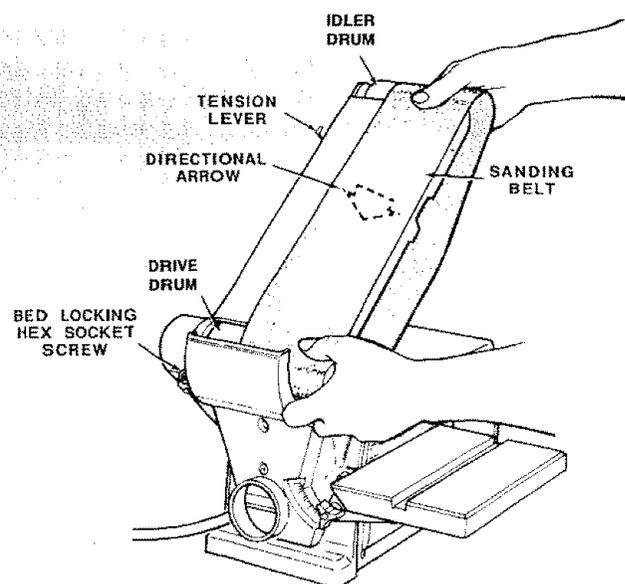


INSTALLING THE SANDING BELT - TENSIONING AND TRACKING

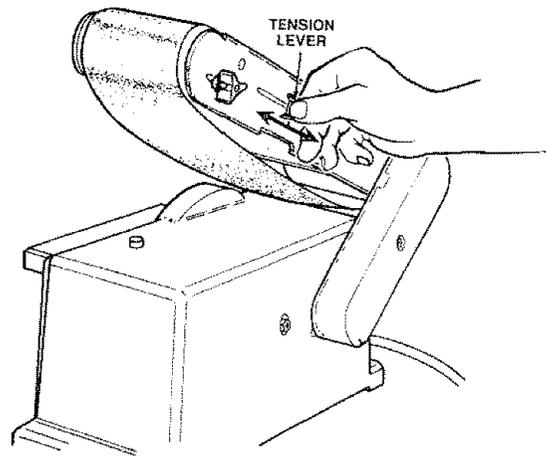
WARNING: To avoid injury from accidental start, turn switch "OFF", remove key and remove plug from power source outlet before removing or installing sanding belt. To avoid injury from belt failure, use only Sears recommended sanding belts. See Sears catalog.

On the smooth side of the sanding belt, you will find a "directional arrow." The sanding belt must run in the direction of this arrow so that the splice does not come apart.

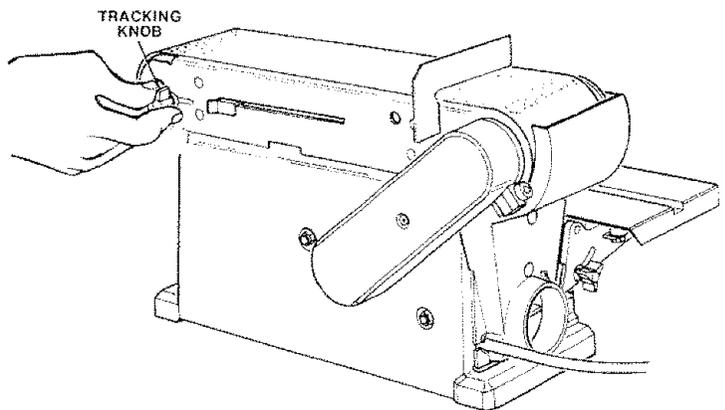
1. Slide tension lever to the right to release the belt tension.
2. Place the sanding belt over the drums with the directional arrow pointing as shown. Make sure the belt is centered on both drums.



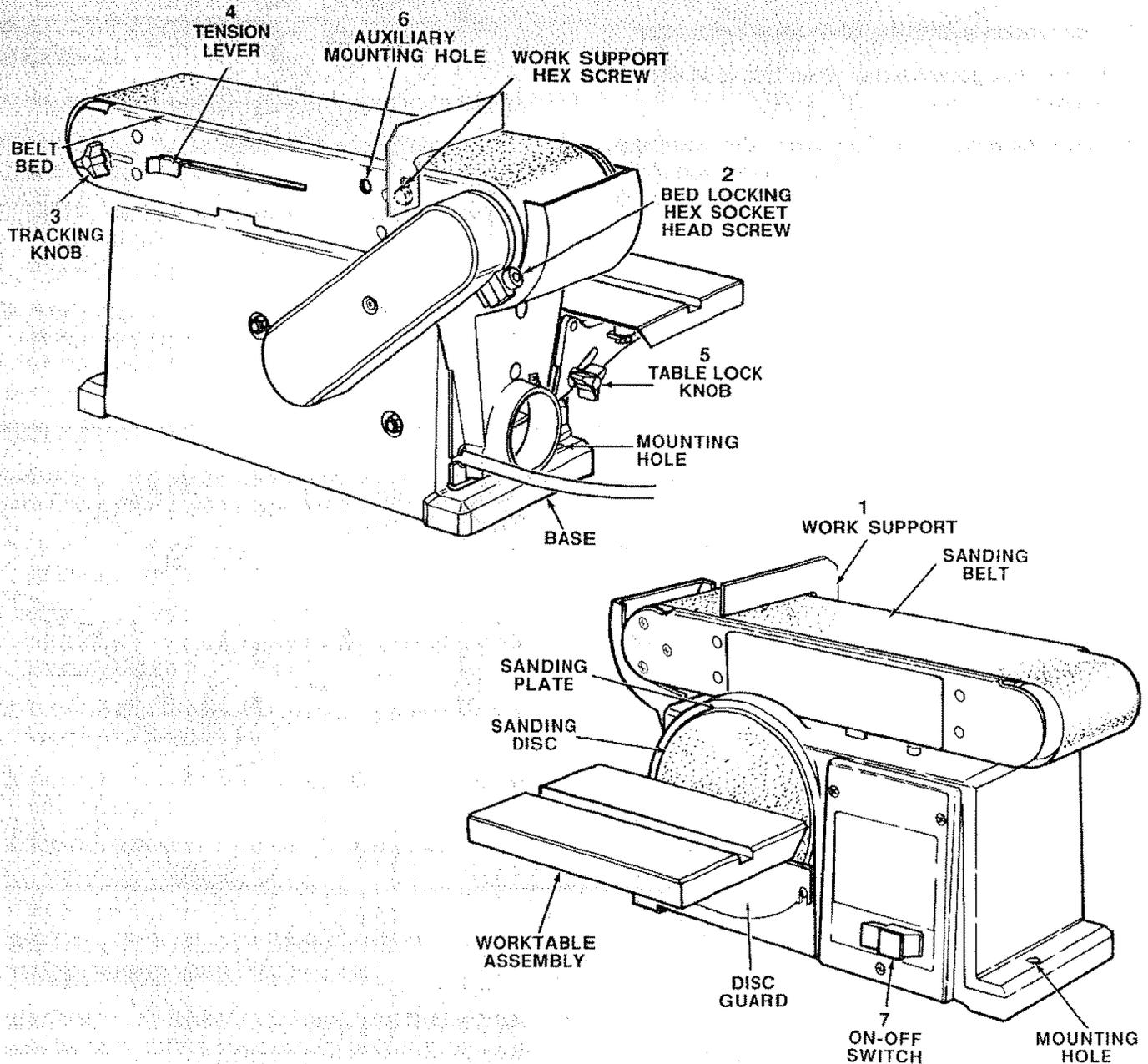
3. Slide tension lever to the left to apply belt tension.
4. Tighten hex socket screw when bed is in desired position.
5. Plug in the power cord. Turn switch "ON" and immediately "OFF," noting if the belt tends to slide off the idler drum or drive drum. If it did not tend to slide off, it is TRACKING properly.



