



# OPERATOR'S MANUAL

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Wood Working



## OSCILLATING EDGE BELT SANDER MODEL: ES-6100

Baileigh Industrial Holdings LLC

P.O. Box 531

Manitowoc, WI 54221-0531

Phone: 920.684.4990

Fax: 920.684.3944

[Baileigh-Sales@jpwindustries.com](mailto:Baileigh-Sales@jpwindustries.com)

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## THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial Holdings LLC. We hope that you find it productive and useful to you for a long time to come.

**Inspection & Acceptance.** Buyer shall inspect all Goods within ten (10) days after receipt thereof. Buyer's payment shall constitute final acceptance of the Goods and shall act as a waiver of the Buyer's rights to inspect or reject the goods unless otherwise agreed. If Buyer rejects any merchandise, Buyer must first obtain a Returned Goods Authorization ("RGA") number before returning any goods to Seller. Goods returned without an RGA will be refused. Seller will not be responsible for any freight costs, damages to goods, or any other costs or liabilities pertaining to goods returned without a RGA. Seller shall have the right to substitute a conforming tender. Buyer will be responsible for all freight costs to and from Buyer and repackaging costs, if any, if Buyer refuses to accept shipment. If Goods are returned in unsalable condition, Buyer shall be responsible for full value of the Goods. Buyer may not return any special-order Goods. Any Goods returned hereunder shall be subject to a restocking fee equal to 30% of the invoice price.

**Specifications.** Seller may, at its option, make changes in the designs, specifications or components of the Goods to improve the safety of such Goods, or if in Seller's judgment, such changes will be beneficial to their operation or use. Buyer may not make any changes in the specifications for the Goods unless Seller approves of such changes in writing, in which event Seller may impose additional charges to implement such changes.

**Limited Warranty.** Seller warrants to the original end-user that the Goods manufactured or provided by Seller under this Agreement shall be free of defects in material or workmanship for a period of twelve (12) months from the date of purchase, provided that the Goods are installed, used, and maintained in accordance with any instruction manual or technical guidelines provided by the Seller or supplied with the Goods, if applicable. The original end-user must give written notice to Seller of any suspected defect in the Goods prior to the expiration of the warranty period. The original end-user must also obtain a RGA from Seller prior to returning any Goods to Seller for warranty service under this paragraph. Seller will not accept any responsibility for Goods returned without a RGA. The original end-user shall be responsible for all costs and expenses associated with returning the Goods to Seller for warranty service. In the event of a defect, Seller, at its sole option, shall repair or replace the defective Goods or refund to the original end-user the purchase price for such defective Goods. Goods are not eligible for replacement or return after a period of 10 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (f) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

**EXCLUSION OF OTHER WARRANTIES.** THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ANY AND ALL OTHER EXPRESS, STATUTORY OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. NO WARRANTY IS MADE WHICH EXTENDS BEYOND THAT WHICH IS EXPRESSLY CONTAINED HEREIN.

**Limitation of Liability.** IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY OTHER PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR DOWN TIME) ARISING FROM OR IN MANNER CONNECTED WITH THE GOODS, ANY BREACH BY SELLER OR ITS AGENTS OF THIS AGREEMENT, OR ANY OTHER CAUSE WHATSOEVER, WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY OF LIABILITY. BUYER'S REMEDY WITH RESPECT TO ANY CLAIM ARISING UNDER THIS AGREEMENT IS STRICTLY LIMITED TO NO MORE THAN THE AMOUNT PAID BY THE BUYER FOR THE GOODS.



**Force Majeure.** Seller shall not be responsible for any delay in the delivery of, or failure to deliver, Goods due to causes beyond Seller's reasonable control including, without limitation, acts of God, acts of war or terrorism, enemy actions, hostilities, strikes, labor difficulties, embargoes, non-delivery or late delivery of materials, parts and equipment or transportation delays not caused by the fault of Seller, delays caused by civil authorities, governmental regulations or orders, fire, lightening, natural disasters or any other cause beyond Seller's reasonable control. In the event of any such delay, performance will be postponed by such length of time as may be reasonably necessary to compensate for the delay.

**Installation.** If Buyer purchases any Goods that require installation, Buyer shall, at its expense, make all arrangements and connections necessary to install and operate the Goods. Buyer shall install the Goods in accordance with any Seller instructions and shall indemnify Seller against any and all damages, demands, suits, causes of action, claims and expenses (including actual attorneys' fees and costs) arising directly or indirectly out of Buyer's failure to properly install the Goods.

**Work By Others; Safety Devices.** Unless agreed to in writing by Seller, Seller has no responsibility for labor or work performed by Buyer or others, of any nature, relating to design, manufacture, fabrication, use, installation or provision of Goods. Buyer is solely responsible for furnishing and requiring its employees and customers to use all safety devices, guards and safe operating procedures required by law and/or as set forth in manuals and instruction sheets furnished by Seller. Buyer is responsible for consulting all operator manuals, ANSI or comparable safety standards, OSHA regulations and other sources of safety standards and regulations applicable to the use and operation of the Goods.

**Remedies.** Each of the rights and remedies of Seller under this Agreement is cumulative and in addition to any other or further remedies provided under this Agreement or at law or equity.

**Attorney's Fees.** In the event legal action is necessary to recover monies due from Buyer or to enforce any provision of this Agreement, Buyer shall be liable to Seller for all costs and expenses associated therewith, including Seller's actual attorney fees and costs.

**Governing Law/Venue.** This Agreement shall be construed and governed under the laws of the State of Wisconsin, without application of conflict of law principles. Each party agrees that all actions or proceedings arising out of or in connection with this Agreement shall be commenced, tried, and litigated only in the state courts sitting in Manitowish County, Wisconsin or the U.S. Federal Court for the Eastern District of Wisconsin. Each party waives any right it may have to assert the doctrine of "forum non conveniens" or to object to venue to the extent that any proceeding is brought in accordance with this section. Each party consents to and waives any objection to the exercise of personal jurisdiction over it by courts described in this section. Each party waives to the fullest extent permitted by applicable law the right to a trial by jury.

**Summary of Return Policy.**

- 10 Day acceptance period from date of delivery. Damage claims and order discrepancies will not be accepted after this time.
- You must obtain a Baileigh issued RGA number PRIOR to returning any materials.
- Returned materials must be received at Baileigh in new condition and in original packaging.
- Altered items are not eligible for return.
- Buyer is responsible for all shipping charges.
- A 30% re-stocking fee applies to all returns.

