

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.



14" Oscillating SPINDLE SANDER



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

ITEM 62146

REV 14g

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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⚠ WARNING

**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

General Tool Safety Warnings

WARNING

Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES.
Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. KEEP WORK AREA CLEAN.
Cluttered areas and benches invite accidents.
4. DON'T USE IN DANGEROUS ENVIRONMENT.
Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
9. USE PROPER EXTENSION CORD. 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. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. DON'T OVERREACH. Keep proper footing and balance at all times.
13. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
14. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
15. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
16. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
17. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
18. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
19. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

**Table A: RECOMMENDED MINIMUM WIRE GAUGE
FOR EXTENSION CORDS
(120 VOLT)**

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH			
	25'	50'	100'	150'
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	Do not use.	

Grounding Instructions

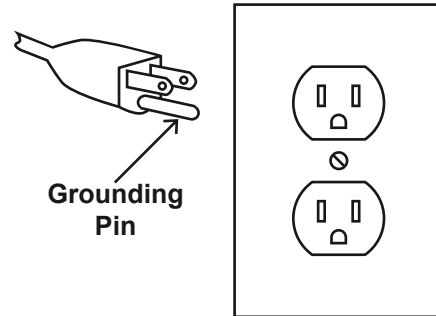


⚠️ WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION
READ AND FOLLOW THESE INSTRUCTIONS:

110-120 VAC Grounded Tools: Tools with Three Prong Plugs

1. 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. This tool is equipped with an electric cord having 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.
2. Do not modify the plug provided – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green 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.
4. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
5. Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.
6. Repair or replace damaged or worn cord immediately.



**125 VAC 3-Prong Plug and Outlet
(for up to 125 VAC and up to 15 A)**

7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in **125 VAC 3-Prong Plug and Outlet**. The tool has a grounding plug that looks like the plug illustrated above in **125 VAC 3-Prong Plug and Outlet**.
8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
9. Do not use an adapter to connect this tool to a different outlet.

Sander Safety Warnings

1. Wear eye protection.
2. Do not wear gloves, necktie, or loose clothing.
3. Support workpiece with worktable.
4. The worktable is the surface mounted close to the sanding surface that the operator rests the workpiece against to prevent it from being pulled by the sanding surface. For safety, use the worktable insert that matches the sanding sleeve.
5. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
6. When servicing use only identical replacement parts.
7. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
8. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
9. Industrial applications must follow OSHA guidelines.
10. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Sander Safety Warnings (cont.)

11. Avoid unintentional starting.
Prepare to begin work before turning on the tool.

12. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.

13. WARNING: SSome dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints
 - Crystalline silica from bricks and cement or other masonry products
 - Arsenic and chromium from chemically treated lumberYour 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. (California Health & Safety Code § 25249.5, *et seq.*)

14. WARNING: The cord of this product contains lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)

15. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.

2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.

3. Use tools with the lowest vibration when there is a choice between different processes.

4. Include vibration-free periods each day of work.

5. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.

6. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



SAVE THESE INSTRUCTIONS.

Specifications



Electrical Rating	120VAC / 60Hz / 3.5A
Motor No Load Speed	1800 RPM
Speed	60 OPM
Stroke	5/8"
Table Top	14" diameter

Call
1-888-866-5797
to order sleeves as
replacement parts.

Setup - Before Use:



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Mounting Sander

1. Select a mounting location that is able to support the weight of the Sander, plus any additional weight placed on it during use.
2. Make sure there are no hidden electric wires, cables or other obstructions that may interfere with the mounting procedure or cause a hazard.
3. Mark the mounting hole locations and drill the appropriate size holes for the mounting bolts (not included).
4. Mount the Sander using Bolts, washers and nuts (not included).

Installing Dust Collector

Attach a dust collection system (not included) to the dust port.