-
6. If the sanding belt moves toward the disc, turn the tracking knob clockwise 1/4 turn.
 7. If the sanding belt moves away from the disc, turn the tracking knob counterclockwise 1/4 turn.
 8. Turn switch "ON" and immediately "OFF" again, noting belt movement. Readjust tracking knob if necessary.



getting to know your belt and disc sander



WARNING: To avoid injury from accidental start, turn switch "OFF" and remove plug from power source outlet before making any adjustments.

- 1. **Work Support.** Supports the workpiece on the sanding belt.
- 2. **Hex Socket Head Screw.** Loosening screw allows belt bed to be raised to the vertical position.
- 3. **Tracking Knob.** Turning knob counterclockwise causes sanding belt to move towards the disc; turning knob clockwise causes sanding belt to move away from the disc.

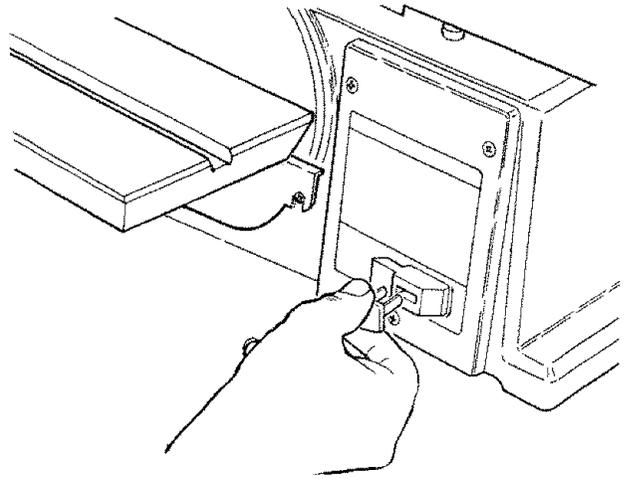
- 4. **Tension Lever.** Sliding lever to the right releases the sanding belt tension; sliding lever to the left applies belt tension.
- 5. **Table Lock Knob.** Loosening knob allows the worktable to be tilted for bevel sanding. (Scale pointer on table trunnion; scale attached to base.)
- 6. **Auxiliary Mounting Hole.** Allows table assembly to be mounted for end sanding when the bed is placed in vertical position.
- 7. **On-Off Switch.**

ON-OFF SWITCH

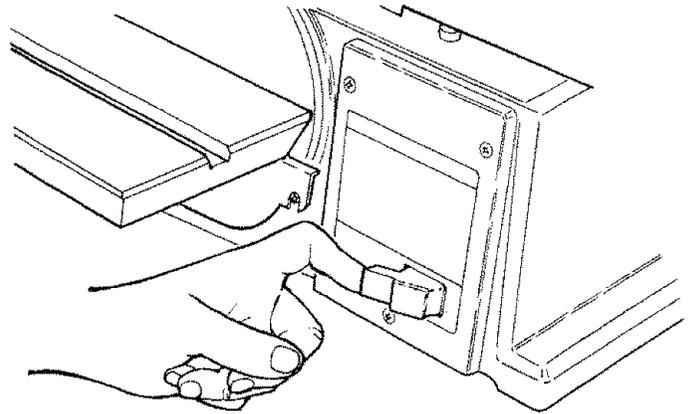
The On-Off switch has a locking feature. THIS FEATURE IS INTENDED TO HELP PREVENT UNAUTHORIZED AND POSSIBLY HAZARDOUS USE BY CHILDREN AND OTHERS.

1. To turn machine "ON" insert key into switch.

NOTE: Key is made of yellow plastic, located in loose parts bag.

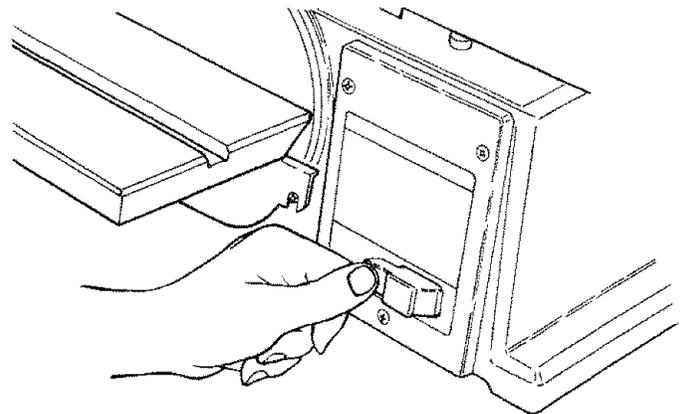


2. Insert finger under switch lever and PULL end of switch out.



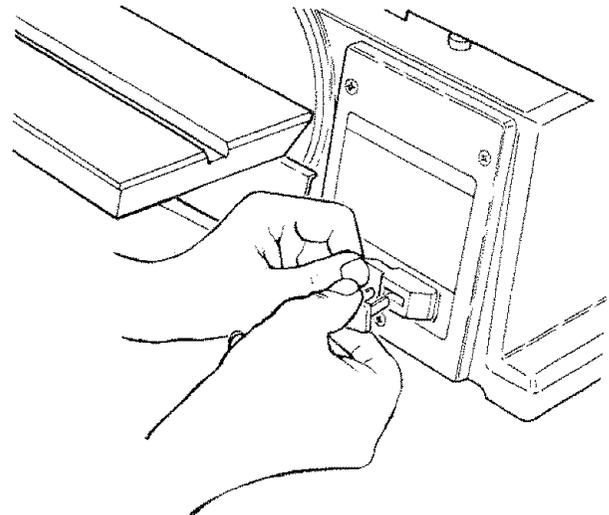
3. To turn machine "OFF" . . . PUSH lever in.