Baileigh Industrial Holdings LLC makes every effort to ensure that our posted specifications, images, pricing and product availability are as correct and timely as possible. We apologize for any discrepancies that may occur. Baileigh Industrial Holdings LLC reserves the right to make any and all changes deemed necessary in the course of business including but not limited to pricing, product specifications, quantities, and product availability.

**For Customer Service & Technical Support:**

Please contact one of our knowledgeable Sales and Service team members at:  
(920) 684-4990 or e-mail us at [Baileigh-Service@jpwindustries.com](mailto:Baileigh-Service@jpwindustries.com)



## **INTRODUCTION**

*The quality and reliability of the components assembled on a Baileigh Industrial Holdings LLC machine guarantee near perfect functioning, free from problems, even under the most demanding working conditions. However, if a situation arises, refer to the manual first. If a solution cannot be found, contact the distributor where you purchased our product. Make sure you have the serial number and production year of the machine (stamped on the nameplate). For replacement parts refer to the assembly numbers on the parts list drawings.*

*Our technical staff will do their best to help you get your machine back in working order.*

### **In this manual you will find: (when applicable)**

- Safety procedures
- Correct installation guidelines
- Description of the functional parts of the machine
- Capacity charts
- Setup and start-up instructions
- Machine operation
- Scheduled maintenance
- Parts lists

## **GENERAL NOTES**

After receiving your equipment remove the protective container. Do a complete visual inspection, and if damage is noted, **photograph it for insurance claims** and contact your carrier at once, requesting inspection. Also contact Baileigh Industrial Holdings LLC and inform them of the unexpected occurrence. Temporarily suspend installation.

Take necessary precautions while loading / unloading or moving the machine to avoid any injuries.

Your machine is designed and manufactured to work smoothly and efficiently. Following proper maintenance instructions will help ensure this. Try and use original spare parts, whenever possible, and most importantly; **DO NOT** overload the machine or make any modifications.



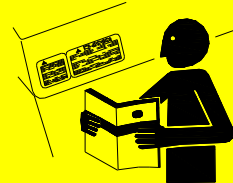
**Note:** This symbol refers to useful information throughout the manual.



## IMPORTANT

### PLEASE READ THIS OPERATORS MANUAL CAREFULLY

It contains important safety information, instructions, and necessary operating procedures. The continual observance of these procedures will help increase your production and extend the life of the equipment.



## SAFETY INSTRUCTIONS

### LEARN TO RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, **BE ALERT TO THE POTENTIAL FOR PERSONAL INJURY!**



Follow recommended precautions and safe operating practices.

### UNDERSTAND SIGNAL WORDS

A signal word – **DANGER**, **WARNING**, or **CAUTION** – is used with the safety alert symbol. **NOTICE**, which is not related to personal injury, is used without a symbol.

**DANGER:** Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

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

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

**NOTICE:** Indicates a situation which, if not avoided, could result in property damage.

**DANGER**

**WARNING**

**CAUTION**

**NOTICE**

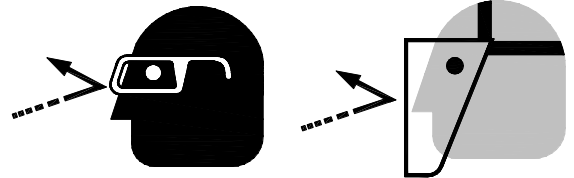


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



**PROTECT EYES**

Wear safety glasses or suitable eye protection when working on or around machinery.



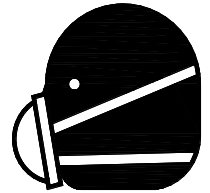
**PROTECT AGAINST NOISE**

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear suitable hearing protective devices such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.



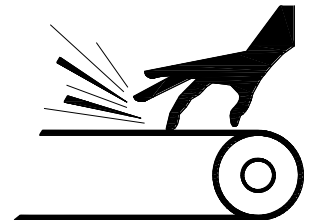
**DUST HAZARD**

Wear appropriate dust mask. Dust created while using machinery can cause cancer, birth defects, and long-term respiratory damage. Be aware of the dust hazards associated with all types of materials.



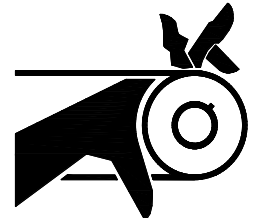
**MOVING BELT ABRASIONS**

**DO NOT** place hands or fingers near, or in contact with sanding belt during operation.



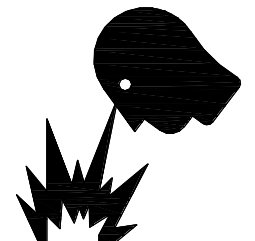
**MOVING BELTS CAN CRUSH AND DISMEMBER**

**DO NOT** allow fingers to get pinched between belt and belt rollers. This may pull the operator's hand into the machine causing serious personal injury. **DO NOT** operate without guards in place.



**DUST PARTICLES AND IGNITION SOURCES**

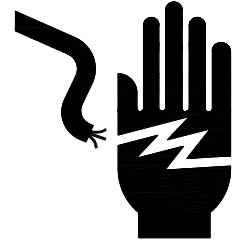
**DO NOT** operate the table saw in areas where explosion risks are high. Such areas include locations near pilot lights, open flames, or other ignition sources.





### HIGH VOLTAGE

USE CAUTION IN HIGH VOLTAGE AREAS. DO NOT assume the power to be off.  
FOLLOW PROPER LOCKOUT PROCEDURES.



### CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm.  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



## SAFETY PRECAUTIONS



Wood working can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result.

Safety equipment such as guards, hold-downs, safety glasses, dust masks and hearing protection can reduce your potential for injury. But even the best guard will not make up for poor judgment, carelessness or inattention. **Always use common sense** and exercise **caution** in the workshop. If a procedure feels dangerous, don't try it.

**REMEMBER: Your personal safety is your responsibility.**



**WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY**

### **Dear Valued Customer:**

- All Baileigh machines should be used only for their intended use.
- Baileigh does not recommend or endorse making any modifications or alterations to a Baileigh machine. Modifications or alterations to a machine may pose a substantial risk of injury to the operator or others and may do substantial damage to the machine.
- Any modifications or alterations to a Baileigh machine will invalidate the machine's warranty.





