

1" X 30" Belt / 5" Disc Sander



Operator's Manual

Record the serial number and date of purchase in your manual for future reference.

Serial Number: _____ Date of purchase: _____

For technical support or parts questions, email techsupport@rikontools.com or call toll free at (877) 884-5167

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SPECIFICATIONS - 50-1305

Motor	1/3HP, 120V, 2.3A, 60Hz
Motor Speed	3,580 RPM
Belt Size	1" x 30"
Belt Speed	3,390 SFPM (1033 m/min)
Belt Table Size	5-11/16" x 5-11/16" (145 x 145mm)
Belt Table Tilt	0-45°
Disc Size	5" PSA
Disc Speed	3,580 RPM
Disc Table	6-11/16" x 3-11/16" (170 x 95mm)
Disc Table Tilt	0-45°
Miter Gauge	Included
Miter Gauge Slot	31/64" x 15/64" (12.2 x 6mm)
Machine Height	15" (380mm)
Machine Width	14-3/8" (365mm)
Machine Depth	13-3/8" (340mm)
Base Size	8-5/16" x 5-7/8" (210 x 150mm)
Dust Ports (2)	1-3/8" OD x 1-3/16" ID (35mm OD x 30mm ID)
Net Weight	17 lbs. (7.71 kgs.)
Shipping Weight	19.8 lbs. (8.98 kgs.)
Shipping Carton	17-3/4" x 12-3/8" x 13" (450 x 315 x 330mm)

This owner's manual is not a teaching aid and is intended to show assembly, adjustments, and general use.

NOTE: The specifications, photographs, drawings and information in this manual represent the current model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Rikon Power Tools, Inc. to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

SAFETY SYMBOLS

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. **The following instructions must be followed at all times.** Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

SAFETY SYMBOLS



SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, or CAUTION. This symbol may be used in conjunction with other symbols or pictographs.



Indicates an imminently hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE: Shown without Safety Alert Symbol indicates a situation that may result in property damage.

GENERAL SAFETY

KNOW YOUR POWER TOOL. Read the owner's manual carefully. Learn the tool's applications, work capabilities, and its specific potential hazards.

BEFORE USING YOUR MACHINE

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.

1.  **WARNING** Some dust created by using power tools contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
 - Crystalline silica from bricks, cement, and other masonry products.
 - Arsenic and chromium from chemically treated lumber.
- Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

2. **READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.

3. **GROUND ALL TOOLS.** If the tool is supplied with a 3 prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on the following pages.

4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** **DO NOT** use electrical tools in a damp environment or expose them to rain.

5. **DO NOT** use electrical tools in the presence of flammable liquids or gases.

6. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.

7. **KEEP VISITORS AND CHILDREN AWAY. DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.

8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

9. **WEAR PROPER CLOTHING. DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

11. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

SAFETY INSTRUCTIONS

12. KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.

13. AVOID ACCIDENTAL STARTING. Make sure that the power switch is in the “OFF” position before plugging in the power cord to the electrical receptacle.

14. REMOVE ALL MAINTENANCE TOOLS from the immediate area prior to turning “ON” the machine.

15. USE ONLY RECOMMENDED ACCESSORIES. Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

16. NEVER LEAVE A RUNNING TOOL UNATTENDED. Turn the power switch to the “OFF” position. **DO NOT** leave the tool until it has come to a complete stop.

17. DO NOT STAND ON A TOOL. Serious injury could result if the tool tips over, or you accidentally contact the tool.

18. DO NOT store anything above or near the tool where anyone might try to stand on the tool to reach it.

19. MAINTAIN YOUR BALANCE. DO NOT extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. MAINTAIN TOOLS WITH CARE. Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

21. EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL. Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

22. DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.

23. SECURE ALL WORK. Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.

24. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.

A moment of inattention while operating power tools may result in serious personal injury.

25. ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES, including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

26. USE A PROPER EXTENSION CORD IN GOOD CONDITION. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. The table on the following page shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.
USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL’S PLUG.

27. ADDITIONAL INFORMATION regarding the safe and proper operation of this product is available from:

- Power Tool Institute
1300 Summer Avenue
Cleveland, OH 44115-2851
www.powertoolinstitute.org
- National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
www.nsc.org
- American National Standards Institute
25 West 43rd Street, 4th Floor
New York, NY 10036
www.ansi.org
- ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor regulations
www.osha.gov

28. SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct others.

SAFETY INSTRUCTIONS

ELECTRICAL SAFETY

⚠ WARNING: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and requires a grounding plug (not included). The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY ANY PLUG. If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

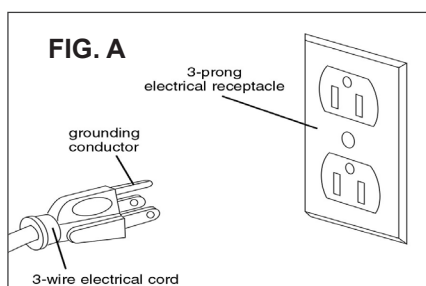
IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

CHECK with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

USE ONLY A 3-WIRE EXTENSION CORD THAT HAS THE PROPER TYPE OF A 3-PRONG GROUNDING PLUG THAT MATCHES THE MACHINE'S 3-PRONG PLUG AND ALSO THE 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. *

REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.

This tool is intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A**. It shows a 3-wire electrical plug and electrical receptacle that has a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown in **FIGURE B** can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**



EXTENSION CORDS

⚠ WARNING: THE USE OF AN EXTENSION CORD WITH THIS MACHINE IS NOT RECOMMENDED. For best power and safety, plug the machine directly into a dedicated, grounded electrical outlet that is within the supplied cord length of the machine.

If an extension cord needs to be used, it should only be for a limited operation of the machine. The extension cord should be as short as possible in length, and have a minimum gauge size of 14AWG.

⚠ WARNING: Check extension cords before each use. If damaged replace immediately. Never use a tool with a damaged cord, since touching the damaged area could cause electrical shock, resulting in serious injury.

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

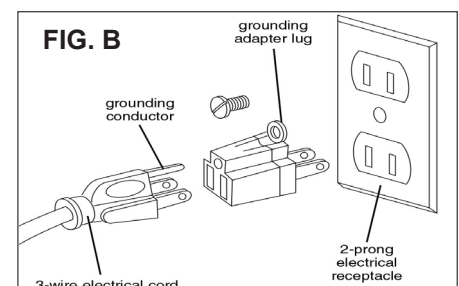
MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

⚠ WARNING: Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with your power tool.

* Canadian electrical codes require extension cords to be certified SJT type or better.

** The use of an adapter in Canada is not acceptable.



SAFETY INSTRUCTIONS

SPECIFIC SAFETY INSTRUCTIONS FOR SANDERS

This machine is intended for the surfacing of natural, solid woods and composite materials. Any other use not as specified, including modification of the machine or use of parts not tested and approved by the equipment manufacturer can cause unforeseen damage, and invalidate the warranty.

ATTENTION: Use of this sander still presents risks that cannot be eliminated by the manufacturer. Therefore, the user must be aware that wood working machines are dangerous if not used with care and all safety precautions are adhered to.