NEVER LEAVE THE MACHINE UNATTENDED UNTIL IT HAS COME TO A COMPLETE STOP.



4. 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 . . . remove the key and store it remote from belt and disc sander.



basic operation

BEFORE USING THE SANDER

WARNING: To avoid mistakes that could cause serious, permanent injury, do not plug the sander in until the following steps are completed.

- Assembly and alignment. (See pages 7 - 11)
- Learn the use and function of the ON-OFF switch, backstop, belt tracking knob, belt tension lever, work table and work table tilt lock knob. (See pages 12 - 13)
- Review and understand all safety instructions and operating procedures in this manual.
- Review of the maintenance methods for this sander. (See pages 19 - 20)

BEFORE EACH USE:

Inspect your sander.

DISCONNECT THE SANDER. To avoid injury from accidental starting, unplug the sander, turn the switch off and remove the switch key before changing the setup, sanding disc or belt or adjusting anything.

CHECK DAMAGED PARTS. Check for:

- alignment of moving parts,
- binding of moving parts,
- broken parts,
- worn parts that cause a gap larger than 1/16" between work support and sanding surface,
- sanding belt narrower than 4 inches. Narrower belts uncover parts that could trap your fingers.
- worn or damaged electric cords,
- stable mounting, and
- any other conditions that may affect the way the sander works.

If any part is missing, bent, or broken in any way, or any electrical parts don't work properly, turn the sander off and unplug the sander. **REPLACE** damaged, missing, or failed parts before using the sander again.

MAINTAIN TOOLS WITH CARE.

Keep the sander clean for best and safest performance. Follow instructions for lubricating.

REMOVE ADJUSTING KEYS AND WRENCHES from tool before turning it on.

To avoid injury from jams, slips or thrown pieces.

- **USE ONLY RECOMMENDED ACCESSORIES.** (See page 21) Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to persons.
- Adjust any work support to clear the sanding surface by no more than 1/16 of an inch. When checking clearance between the belt and work support, press the belt flat against the metal beneath it.
- Make sure all clamps and locks are tight and no parts have excessive play.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

To avoid burns or other fire damage, never use the sander near flammable liquids, vapors or gases.

PLAN AHEAD TO PROTECT YOUR EYES, HANDS, FACE, EARS

KNOW YOUR SANDER. Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

To avoid injury from accidental contact with moving parts:

- **KEEP GUARDS IN PLACE** and in working order.
- Don't do layout, assembly, or setup work on the sander while any parts are moving.
- **AVOID ACCIDENTAL STARTING.** Make sure switch is "OFF" before plugging sander into a power outlet.

Plan your work.

USE THE RIGHT TOOL. Don't force tool or attachment to do a job it was not designed to do.

CAUTION: This machine is not designed for heavy deburring operations. When finishing metals, sparks or hot fragments could cause a fire. To avoid this:

- **Disconnect any dust collecting hose** from the sander.
- **Remove all traces of wood dust** from inside the sander.
- **Remove all traces of metal dust** from inside the sander before sanding wood again.

Dress for safety.

Any power sander can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using sander for hours at a time.
- Sanding operations are usually dusty. Wear a dust mask along with the safety goggles.

Inspect your workpiece

Make sure there are no nails or foreign objects in the part of the workpiece to be sanded.

Plan your work to avoid THROWBACKS - when the workpiece catches on the sanding belt or disc and is torn from your hands.

- Make sure there's no debris between the workpiece and its supports.
- When sanding irregularly shaped workpieces, plan your work support so it will not slip and be pulled from your hands.
- Use extra caution with large, very small or awkward workpieces.
- Never use this tool to finish pieces too small to hold by hand.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- NEVER use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic sander table, or to help feed, support, or pull the workpiece.
- When finishing on the disc, always press the workpiece against the "Down" side of the disc. Sanding against the side coming up from under the table could damage the work by making it "chatter," or tear the work from your hands and throw it.

- Sand only one workpiece at a time.
- Clear everything except the workpiece and related support devices off the table before turning the sander on.

Plan the way you will hold the workpiece from start to finish.

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into a sanding surface. Keep fingers away from where the belt goes into the dust trap.

DON'T OVERREACH. Keep good footing and balance.

Keep your face and body to one side, out of line with a possible throwback.

WHENEVER SANDER IS RUNNING

WARNING: Don't let familiarity (gained from frequent use of your belt and disc sander) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your work, watch the sander while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the sander off. Unplug the sander. Do not restart until finding and correcting the problem.

Make sure the sanding disc turns counterclockwise before using the sander.

KEEP CHILDREN AWAY. Keep all visitors a safe distance from the sander. Make sure bystanders are clear of the sander and workpiece.

DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Press the workpiece against the sanding material only hard enough to let it sand without bogging down or binding.

Before freeing any jammed material:

- Turn switch "OFF."
- Unplug the sander.
- Wait for all moving parts to stop.

BEFORE LEAVING THE SANDER:

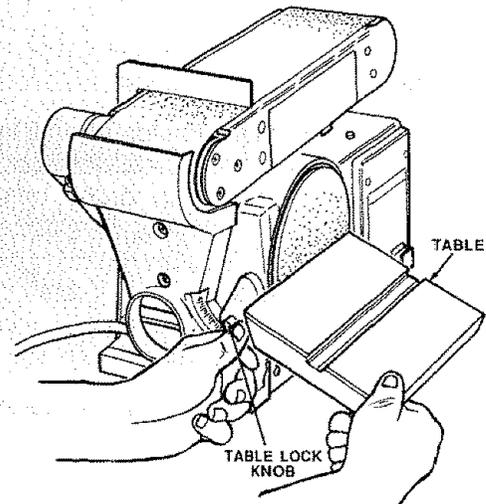
NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

MAKE WORKSHOP CHILD-PROOF. Lock the shop. Disconnect master switches. Remove the yellow switch key. Store it away from children and others not qualified to use the tool.

