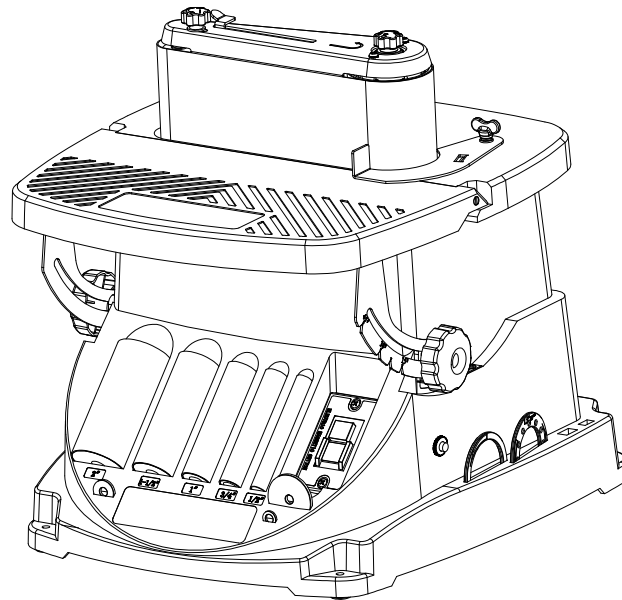




# OSCILLATING BELT & SPINDLE SANDER



Model # 6524  
[bit.ly/wenvideo](http://bit.ly/wenvideo)

## IMPORTANT:

Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged, trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for intended purpose, you will enjoy years of safe, reliable service.



## NEED HELP? CONTACT US!

Have product questions? Need technical support?  
Please feel free to contact us at:

 **800-232-1195** (M-F 8AM-5PM CST)

 [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com)

 [WENPRODUCTS.COM](http://WENPRODUCTS.COM)

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## TECHNICAL DATA

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Model Number:	6524
Motor:	120 V, 60 Hz, 3.5A, 1/2 HP, 11,500 RPM
Belt Speed:	1575 FPM
Spindle Speed:	2000 RPM
Oscillations:	58 OPM
Spindle Travel:	5/8 in.
Table Tilt:	0 to 45°
Sanding Drum Sizes:	3/4, 1, 1-1/2, & 2 in.
Sanding Sleeve Sizes:	1/2, 3/4, 1, 1-1/2, 2 in.
Dust Port:	1-1/2 in.
Net Weight:	27 lb
Product Dimensions:	18-1/2 x 16-1/2 x 18 in.

## GENERAL SAFETY RULES

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Safety is a combination of common sense, staying alert and knowing how your item works. **SAVE THESE SAFETY INSTRUCTIONS.**



**WARNING:** To avoid mistakes and serious injury, do not plug in your tool until the following steps have been read and understood.

1. **READ** and become familiar with this entire instruction manual. **LEARN** the tool's applications, limitations, and possible hazards.
2. **AVOID DANGEROUS CONDITIONS.** Do not use power tools in wet or damp areas or expose them to rain. Keep work areas well lit.
3. **DO NOT** use power tools in the presence of flammable liquids or gases.
4. **ALWAYS** keep your work area clean, uncluttered, and well lit. **DO NOT** work on floor surfaces that are slippery with sawdust or wax.
5. **KEEP BYSTANDERS AT A SAFE DISTANCE** from the work area, especially when the tool is operating. **NEVER** allow children or pets near the tool.
6. **DO NOT FORCE THE TOOL** to do a job for which it was not designed.
7. **DRESS FOR SAFETY.** Do not wear loose clothing, gloves, neckties, or jewelry (rings, watches, etc.) when operating the tool. Inappropriate clothing and items can get caught in moving parts and draw you in. **ALWAYS** wear non-slip footwear and tie back long hair.
8. **WEAR A FACE MASK OR DUST MASK** to fight the dust produced by operations.



**WARNING:** Dust generated from certain materials can be hazardous to your health. Always operate the tool in a well-ventilated area and provide for proper dust removal. Use dust collection systems whenever possible.

9. **ALWAYS** remove the power cord plug from the electrical outlet when making adjustments, changing parts, cleaning, or working on the tool.
10. **KEEP GUARDS IN PLACE AND IN WORKING ORDER.**
11. **AVOID ACCIDENTAL START-UPS.** Make sure the power switch is in the **OFF** position before plugging in the power cord.
12. **REMOVE ADJUSTMENT TOOLS.** Always make sure all adjustment tools are removed from the tool before turning it on.
13. **NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to **OFF**. Do not leave the tool until it has come to a complete stop.
14. **NEVER STAND ON A TOOL.** Serious injury could result if the tool tips or is accidentally hit. **DO NOT** store anything above or near the tool.

## GENERAL SAFETY RULES

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15. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Wear oil-resistant rubber-soled footwear. Keep the floor clear of oil, scrap, and other debris.
16. **MAINTAIN TOOLS PROPERLY.** ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.
17. **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, jamming, breakage, improper mounting, or any other conditions that may affect the tool's operation. Any part that is damaged should be properly repaired or replaced before use.
18. **MAKE THE WORKSHOP CHILDPROOF.** Use padlocks and master switches and ALWAYS remove starter keys.
19. **DO NOT** operate the tool if you are under the influence of drugs, alcohol, or medication that may affect your ability to properly use the tool.
20. **USE SAFETY GOGGLES AT ALL TIMES** that comply with ANSI Z87.1. Normal safety glasses only have impact resistant lenses and are not designed for safety. Wear a face or dust mask when working in a dusty environment. Use ear protection such as plugs or muffs during extended periods of operation.

## SPECIFIC RULES FOR THE BELT & SPINDLE SANDER

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**WARNING:** Do not operate this tool until it is completely assembled and installed according to the instructions.

1. This sander is designed to sand wood or wood-like products only. Sanding or grinding other materials could result in fire, injury, or damage to the workpiece.
2. Use the sander on horizontal surfaces only. Operating the sander when mounted on non-horizontal surfaces may result in motor damage or injury.
3. Make sure the sanding belt is installed in the correct direction. See directional arrow on back of belt. Feed workpieces against the direction of the rotation for maximum safety.
4. Keep hands away from the drum and belt during operation. Do not touch moving pieces. If cleaning is necessary, use a brush to remove sawdust and chips instead of your hands.
5. Do not use sanding belts or drums that are damaged, torn, or loose. Use only the correct size sanding belt.
6. Always hold the workpiece firmly when sanding. Keep hands away from sanding belt or spindle. Sand only one workpiece at a time.
7. Always hold the workpiece firmly on the table when using the sander.
8. Allow spindle to reach full speed before sanding. Do not forcefully jam a workpiece into the sanding surface. Firmly hold the workpiece and lightly ease it against the spindle.
9. Always maintain a minimum clearance of 1/16 inch (1.6 mm) or less between the table and the sanding belt.