**PLEASE ENJOY YOUR BAILEIGH MACHINE! ....PLEASE ENJOY IT SAFELY!**

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.** Learn the machine's application and limitations as well as the specific hazards.
2. **Only trained and qualified personnel can operate this machine.**
3. **Make sure guards are in place and in proper working order before operating machinery.**
4. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
5. **Keep work area clean.** Cluttered areas invite injuries.
6. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
7. **Do not force tool.** Your machine will do a better and safer job if used as intended. **DO NOT** use inappropriate attachments in an attempt to exceed the machines rated capacity.
8. **Use the right tool for the job. DO NOT** attempt to force a small tool or attachment to do the work of a large industrial tool. **DO NOT** use a tool for a purpose for which it was not intended.
9. **Dress appropriate. DO NOT** wear loose fitting clothing or jewelry as they can be caught in moving machine parts. Protective clothing and steel toe shoes are recommended when using machinery. Wear a restrictive hair covering to contain long hair.
10. **Use eye protection.** Always wear ISO approved protective eye wear when operating machinery. Wear a full-face shield if you are producing metal filings. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specification. Use of eye wear which does not comply with ANSI Z87.1 specification could result in severe injury from breakage of eye protection.
11. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
12. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
13. **Check for damaged parts.** Before using any tool or machine, carefully check any part that appears damaged. Check for alignment and binding of moving parts that may affect proper machine operation.
14. **Observe work area conditions. DO NOT** use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted. **DO NOT** use electrically powered tools in the presence of flammable gases or liquids.
15. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
16. Keep visitors a safe distance from the work area.



17. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
18. **DO NOT operate machine if under the influence of alcohol or drugs.** Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
19. Watch for fire and keep a fire extinguisher close by.
20. **DO NOT** touch live electrical components or parts.
21. Turn off power before checking, cleaning, or replacing any parts.
22. Be sure all equipment is properly installed and grounded according to national, state, and local codes.
23. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**
24. **DO NOT** bypass or defeat any safety interlock systems.
25. Know the location of the **ON - OFF** switch and the **“E”- STOP** button.
26. **Machines can eject** piece parts towards the operator. Know and avoid the conditions which cause the piece part to kickback.
27. **Check** for damaged parts before using machinery. Check for binding or misaligned parts, broken parts, loose bolts, or any other conditions which may impair the machines operation. Repair or replace any damaged parts before operation.
28. **Do not remove** any warning signs.
29. **Maintain machine in top condition.** Keep clean for best and safest performance. Follow instructions for lubricating and changing accessories.
30. **Reduce the risk of unintentional starting.** Make sure switch is in **“OFF”** position before plugging in power cord.
31. **Never leave machine running unattended. TURN POWER OFF.** Don't leave machine until it comes to a complete stop.
32. **Make sure machine is disconnected from power supply** while motor is being mounted, connected or reconnected.
33. **Minimum Stock Dimensions. DO NOT** sand material thinner than 1/16” (1.5mm), narrower than 1/8” (3mm), or shorter than 8” (203mm).
34. **Changing Sanding Belt. DO NOT** operate the sander if the belt is damaged or badly worn. Replace at once.
35. **Inspect Piece Part.** Always inspect piece part for staples, nails, knots, or other imperfections that could become projectiles causing personal injury.
36. **Sand Appropriate Material.** Only use this sander for natural wood stock. It is **NOT** recommended to sand particle board, plastics, laminates, medium-density fiber board (MDF), metal, glass, ceramics, or products containing asbestos or lead paint. Some of these materials contain hazardous dust and will shorten the life span of the belt.



37. **Correctly Feeding the Stock.** Grasp the piece part firmly with both hands and ease into the belt with light pressure. **NEVER** force the piece part into the belt. **DO NOT** sand tapered or pointed stock with the point facing into the feed direction of the belt. **NEVER** sand more than one piece of stock at a time.
38. **Warning:** The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal. Use a wood dust collection system whenever possible.

## TECHNICAL SPECIFICATIONS

Power	220VAC, 1ph, 60hz, 10A
Motor	220VAC, 1ph, 60hz 9.5A, 2hp (1.5kw)
Dust Collection Port	1 @ 4" (101.6mm)
Table Size (L x W)	33" x 11.8" (840 x 300mm)
Fence Size (L x W)	27.5" x 2.3" (700 x 60mm)
Table Travel (spring assist lift)	3.1" (80mm)
Belt Oscillation Travel	.375" (9.5mm)
Belt Speed	3773 fpm (1150mpm)
Belt/Blade Size	99" x 6" (2515 x 152)
Table Tilt (degrees)	0° - 90°
Radius Roll Size (Idler)	2" x 6" (101.6 x 152mm)
Overall Dimensions (L x W x H)	50" x 29" x 36" (1270 x 737 x 914mm)
Weight	326 lbs. (148kg)

## TECHNICAL SUPPORT

Our technical support department can be reached at 920.684.4990 and asking for the support desk for purchased machines. Tech Support handles questions on machine setup, schematics, warranty issues, and individual parts needs: (other than die sets and blades).

For specific application needs or future machine purchases contact the Sales Department at: [sales@baileigh.com](mailto:sales@baileigh.com), Phone: 920.684.4990, or Fax: 920.684.3944.



**Note:** *The photos and illustrations used in this manual are representative only and may not depict the actual color, labeling or accessories and may be intended to illustrate technique only.*



**Note:** *The specifications and dimensions presented here are subject to change without prior notice due to improvements of our products.*



## UNPACKING AND CHECKING CONTENTS

Your Baileigh machine is shipped complete. Separate all parts from the packing material and check each item carefully. Make certain all items are accounted for before discarding any packing material.

**⚠ WARNING: SUFFOCATION HAZARD!** Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.  
If any parts are missing, **DO NOT** place the machine into service until the missing parts are obtained and installed correctly.

### Cleaning

**⚠ WARNING: DO NOT USE** gasoline or other petroleum products to clean the machine. They have low flash points and can explode or cause fire.

**⚠ CAUTION:** When using cleaning solvents work in a well-ventilated area. Many cleaning solvents are toxic if inhaled.

Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface. For a more thorough cleaning, some parts will occasionally have to be removed. **DO NOT USE** acetone or brake cleaner as they may damage painted surfaces.

Follow manufacturer's label instructions when using any type of cleaning product. After cleaning, wipe unpainted metal surfaces with a light coating of quality oil or grease for protection.



**Important:** This waxy coating is **NOT** a lubricant and will cause the machine to stick and lose performance as the coating continues to dry.