1. Do not operate this machine until you have read all of the following instructions.
2. Do not attempt to operate this machine until it is completely assembled.
3. Do not turn ON this machine if any pieces are damaged or missing.
4. This machine must be properly grounded.
5. If you are not familiar with the operation of the machine, obtain assistance from a qualified person.
6. It is highly recommended that this machine be firmly mounted to a flat and secure work surface or stand.
7. Always wear protective eyewear prior to operating this machine.
8. Always wear a dust mask and use adequate dust collection and proper ventilation. Use of sanders can produce harmful particles while sanding certain types of woods.
9. Do not wear loose clothing or jewelry when operating this machine. Keep long hair tied back.
10. Always make sure the power switch is in the OFF position prior to plugging in the machine.
11. Always make sure the power switch is in the OFF position when doing any assembly or setup operation.
12. Make sure all safety guards and hardware are securely tightened before operating the machine.
13. The use of any accessories or attachments not recommended may cause injury to you and damage your machine.
14. Abrasive discs and belts should be the recommended width and length of the manufacturer.
15. Replace worn, frayed or torn abrasives, as injury to the user, or the machine, may result.
16. Always keep your face and hands clear of moving parts such as belts, discs and pulleys.
17. Keep power supply cords free of moving parts of the sander. Damaged cords can result in electric shock.
18. Maintain a minimal gap clearance (1/16" or less) between the sanding disc or the sanding belt and their tables.
19. Always support the workpiece with the table or backstop during sanding.
20. Carefully feed work into the rotating sanding belt, or disc, on the downward direction, so that the abrasive action pushes the work down onto the tables where it can be controlled.
21. Do not force the work into the abrasives, as burning of the wood or stalling of the machine may result.
22. Remove material or debris from the work area. Keep work area neat and clean.

SAVE THESE INSTRUCTIONS. Refer to them often.

This owner's manual is not a teaching aid and is intended to show assembly, adjustments, and general use.

CALIFORNIA PROPOSITION 65 WARNING:



Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

CONTENTS OF PACKAGE

UNPACKING AND CLEAN-UP

1. Carefully remove all contents from the shipping carton. Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly. If any parts are missing or broken, please call RIKON Customer Service (877-884-5167) as soon as possible for replacements. **DO NOT** turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.
2. Report any shipping damage to your local distributor. Take photographs for any possible insurance claims.
3. Clean all rust protected surfaces with ordinary house hold type grease or spot remover. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces.
4. Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean dry cloth.
5. Set packing material and shipping carton aside. **Do not discard** until the machine has been set up and is running properly.

50-1305 1" X 30" Belt / 5" Disc Sander

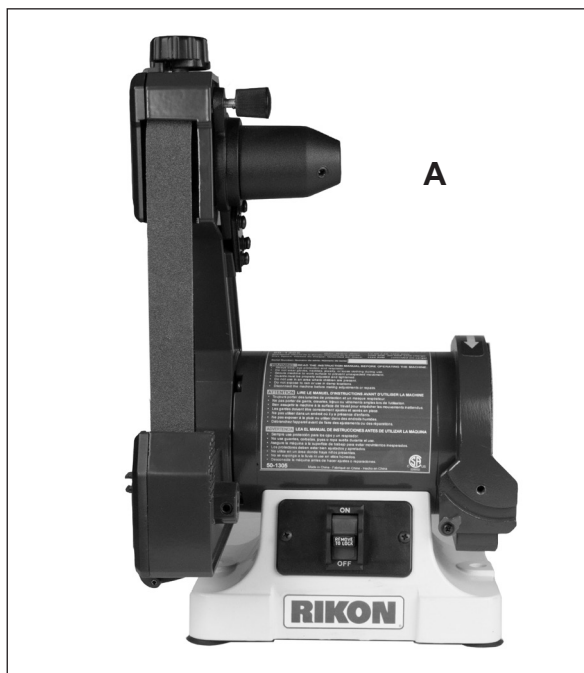
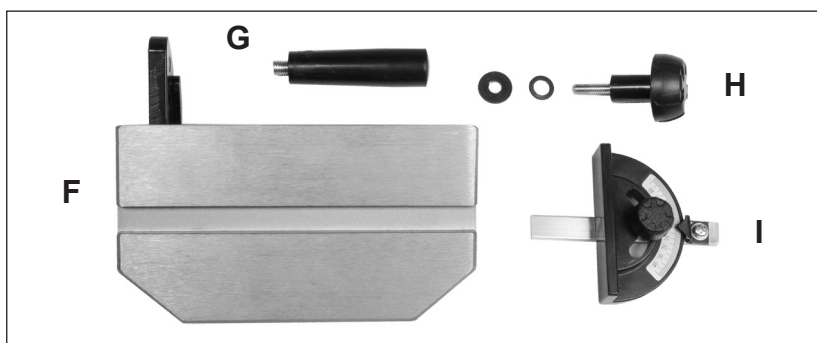
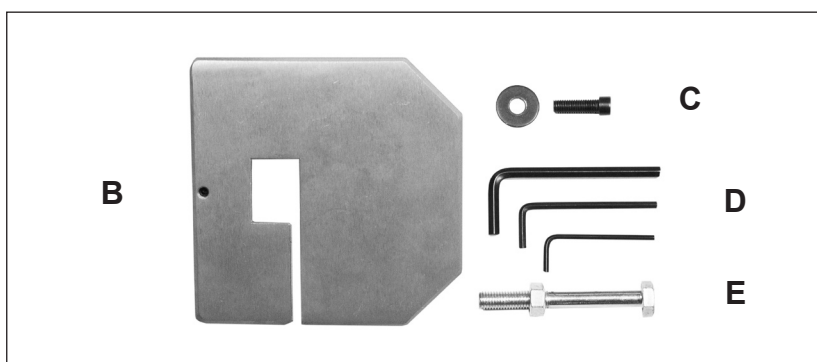


TABLE OF LOOSE PARTS



- A. Belt & Disc Sander Assembly
- B. Sanding Belt Table
- C. Hex Bolt & Washer 8mm
- D. Hex Wrenches (3) 3mm, 4mm, 6mm

- E. Support Hex Bolt & Nut 10mm
- F. Sanding Disc Table
- G. Sanding Belt Tension Handle
- H. Lock Knob, Spring Washer & Washer 6mm
- I. Miter Gauge