Functions

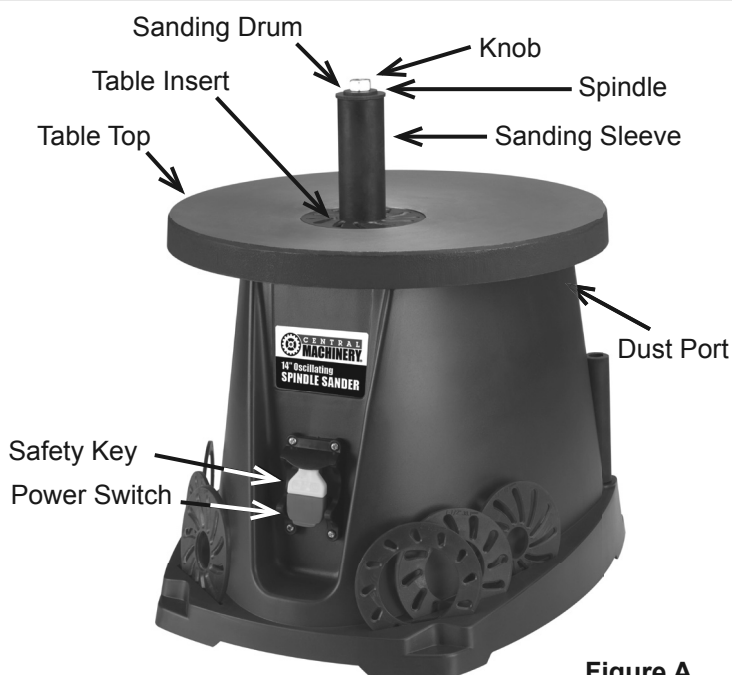


Figure A

Accessories						
	1/2"	3/4"	1"	1½"	2"	3"
Drum Washer						
Spindle Drum						
Sanding Sleeve						
Table Insert						

Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up - Installing Sanding Sleeves

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY:

DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.

Note: Call 1-888-866-5797 to order sleeves as replacement parts.

Note: Do not mix component sizes. For instance, only use the 3/4" Sanding Sleeve with the 3/4" Drum Washer, 3/4" Spindle Drum and 3/4" Table Insert.

Note: The 1/2" Sanding Sleeve does not have a matching Spindle Drum. It slides directly onto the Spindle.

1. Select the desired size Sanding Sleeve and matching Table Insert, Rubber Drum and Drum Washer.
2. Insert the matching Table Insert into the Table top with the directional arrows facing in a clockwise direction.

3. Unthread the Knob on the top of the Spindle.

Note: The Knob unthreads clockwise and tightens counterclockwise.

4. If using the Smallest size Sanding Sleeve (1/2") slide the Sanding Sleeve over the Spindle. If using any other size Sanding Sleeve, slide it over the same size Rubber Drum then slide the drum onto the Spindle.
5. If using the Smallest size Sanding Sleeve (1/2") thread the Knob onto the Spindle. If using any other size Sanding Sleeve, slide the same size Drum Washer onto the Spindle, then thread the Knob onto the top of the Spindle.

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. There must not be objects, such as utility lines, nearby that will present a hazard while working.

General Operating Instructions

1. Install the desired sanding sleeve.
2. Plug the Power Cord into a grounded 120V outlet.
3. Insert the Safety Key and turn the Power Switch on.
5. Keep the piece moving steadily and smoothly across the sanding surface until the desired finish is achieved.
6. When finished, turn the Power Switch off and remove the Safety Key.
7. To prevent accidents, turn off the tool, remove its safety key and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.
4. Contact the workpiece with minimal pressure.

WARNING! FOR DRY SANDING ONLY. Do not use water or another lubricant with this sander. Wet sanding will damage the machine and present a shock hazard.

Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.


TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for:
 - loose hardware,
 - misalignment or binding of moving parts,
 - cracked or broken parts,
 - damaged electrical wiring, and
 - any other condition that may affect its safe operation.
2. **AFTER USE**, wipe external surfaces of the tool with clean cloth.
3. **⚠ WARNING!** If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> 1. Cord not connected. 2. No power at outlet. 3. Tool's thermal reset breaker tripped (if equipped). 4. Internal damage or wear. (Carbon brushes or switch, for example.) 	<ol style="list-style-type: none"> 1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. 3. Turn off tool and allow to cool. Press reset button on tool. 4. Have technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.
Performance decreases over time.	<ol style="list-style-type: none"> 1. Accessory dull or damaged. 2. Carbon brushes worn or damaged. 	<ol style="list-style-type: none"> 1. Keep cutting accessories sharp. Replace as needed. 2. Have qualified technician replace brushes.
Excessive noise or rattling.	<ol style="list-style-type: none"> 1. Internal damage or wear. (Carbon brushes or bearings, for example.) 2. Sanding Sleeve and/ or Drum not secure. 	<ol style="list-style-type: none"> 1. Have technician service tool. 2. Check that Sanding Sleeve and Drum are secured in place with the Knob.
Overheating.	<ol style="list-style-type: none"> 1. Forcing machine to work too fast. 2. Blocked motor housing vents. 3. Motor being strained by long or small diameter extension cord. 	<ol style="list-style-type: none"> 1. Allow machine to work at its own rate. 2. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 3. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.
Sanding Sleeve slips on Drum.	<ol style="list-style-type: none"> 1. Too much pressure on Sanding Sleeve. 2. Spindle Knob loose. 3. Starting machine with workpiece contacting sleeve. 4. Mismatched sleeve, drum or washer. 	<ol style="list-style-type: none"> 1. Apply light pressure. Do not press hard on the Spindle while sanding. 2. Check that spindle Knob is secure. 3. Allow sleeve to come up to full speed before contacting workpiece. 4. Check that the sleeve, drum and washer are the same size.
Material not affected from sanding.	Sanding Sleeve is dull, glazed or loaded with sawdust.	Replace Sanding Sleeve.
Wood burns appearing on wood.	Sanding Sleeve glazed or loaded with sawdust.	Replace Sanding Sleeve.
Spindle does not fully oscillate.	<ol style="list-style-type: none"> 1. Sawdust build up. 2. Mechanical issue. 	<ol style="list-style-type: none"> 1. Turn off and unplug the Sander then clean all sawdust from machine. 2. Have serviced by a qualified technician.
 Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.		

Call
1-888-866-5797
to order sleeves as
replacement parts.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