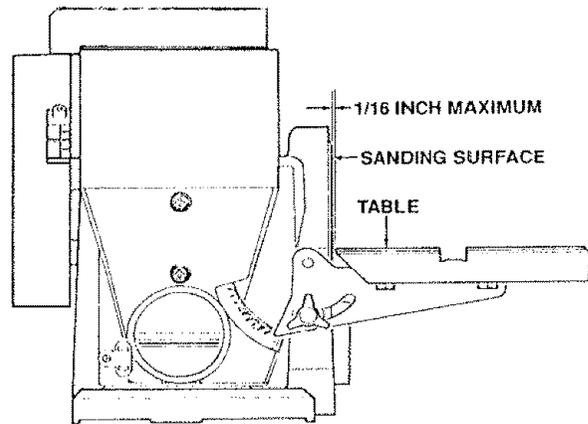
basic operation

BEVEL SANDING

The worktable can be tilted from 0° to 45° for bevel sanding. Loosen the table lock knob and tilt the worktable to desired angle as shown. Retighten table lock knob.



WARNING: To avoid trapping the work or fingers between the table and sanding surface, the table should be repositioned on the table support to retain a maximum of 1/16 inch distance between sanding surface and table.

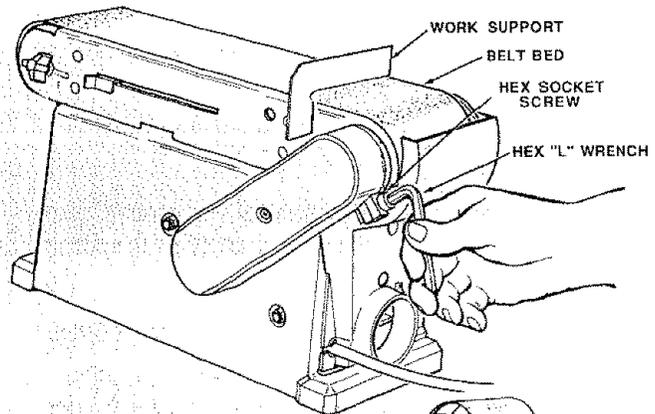


POSITIONING BELT BED

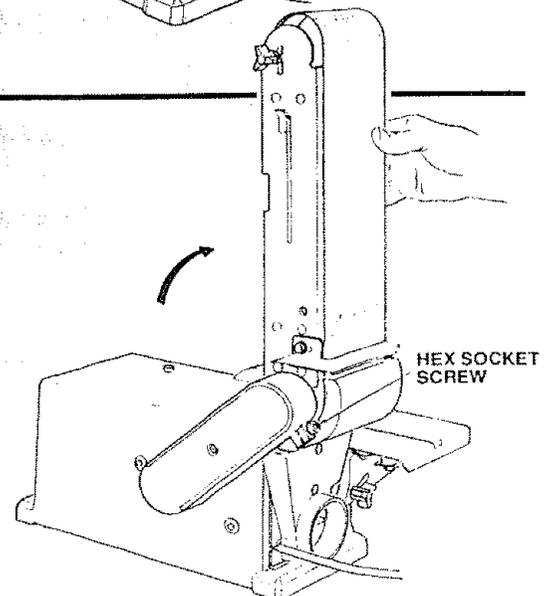
A bed locking hex socket head screw locks the belt bed in a vertical or horizontal position.

To adjust vertical position:

1. Remove the work support.
2. Loosen the hex socket head locking screw using a 6mm hex wrench.



3. Position belt bed vertically as shown and tighten the hex socket head screw.



SURFACE SANDING ON THE SANDING BELT

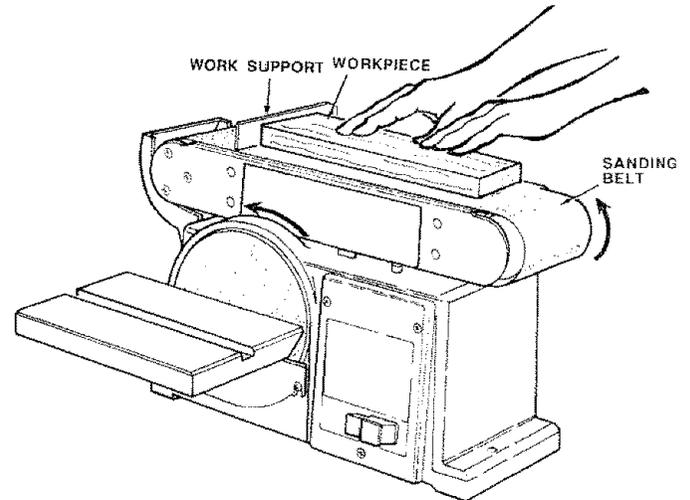
WARNING: To avoid injury from slips, jams or thrown pieces, adjust the backstop to clear the sanding surface by no more than 1/16 of an inch. When checking clearance between the belt and work support, press the belt flat against the metal beneath it.

Hold the workpiece firmly with both hands, keeping fingers away from the sanding belt.

Keep the end butted against the backstop and move the work evenly across the sanding belt. Use extra caution when sanding very thin pieces.

For sanding long pieces, remove the work support.

Apply only enough pressure to allow the sanding belt to remove material.

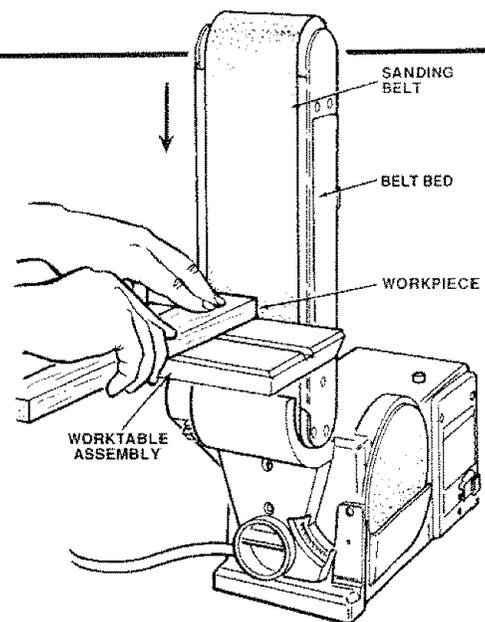


END SANDING ON THE SANDING BELT

It is more convenient to sand the ends of long workpieces with sanding belt in a vertical position.