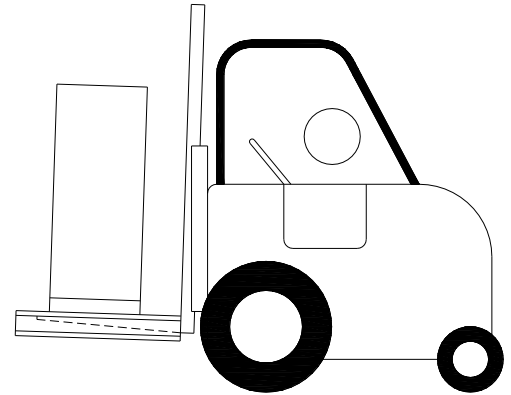


## **TRANSPORTING AND LIFTING**

**NOTICE:** *Lifting and carrying operations should be carried out by skilled workers, such as a truck operator, crane operator, etc. If a crane is used to lift the machine, attach the lifting chain carefully, making sure the machine is well balanced.*

### **Follow these guidelines when lifting with truck or trolley:**

- The lift truck must be able to lift at least 1.5 – 2 times the machines gross weight.
- Make sure the machine is balanced. While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.
- Use a forklift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine.
- Remove the securing bolts that attach the machine to the pallet.
- Approaching the machine from the side, lift the machine on the frame taking care that there are no cables or pipes in the area of the forks.
- Move the machine to the required position and lower gently to the floor.
- Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.



### **Follow these guidelines when lifting crane or hoist:**

- Always lift and carry the machine with the lifting holes provided at the top of the machine.
- Use lift equipment such as straps, chains, capable of lifting 1.5 to 2 times the weight of the machine.
- Take proper precautions for handling and lifting.
- Check if the load is properly balanced by lifting it an inch or two.
- Lift the machine, avoiding sudden accelerations or quick changes of direction.
- Locate the machine where it is to be installed, then lower slowly until it touches the floor.



## **INSTALLATION**

### **IMPORTANT:**

Consider the following when looking for a suitable location to place the machine:

- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for safety.
- Have the work area well illuminated with proper lighting.
- Keep the floor free of oil and make sure it is not slippery.
- Remove scrap and waste materials regularly, and make sure the work area is free from obstructing objects.
- It is important to maintain free area around the machine, which is required for the working place. If any long material is machined, it is necessary to have a sufficient room in front of the machine as well behind it in the places of material input and output.



**WARNING:** Before operating; make sure it is firm level footing to the floor. If it tips over on you, it could cause severe injury or death.

- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine. The accuracy of any machine depends on the precise placement of it to the mounting surface.
  1. Four rubber pads are furnished with the machine, which are to be placed under the machine at the four corners.
  2. Adjust the leveling pads as required for leveling.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.



## ASSEMBLY AND SET UP

**⚠ WARNING:** For your own safety, **DO NOT** connect the machine to the power source until the machine is completely assembled and you read and understand the entire instruction manual.

### Radius Table Mounting

1. Install the radius table onto the idler wheel end (left end) of the belt housing as shown.
2. Locate and remove the three cap screws on the underside of the belt housing.
3. Position the mounting arm onto the belt housing and secure with the three cap screws.
4. Insert the support rod into the arm with the flat surface toward the hand knob and snug into position.
5. Install the table onto the support rod and secure in place with the bolt and use the nut as a jam nut to tighten the bolt into the casting.



**Note:** Position the table so that it does not rub on the belt. This will damage the table. Keep the table close enough however, so that the material will not be pulled between the table and the belt.



### End Stop Fence

1. Install the end stop fence into the top of the belt housing as shown.
2. Engage the roll pin into the predrilled hole and secure in position with the hand knob.



**Note:** Be sure that the end stop fence does not drag on the belt.



### Motor/Dust Cover

1. Loosen the two hand knobs at the back of the belt housing and the hand knob for the belt cover.
2. Slide the dust cover over the belt cover and under the support bracket as well as under the washer and up to bolt threads on the upper hand knob.
3. Hold the dust cover in position so that it does not contact the belt or pulley and tighten the three hand knobs.







## ELECTRICAL

**⚠ CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!  
Check if the available power supply is the same as listed on the machine nameplate.

**⚠ WARNING:** Make sure the grounding wire (green) is properly connected to avoid electric shock. DO NOT switch the position of the green grounding wire if any electrical plug wires are switched during hookup.

### Power Specifications

Your machine is wired for 220 volts, 60hz alternating current. Before connecting the machine to the power source, make sure the power source is OFF.

Before switching on the power, you must check the voltage and frequency of the power to see if they meet with the requirement, the allowed range for the voltage is  $\pm 5\%$ , and for the frequency is  $\pm 1\%$ .

### Considerations

- Observe local electrical codes when connecting the machine.
- The circuit should be protected with a time delay fuse or circuit breaker with an amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your machines. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine.
- All line connections should make good contact. Running on low voltage will damage the motor.
- 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 machine 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.

**⚠ WARNING:** In all cases, make certain the receptacle in question is properly grounded. If you are not sure, have a qualified electrician check the receptacle.



- Improper connection of the equipment-grounding conductor can result in 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.
- Check with qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.
- Repair or replace damaged or worn cord immediately.

### **Extension Cord Safety**

Extension cord should be in good condition and meet the minimum wire gauge requirements listed below:

AMP RATING	LENGTH		
	25ft	50ft	100ft
1-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No
WIRE GAUGE			

An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords immediately.

### **Power cord connection:**

1. Turn the main disconnect switch on the control panel to the OFF position.
2. Unwrap the power cord and route the cord away from the machine toward the power supply.
  - a. Route the power cord so that it will NOT become entangled in the machine in any way.
  - b. Route the cord to the power supply is a way that does NOT create a trip hazard.
3. Have an electrician install the correct plug for the application.
4. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
5. When the machine is clear of any obstruction. The main power switch may be turn ON to test the operation.
6. Turn the switch OFF when the machine is not in operation.



## OPERATION

**⚠ CAUTION:** Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges. When handling large heavy material make sure they are properly supported.

1. Connect machine to power supply.
2. Verify area around machine and belt are clear and not in contact with any material.
3. Push green button to start the machine.
4. Place the material on the table and using a firm grip, bring the material into contact with the belt in a smooth steady fashion. Use the miter gauge as needed to assist in securing the material while sanding.
5. To switch off the machine push red knob.

