

# 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.

20a

# **Bauer**<sup>TM</sup>

## **191511E-B**

## **OSCILLATING EDGE / BELT AND SPINDLE SANDER**



Visit our website at: <http://www.harborfreight.com>  
Email our technical support at: [productsupport@harborfreight.com](mailto:productsupport@harborfreight.com)

**56870**

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.

Copyright© 2019 by Harbor Freight Tools®. All rights reserved.  
No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

### **⚠ WARNING**

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

## Table of Contents

|                      |   |                              |    |
|----------------------|---|------------------------------|----|
| Safety .....         | 2 | Maintenance .....            | 8  |
| Specifications ..... | 5 | Parts List and Diagram ..... | 10 |
| Setup .....          | 5 | Warranty .....               | 12 |
| Operation .....      | 6 |                              |    |

# Bauer™

### 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.

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

| NAMEPLATE AMPERES<br>(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  | <b>Do not use.</b> |      |

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. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
17. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. **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.
20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. **NEVER LEAVE TOOL RUNNING UNATTENDED.** TURN POWER OFF. Don't leave tool until it comes to a complete stop.

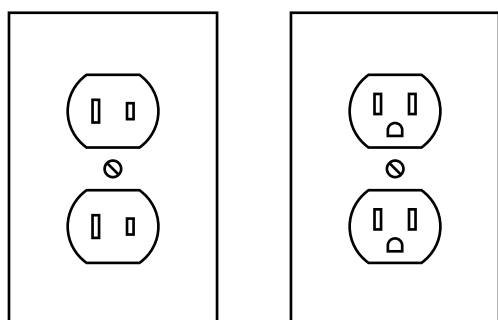
## Grounding Instructions



### ⚠ WARNING

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

## 110-120 VAC Double Insulated Tools: Tools with Two Prong Plugs



Outlets for 2-Prong Plug

1. To reduce the risk of electric shock, double insulated equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
2. Double insulated tools may be used in either of the 120 volt outlets shown in the preceding illustration. (See Outlets for 2-Prong Plug.)

# Sander Tool Safety Warnings

SAFETY

SETUP

OPERATION

MAINTENANCE

## For Your Own Safety Read Instruction Manual Before Operating Tool Sander

1. Wear eye protection.
2. Support workpiece with miter gauge, backstop, or worktable.
3. Maintain 1/16 inch maximum clearance between table and Sanding Belt or disc.
4. The backstop is a fence near the surface that helps the operator maintain control of the workpiece and prevents the workpiece from being pulled into the machine. For safety, it must be adjusted very close to the sanding surface.
5. 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, it must be adjusted very close to the sanding surface.
6. The sanding belt is designed to rotate down towards the table while the disc rotates both up from the table and down towards the table.
7. **DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED. Moving guards must move freely and close instantly.**
8. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
9. When servicing use only identical replacement parts.
10. Do not depress the spindle lock when starting or during operation.
11. 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.
12. 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.
13. Industrial applications must follow OSHA guidelines.
14. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
15. Avoid unintentional starting. Prepare to begin work before turning on the tool.
16. 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.
17. 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 workpiece 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 |
| Belt Speed        | 1611 FPM             |
| Spindle Speed     | 2000 RPM             |
| Belt Size         | 4" W x 24" L         |