See "Basic Operation - Positioning Belt Bed" for adjusting the belt bed, and see "Assembly - Installing Table Assembly" for adjusting worktable.

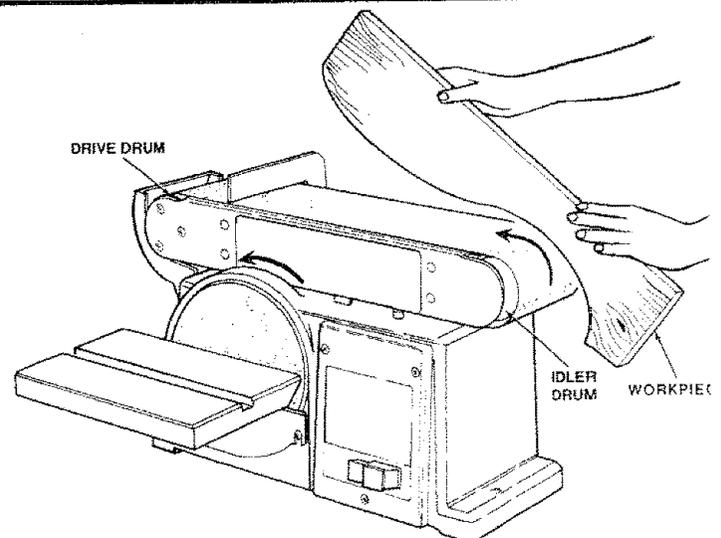
Move the work evenly across the sanding belt. For accuracy, use a miter gauge (accessory).



SANDING CURVED EDGES

Always sand inside curves on the idler drum as shown.

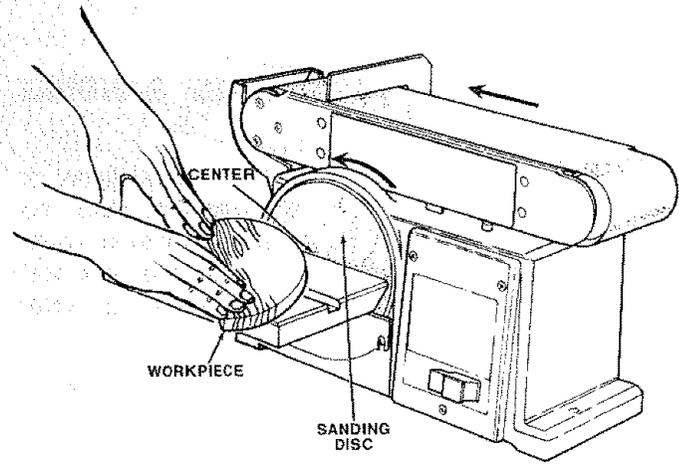
WARNING: Never attempt to sand the ends of a workpiece on the idler drum. Applying the end of the workpiece to the idler drum could cause the workpiece to fly up and result in an injury.



basic operation

Always sand outside curves on the left side of center on the sanding disc as shown.

WARNING: Applying the workpiece to the right side of the disc could cause workpiece to fly up (kickback) and result in an injury.

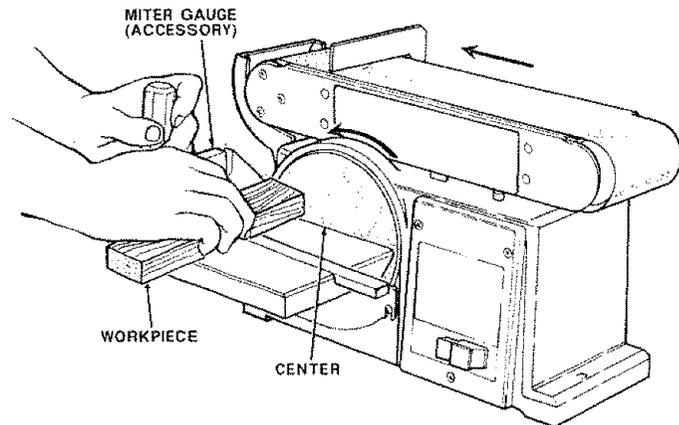


SANDING SMALL END SURFACES ON THE SANDING DISC

NOTE: Use of a Miter Gauge (optional accessory) is recommended for this operation.

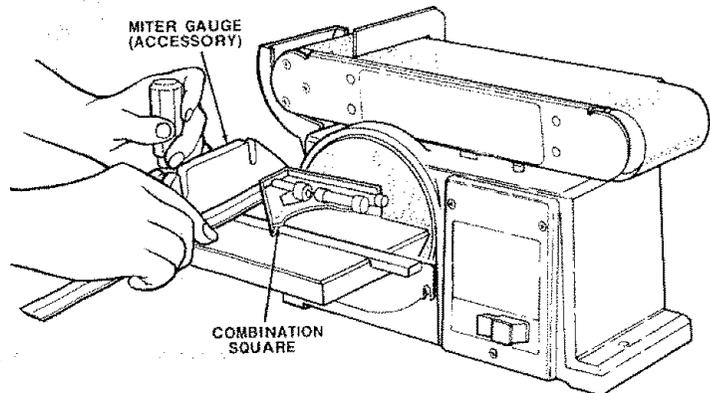
Always move the work across left side of center on the sanding disc face as shown.

WARNING: Applying the workpiece to the right side of the disc first could cause workpiece to fly up (kickback) and result in an injury.



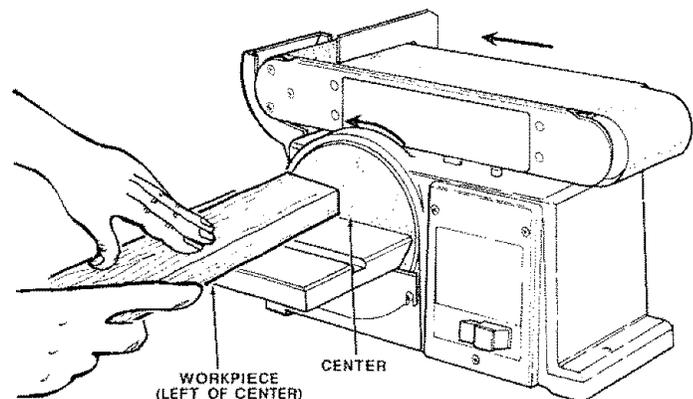
WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before adjusting your sander.