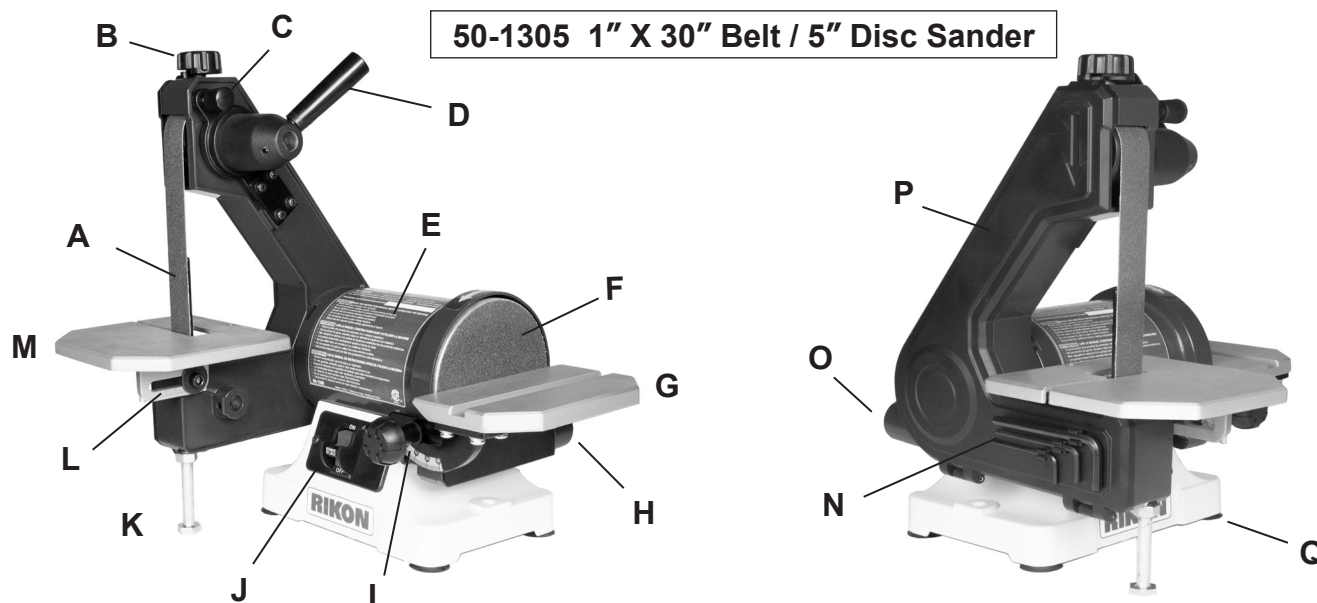
TOOL STORAGE

NOTE: Storage to the 3 Hex Wrenches are provided on the Belt Guard.
SLIDE the tools in or out of the plastic holders.



See pages 16 - 18
for the full
Parts Diagram
and Parts List

GETTING TO KNOW YOUR SANDER



Item Description

- A. Sanding Belt 1" x 30" & Platen
- B. Sanding Belt Cover Knob
- C. Sanding Belt Tracking Knob
- D. Sanding Belt Tension Handle
- E. Motor
- F. Sanding Disc 5" (PSA)
- G. Sanding Disc Table
- H. Sanding Disc Dust Port

Item Description

- I. Disc Table Lock Handle & Angle Scale
- J. ON/OFF Switch
- K. Belt Table Support Bolt & Nut
- L. Sanding Belt Table Lock Bolt
- M. Sanding Belt Table
- N. Hex Wrench Storage (3) 3mm, 4mm, 6mm
- O. Sanding Belt Dust Port
- P. Sanding Belt Safety Cover
- Q. Rubber Machine Feet (4)

INSTALLATION

MOVING & INSTALLING THE SANDER

⚠ CAUTION When moving the sander, lift the machine with your hands positioned under the motor ends or belt and disc housings. **DO NOT** carry or move it using the attached work tables.

1. The machine should be firmly bolted to a stand or solid, level workbench to avoid any movement of the machine during use. The sander's base has holes for this purpose (mounting hardware is not included).

For portability and secure clamping of the sander to a workbench, the machine can be first permanently

bolted to a piece of plywood. Then the sander can be positioned on your workbench, or other solid surface, and the plywood can be clamped in place to secure the sander for use. After use, the plywood can be unclamped and the sander stored for future use.

2. When positioning the machine for work, locate it in an area that has ample space around the sander for the moving of projects to be sanded. Align the machine so that it will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions. Use a Dust Collector to capture the fine dust that is created when sanding. See the safety instructions.

ASSEMBLY

Tools Required for Assembly:

- 17mm or adjustable wrench (not supplied)
- #2 Phillips screwdriver (not supplied)

ASSEMBLY

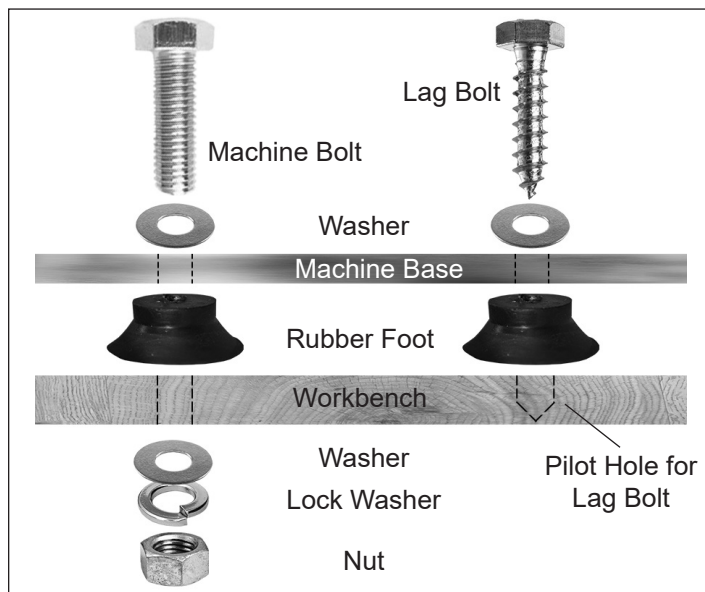
NOTE: The parts listed in the instructions refer to the Parts Diagrams & Parts Lists on pages 16 to 18.

WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL FULL ASSEMBLY AND ALL ADJUSTMENTS ARE COMPLETE.

MOUNTING THE SANDER TO A WORKBENCH

CAUTION: If during operation there is any tendency for the sander to tip over, slide or walk on the supporting surface, the sander should be properly mounted to a workbench or stand.

1. Rubber feet are fastened to this sander prior to shipping. They may, or may not, be used when attaching the sander to a bench or stand.
2. Position the sander on the workbench.
3. Mark the workbench through the two mounting holes located in the left and right sides of the sander base (between the holes for rubber feet).
4. Drill holes in the workbench at the 2 marks.
5. Using long bolts, washers, lock-washers and nuts; or lag bolts; (fasteners not supplied), secure the sander to the workbench.



INSTALLING THE SANDING BELT TENSION HANDLE

1. Locate the Sanding Belt Tension Handle (Part #69).
2. Screw it into the Tension Handle Base (67). When pulled forward, this handle releases the tension on the belt from the Tension Spring (66) so that the belt can be removed and a new belt installed. FIG. A.



INSTALLING THE BELT SANDER TABLE

1. Locate the Sanding Belt Table (40).
2. Position the table by threading the belt and rear plate through the table's slot and square opening.
3. Fasten the table to the frame by using the Washer and Hex Bolt (44, 43). FIG. B.
4. Bring the adjustment Hex Bolt's screw through the slot in the bracket opening on the underside of the table, then into the threaded hole in the sander's metal Frame (28).
5. Fasten the table in place by using the adjustment Hex Bolt with the supplied 6mm Hex Wrench to turn its integral screw into the frame's nut.

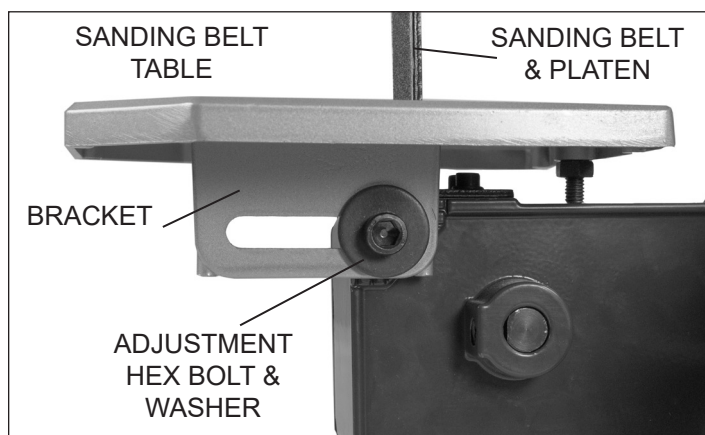


FIG. B

INSTALLING THE BELT TABLE SUPPORT

1. Locate long Hex Bolt and Hex Nut (60, 61).
2. If not previously assembled by the factory, screw the Hex Nut onto the end of the long Hex Bolt.
3. Install the threaded end of the hex bolt up into the threaded hole that is in the metal frame under the sanding belt assembly. FIG. C.
4. Adjust the bolt so that the hex head rests on your work table. Screw the hex nut up until it rests against the frame, locking the bolt in position.