## **SPECIFIC RULES FOR THE BELT & SPINDLE SANDER**

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10. Replace worn or damaged belts before operation. Always unplug the unit before making adjustments or changing sandpaper or drums.
11. When sanding a large workpiece, provide additional support. Do not sand with the workpiece unsupported.
12. Inspect the workpiece for imperfections, nails, staples, etc. before sanding. Never sand stock that has questionable imperfections or embedded foreign objects.
13. Always remove scrap pieces and other objects from the table, backstop, or belt before turning the sander ON.
14. Never perform layout, assembly or set-up work on the table while the sander is operating.
15. Never use solvents to clean plastic parts. Solvents could dissolve or otherwise damage the material. Use only a soft damp cloth to clean plastic parts.
16. Should any component of your sander be missing/damaged or fail in any way, shut off switch and remove plug from power supply outlet. Replace the missing, damaged, or failed parts before resuming operation.
17. Keep cords away from heat, oil, and sharp edges. Have an electrician replace or repair damaged or worn cords immediately.
18. Always use the table insert that fits the diameter of the drum to minimize the gap and reduce risk of injury.
19. Only sand workpieces sturdy enough to withstand the force of the sanding belts and spindles.

## **ELECTRICAL INFORMATION**

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### **GROUNDING INSTRUCTIONS**

**IN THE EVENT OF A MALFUNCTION OR BREAKDOWN**, grounding provides the path of least resistance for an electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

**DO NOT MODIFY THE PLUG PROVIDED.** If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

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

**CHECK** with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

**CAUTION:** In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet.

## ELECTRICAL INFORMATION

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**WARNING:** This tool is for indoor use only. Do not expose to rain or use in damp locations.

### GUIDELINES FOR EXTENSION CORDS

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to be used according to cord length and nameplate ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

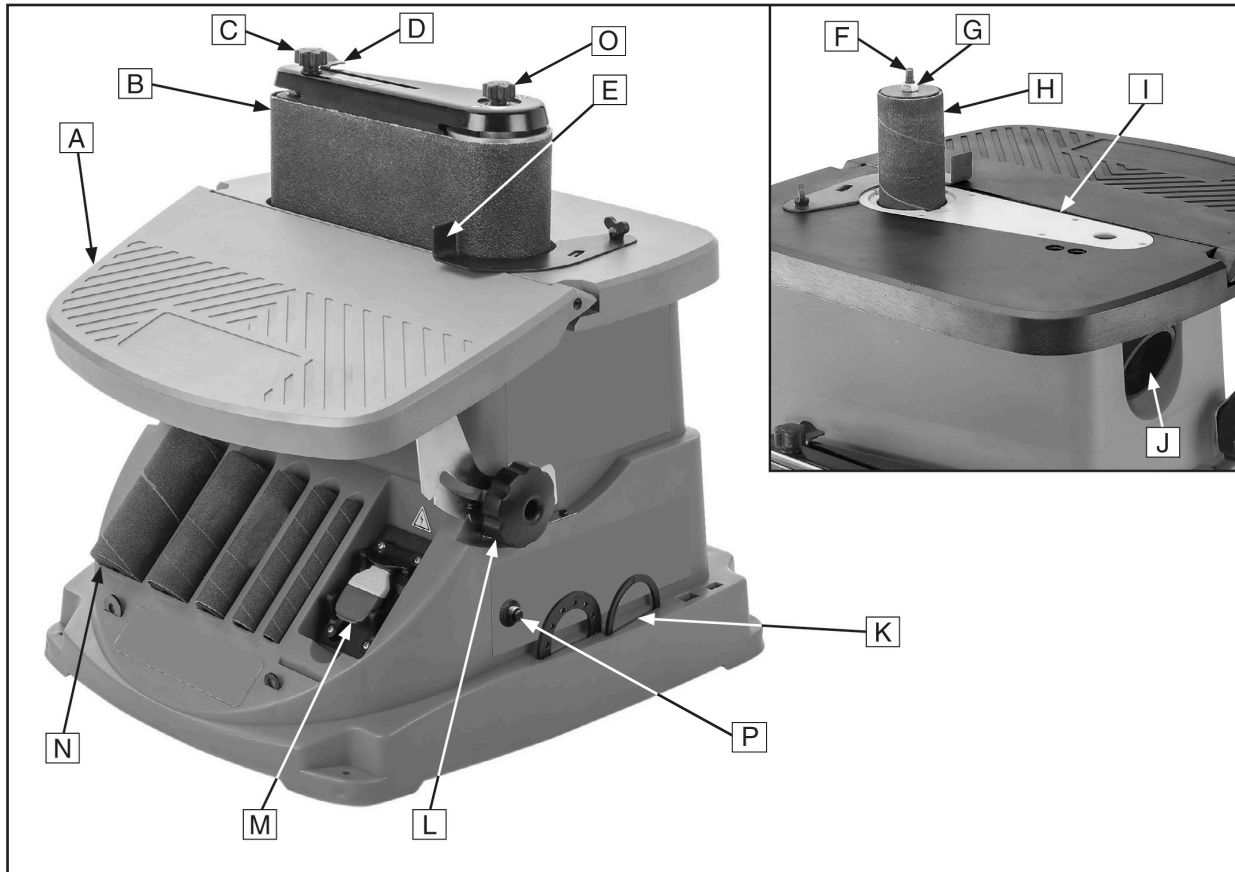
Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
	25 ft.	50 ft.	100 ft.	150 ft.
3.5 A	18 gauge	16 gauge	16 gauge	14 gauge

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

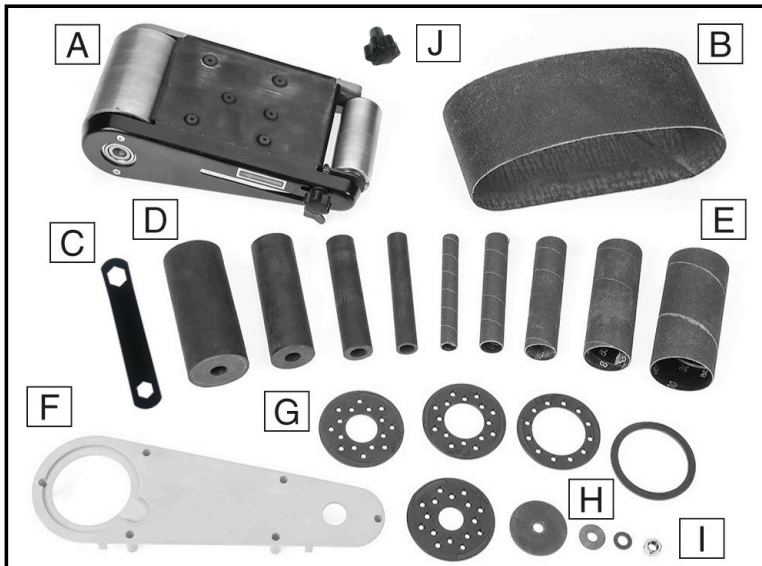
**WARNING:** This tool must be grounded while in use to protect the operator from electric shock.