## 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.

## Assembly

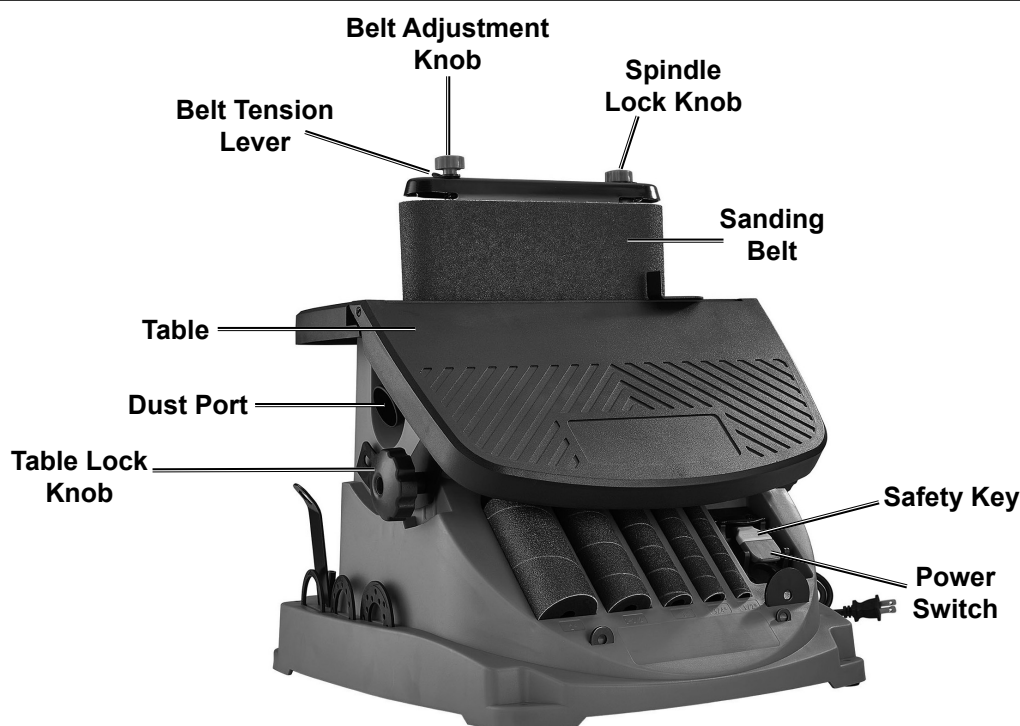
### Mounting Sander

1. Select a workbench or 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



## 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

#### **⚠ 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.

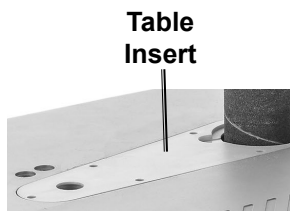
**TO PREVENT SERIOUS INJURY:**

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

#### Installing Sanding Drum

**Note:** Do not mix component sizes. For instance, only use the 3/4" Sanding Sleeve with the 3/4" Sanding Drum and corresponding Throat Plate.

1. Remove Backstop. Place Table Insert in table opening.



2. Select the desired size Sanding Drum with matching Sanding Sleeve and Throat Plate.

3. Place Throat Plate over Spindle Shaft, followed by Sanding Drum and matching Sanding Sleeve.

**Note:** The 1/2" Sanding Sleeve does not have a matching Sanding Drum. It slides directly onto the Spindle, and is held in place with the Spindle Washer and Nut.

4. Secure Sanding Drum with Spindle Nut and Washer. Use Nut Wrench to tighten.

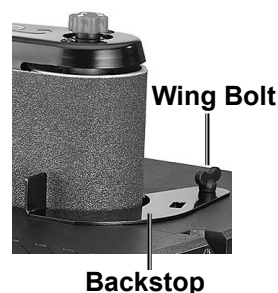


#### Installing Sanding Belt

1. Remove any current Sanding Drum.
2. Place Sanding Belt housing over Spindle and secure with Spindle Lock Knob.



3. Install Backstop and secure with Wing Bolt.



#### Replacing Sanding Belt

1. Push Belt Tension Lever to the right to release tension on the belt.



2. Remove Sanding Belt.
3. Place new Belt onto housing and move Belt Tension Lever back to original position.
4. Adjust the Sanding Belt Tracking as explained in the next section.

## Adjusting the Sanding Belt Tracking

**Note:** Adjust belt tracking every time you replace the Sanding Belt.

1. Turn Sander on, then immediately turn off.
2. The belt should remain centered on its housing. If not, do the following:
  - a. If belt moves up, turn Adjustment Knob counterclockwise 1/4 turn.
  - b. If belt moves down, turn Adjustment Knob clockwise 1/4 turn.

## 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.
4. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.

## General Operating Instructions

### Spindle Sanding

**Note:** The Spindle will move up and down as the belt moves across the workpiece.

1. Install the desired Sanding Drum with matching Sleeve.
2. Make sure that the Switch is in the off-position, then plug in the tool.
3. Insert the Safety Key and turn on the tool.

**WARNING! USE 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.

### Belt Sanding

**Note:** The belt housing will move up and down as the belt moves across the workpiece.

1. Make sure that the Switch is in the off-position, then plug in the tool.
2. Insert the Safety Key and turn on the tool.

**WARNING! USE 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.

3. Use two hands and hold workpiece securely against table and/or fence at all times.

4. Use two hands and hold workpiece securely against table and/or fence at all times.
5. Press the workpiece against the belt to start sanding. Keep the workpiece moving for a better finish. Contact the workpiece with minimal pressure.
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. Press the workpiece against the belt to start sanding. Keep the workpiece moving for a better finish. Contact the workpiece with minimal pressure.