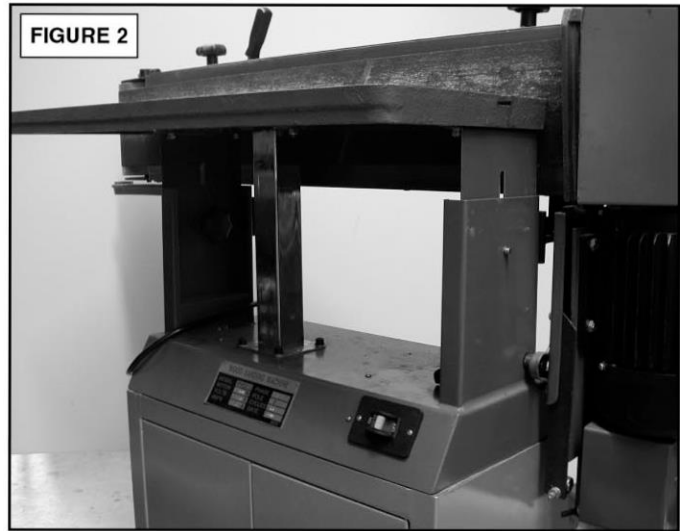
**⚠ WARNING:** Never operate the belt sander with any covers removed missing or damaged. It could cause severe injury or death.

Belt in vertical position and plunging table locked at lowest position.





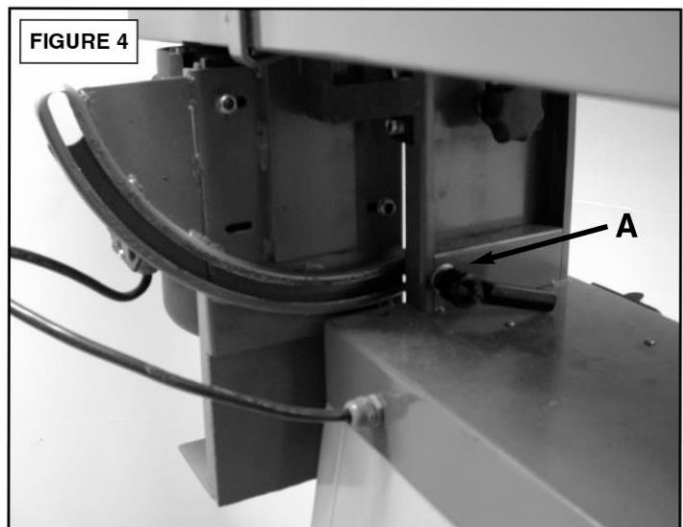
Belt in vertical position and plunging table released. Allows better use of belt and helps prevent burning.



Sanding table and belt assembly can be adjusted from 0° (horizontal) - 90° (vertical), position. The belt is shown in the horizontal position.



Loosen angle lock knob (a) to set and tighten the angle.





Miter gauge can be adjusted 45° - 90° and clamped by hex handle - for sanding miter angles.



FIGURE 5

Loosen belt tension lever to remove and replace belt. Return lever to tight position before starting.



FIGURE 6

Adjust roller to track belt while sander is running.



FIGURE 7

For contour sanding (horizontal belt position).



FIGURE 8



For contour sanding (vertical belt position).



FIGURE 9

Mount fence (a) for flat sanding, adjust to angle if needed. Adjust knob to clamp bracket (b) for securing job. Use secondary fence while using sander in the horizontal position.

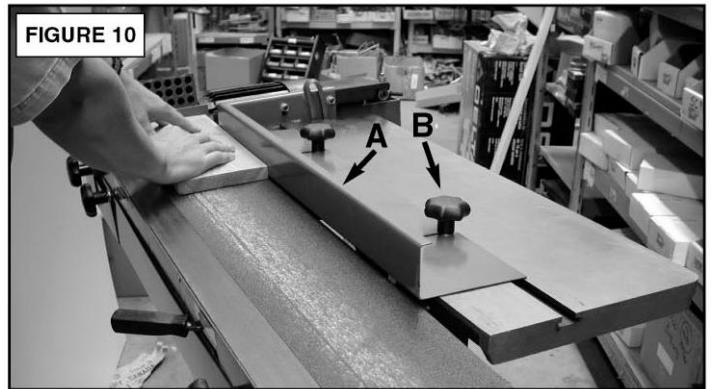


FIGURE 10

Built in dust hood with 4" opening.



FIGURE 11



## LUBRICATION AND MAINTENANCE



**WARNING:** Make sure the electrical disconnect is OFF before working on the machine.

Maintenance should be performed on a regular basis by qualified personnel.

Always follow proper safety precautions when working on or around any machinery.

### Daily Maintenance

- Do a general cleaning by removing dust and chips from the machine.
- Check and tighten any loose mounting bolts.
- Inspect the power plug and cord.
- Keep area around machine clear of debris.
- Check for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- Check of the auxiliary wheel and drive wheel.



**Note:** When cleaning chips and debris from the machine, use a brush and a shop vacuum. **DO NOT** blow off the machine with compressed air. The force of the compressed air may force chips into critical mechanisms or may inflict injury to yourself or others.

### Monthly Maintenance

- Check that all screws and bolts are tight and secure.
- Check for worn or damaged electrical cables.
- The auxiliary wheel and the drive wheel are made by rubber material, after the machine has been operated for long period of time the auxiliary wheel and drive wheel may be wear. If this happens the auxiliary wheel and drive wheel needs to be replaced. When the auxiliary drive wheel is worn to replacement, we recommend replace all auxiliary wheel units.