# KNOW YOUR BELT & SPINDLE SANDER



- A - Work Table
- B - Sanding Belt
- C - Belt Tracking Adjustment Knob
- D - Belt Tensioning Lever
- E - Work Stop
- F - Spindle
- G - Spindle Nut
- H - Sanding Drum w/ Sleeve

- I - Table Insert
- J - Dust Port
- K - Throat Plate Storage
- L - Table Tilt Locking Knob
- M - ON/OFF Switch
- N - Sanding Drum Storage
- O - Spindle Knob
- P - Circuit Breaker



## UNPACKING

- A - Belt Sanding Attachment
- B - 80-Grit Sanding Belt (4 x 24 in.)
- C - Spindle Nut Wrench (13 mm/10 mm)
- D - Sanding Drums (3/4, 1, 1-1/2, & 2 in.) (4 pcs)
- NOTE:** There is no 1/2 in. drum; the 1/2 in. sleeve fits directly on the spindle.
- E - 80-Grit 4-1/2 in. Sanding Sleeves (1/2, 3/4, 1, 1-1/2, & 2 in. diameter) (5 pcs)
- F - Table Insert
- G - Throat Plates (1/2, 3/4, 1, 1-1/2, & 2 in.)
- H - Spindle Washers (5/8, 7/8, & 1-3/4 in. outer diameter) (3 pcs)
- I - Hex Nut (M8 - 1.25)
- J - Spindle Knob

# ASSEMBLY

## ASSEMBLY

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

**NOTE:** The table insert is only to be used with the sanding drums, not with the sanding belt attachment.

Place the spindle nut, table inserts, sanding drums, sanding sleeves, spindle washers, belt-sanding attachment and spindle nut wrench in the appropriate storage slots beneath the table (Fig. A & Fig. B). A sanding drum does not need to be installed until after the initial test startup. For drum and belt installation instructions, see p. 10.

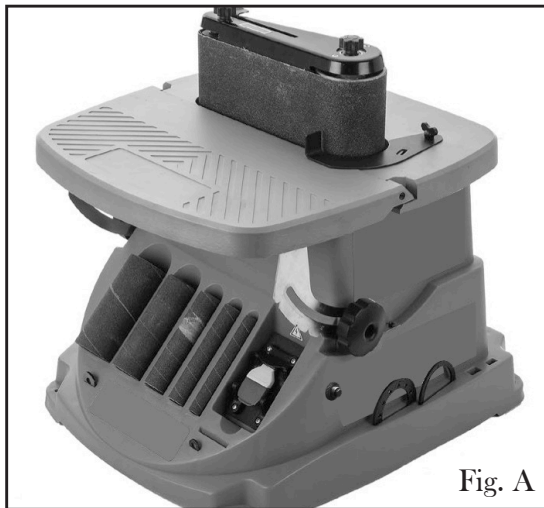


Fig. A

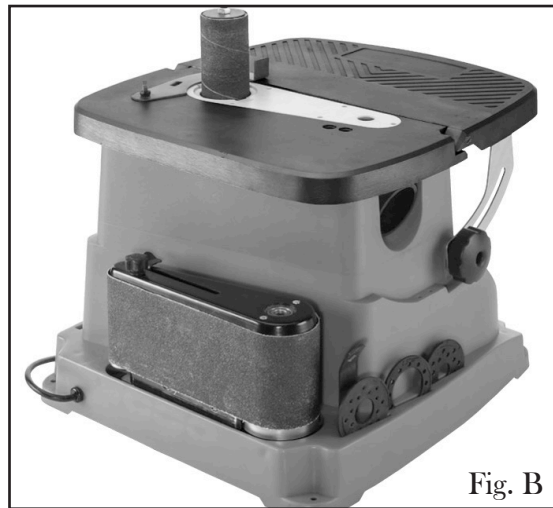


Fig. B

## MOUNTING THE UNIT

The base of this machine has four 1/4 inch mounting holes on the corners of the base. Mount to a benchtop surface to maximize safety and minimize vibration, walking, tipping and wobbling.

The strongest mounting option is a through mount, where the bolts go all the way through the work surface (Fig. C). The other option is a direct mount, where the sander is mounted using screws that go directly into the work surface (Fig. D).

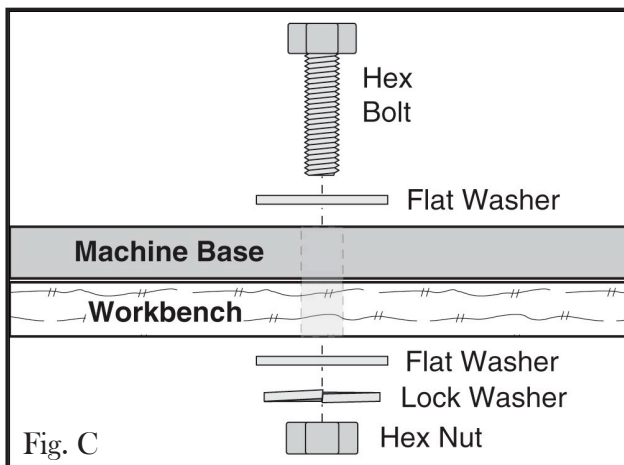


Fig. C

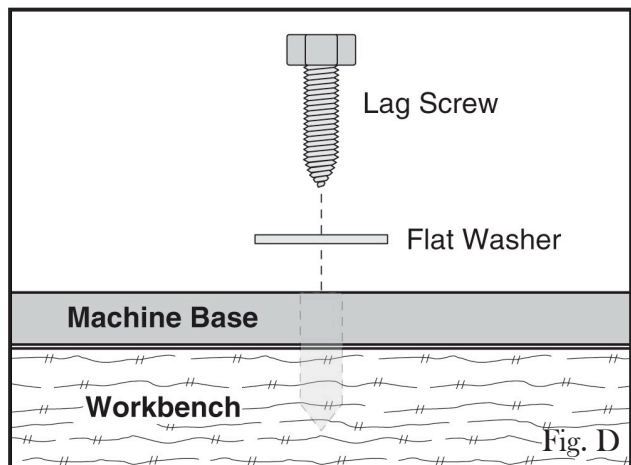


Fig. D



# OPERATION

## DUST COLLECTION (Fig. D)



**WARNING:** This machine creates a lot of dust. Inhaling said dust on a regular basis can cause permanent respiratory illness. Minimize your exposure by wearing a respirator and using a dust collector. If you do not use some method of dust extraction or collection, the motor could overheat and fail. Failure to use some method of dust extraction or collection will void the warranty.

To connect a dust collection system to the machine:

1. Fit a 1-1/2 in. dust hose over the dust port and secure in place with a hose clamp as needed.
2. Tug the hose to make sure that puppy is tight. A tight fit is necessary for proper performance.