**Note:** When sanding a 90° edge, use the Backstop to support workpiece.

**Note:** When sanding the inside curve of a workpiece, use either rounded end of Sanding Belt. If necessary, remove Backstop.

5. When finished, turn the Power Switch off and remove the Safety Key.
6. 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.

### Bevel Sanding

**Note:** Bevel sanding can be done using both the Spindle and Belt functions.

1. Loosen both Table Lock Knobs.
2. Tilt table to desired angle. The table will lock into place at 0°, 15°, 22.5°, 30°, and 45°.

**CAUTION!** To avoid injury, use both hands when tilting the table to desired position.

3. Tighten both knobs to secure table position.

## 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. Periodically, wear ANSI-approved safety goggles and NIOSH-approved breathing protection and blow dust out of the motor vents using dry compressed air.
4. **⚠️ 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"> <li>1. Cord not connected.</li> <li>2. No power at outlet.</li> <li>3. Tool's thermal reset breaker tripped (if equipped).</li> <li>4. Internal damage or wear. (Carbon brushes or switch, for example.)</li> </ol> | <ol style="list-style-type: none"> <li>1. Check that cord is plugged in.</li> <li>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.</li> <li>3. Turn off tool and allow to cool. Press reset button on tool.</li> <li>4. Have technician service tool.</li> </ol>                                                                              |
| 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 <b>Table A</b> on page 3.                                                                                                                                                                                                                                                                                                                                    |
| Performance decreases over time.                                                                                                                                                                            | <ol style="list-style-type: none"> <li>1. Accessory dull or damaged.</li> <li>2. Carbon brushes worn or damaged.</li> </ol>                                                                                                                            | <ol style="list-style-type: none"> <li>1. Keep Sanding Drums and Belts in good condition. Replace as needed.</li> <li>2. Have qualified technician replace brushes.</li> </ol>                                                                                                                                                                                                                                                                                                              |
| Excessive noise or rattling.                                                                                                                                                                                | Internal damage or wear. (Carbon brushes or bearings, for example.)                                                                                                                                                                                    | Have technician service tool.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Overheating.                                                                                                                                                                                                | <ol style="list-style-type: none"> <li>1. Forcing machine to work too fast.</li> <li>2. Accessory dull or damaged.</li> <li>3. Blocked motor housing vents.</li> <li>4. Motor being strained by long or small diameter extension cord.</li> </ol>      | <ol style="list-style-type: none"> <li>1. Allow machine to work at its own rate.</li> <li>2. Keep Sanding Drums and Belts in good condition. Replace as needed.</li> <li>3. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.</li> <li>4. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See <b>Table A</b> on page 3.</li> </ol> |
|  <b>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</b> |                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 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 and Diagram

### Parts List

| Part | Description          | Qty |
|------|----------------------|-----|
| 1    | Spindle Lock Knob    | 2   |
| 2    | Bearing 604          | 2   |
| 3    | Large Drum Wheel     | 1   |
| 4    | Connector            | 1   |
| 5    | Hex Lock Nut         | 5   |
| 6    | Tension Plate Gasket | 2   |
| 7    | Extension Spring     | 1   |
| 8    | Belt Tension Arm     | 1   |
| 9    | Knob                 | 1   |
| 10   | Rubber Washer B      | 1   |
| 11   | Knob Washer          | 2   |
| 12   | Knob Spring          | 1   |
| 13   | Spring Washer 12     | 3   |
| 14   | Drum Shaft Gasket    | 2   |
| 15   | Bearing 601          | 3   |
| 16   | Small Drum Wheel     | 1   |
| 17   | Small Drum Shaft     | 1   |
| 18   | Drum Wheel Support   | 1   |
| 19   | Drum Wheel Support   | 1   |
| 20   | Screw M4x16          | 2   |
| 21   | External Lock Washer | 2   |
| 22   | Belt Housing Cover   | 1   |
| 23   | Hex Screw M5x36      | 5   |
| 24   | Hex Screw M5x20      | 1   |
| 25   | Sanding Belt         | 1   |
| 26   | Wing Bolt            | 1   |
| 27   | Spring Washer 6      | 9   |
| 28   | Washer 6             | 9   |
| 29   | Backstop             | 1   |
| 30   | Work Table           | 1   |
| 31   | Screw M6x25          | 2   |
| 32   | Screw M6x16          | 8   |
| 33   | Screw M5x13          | 2   |
| 34   | Flexible Slider      | 1   |
| 35   | Square Nut M6        | 2   |
| 36   | Rubber Washer        | 1   |
| 37   | Dust Port B          | 1   |
| 38   | Flat Washer 5        | 14  |
| 39   | Spring Washer 5      | 14  |
| 40   | Screw M5x12          | 5   |
| 41   | Table                | 1   |
| 42   | Rotary Screw         | 2   |
| 43   | Right Bucket         | 1   |
| 44   | Hex Screw M5x12      | 2   |
| 45   | Left Bucket          | 1   |