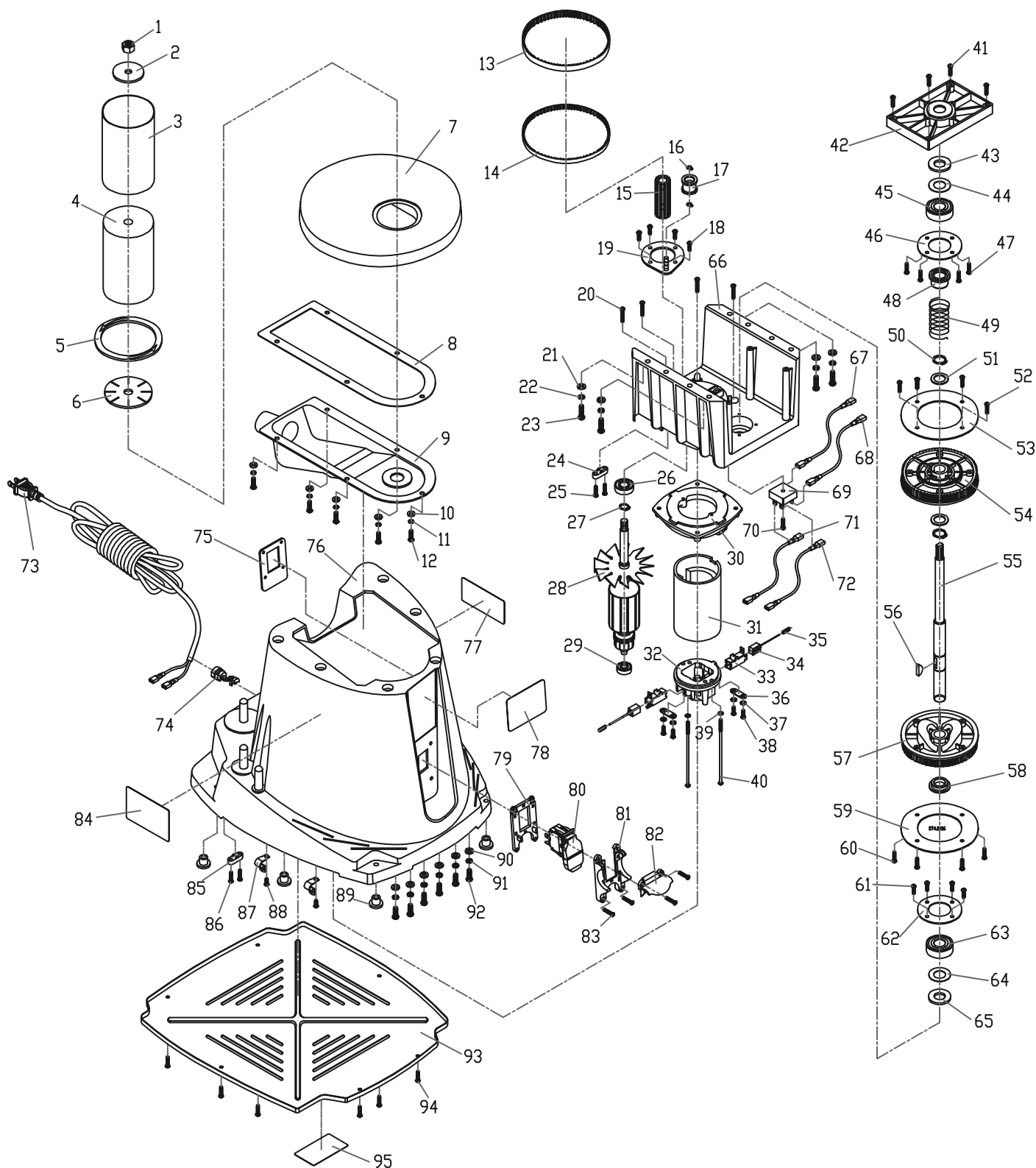
Part	Description	Qty	Part	Description	Qty	Part	Description	Qty
1	Nut, 10mm	1	33	Brush Holder	2	65	Felt	1
2	Upper Spindle Washer	1	34	Carbon Brush	2	66	Wheel Support	1
3	Sander Sleeve	1	35	Brush Spring	2	67	Wire Assembly (I)	1
4	Rubber Spindle	1	36	Cord Clamp	2	68	Wire Assembly (II)	1
5	Throat Plate	1	37	Washer Ø4	4	69	Rectifier	1
6	Lower Spindle Washer	1	38	Screw 4.2X13	4	70	Screw 4.2X19	1
7	Cast Iron Table	1	39	Washer Ø4	2	71	Wire Assembly (III)	1
8	Dust Washer	1	40	Screw 4.2X110	2	72	Wire Assembly (IV)	1
9	Dust Cover	1	41	Screw 4.2X22	4	73	Cord	1
10	Washer Ø5	5	42	Bearing Cover	1	74	Cord Clamp	1
11	Spring Washer Ø5	5	43	Felt	1	75	Switch Orientation Plate	1
12	Screw 5X12	5	44	Rubber Washer	1	76	Housing Base	1
13	Belt	1	45	Bearing 6203zz	1	77	Data Label	1
14	Belt II	1	46	Bearing Support	1	78	Logo Label	1
15	Belt Wheel	1	47	Screw 4.2X15	4	79	Switch Orientation (I)	1
16	Spring Washer	2	48	Bearing Sleeve	1	80	Switch	1
17	Tension Roller Assembly	1	49	Spring	1	81	Switch Orientation (II)	1
18	Screw 4.2X13	4	50	Spring Washer	2	82	Switch Assistant Orientation	1
19	Orientation Plate Assembly	1	51	Spindle Washer	2	83	Screw 4X16	4
20	Screw 4.2X22	4	52	Screw 4.2X13	4	84	Warning Label (I)	1
21	Washer Ø6	4	53	Wheel Plate	1	85	Cord Clamp	1
22	Spring Washer Ø6	4	54	Wheel (I)	1	86	Screw 4.2X15	2
23	Screw 6X16	4	55	Spindle	1	87	Thread	2
24	Cord Clamp	1	56	Pin	1	88	Screw 4.2X10	2
25	Screw 4.2X15	2	57	Wheel (II)	1	89	Rubble Foot	4
26	Bearing 6001zz	1	58	Bearing Sleeve	1	90	Washer Ø6	6
27	Spring Washer	1	59	Wheel Plate	1	91	Spring Washer Ø6	6
28	Armature Assembly	1	60	Screw 4.2X13	4	92	Screw 6X16	6
29	Bearing 608zz	1	61	Screw 4.2X13	4	93	Bottom Plate	1
30	Connection Plate	1	62	Bearing Support	1	94	Screw 4.2X13	6
31	Field Assembly	1	63	Bearing 6203zz	1	95	Warning Label (II)	1
32	Rear Cover	1	64	Rubble Washer	1			

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Assembly Diagram



SAFETY

SETUP

OPERATION

MAINTENANCE

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We 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 product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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