## INITIAL TEST RUN

**WARNING:** This machine creates a lot of dust. Inhaling said dust on a regular basis can cause permanent respiratory illness. Minimize your exposure by wearing a respirator and using a dust collector.

Once assembly has been completed, run the machine to ensure proper connection.

1. Clear all setup tools away from the machine.
2. Connect the machine to a power supply.
3. Turn the machine ON to make sure the motor runs correctly. Once verified, turn the machine OFF. The motor should run smoothly without any unusual problems or noises.
4. Remove the yellow safety tab and try to start the machine (Fig. E). The sander should not power up without this tab.

Once all of these steps have been checked and completed, the sander is ready for operation. If at any point you encounter problems or have questions, contact customer service at 1-800-232-1195, M-F 8-5 CST, or email [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com).

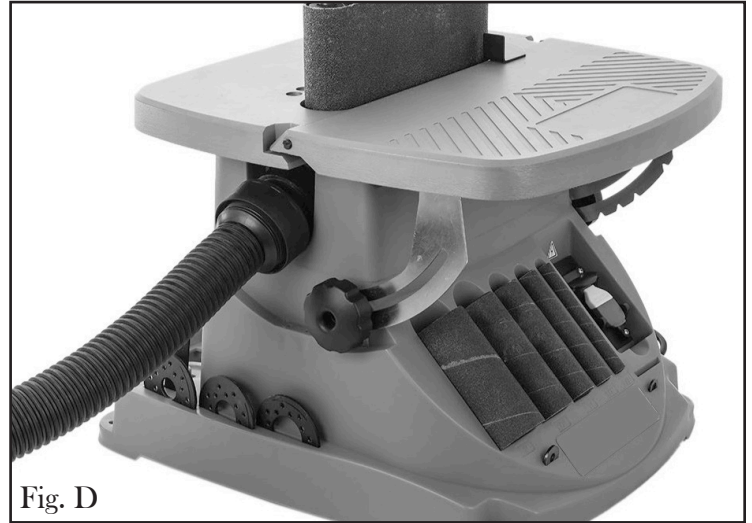


Fig. D

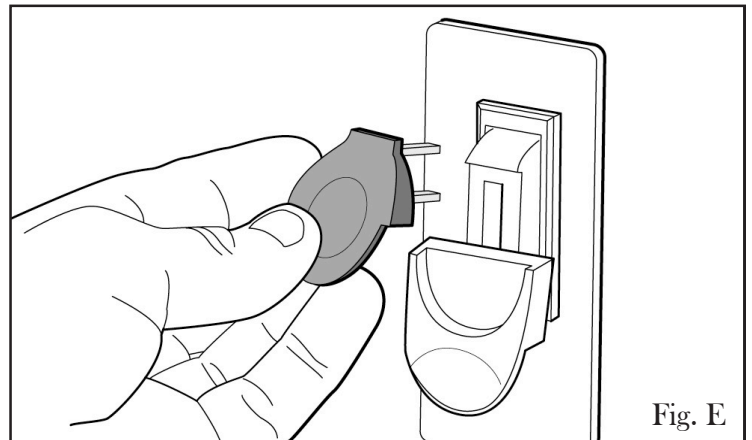


Fig. E

# OPERATION

## SPINDLE SANDING

Spindle sanding is the preferred method of removing material from inside curves and irregular edges. The oscillating spindle moves up and down as it rotates to help smooth surfaces more quickly and evenly than a non-oscillating sander. To use the spindle sander, you must first configure the machine for spindle sanding by installing the appropriate sanding drum/sleeve for your operation.

### INSTALLING A SANDING DRUM AND SLEEVE

To ensure the workpiece is supported during spindle sanding operations, make sure to use the table insert and throat plate that best matches the drum and sleeve that you'll be working with. The following table can help ensure that you are using the proper sizes of throat plates, drums and washers for each respective sanding sleeve. Keep in mind the smallest size sanding sleeve does not include a drum. It instead goes directly onto the bare spindle.

1. Disconnect the machine from the power source.
2. Use the table to the right to select the required size of components for the sanding drum and sleeve size you have chosen.
3. Place the table insert into the table opening. Install the preferred drum onto the spindle shaft, followed by the corresponding sanding sleeve and throat plate (Fig. F).
4. Secure the sanding drum in place with the corresponding washer and nut (Fig. F). Tighten the nut until the sanding drum creates equal pressure to all sides of the sanding sleeve. The sleeve should not be able to freely rotate without also rotating the sanding drum.

SANDING SLEEVE	SANDING DRUM	THROAT PLATE	SPINDLE WASHER
1/2 in.	N/A	1/2 in.	5/8 in.
3/4 in.	3/4 in.	3/4 in.	7/8 in.
1 in.	1 in.	1 in.	7/8 in.
1-1/2 in.	1-1/2 in.	1-1/2 in.	7/8 in.
2 in.	2 in.	2 in.	1-3/4 in.

### USING SPINDLE SANDER

1. Turn the sander ON and allow it to reach full speed.
2. Maintain a firm grip with both hands on the workpiece for maximum control. Guide it against the rotation of the spindle as shown in Fig. G. Do not force the workpiece against the sanding sleeve. Allow the machine to do the work.
3. When you are finished, turn off the sander.