NOTE: This bolt adds support to the sander and prevents it from tipping forward when projects are being sanded with the belt.



FIG. C

ASSEMBLY & ADJUSTMENTS

INSTALLING THE SANDING DISC TABLE

1. Tilt the Disc-Sanding Table (48) upward to slide it onto the sander's Disc Guard Frame (1), aligning the table Support's semi-circular slot with the threaded hole in the frame's side. FIG. D.
2. Place the Spring Washer and Flat Washer (58,51) on the threaded shaft of the Locking Knob (50), then insert the shaft through the table's lower curved support slot (49) and into the frame's threaded hole. Tighten the knob to fasten the table to the frame.
3. Adjust the Disc-Sanding Table to level or any angle between 0° to 90° for sanding.
4. When required for sanding small parts or for sanding to specific angles, use the miter gauge which slides in the slot on the disc-sanding table.

SANDING BELT TABLE ADJUSTMENTS

For most sanding operations, the table will likely remain at a 90° angle to the belt. To ensure and check the positive-stop 90° angle, proceed as follows:

1. Loosen the table-locking Bolt (43).
2. Tilt the table back to the rear as far as possible.
3. Using a square, protractor or other 90° tool, measure the angle of the table against the rear, steel Platen (37). FIG. E. To adjust the table angle to ensure a 90° angle, turn the table's rear adjustment Hex Bolt (41) as needed with the 3mm hex wrench. Once the 90° is setting is found, lock it in place with the Hex Nut (42), that is under the table mounted onto the Bolt.
4. To set the table to a different angle, tilt the table forward until it is at your required angle. FIG. F.
5. Tighten the table-locking bolt to lock the table in position for sanding.

NOTE: To get the full range of table angling, the table-locking bolt must be very loose, so that it slides along the slot in the table bracket. The table can then be moved back to get maximum angles.

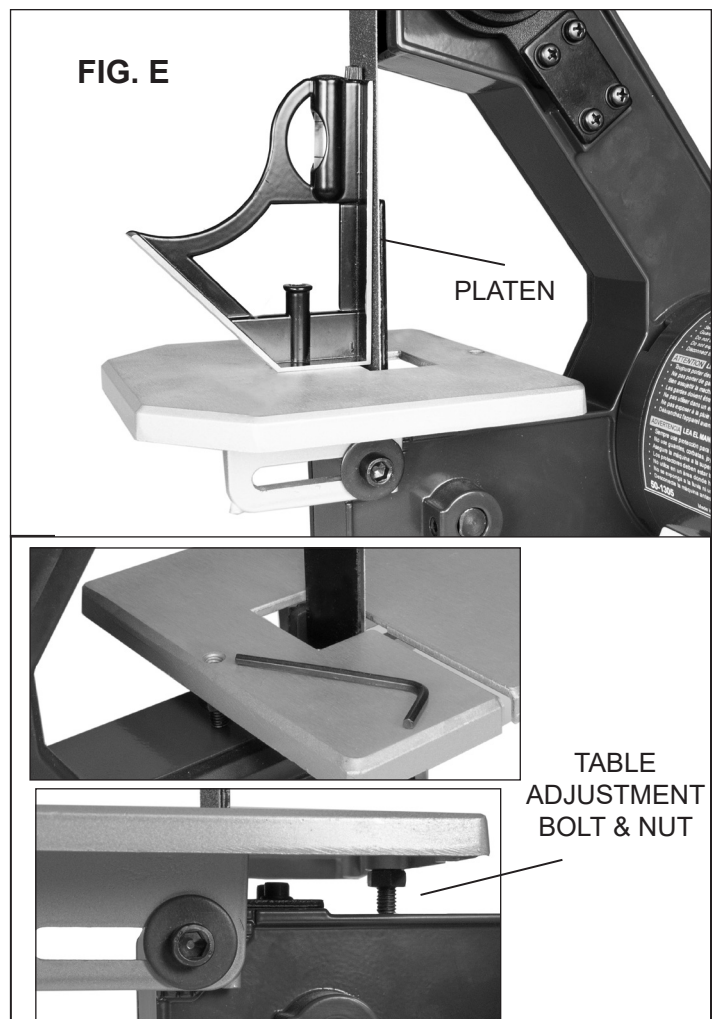
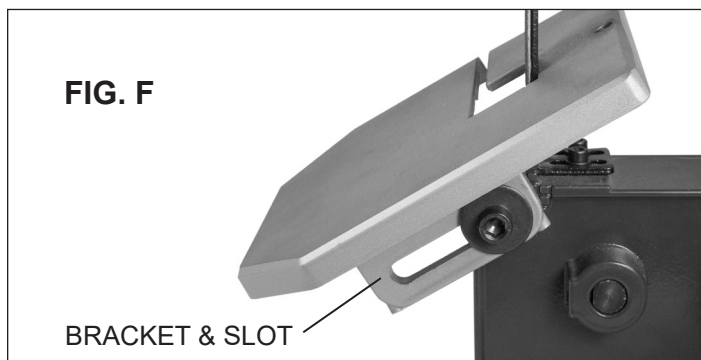


FIG. E

ADJUSTMENTS

INSTALLING & CHANGING SANDING DISCS

⚠ WARNING: Turn the power off and remove the plug from the outlet before changing the accessories.

SANDING DISC TABLE ADJUSTMENTS

1. To check the trueness of the 90° angle of the disc-sanding table, place a square or other measuring device on the table with the other end against the sanding disc. FIG. G.
2. Loosen the disc-table adjustment Knob (50), and adjust table angle to 90°.
3. Retighten the disc-table adjustment knob.
4. If needed, adjust the Angle Scale Pointer (52) to 0°
5. To adjust the disc-table to another angle, loosen the disc-table adjustment knob.
6. Set the table at the desired angle. FIG. H.
7. Retighten the disc-table adjustment knob.

⚠ WARNING: To avoid jamming the work piece or fingers between the table and sanding surface, the disc table edge should be set to a maximum of 1/16 inches away from sanding surface. The disc table's distance from the abrasive disc can be set by loosening the Phillips Screws (#29) under the Disc Table Support (49), FIG. H, adjusting the table on the support, then tightening the support screws.

SANDING DISC REMOVAL:

1. Remove and set aside miter gauge.
2. Completely remove the disc-table from the disc guard frame using the adjustment knob and washers.
3. Tip the table up and remove it from the guard frame by slipping the table back out of the slot in the guard.
4. Sanding discs are adhered to the plate using a "pressure-sensitive adhesive" (PSA). Remove the sanding disc from disc plate. A putty knife and hair dryer may help in this process. FIG. I.