| Part | Description          | Qty |
|------|----------------------|-----|
| 46   | Tap Screw ST4.2x13   | 30  |
| 47   | Bearing Cover        | 2   |
| 48   | Bearing 6203         | 2   |
| 49   | Wool Felt            | 2   |
| 50   | Rubber Gasket        | 1   |
| 51   | Spring Washer        | 2   |
| 52   | Bearing Sleeve       | 1   |
| 53   | Guide Plate          | 1   |
| 54   | Tap Screw            | 8   |
| 55   | Wheel Support        | 1   |
| 56   | Connector Set I      | 1   |
| 57   | Connector Set II     | 1   |
| 58   | Cable Clamp          | 2   |
| 59   | Bridge Rectifier     | 1   |
| 60   | Tap Screw            | 1   |
| 61   | Long Belt Wheel      | 1   |
| 62   | Rotor Component      | 1   |
| 63   | Bearing 608          | 1   |
| 64   | Junction Plate       | 1   |
| 65   | Cylinder             | 1   |
| 66   | Magnetic Shoe I      | 1   |
| 67   | Magnetic Shoe II     | 1   |
| 68   | Rotor Base           | 1   |
| 69   | Brush Holder         | 2   |
| 70   | Carbon Brush         | 2   |
| 71   | Brush Spring         | 2   |
| 72   | Tension Disc         | 2   |
| 73   | Internal Lock Washer | 4   |
| 74   | Flat Washer 4        | 6   |
| 75   | Tap Screw St4.2x110  | 2   |
| 76   | Rubber Dust Washer   | 1   |
| 77   | Bearing Cover        | 1   |
| 78   | Tap Screw St4.2x16   | 14  |
| 79   | Large Bearing Sleeve | 1   |
| 80   | Compression Spring   | 1   |
| 81   | Output Shaft         | 1   |
| 82   | Rubber Plug 5x8      | 1   |
| 83   | Woodruff Key         | 1   |
| 84   | Flat Washer 17       | 2   |
| 85   | Output Shaft Gasket  | 2   |
| 86   | Pulley Plate         | 2   |
| 87   | Driving Pulley       | 1   |
| 88   | Synchronous Belt II  | 1   |
| 89   | Synchronous Belt     | 1   |
| 90   | Passive Belt Wheel   | 1   |