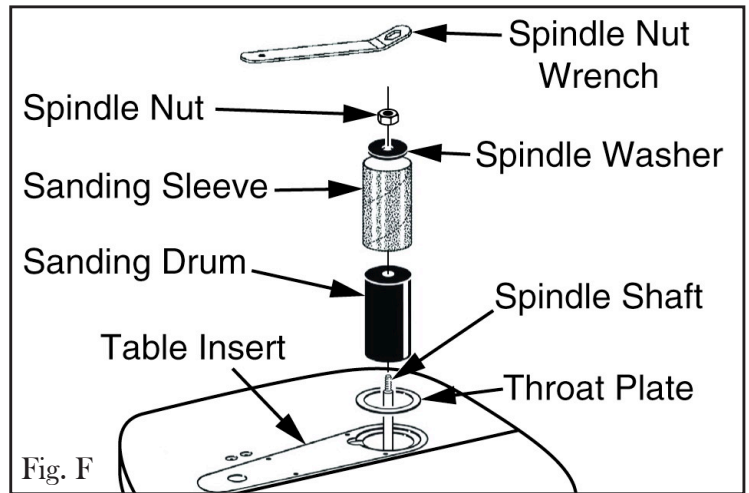


Fig. F

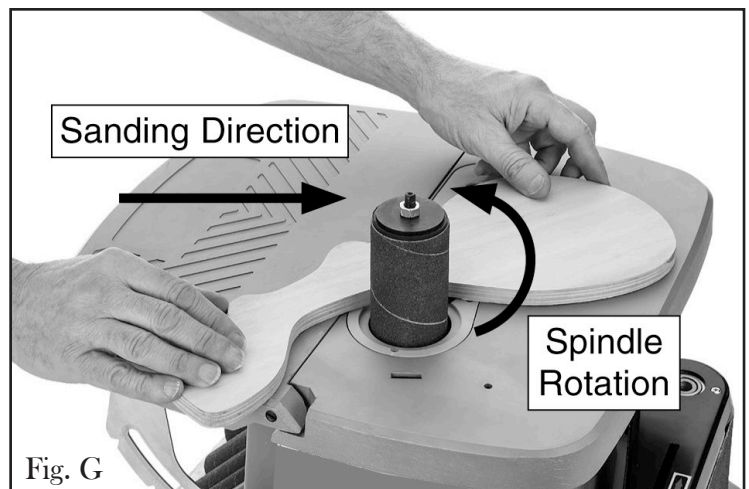


Fig. G

## OPERATION

### CHANGING/REPLACING SANDING DRUMS AND SLEEVES

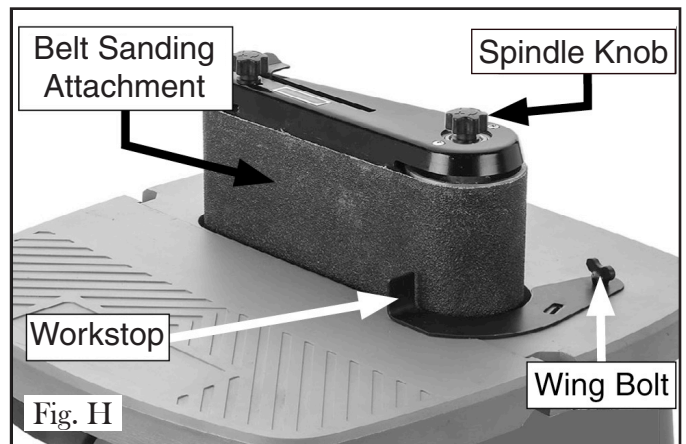
1. As always, disconnect the sander from the power source.
2. Remove the spindle sanding components in reverse order of the installation (Fig. F).
3. Clean all sawdust and debris from the opening for the table insert, the throat plates and any other areas where it may have collected.
4. Select which new sanding diameter you would like to use and install all necessary components (Fig. F).
5. Secure the sanding drum with the appropriate spindle washer and nut. Tighten until the rubber sanding drum places enough pressure on the sanding sleeve to prevent it from freely spinning without the drum.

NOTE: The 1/2 inch sanding sleeve does not use a sanding drum. Instead, it mounts directly onto the spindle shaft.

### INSTALLING THE BELT SANDER

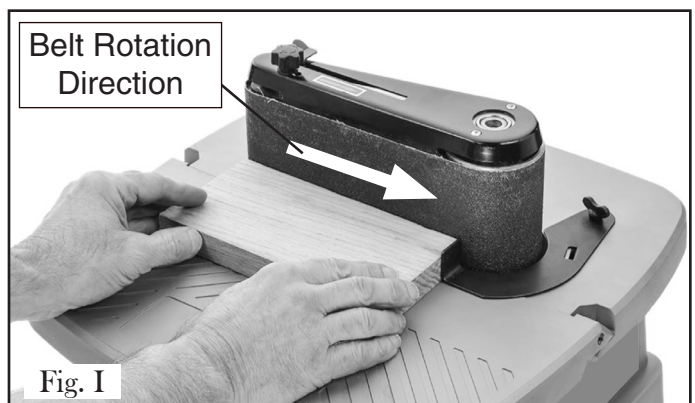
Belt sanding is helpful for sanding straight lines or curves along the outside edge of a workpiece. The belt sanding attachment oscillates up and down while the belt moves horizontally across the workpiece. The work stop supports the workpiece during sanding, helping to prevent it from being ejected by the moving sanding belt (Fig. H). To use the belt sander, remove the spindle sanding components and follow these steps:

1. Unplug the sander from the power source.
2. If spindle sanding components are installed, remove them and place them back in their respective storage slots.
3. Place the belt sanding attachment over the spindle. Ensure that the drive splines on the attachment mesh with those on the fan. Ensure that the alignment tab is held by the alignment slots. Secure it in place with the spindle knob (Fig. H).
4. Install the work stop and secure it in place using the wing bolt. Test-run the belt sander to make sure it is operating properly before applying any load.



### BELT SANDING STRAIGHT LINES

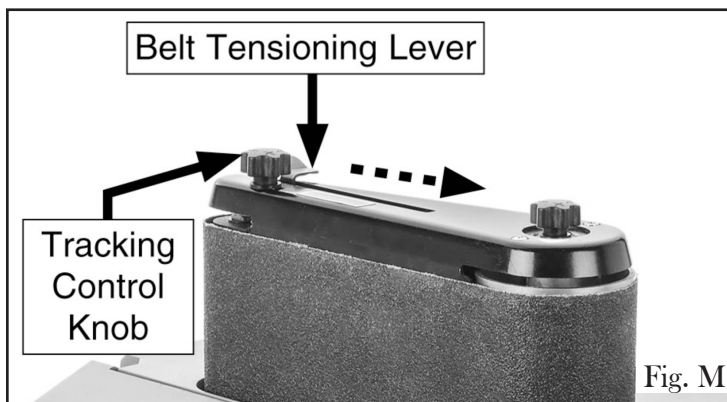
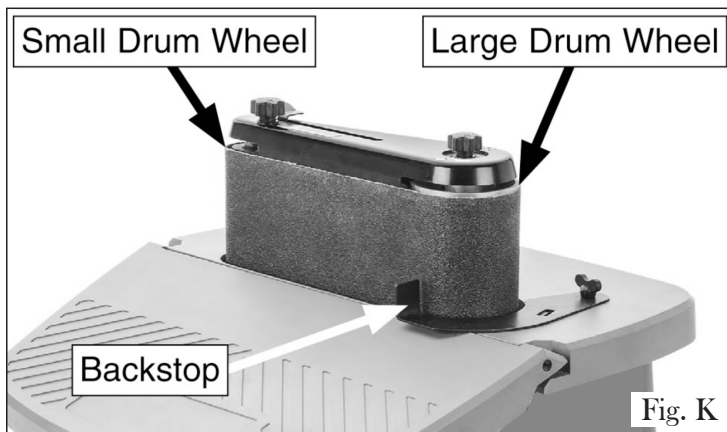
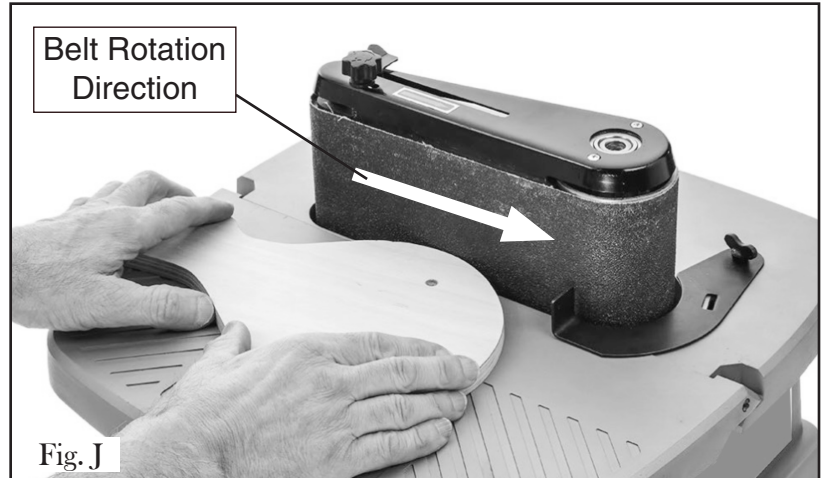
1. Turn sander ON and allow it to reach full speed before apply a load.
2. Support the workpiece against the workstop (Fig. I). Using both hands, guide the workpiece against the rotation of the sanding belt. Do not force the workpiece against the sanding belt. Allow the machine to do the work.
3. When finished, turn the sander OFF.