NOTE: Use a combination square to square the miter gauge to the face of the disc (combination square must be "true" - See "Unpacking - Tools Needed" section on page 6 for checking this method). If it is not square, loosen the miter gauge knob and move the miter gauge slightly until it is square. Without moving the miter gauge, tighten the knob securely.



Always position the workpiece to the left of center on sanding disc with disc rotating counterclockwise as shown.

The table may be tilted for beveled work.



maintenance

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before adjusting, maintaining, or lubricating your belt and disc sander.

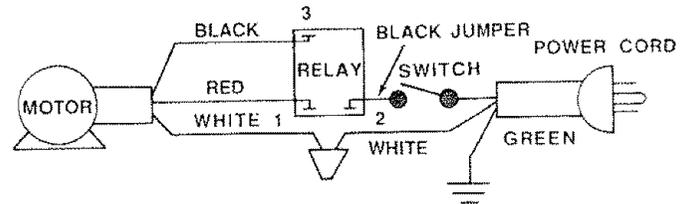
WARNING: To avoid electrocution or fire, any repairs to electrical systems should be done only by qualified service technicians. Unit must be reassembled exactly to factory specifications.

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

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

A coat of automobile-type wax applied to the worktable will make it easier to feed the work while finishing.

Do not apply wax to the abrasive belt table because the belt could pick up the wax and deposit it on the pulleys, causing the belt to slip.



WIRING DIAGRAM

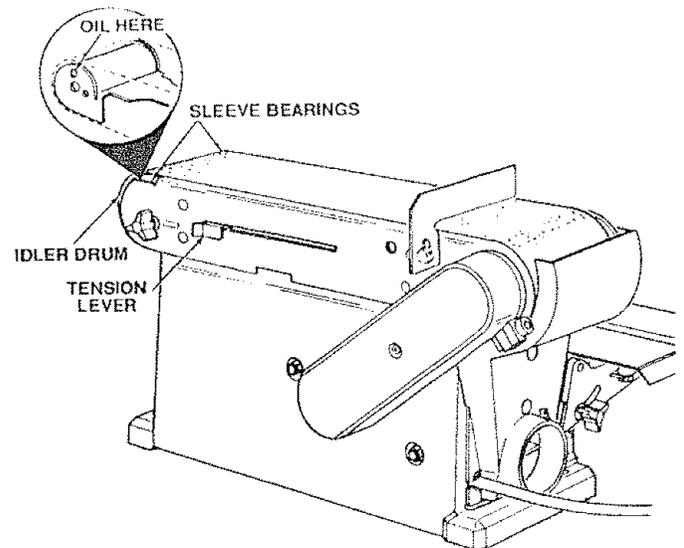
LUBRICATION

The BALL BEARINGS in this machine are packed with grease at the factory. They require no further lubrication. Sleeve bearings should be lubricated with 30 weight oil or equivalent after each 10 hours of operation - see instructions below.

OILING SLEEVE BEARINGS

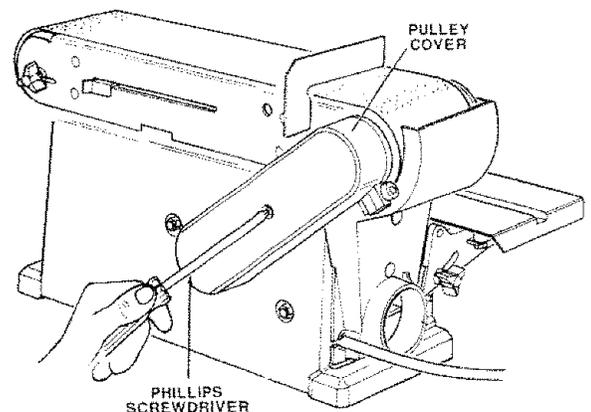
WARNING: TO AVOID INJURY, TURN SWITCH "OFF," REMOVE KEY AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE OILING UNIT.

1. Release belt tension by sliding the tension lever to the right.
2. Move the sanding belt slightly to either side of the idler drum to expose the oval shaped oiling hole.
3. Apply two to three drops of oil in the hole on each side as shown. Do not apply more than three drops of oil. Too much oil can cause belt to slip, and oil may get on workpiece.
4. Adjust belt tracking as described in the Assembly instructions under the heading "Installing the Sanding Belt - Tensioning and Tracking."



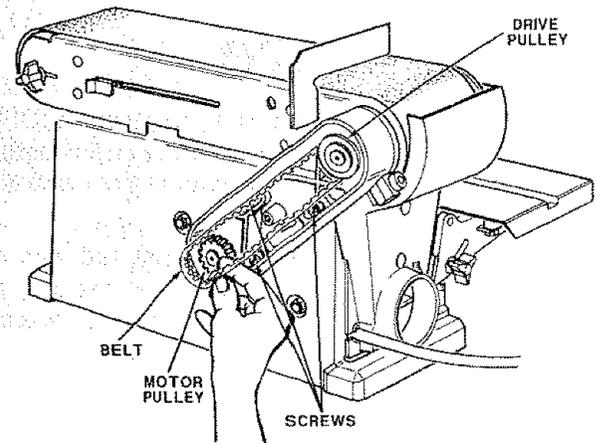
REMOVING PULLEY COVER AND INSTALLING TIMING DRIVE BELT

1. Using a phillips screwdriver, remove the flat head screw located in the middle of the cover.
2. Remove the cover.

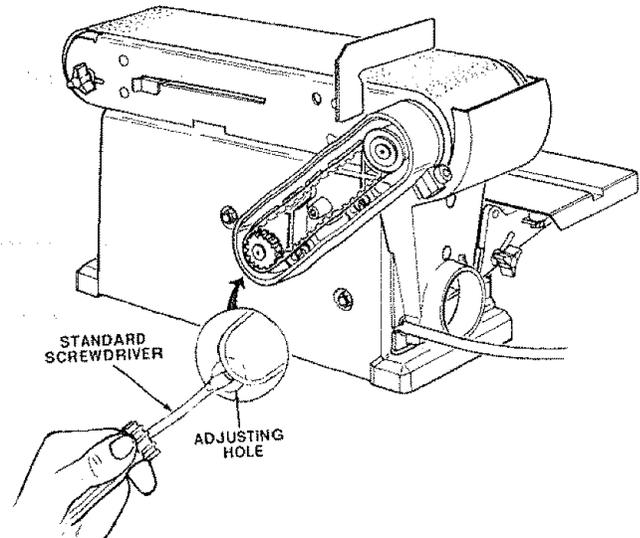


maintenance

3. Loosen (3) screws to allow pulleys to shift enough to place belt around them. Place belt around motor pulley and drive pulley as shown if belt is ever broken.