**Note:** Proper maintenance can increase the life expectancy of your machine.

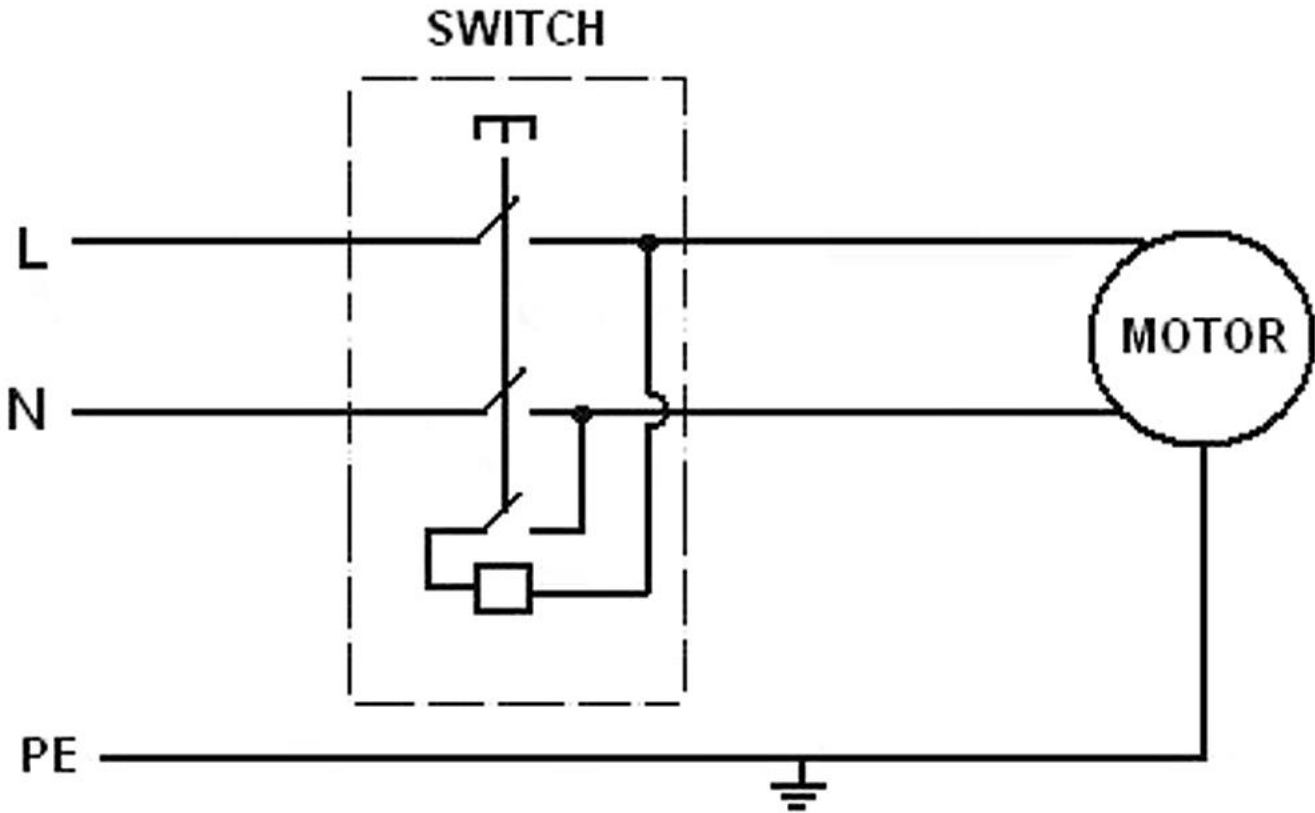
### Storing Machine for Extended Period of Time

If this machine is to be inactive for a long period of time, prepare the machine as follows:

- Disconnect the electrical supply from the power panel.
- Empty and clean any debris trays and or drawers.
- Clean and grease the machine.
- Cover the machine.