## OPERATION

### BELT SANDING OUTSIDE CURVES

1. Turn sander ON and allow it to reach full speed before applying a load.
2. Using both hands, slowly guide the workpiece against the sanding belt. Maintain downward pressure on the workpiece against the table, gently working it along the sanding belt until the desired curve has been created (Fig. J).
3. When finished, turn the sander OFF.



### BELT SANDING INSIDE CURVES

To belt sand any inside curves, use the rounded surface of the large or the small sanding drum wheel. Removing the workstop may be required in order to do so. Make sure to unplug the sander when making any adjustments.

1. Set table tilt to  $0^\circ$  and remove the work stop.
2. Power on the sander and allow it to reach full speed before applying a workpiece.
3. Using both hands, slowly guide the workpiece against the drum wheel portion of the sanding belt. Maintain downward pressure on the workpiece against the table, gently working it along the sanding belt until the desired curve has been created (Fig. L).

### CHANGING SANDING BELTS

To replace the 4 x 24 inch sanding belt, disconnect the machine from its power source and slide the belt tensioning lever (Fig. M) to the right to release the tension. Remove the sanding belt and put on the grit of your choice before re-tightening the belt tensioning lever.

# OPERATION

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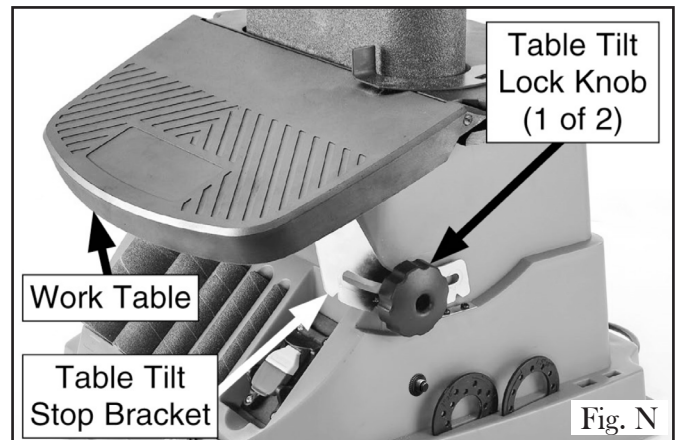
## ADJUST THE TRACKING OF THE SANDING BELT

1. Install the belt sanding attachment and remove all tools from the sander.
2. Connect the sander to a power source and turn it ON. Immediately turn the machine OFF, checking to see if the sanding belt rides centered on the drums, and does not move toward the top nor the bottom edge of the belt sanding attachment.
3. If the sanding belt moves toward the top of the belt sanding attachment, rotate the tracking control knob (see Fig. M) counterclockwise a quarter of a turn.
4. If the sanding belt moves toward the bottom of the belt sanding attachment, rotate the tracking knob clockwise a quarter of a turn.
5. Turn the machine ON, then immediately turn the machine OFF. The sanding belt should be centered on the drums. If it is, then the belt is tracking properly and no further adjustments need to be made. Otherwise, repeat steps 3 or 4 as necessary.

## BEVEL SANDING (Fig. N)

The work table has the capacity to tilt from 0 to 45 degrees for sanding bevels on your workpiece. The table tilt stop bracket has stops for quickly setting the most common angles: 0°, 15°, 22.5°, 30°, and 45°.

1. Unplug the sander from its power source.
2. Install the spindle sander or the belt-sanding attachment.
3. Loosen both table tilt lock knobs.
4. Tilt table to the desired angle.
5. Tighten both lock knobs to secure the table's tilt.



## OVERLOAD PROTECTION

To protect the motor, your sander is equipped with a circuit breaker, located on the right side of the unit near the power switch. If the motor is overloaded, the circuit breaker will trip. To reset the breaker, wait a moment and then press it in to reset it. Do not press too hard on the sandpaper, or the motor may overload.

## REPLACEMENT SANDPAPER

Replacement sandpaper can be purchased from [wenproducts.com](http://wenproducts.com), or by calling 1-800-232-1195 M-F 8-5 CST.

## MAINTENANCE

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**WARNING:** For your own safety, turn the switch OFF and remove the plug from the electrical outlet before adjusting or performing maintenance on the belt/spindle sander.

Before using, check to make sure parts are not damaged, missing, or worn. Check for alignment of moving parts, binding of moving parts, improper mounting, or any other conditions that may affect the sander's safe operation. If any of these conditions exist, do not use the sander until parts are replaced or the sander is properly repaired. Frequently blow or vacuum dust from all sanding parts and motor housing.

**WARNING:** This machine creates a lot of dust. Inhaling said dust on a regular basis can cause permanent respiratory illness. Minimize your exposure by wearing a respirator and using a dust collector. If you do not use some method of dust extraction or collection, the motor could overheat and fail. Failure to use some method of dust extraction or collection will void the warranty.

**WARNING:** Any attempt to repair or replace electrical parts on this tool may be hazardous. Repairs should be done by a qualified service technician.

Clean the machine regularly, vacuuming excess wood chips and saw dust and wiping down the remaining dust with a cloth. If resin accumulates, clean it with a resin-dissolving cleaning agent.

Check the drive belts for damage and wear once a month. Make sure they are properly tensioned, especially after times of heavy usage.