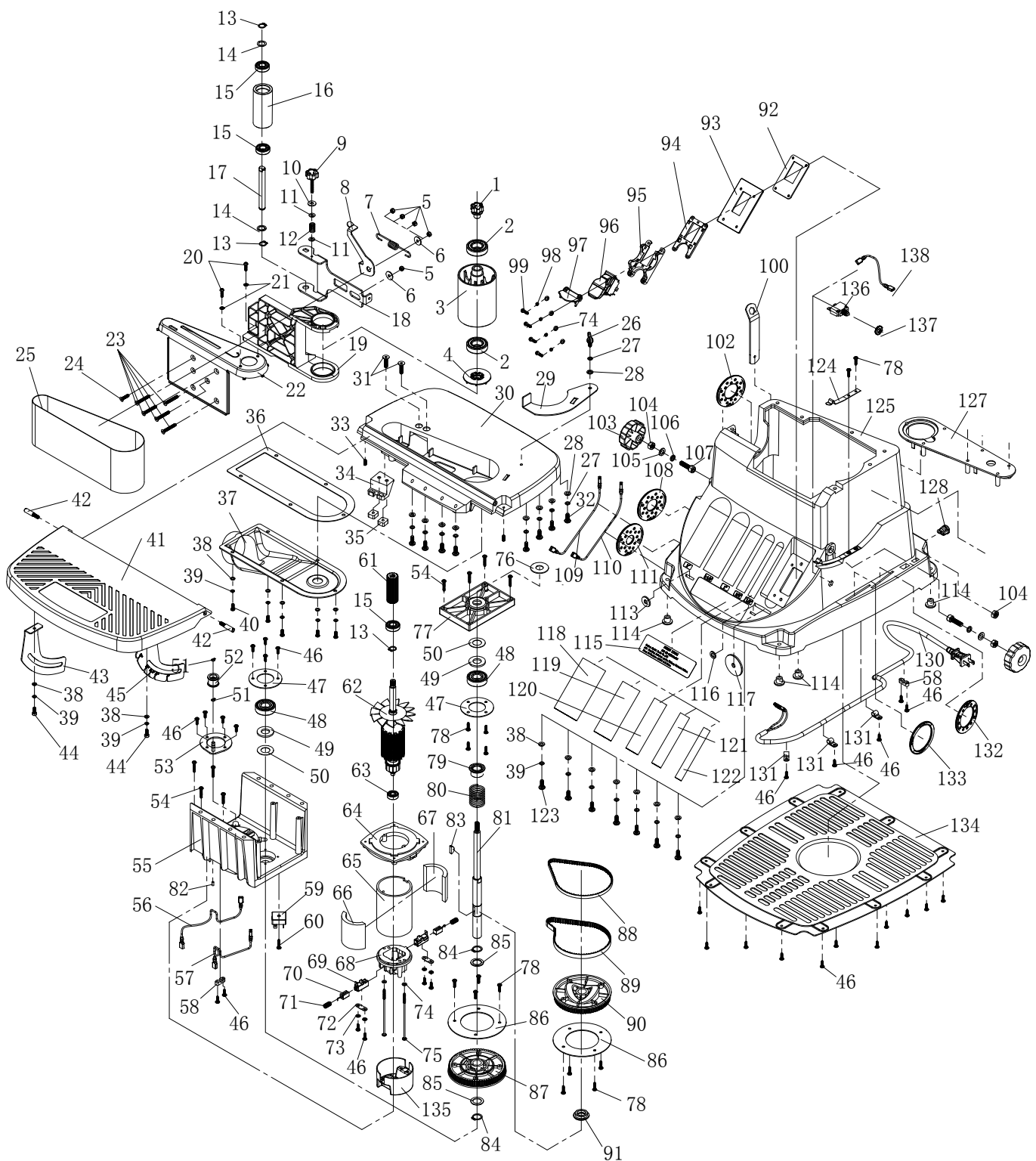
| Part | Description            | Qty |
|------|------------------------|-----|
| 91   | Small Bearing Sleeve   | 1   |
| 92   | Positioning Board      | 1   |
| 93   | Switch Subplate        | 1   |
| 94   | Switch Set Ring        | 1   |
| 95   | Switch Set Ring        | 1   |
| 96   | On/Off Switch          | 1   |
| 97   | Safety Key             | 1   |
| 98   | Spring Washer 4        | 4   |
| 99   | Screw M4x19            | 4   |
| 100  | Wrench                 | 1   |
| 102  | Throat Plate 1         | 1   |
| 103  | Knob                   | 2   |
| 104  | Nut M8                 | 3   |
| 105  | Flat Washer 8          | 2   |
| 106  | Spring Washer 8        | 2   |
| 107  | Hex Screw M8x28        | 2   |
| 108  | Throat Plate 2         | 1   |
| 109  | Motor Connector Set I  | 1   |
| 110  | Motor Connector Set II | 1   |
| 111  | Throat Plate 3         | 1   |
| 113  | Spindle Washer         | 1   |
| 114  | Rubber Foot            | 4   |
| 115  | Brandmark              | 1   |
| 116  | Spindle Washer         | 1   |
| 117  | Spindle Washer         | 1   |
| 118  | Sanding Sleeve 1       | 1   |
| 119  | Sanding Sleeve 2       | 1   |
| 120  | Sanding Sleeve 3       | 1   |
| 121  | Sanding Sleeve 4       | 1   |
| 122  | Sanding Sleeve 5       | 1   |
| 123  | Hex Screw M8x16        | 7   |
| 124  | Division Plate         | 1   |
| 125  | Housing                | 1   |
| 127  | Table Insert           | 1   |
| 128  | Line Card              | 1   |
| 130  | Cable                  | 1   |
| 131  | Clamp                  | 3   |
| 132  | Throat Plate 4         | 1   |
| 133  | Throat Plate 5         | 1   |
| 134  | Base                   | 1   |
| 135  | Motor Safety Cover     | 1   |
| 136  | Overload Protector     | 1   |
| 137  | Screw Nut              | 1   |
| 138  | Connector Set          | 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.

The logo for Bauer, featuring the word "Bauer" in a bold, italicized, sans-serif font. A small trademark symbol (TM) is located at the end of the word.