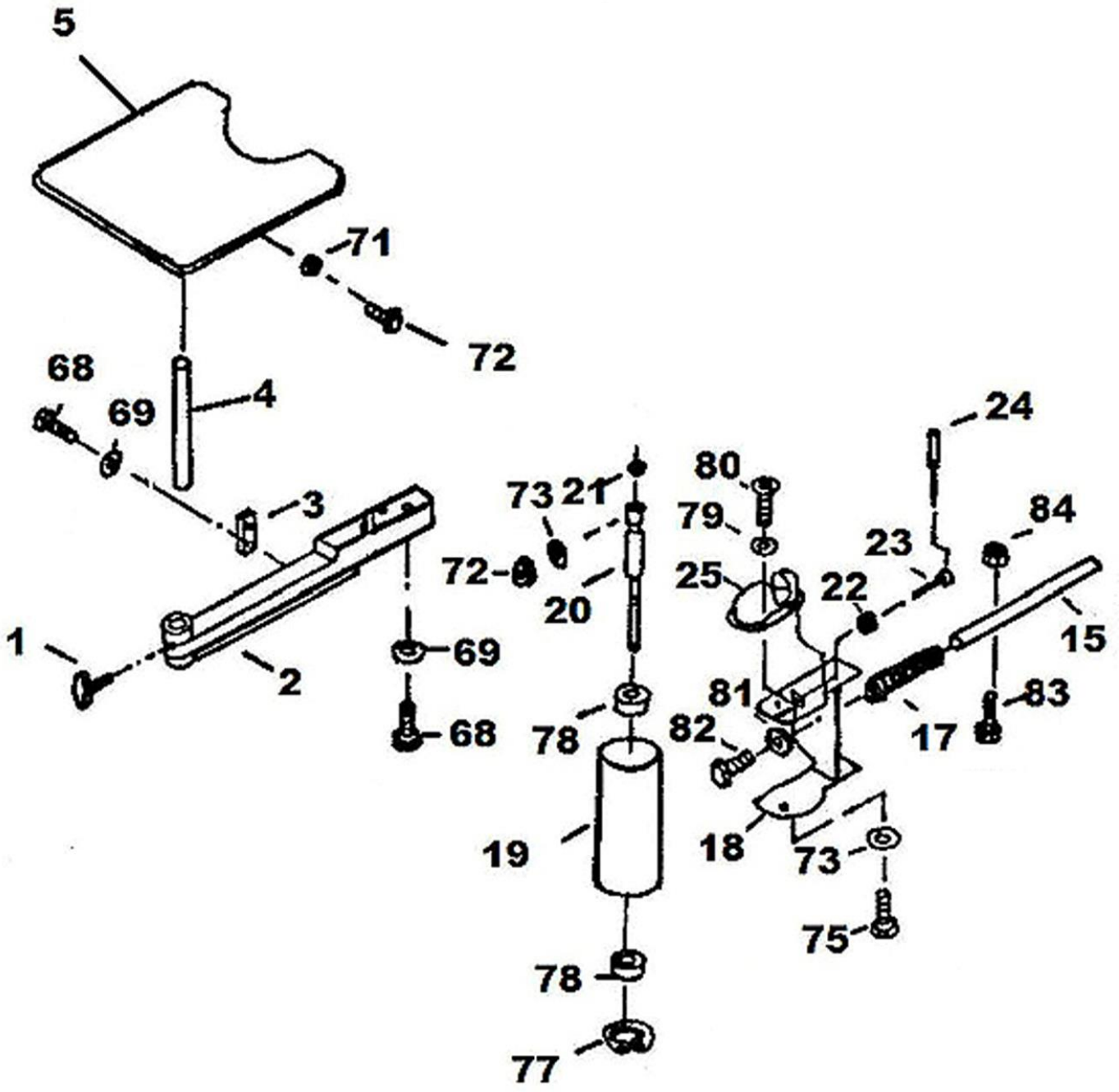
**WIRING DIAGRAM**

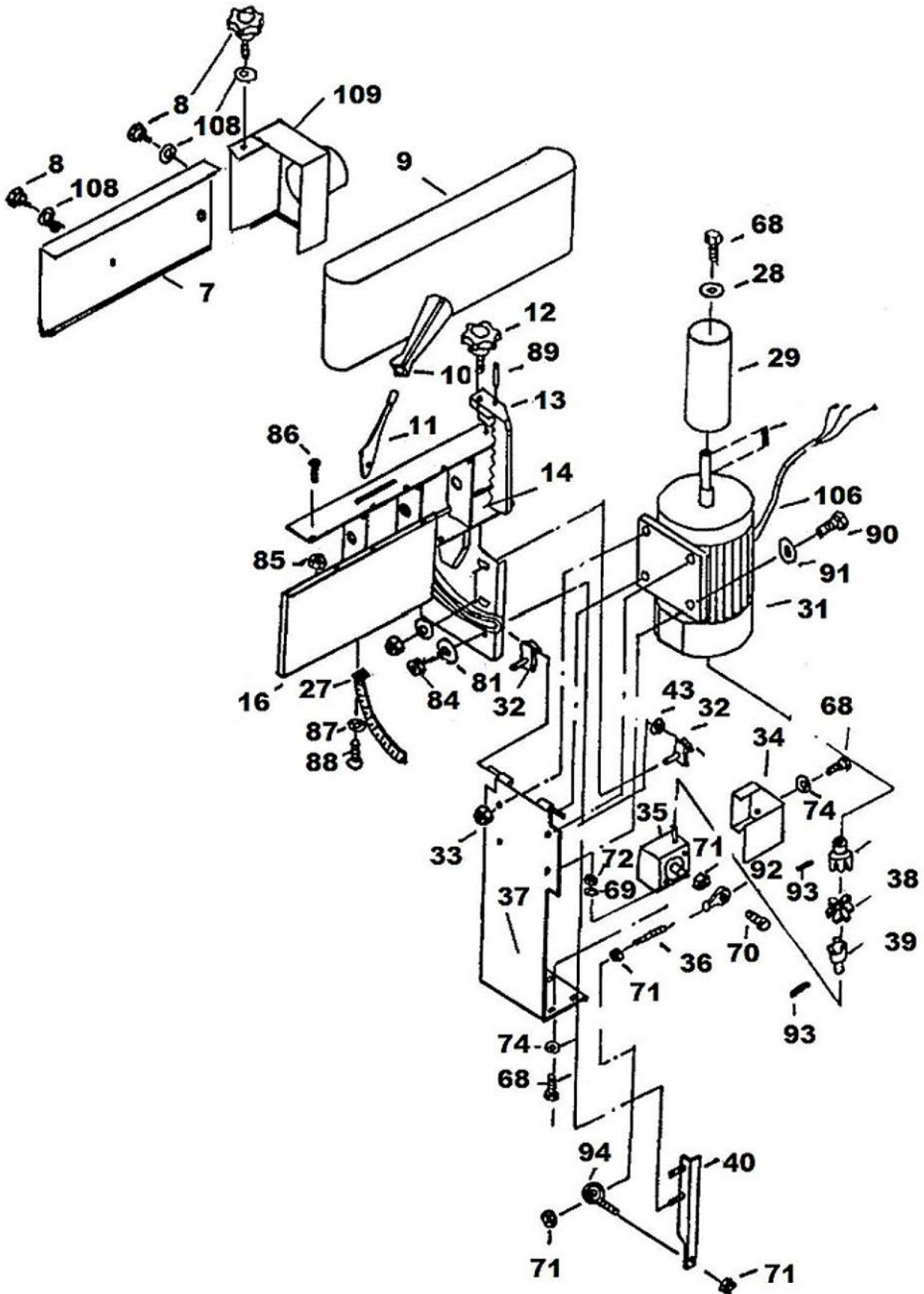


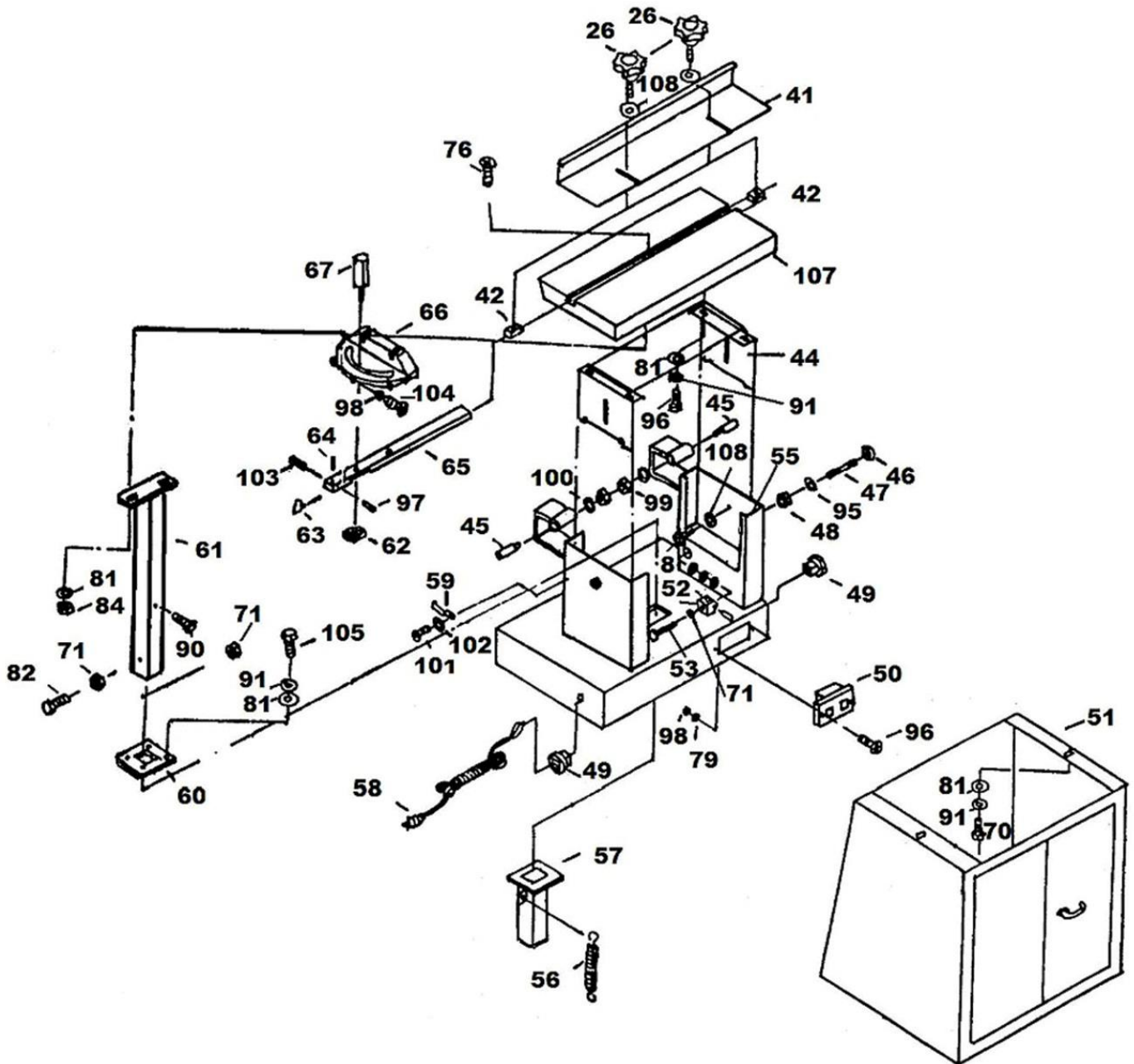




**EXPLODED PARTS DIAGRAM**









## Exploded Parts List

Item	Part No.	Description
1	ES6100-01	Knob
2	ES6100-2	Locating Arm
3	ES6100-3	Locating Plate
4	ES6100-4	Extension Support
5	ES6100-5	Extension Platform
6	ES6100-6	Secondary Belt Cover
7	ES6100-7	Belt Cover
8	ES6100-08	50mm Hand Knob 22x20mm Shoulder M8-1.25 X 16 Stud
9	ES6100-9	Sanding Belt
10	ES6100-10	Sanding Clamp Handle
11	ES6100-11	Belt Replacing Plate
12	ES6100-12	Knob
13	ES6100-13	Bracket
14	ES6100-14	Sanding Belt Platform
15	ES6100-15	Tension Bar
16	ES6100-16	Table
17	ES6100-17	Spring
18	ES6100-18	Roller Arm
19	ES6100-19	Driver Roller
20	ES6100-20	Shaft
21	ES6100-21	Globular Sleeve
22	ES6100-22	Micro-Inching Nut
23	ES6100-23	Micro-Inching Screw
24	ES6100-24	Driver Wrench
25	ES6100-25	Micro-Inching Box
26	ES6100-26	Knob
27	ES6100-27	Tilt Scale
28	ES6100-28	Washer
29	ES6100-29	Motor Roller
30	ES6100-30	Key
31	ES6100-31	Motor
	ES6100-CAP	Motor Starter Cap (150UF, 250V. AC)
32	ES6100-32	Nut
	ES6100-32A	Shaft
33	ES6100-33	Screw
34	ES6100-34	Protection Cover
35	ES6100-35	Gear Case
36	ES6100-36	Spring
37	ES6100-37	Motor Base



Item	Part No.	Description
38-39	ES6100-38-39	Coupler Assembly
40	ES6100-40	Screw
41	ES6100-41	Fence
42	ES6100-42	Guide Block
43	ES6100-43	Copper Washer
44	ES6100-44	Lifting Plate
45	ES6100-45	Screw
46	ES6100-46	Regulating Collar
47	ES6100-47	Worktable Bracket
48	ES6100-48	Partition Ring
49	ES6100-49	Clamper
50	ES6100-50	Switch
51	ES6100-51	Stand
52	ES6100-52	Cam Eccentric