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Sanding grains easily rub off	<ol style="list-style-type: none"> <li>1) Sanding belt/sleeve has been stored in the wrong environment.</li> <li>2) Sanding belt/sleeve has been damaged or folded.</li> </ol>	<ol style="list-style-type: none"> <li>1) Store sanding accessories away from extremely hot/dry temperatures.</li> <li>2) Store sanding accessories properly, without bends, folds, or crushing.</li> </ol>
Deep sanding grooves or scars in workpiece.	<ol style="list-style-type: none"> <li>1) Sanding belt/sleeve grit is too coarse for the desired finish.</li> <li>2) Workpiece sanded across the grain.</li> <li>3) Too much sanding force on workpiece.</li> <li>4) Workpiece held still against sanding surface for too long.</li> </ol>	<ol style="list-style-type: none"> <li>1) Use a finer-grit sanding accessory.</li> <li>2) Sand with the grain of the wood.</li> <li>3) Reduce pressure on workpiece while sanding.</li> <li>4) Keep workpiece moving while sanding on the sanding accessory.</li> </ol>
Sanding surface clogs quickly	<ol style="list-style-type: none"> <li>1) Too much pressure against belt/spindle.</li> <li>2) Sanding softwood.</li> </ol>	<ol style="list-style-type: none"> <li>1) Clean sanding belt/sleeve and then reduce pressure on workpiece while sanding.</li> <li>2) Use different stock/sanding accessories, or accept that this will happen and plan on cleaning or replacing belts/sleeves frequently.</li> </ol>
Burns on workpiece	<ol style="list-style-type: none"> <li>1) Use a sanding grit that is too fine.</li> <li>2) Using too much pressure.</li> <li>3) Work held still for too long.</li> <li>4) Sanding belt/sleeve loaded with debris.</li> </ol>	<ol style="list-style-type: none"> <li>1) Use a coarser-grit sanding accessory.</li> <li>2) Reduce sanding pressure on workpiece.</li> <li>3) Do not keep workpiece in one place for too long.</li> <li>4) Clean or replace the sleeve or belt.</li> </ol>
Sander does not turn on	<ol style="list-style-type: none"> <li>1) Not plugged in to an electrical outlet.</li> <li>2) Defective power switch.</li> <li>3) Onboard circuit breaker tripped.</li> <li>4) Motor or wiring problem.</li> </ol>	<ol style="list-style-type: none"> <li>1) Connect the unit to an outlet.</li> <li>2) Replace the switch.</li> <li>3) Press circuit breaker to reset.</li> <li>4) Have a qualified technician make repairs.</li> </ol>
Motor will not start—fuses or circuit breakers tripping/blowing	<ol style="list-style-type: none"> <li>1) Short circuit in line, cord or plug.</li> <li>2) Short circuit in motor or loose connections.</li> <li>3) Incorrect fuses or circuit breakers in power line.</li> <li>4) Carbon brushes worn down.</li> </ol>	<ol style="list-style-type: none"> <li>1) Inspect cord or plug for damaged insulation and shorted wires.</li> <li>2) Inspect all connections on motor for loose or shorted terminals and/or worn insulation.</li> <li>3) Install correct fuses or circuit breakers or switch tool to an appropriately sized circuit.</li> <li>4) Call customer service (1-800-232-1195) for assistance.</li> </ol>
Motor overheats	<ol style="list-style-type: none"> <li>1) Motor overloaded.</li> <li>2) Extension cord too long with an insufficient gauge.</li> </ol>	<ol style="list-style-type: none"> <li>1) Reduce load on motor (pressure on object being sanded).</li> <li>2) Utilize an extension cord of appropriate gauge and length or plug tool directly into outlet.</li> </ol>
Sander vibrates excessively or has noisy operation.	<ol style="list-style-type: none"> <li>1) Sanding belt/sleeve out of balance/loose.</li> <li>2) Motor or component loose.</li> <li>3) Pulley loose.</li> <li>4) Machine incorrectly mounted to bench.</li> <li>5) Faulty motor bearings.</li> </ol>	<ol style="list-style-type: none"> <li>1) Ensure sleeve/belt is properly installed.</li> <li>2) Inspect/replace damaged bolts/nuts and retighten with thread-locking fluid.</li> <li>3) Re-align/replace shaft, pulley set screw and key.</li> <li>4) Adjust feet. Tighten mounting hardware.</li> <li>5) Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>