SANDING DISC INSTALLATION:

5. Make sure that the disc plate is clean of any residue. Mineral spirits will soften the PSA adhesives for its removal. Rotate the disc by hand may be necessary to get access to all of the disc surface.
6. Peel the protective backing from the new PSA 5" abrasive sanding disc.
7. Center and press the new sanding disc firmly onto the disc-plate.
8. Replace the sanding table and knob with washers that were removed in steps 2 and 3 above.

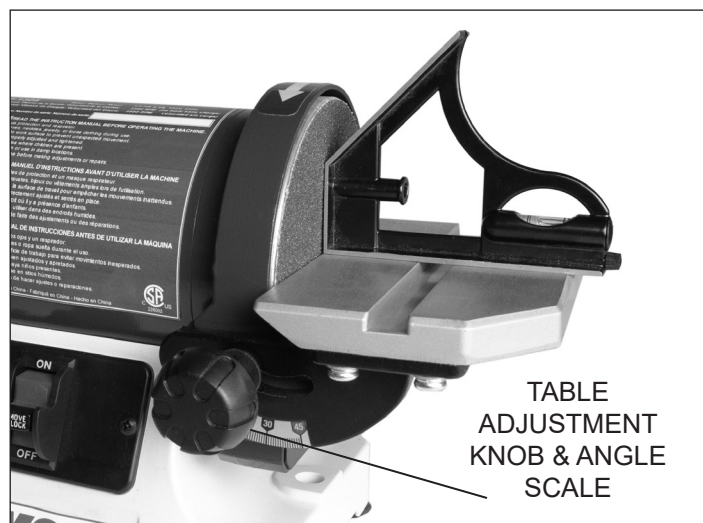


FIG. G

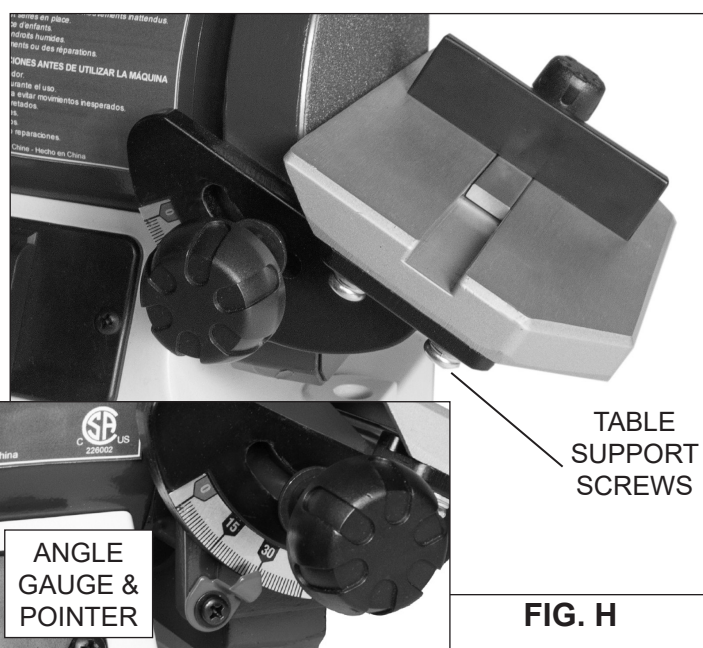


FIG. H

NOTE: Hook & Loop sanding discs cannot be used with this sander! Only 5" sanding discs with pressure sensitive adhesive (PSA) backing can be used.



FIG. I

ADJUSTMENTS

INSTALLING & CHANGING SANDING BELTS

SANDING BELT REMOVAL:

1. Open the side Belt Cover (70) by turning the top Locking Knob (71)) and tilting down the hinged cover to reveal the frame's interior parts. FIG. J.
2. Release the belt tension by pulling down on the spring-loaded Belt Tension Handle (69) and then;
3. Remove the belt past the rear of the belt table and off of the three drive and tracking wheels.

SANDING BELT INSTALLATION:

4. Release the belt tension again by pulling down on the spring-loaded Tension Handle (69) and then;
5. Install the new belt around the top wheel, the large drive wheel, and then the rear idler wheel. Return the tension on the belt by releasing the tension handle back to its original position.
6. Return the side belt cover to its closed position and re-fasten the locking knob loosened in step 1 above.
7. Before using, check the belt tracking as described in "Belt Tracking" section below, and adjust as necessary.

BELT TRACKING

The belt-tracking adjustment is set at the factory so that the abrasive belt will run true on the pulleys. If, however, the belt should track to one side or the other, an adjustment can be made by turning the Tracking Knob (56), which is located next to the Tension Handle at the top right of the belt frame. FIG. K.

- Turning the knob *clockwise* (forward) will cause the belt to track to the left, towards the sander's guard.
- Turning the knob *counter-clockwise* (backwards) will cause the belt to track to the right, towards the tension handle.

BELT SANDER PLATEN

The Platen (37) is a heavy steel support plate that is positioned behind the sanding belt, rising from the table level to a point several inches above the table surface. Its purpose is to support the belt when sanding. The platen should be adjusted so that it is almost touching the back of the sanding belt. This can be done by loosening the two Hex Bolts (38) that fasten the bottom of the platen to the sander frame. If the platen is out of alignment for some reason, loosen these two bolts, adjust the platen, and re-tighten the two bolts. FIG. L.

To remove the platen for operations such as curved surface sanding, stropping, polishing or other special operations, remove the two bolts that fasten the bottom of the platen to the frame, and remove the platen.

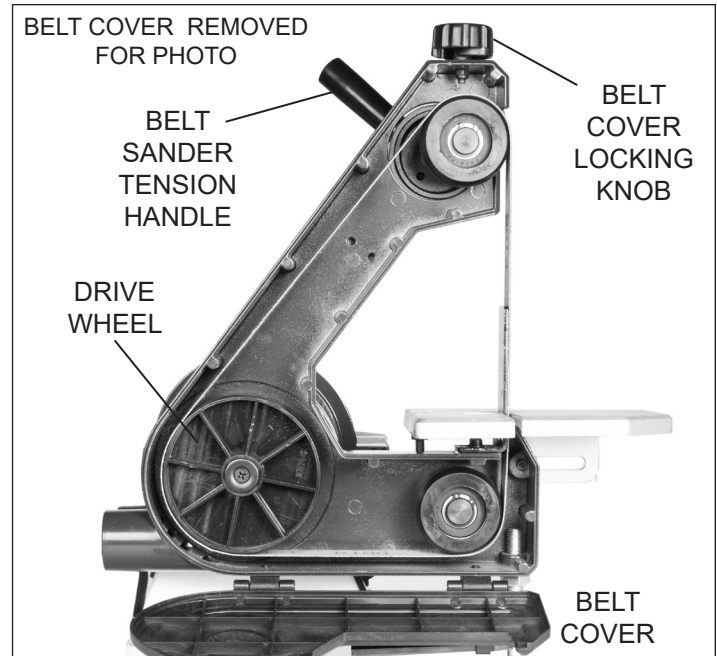


FIG. J

WARNING: Turn the power off and remove the plug from the outlet before changing the accessories.