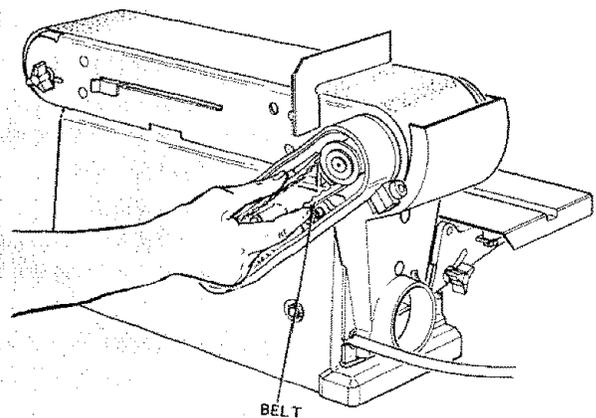


4. Slightly tighten (3) screws. Adjust tension of belt by putting blade screwdriver in adjusting hole. Push up on screwdriver to tighten tension between pulleys.
5. Tighten screws being careful not to disturb belt.



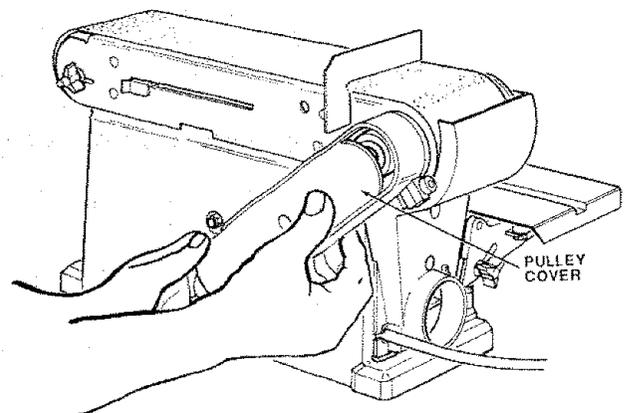
6. Test belt tension by placing fingers on either side of belt and squeeze. There should be about a 1/4" give to the belt.

NOTE: Excessive tightness on pulley belt may cause increased noise and over load motor. Excessive looseness on pulley belt may cause belt to fail prematurely.



INSTALLING PULLEY COVER

1. Locate the pulley cover and position it inside the relief edges of pulley housing.
2. Using a phillips screwdriver, reinstall and tighten the flat head screw.



troubleshooting

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before troubleshooting your sander.

TROUBLE	PROBABLE CAUSE	REMEDY
Motor will not run.	<ol style="list-style-type: none"> 1. Defective On-Off switch Defective switch cord. Defective switch box. 2. Burned out motor. 	<ol style="list-style-type: none"> 1. Replace defective parts before using belt disc sander again. 2. 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 your nearest Sears Store.
Machine slows down when sanding.	<ol style="list-style-type: none"> 1. Timing belt too tight. 2. Applying too much pressure to workpiece. 	<ol style="list-style-type: none"> 1. Decrease belt tension, see Maintenance section, "Removing Pulley Cover and Installing Timing Belt." 2. Ease up on pressure.
Sanding Belt runs off drums.	<ol style="list-style-type: none"> 1. Not tracking properly. 	<ol style="list-style-type: none"> 1. Adjust tracking, see Assembly section, "Installing the Sanding Belt - Tensioning and Tracking"
Wood burns while sanding.	<ol style="list-style-type: none"> 1. Sanding disc or belt is glazed with sap. 	<ol style="list-style-type: none"> 1. Replace disc or belt.
Excessive noise.	<ol style="list-style-type: none"> 1. Timing belt too tight. 	<ol style="list-style-type: none"> 1. Decrease belt tension, see Maintenance Section "Removing Pulley Cover and Installing Timing Belt".

sears recommends the following accessories

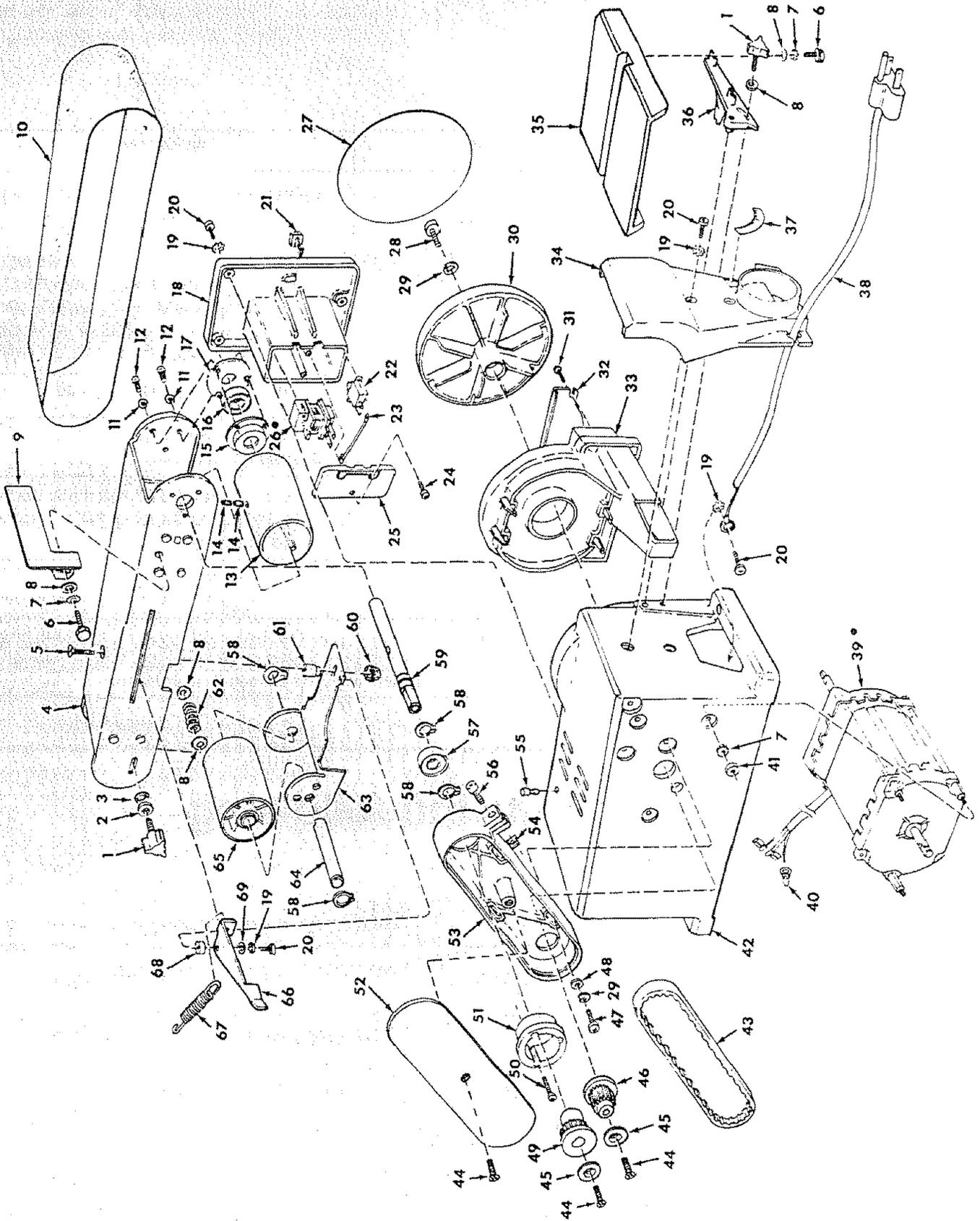
ITEM	CAT NO.
Miter Gauge Sanding Belts and Discs Leg Set	9-24214 See Catalog 9-22244