## EXPLODED VIEW AND PARTS LIST

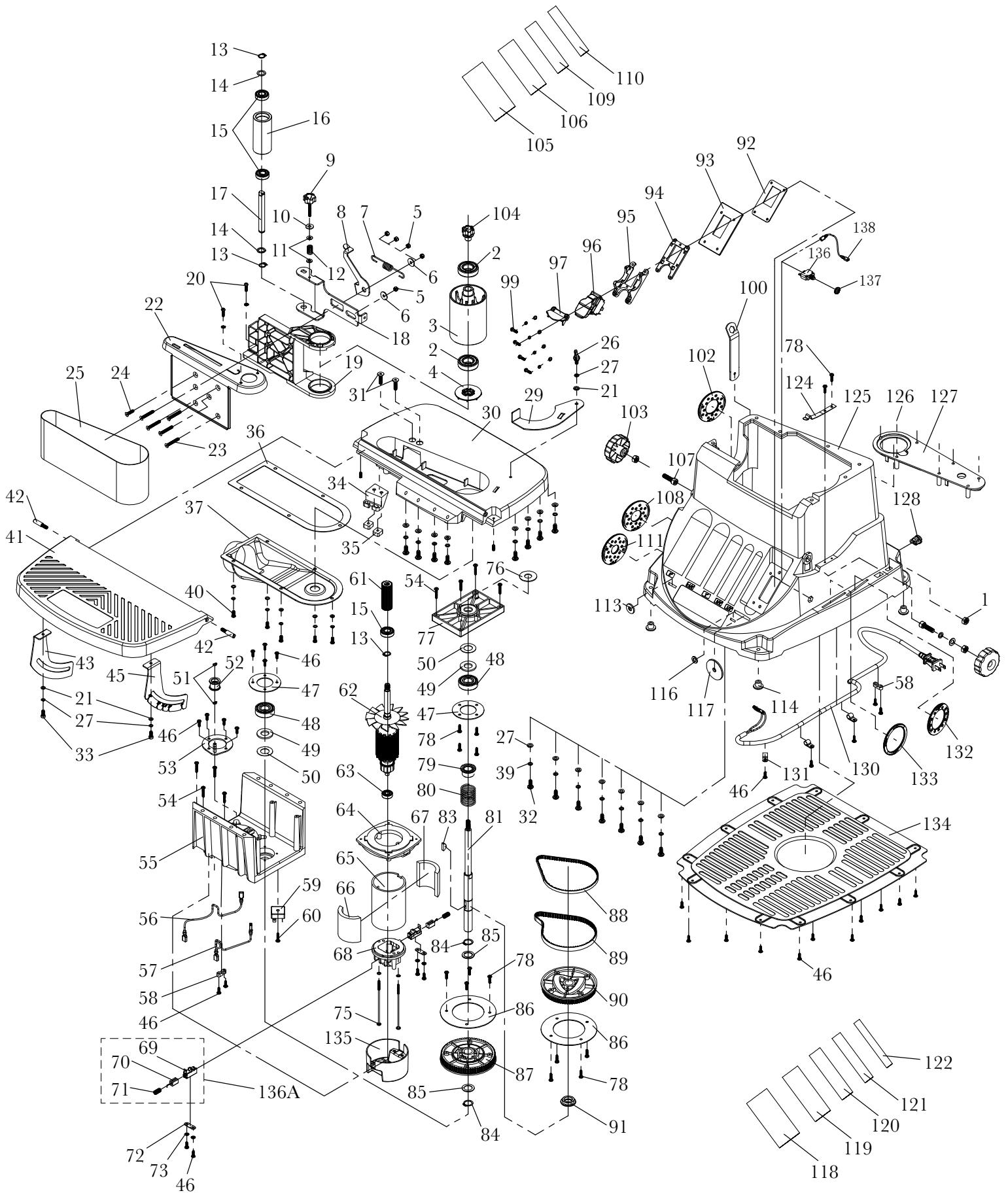
No.	Part No.	Description	No.	Part No.	Description
1	6523-001	Hex Nut, M8	34	6523-034	Drum Housing Support
2	6523-002	Ball Bearing	35	6523-035	Square Nut, M6
3	6523-003	Aluminum Drum Wheel, 3" x 4"	36	6523-036	Dust Port Gasket
4	6523-004	Spindle Washer (3 pcs)	37	6523-037	Dust Port, 1-1/2"
5	6523-005	Lock Nut, M5	40	6523-040	Phillips Screw, M5
6	6523-006	Flat Washer, M5	41	6523-041	Beveling Table
7	6523-007	Extension Spring	42	6523-042	Table Bevel Pin, M6
8	6523-008	Belt Tensioning Arm	43	6523-043	Table Bevel Bracket, Left
9	6523-009	Knob Bolt, M5-.8 x 35	45	6523-045	Table Bevel Stop Bracket, Right
10	6523-010	Rubber Washer, M6	46	6523-046	Tap Screw, M4
12	6523-012	Compression Spring	47	6523-047	Upper Bearing Support
13	6523-013	Flat Washer, M14	48	6523-048	Ball Bearing
14	6523-014	Retaining Ring, M12	49	6523-049	Felt Ring
15	6523-015	Ball Bearing	50	6523-050	Rubber Gasket
16	6523-016	Aluminum Drum Wheel, 1.5" x 3.375"	51	6523-051	Spindle Washer
17	6523-017	Drum Axle	52	6523-052	Bearing Sleeve
18	6523-018	Drum Carriage	53	6523-053	Lower Bearing Support
19	6523-019	Drum Wheel Housing	54	6523-054	Tap Screw, M4
20	6523-020	Screw, M4	55	6523-055	Wheel Support
22	6523-022	Belt Housing Cover	58	6523-058	Wire Clamp
23	6523-023	Screw, M5	59	6523-059	Rectifier
24	6523-024	Screw, M5	60	6523-060	Tap Screw, M4
25	6523-025	Sanding Belt, 4" x 24" 80-grit	61	6523-061	Drum Wheel
26	6523-026	Wing Bolt, M6	62	6523-062	Rotor
27	6523-027	Lock Washer, M5	63	6523-063	Ball Bearing
29	6523-029	Backstop	64	6523-064	Fan Shroud
30	6523-030	Fixed Table	65	6523-065	Field Assembly
31	6523-031	Screw, M6	66	6523-066	Magnetic Shoe, Bottom
32	6523-032	Phillips Screw, M6	67	6523-067	Magnetic Shoe, Top
33	6523-033	Phillips Screw, M5	68	6523-068	Rotor Base
			69	6523-069	Carbon Brush Holder



## EXPLODED VIEW AND PARTS LIST

<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>
70	6523-070	Carbon Brush	105	90225-111	Sanding Drum, 2"
71	6523-071	Carbon Brush Spring	106	90225-110	Sanding Drum, 1-1/2"
72	6523-072	Cord Clamp	107	6523-107	Cap Screw
73	6523-073	Washer, M4	108	6523-108	Throat Plate, 3/4"
75	6523-075	Tap Screw, M4	109	90225-109	Sanding Drum, 1"
76	6523-076	Flat Washer, M6	110	90225-108	Sanding Drum, 3/4"
77	6523-077	Bearing Cover	111	6523-111	Throat Plate, 1/2"
78	6523-078	Tap Screw, M4	113	6523-113	Spindle Washer, 7/8"
79	6523-079	Bearing Sleeve, Upper	114	6523-114	Rubber Foot
80	6523-080	Compression Spring	116	6523-116	Spindle Washer, 5/8"
81	6523-081	Spindle	117	6523-117	Spindle Washer, 1-3/4"
83	6523-083	Woodruff Key, 5 x 19	118	6523-118	Sanding Sleeve, 2" 80-Grit
84	6523-084	Flat Washer, M17	119	6523-119	Sanding Sleeve, 1-1/2" 80-Grit
85	6523-085	Washer, M17	120	6523-120	Sanding Sleeve, 1" 80-Grit
86	6523-086	Pulley Plate	121	6523-121	Sanding Sleeve, 3/4" 80-Grit
87	6523-087	Pulley, Lower	122	6523-122	Sanding Sleeve, 1/2" 80-Grit
88	6523-088	Belt, 3/8" x 160XL	124	6523-124	Bevel Plate Bracket
89	6523-089	Belt, 1/4" x 160XL	125	6523-125	Base
90	6523-090	Pulley, Upper	126	6523-126	Phillips Screw, M5
91	6523-091	Bearing Sleeve, Lower	127	6523-127	Table Insert
92	6523-092	Metal Switch Plate	128	6523-128	Strain Relief
93	6523-093	Plastic Switch Plate Cover	130	6523-130	Power Cord
94	6524-094	Switch Pivot Plate Base	131	6523-131	Cord Clamp
95	6523-095	Switch Pivot Plate	132	6523-132	Throat Plate, 1-1/2"
96	6523-096	Switch	133	6523-133	Throat Plate, 2"
97	6523-097	Switch Key	134	6523-134	Bottom Guard
99	6523-099	Phillips Screw, M4	135	6524-135	Motor Vent Cover
100	6523-100	Spindle Nut Wrench	136A	6523-136A	Brush Assembly
102	6523-102	Throat Plate, 1"	136	6524-136	Circuit Breaker
103	6523-103	Knob	137	6524-137	Circuit Breaker Nut
104	6524-104	Hex Nut Knob, M8	138	6524-138	Wire Lead

# EXPLODED VIEW AND PARTS LIST



## LIMITED TWO YEAR WARRANTY

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WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

### LIMITED WARRANTY OF WEN CONSUMER POWER TOOLS PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC (“Seller”) warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship for a period of two (2) years from date of purchase. Ninety days for all WEN products, if the tool is used for professional use.

**SELLER’S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY** under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of purchase must be a direct vendor of Great Lakes Technologies, LLC. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com) or 1-800-232-1195 to make arrangements for repairs and transportation.

When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the warranty card and/or the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge.

**THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.**

**ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S., SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

**IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

**THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.**

**THIS LIMITED WARRANTY APPLIES ONLY TO PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNEUMATIC TOOLS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE.**

**THANKS FOR  
REMEMBERING**