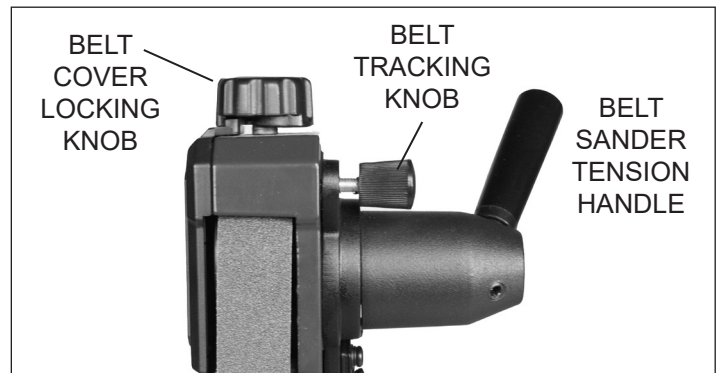


FIG. K

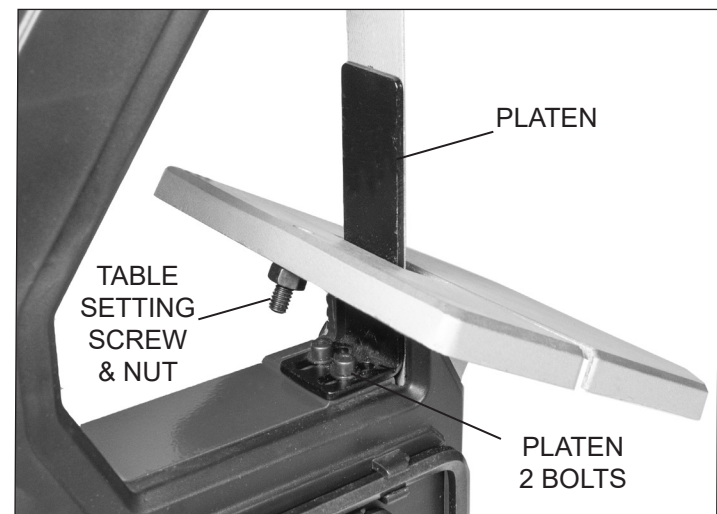


FIG. L

GENERAL USAGE

ON/OFF SWITCH

The rocker ON/OFF power switch is located on the front of the sander. FIG. M.

1. Move the switch up to turn the sander ON.
2. Move the switch down to turn the sander OFF.
3. Unplug the sander from the power source when not in use.

NOTE: To prevent unauthorized use of the sander, the power switch has a removable locking key. With the power switch in the “OFF” position, pull the locking key out. The sander cannot be turned “ON” with the key removed. Insert the locking key back into the power switch to resume sanding operations.

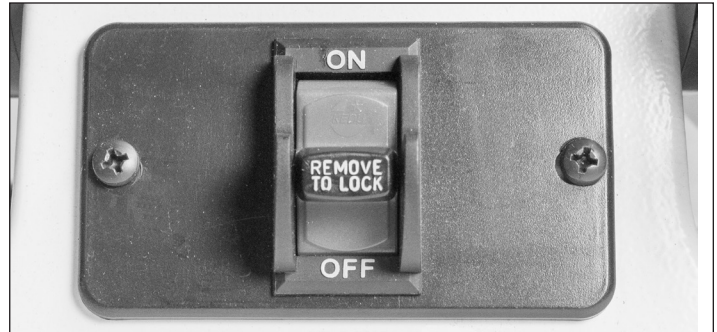


FIG. M

DUST CHUTES / PORTS

Sanding operations are inherently dusty. To help minimize the amount of dust that escapes into the surrounding air, this sander is equipped with two dust chutes (aka: ports) that can be easily connected to a dust-collection system. FIG. N.

There is one dust chute for the belt-sanding system and another for the disc-sanding system. Attach your dust collector to the proper dust chute according to which sanding mode (belt or disc) is being used.

It is strongly recommended that users employ a dust-collection system when using this sander. Use of a mask or respirator is still recommended, even when a dust-collection system is in use.



FIG. N

MITER GAUGE

A miter gauge is supplied with your sander, and can be used on the disc table, which has a slot in its design to fit the miter gauge's bar. The miter gauge head can be set anywhere up to 45° (right or left) by loosening the lock-Knob (56), setting the miter gauge head to the desired angle and re-tightening the knob. FIG. O.

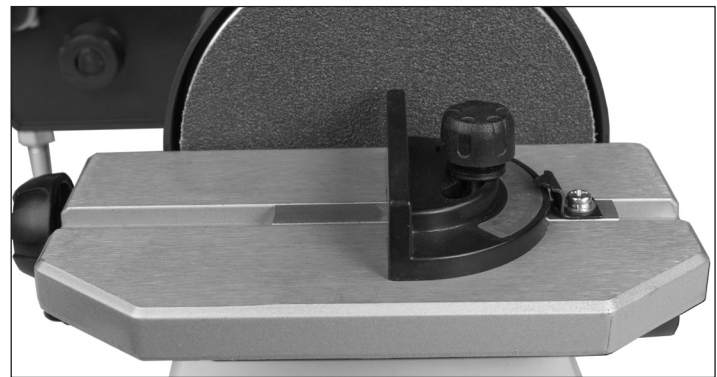


FIG. O

MAINTENANCE

⚠ WARNING: Turn the power switch “OFF” and disconnect the plug from the outlet prior to adjusting or maintaining the sander. DO NOT attempt to repair or maintain the electrical components of the motor. Take the sander to a qualified service technician for this type of maintenance.

MAINTENANCE REQUIRED

1. Check the power cord for any damage.
2. Check sanding belts and discs for damage.
3. Check all guards and hardware to make sure they are secure.
4. Check all moving parts for alignment and binding issues.
4. Dress/Clean sanding surfaces for best abrasive action.
5. Replace sanding belts or discs when worn or damaged.
6. Clean and vacuum dust from the motor housing and other sander parts.