Sears may recommend other accessories not listed in the manual. See your nearest Sears store or Catalog department for other accessories.

Do not use any accessory unless you have received and read complete instructions for its use.

repair parts

PARTS LIST FOR CRAFTSMAN BELT AND DISC SANDER MODEL 113.226431



repair parts

PARTS LIST FOR CRAFTSMAN BELT AND DISC SANDER MODEL 113.226431

Key No.	Part No.	Description
1	820247	Knob
2	820175	Washer, Rubber
3	821156	Washer, Notched
4	819496	Bed
5	820235	Screw, Flat Cross M5 x 0.8-35
6	820249	Screw, Hex M6 x 1.0-14
7	STD852006	* Lockwasher, Ext. M6
8	820238	Washer, 6.5 x 17.8 x 1.6
9	819481	Support, Work
10	9-28394	† Belt, Sanding 4" x 36"
11	820383-4	Lockwasher, Helical M5
12	820240-1	Screw, Pan Hd M5 x 0.8-8
13	819476	Drum, Drive
14	820382-2	Screw, Socket Set M8 x 1.25-10
15	820243	Cap, Bearing
16	821584	Bearing w/Felt Washer
17	820618	Spacer, Bearing
18	819491	Housing Switch
19	STD852005	* Lockwasher, Ext. M5
20	820240	Screw, Pan Hd. M5 x 0.8-16
21	9-22256	† Key, Switch
22	816113	▲ Switch, Locking
23	819461	Lead
24	820248-1	Screw, Pan Cross Type "AB" M4.2 x 1.4-30
25	819479	Cover, Switch Box
26	814589	* Relay
27	9-28308	† Pad, 6" Sandpaper
28	820244	Screw, Pan Cross M6 x 1.0-12
29	820383-5	Lockwasher, Helical M6
30	821588	Disc
31	820248	Screw, Pan Hd Type "AB" M4.2 x 1.4-12
32	819484	Guard, Disc
33	819497	Shroud, Disc
34	819495	Collector, Dust

Key No.	Part No.	Description
35	819487	Table
36	819490	Support, Table
37	819459	Label, Scale
38	819463	Cord W/Plug
39	821587	▲ * Motor (1/3 HP)
40	STD375007	* Connector, Wire
41	STD840610	* Nut, Hex M6 x 1.0
42	819498	Base
43	814002-3	Belt, Timing Drive
44	820235-2	Screw, Flat Cross M5 x 0.8-10
45	821586	Washer, Countersink
46	821585-1	Pulley, Drive
47	820244-1	Screw, Pan Hd. M6 x 1.0-25
48	STD851006	* Washer, M6 x 12 x 1.6
49	821585	Pulley, Drive
50	820235-1	Screw, Flat Hd. M5 x 0.8-25
51	819473	Support, Bearing
52	819474	Cover, Belt
53	819482	Support, Bed
54	820258-4	Nut, Square M8 x 1.25
55	820779	Bumper, Rubber
56	820239	Screw, Hex Soc. Cap M8 x 1.25-25
57	814101	Bearing, Ball
58	820242	▲ Ring, Retaining M12
59	821589	Shaft, Drive
60	821557	Nut, Hex Flange M5 x 0.8
61	819465	Spacer, Guide
62	63658	Spring, Index
63	821582	Guide, Drum
64	821581	Shaft, Idler
65	819475	Drum, Idler
66	819470	Lever, Tension
67	819468	Spring, Tension
68	819471	Spacer, Lever
69	STD851005	* Washer, M5 x 15 x 1.2
—	SP5632	Owner's Manual (Not Illus.)

- * Standard Hardware Item - May be purchased locally.
- † Stock Item - May be secured through the Hardware Department of most Sears Retail Stores and Catalog Order Houses.
- * Relay must accompany motor when motor is returned for 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 your nearest Sears store.

▲ WARNING: These Items Are Important To The Safety Of This Tool. Do Not Substitute Common Parts.

SEARS

*owners
manual*

SERVICE

**MODEL NO.
113.226431**

**HOW TO ORDER
REPAIR PARTS**

BELT AND DISC SANDER

Now that you have purchased your Belt and Disc Sander, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Belt and Disc Sander will be found on a plate attached to your sander on the back side of the base.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

PART NUMBER

PART DESCRIPTION

MODEL NUMBER
113.226431

NAME OF ITEM
Belt and Disc Sander

All parts listed may be ordered from any Sears Service Center and most Sears stores. If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

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