53	ES6100-53	Handle
54	ES6100-54	Hand Knob
55	ES6100-55	Base
56	ES6100-56	Spring
57	ES6100-57	Guide Sleeve
58	ES6100-58	Power Cord
59	ES6100-59	Width Pointer
60	ES6100-60	Connecting Plate
61	ES6100-61	Guide Pillar
62	ES6100-62	Locating Block
63	ES6100-63	Locating Plate
64	ES6100-64	Pointer
65	ES6100-65	Guide Bar
66	ES6100-66	Miter Gage Body
67	ES6100-67	Hex Head Screw
68	ES6100-68	Gear Washer
69	ES6100-69	Nut
70	ES6100-70	Hex Bolt M8-1.25 x 30
71	ES6100-71	Nut
72	ES6100-72	Nut
73	ES6100-73	Flat Washer
74	ES6100-74	Shaft
75	ES6100-75	Hex Head Screw
76	ES6100-76	Socket Head Set Screw
77	ES6100-77	Spring Ring
78	ES6100-78	Bearing
79	ES6100-79	Gear Washer
80	ES6100-80	Pan Hd. Screw



Item	Part No.	Description
81	ES6100-81	Washer
82	ES6100-82	Hex Head Screw
83	ES6100-83	Hex Head Screw
84	ES6100-84	Plate
85	ES6100-85	Nut
86	ES6100-86	Secant Set Screw
87	ES6100-87	Nut
88	ES6100-88	Pan Hd. Screw
89	ES6100-89	Spring Roll Pin
90	ES6100-90	Hex Head Screw
91	ES6100-91	Gear Washer
92	ES6100-92	Bearing
93	ES6100-93	Socket Head Set Screw
94	ES6100-94	Bearing
95	ES6100-95	Washer
96	ES6100-96	Pan Hd. Screw
97	ES6100-97	Spring Roll Pin
98	ES6100-98	Nut
99	ES6100-99	Nut
100	ES6100-100	Spring Washer
101	ES6100-101	Pan Hd. Screw
102	ES6100-102	Gear Washer
103	ES6100-103	Socket Head Set Screw
104	ES6100-104	Pan Hd. Screw
105	ES6100-105	Socket Head Set Screw
106	ES6100-106	Switch Cord
107	ES6100-107	Table
108	ES6100-108	Washer
109	ES6100-109	Cover



NOTES



**BAILEIGH INDUSTRIAL HOLDINGS LLC**  
**1625 DUFEK DRIVE MANITOWOC, WI 54220**  
**PHONE: 920. 684. 4990 FAX: 920. 684. 3944**  
**[www.baileigh.com](http://www.baileigh.com)**