FREQUENCY

- Before each use.
- Before each use.
- Before each use.
- Before each use.
- As needed
- As needed.
- As needed.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Motor will not start.	1. Low voltage 2. Open circuit in motor or loose connections. 3. Blown fuse or breaker.	1. Check power source for proper voltage. 2. Inspect all lead connections on motor for loose or open connections. (Send for Servicing.) 3. Short circuit. (Send for Servicing.) 4. Improper match between tool and circuit, fuse or breaker.
Motor will not start – fuses or circuit breakers tripping or blowing.	1. Short circuit in line, cord or plug. 2. Short circuit in motor or loose connections. 3. Incorrect fuses or circuit breakers in power line.	1. Inspect cord or plug for damaged insulation and shorted wires. 2. Inspect all connections on motor for loose or shorted terminals and/or worn insulation. 3. Install correct fuses or circuit breakers or switch tool to an appropriately sized circuit.
Motor overheats. WARNING: DO NOT TOUCH HOT MOTORS. Class B motors run hot - up to 95° C (203° F) !	1. Motor is overloaded. 2. Extension cord is too long and of insufficient gauge (weight). 3. Poor air circulation around the motor	1. Reduce load on motor (pressure on the sandpaper from the object being sanded.) 2. Utilize an extension cord of appropriate gauge and length or plug tool directly into outlet. 3. Reduce the motor run time.
Motor stalls or runs slow - resulting in blown fuses or tripped circuit.	1. Motor is overloaded. 2. Short circuit in the motor or loose connections. 3. Low line voltage. 4. Incorrect fuses or circuit breakers in the power line. 5. Motor capacitor has failed.	1. Reduce the load on the motor. 2. Inspect connections on motor for loose or shorted terminals or worn insulation. 3. Correct low voltage conditions (for example: improper extension cord length and/or wire gauge). 4. Install CORRECT fuses or circuit breakers or plug tool into an appropriate circuit, matched to an appropriate fuse or breaker. 5. Replace motor capacitor. 6. Change sanding belt.
Machine slows down when operating.	1. Feed rate is too great. 2. Undersized circuit or use of undersized extension cord.	1. Reduce the rate at which the work is fed into the sandpaper. 2. Ensure circuit wires or extension cords are proper gauge, or eliminate use of extension cords.
Machine vibrates excessively or makes excess noise.	1. Incorrect motor mounting. 2. Incorrect sanding-belt tension. 3. Weak or broken belt tension spring. 4. Idler roller is too loose. 5. Broken/defective sanding belt or disc.	1. Make sure all fasteners are tightened. 2. Adjust tension-adjustment knob. Follow belt tensioning/tracking instructions in this manual. 3. Replace belt tension spring by service technician. 4. Have service technician adjust idler roller. 5. Replace sanding belt/disc.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Burn marks on workpiece.	- Using a sanding grit that is too fine. - Using too much pressure. - Work held still for too long against the sandpaper.	- Use a coarser-grit sandpaper. - Reduce work piece pressure on the sandpaper while sanding. - Do not keep the work piece sanding in one place for too long.
Deep sanding grooves or scars in work piece.	- Sanding belt/disc grit is too coarse for the desired finish. - Work piece is being sanded across the grain. - Too much sanding force on the work piece. - Work piece held still against the belt-disc for too long.	- Use a finer-grit sanding belt or disc. - Sand with the grain of the wood. - Reduce pressure on workpiece while sanding. - Keep work piece moving while sanding.
Sanding surface clogs quickly.	- Too much pressure against the belt or disc. - Sanding softwood or highly resinous woods.	- Reduce pressure on work piece while sanding. - Use different stock, sandpaper grits, or accept that this will happen and plan on cleaning or replacing belts & discs frequently.
Sanding grains easily rub off the belt or disc.	- Sandpaper has been stored in an incorrect environment. - Sandpaper has been damaged or folded.	- Ensure sandpaper is stored away from extremely hot & dry or damp/humid conditions. - Store sanding accessories flat – not bent or folded.
Workpiece lifts up from the sanding disc-table.	Sanding on the “up”, right side of the disc, where rotation is up and away from the table.	Sand on left side of sanding disc, where the disc rotates down towards the table.

Service on these tools should only be performed by an authorized, qualified technician.

WIRING DIAGRAM

50-1305

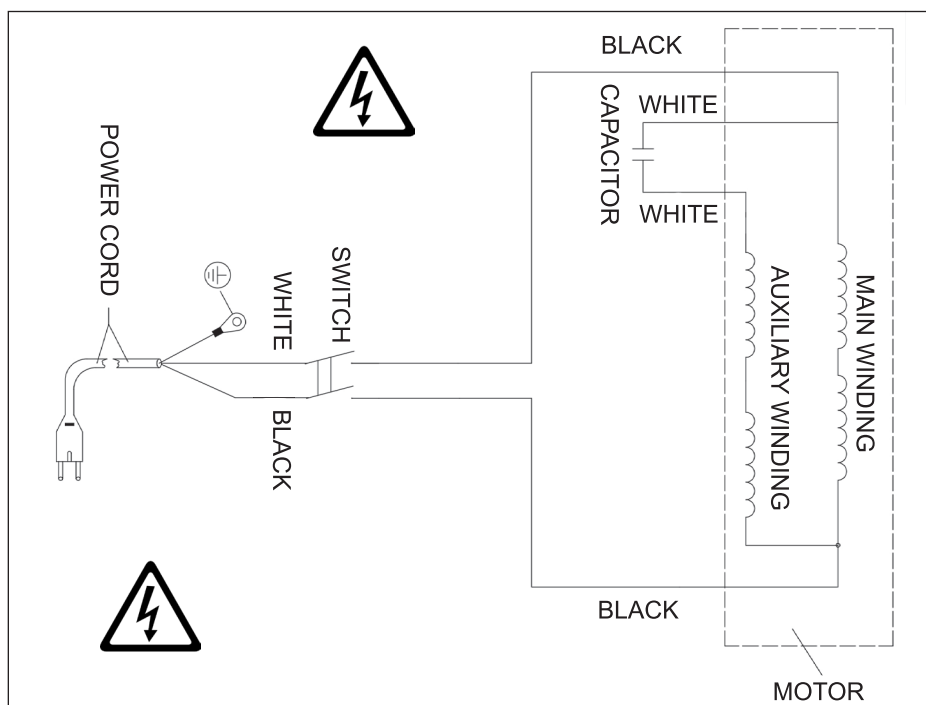
1" X 30" Belt / 5" Disc Sander

WARNING:

This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician.

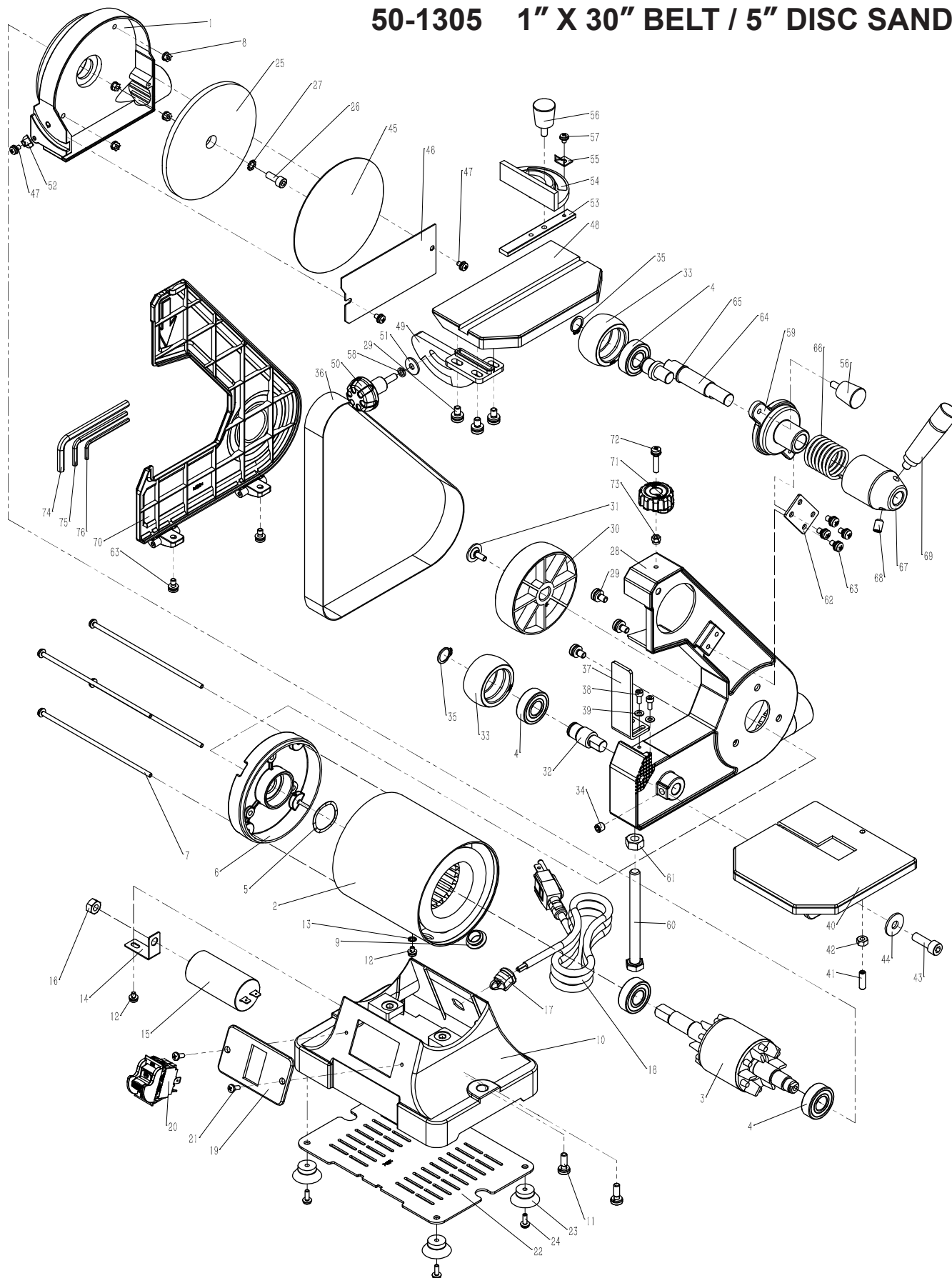
Read the Electrical Safety Information on pages 5 and 6 for further information.

This tool is intended for use on a circuit that has a 120 volt electrical receptacle. The illustration on page 5 shows the type of 120V, 3-wire electrical plug and receptacle that has a grounding conductor that is required.



PARTS EXPLOSION

50-1305 1" X 30" BELT / 5" DISC SANDER



PARTS LIST

50-1305 1" X 30" BELT / 5" DISC SANDER

KEY NO.	DESCRIPTION	QTY.	PART NO.
1	Sanding disc guard frame	1	P50-1305-1
2	Stator	1	P50-1305-2
3	Rotor	1	P50-1305-3
4	Bearing 6202-2RZ	4	P50-1305-4
5	Wave spring washer D35	1	P50-1305-5
6	End cap	1	P50-1305-6
7	Phillips screw assembly M4x153	4	P50-1305-7
8	Hex nut M4	4	P50-1305-8
9	Cord bushing	1	P50-1305-9
10	Base	1	P50-1305-10
11	Phillips screw assembly M6x18	2	P50-1305-11
12	Phillips screw assembly M4x7	2	P50-1305-12
13	Tooth lock washer D4	1	P50-1305-13
14	Capacitor support	1	P50-1305-14
15	Capacitor	1	P50-1305-15
16	Hex nut M8	1	P50-1305-16
17	Cord clip	1	P50-1305-17
18	Power cord	1	P50-1305-18
19	Switch plate	1	P50-1305-19
20	Switch	1	P50-1305-20
21	Phillips screw M4x10	2	P50-1305-21
22	Base plate	1	P50-1305-22
23	Rubber foot	4	P50-1305-23
24	Phillips screw M4x12	4	P50-1305-24
25	Sanding disc plate	1	P50-1305-25
26	Inner hex bolt M6x16	1	P50-1305-26
27	Tooth lock washer D6	1	P50-1305-27
28	Belt frame	1	P50-1305-28
29	Phillips screw assembly M6x12	6	P50-1305-29
30	Main drive wheel	1	P50-1305-30
31	Phillips screw assembly M5x16 LH	1	P50-1305-31
32	Idler shaft	1	P50-1305-32
33	Idler wheel	2	P50-1305-33
34	Hex bolt M8x8	1	P50-1305-34
35	Circlip for shaft D15	2	P50-1305-35
36	Sanding belt 100#	1	P50-1305-36
37	Belt limit plate (platen)	1	P50-1305-37
38	Hex bolt M4x10	2	P50-1305-38
39	Flat washer D4	2	P50-1305-39
40	Belt work table	1	P50-1305-40
41	Hex bolt M6x20	1	P50-1305-41
42	Hex nut M6	1	P50-1305-42
43	Hex bolt M8x25	1	P50-1305-43
44	Big flat washer D8	1	P50-1305-44
45	Sanding disc paper 80#	1	P50-1305-45

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

PARTS LIST

50-1305 1" X 30" BELT / 5" DISC SANDER

KEY NO.	DESCRIPTION	QTY.	PART NO.
46	Disc plate	1	P50-1305-46
47	Phillips screw assembly M4x8	3	P50-1305-47
48	Disc work table	1	P50-1305-48
49	Disc table support	1	P50-1305-49
50	Disk table locking knob	1	P50-1305-50
51	Big flat washer D6	1	P50-1305-51
52	Pointer	1	P50-1305-52
53	Miter gauge slide bar	1	P50-1305-53
54	Miter gauge	1	P50-1305-54
55	Pointer	1	P50-1305-55
56	Belt tracking knob	2	P50-1305-56
57	Phillips screw M4x6	1	P50-1305-57
58	Spring washer D6	1	P50-1305-58
59	Support base	1	P50-1305-59
60	Hex bolt M10x110	1	P50-1305-60
61	Hex nut M10	1	P50-1305-61
62	Belt adjustable plate	1	P50-1305-62
63	Phillips screw M5x10	6	P50-1305-63
64	Eccentric shaft assembly	1	P50-1305-64
65	Circlip for shaft D16	1	P50-1305-65
66	Tension spring	1	P50-1305-66
67	Tension handle base	1	P50-1305-67
68	Hex bolt M8x12	1	P50-1305-68
69	Belt tension handle	1	P50-1305-69
70	Belt guard	1	P50-1305-70
71	Locking knob	1	P50-1305-71
72	Phillips screw assembly M5x25	1	P50-1305-72
73	Hex nut M5	1	P50-1305-73
74	Hex wrench s=6	1	P50-1305-74
75	Hex wrench s=4	1	P50-1305-75
76	Hex wrench s=3	1	P50-1305-76

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

ACCESSORIES

SANDING BELTS

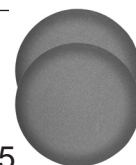
1" x 30" Aluminum Oxide



50-9080	80 Grit	Pack of 10
50-9120	120 Grit	Pack of 10
50-9150	150 Grit	Pack of 10
50-9180	180 Grit	Pack of 10
50-9220	220 Grit	Pack of 10
50-9999	Assortment 2 each 5 grits	Pack of 10

SANDING DISCS

5" Diameter, PSA, Aluminum Oxide



50-5080	80 Grit	Pack of 5
50-5120	120 Grit	Pack of 5
50-5150	150 Grit	Pack of 5
50-5180	180 Grit	Pack of 5
50-5220	220 Grit	Pack of 5
50-5999	Assortment 2 each 5 grits	Pack of 10

RIKON

POWER TOOLS®

5-Year Limited Warranty

RIKON Power Tools Inc. ("Seller") warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of five (5) years from the date the product was purchased at retail. This warranty may not be transferred.

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This five-year warranty does not cover products used for commercial, industrial or educational purposes. The warranty term for these claims will be limited to a two-year period.

This limited warranty does not apply to accessory items such as blades, drill bits, sanding discs, grinding wheels, belts, guide bearings and other related items.

Seller shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, proof of purchase documentation must be provided which has the date of purchase and an explanation of the complaint.

The Seller reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

To register your machine online, visit RIKON at www.rikontools.com/warranty

To take advantage of this warranty, or if you have any questions,
please contact us at 877-884-5167 or email warranty@rikontools.com



For more information:
25 Commerce Way
North Andover, MA 01845

877-884-5167 / 978-528-5380
techsupport@rikontools.com