



# OPERATOR'S MANUAL

Metal Working



## INDUSTRIAL BENCH TOP BUFFER MODEL: IB-8 AND IB-10

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IB-10 shown

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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, (e) 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 Manitowoc 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 [sales@baileigh.com](mailto:sales@baileigh.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**

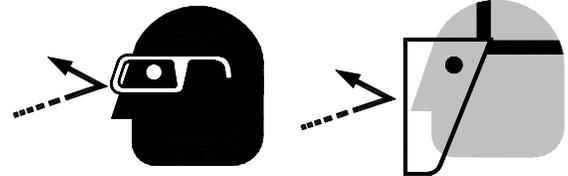


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



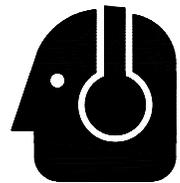
**PROTECT EYES**

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



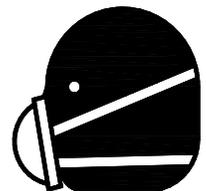
**PROTECT AGAINST NOISE**

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.



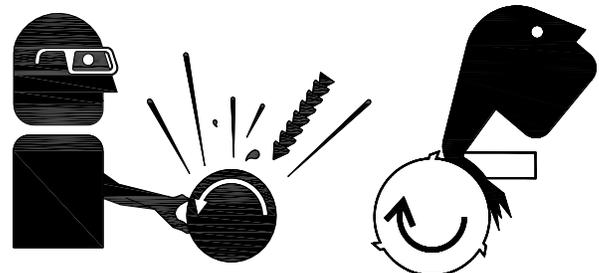
**DUST HAZARD**

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.



**ENTANGLEMENT HAZARD – ROTATING WHEELS**

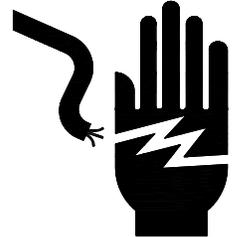
Keep hands and fingers away from the buffing wheels when the machine is plugged in and or powered on. Keep guards in place at all times while the machine is running. Contain long hair, **DO NOT** wear jewelry or loose fitting clothing.





### HIGH VOLTAGE

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



### Power Switch with Lock Out

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the Power Switch paddle downward. Remove the yellow lock key to prevent the machine from starting.



**Note:** Resetting the Power Switch WILL start the machine.



### CALIFORNIA PROPOSITION 65

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





## **SAFETY PRECAUTIONS**



Metal 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!**

Abrasive sanding can be hazardous to operators and bystanders. Sanding sparks, chips, and dust particles thrown off by the sanding disc can cause serious injury if contacted or inhaled. To avoid such injuries, you must comply with the following safety requirements:

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. **Dress appropriately. 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.



5. **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.
6. **Remove any adjusting tools.** Before operating the machine, make sure any adjusting tools have been removed.
7. **Turn off** power before checking, cleaning, or replacing any parts.
8. **Never** leave this or any piece of equipment running unattended. Turn power off and do not leave machine until the machine moving components have come to a complete stop.
9. **Keep work area clean.** Cluttered areas invite injuries.
10. **Overloading machine.** By overloading the machine, you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
11. **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 machine's rated capacity.
12. **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.
13. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
14. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
15. **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.
16. **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.
17. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
18. Keep visitors a safe distance from the work area.
19. **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.
20. **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.
21. **Do not** cut where the atmosphere might contain flammable dust, gas, or liquid vapors such as from gasoline.



22. Be sure **all** equipment is properly installed and grounded according to national, state, and local codes.
23. Keep **all** cords dry, free from grease and oil, and protected from sparks and hot metal.
24. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!** **DO NOT** touch live electrical components or parts.
25. **DO NOT** bypass or defeat any safety interlock systems.
26. **Before** buffing, always allow the motor to come up to operating speed, then visually and audibly check the buffing wheel for wobble, run out, or any unbalanced condition. If the wheel is not operating accurately and smoothly, immediately stop the motor and make repairs before attempting any operations.
27. Buffing wheel and Buffing compound must be stored in a controlled environment area. Follow the manufactures recommendations for handling and storage.
28. Only apply workpiece to lower half of buffing wheel.
29. Do not overtighten wheel nut.
30. Use buffing wheel suitable for speed of machine.
31. Do not crowd the work so that the wheels slow.
32. Use only the flanges that are furnished with the buffer.
33. Do not start the buffer while a workpiece is contacting a buffing wheel.



## TECHNICAL SPECIFICATIONS

Model Number		IB-8	IB-10
Motor and Electricals			
Motor	Type	Totally Enclosed, Induction, Capacitor Start	
	Power	1HP, 1ph, 60hz	1.5HP, 1ph, 60hz
	Voltage	115/230V, Prewired 115V	
	Listed FLA (Full Load Amps)	11 / 5.5 A	15 / 7.5 A
	Speed	3,600 RPM	1,800 RPM
	Starting Capacitor	200MFD, 125VAC	400MFD, 125VAC
	Running Capacitor	35µf, 350V	45µf, 350V
Input Power Required		Single Phase 115V (Or 230V If Rewired)	
On/Off Switch		Toggle w/Safety Key, 125/250V, 20/12A	
Power Transfer		Direct Drive	
Power Cord		SJT 16AWG x 3C, 6 Ft. (183cm)	
Power Plug Installed		5-15P, 125V/15A	
Recommended Minimum Circuit Size <sup>1</sup>		15 A	
Lighting		Included, Flexible 3W LED (separate power connection)	
Sound Emission Without Load <sup>2</sup>		75 Db at 3 Ft. (92cm)	
Shafts			
Shaft Diameter		5/8" (15.875mm)	1" (25.4mm)
Threads (Diameter-Pitch)		5/8"-11UNC	1"-8UNC
Buffing Wheel Size (OD x W x B)		8" x .5" x .625" (203.2 x 12.7 x 15.875mm)	10" x 1" x 1" (255 x 25.4 x 25.4mm)
Buffing Wheel Style		Spiral and Half Spiral	
Spacer (L/in.)		1" (25.4mm), .625" (15.875mm), .5" (12.7mm)	2" (51mm), 1" (25.5mm), .5" (12.7mm)
Materials			
Motor Housing		Sheet Metal	Cast Iron
End Cover		Aluminum	Cast Iron
Base		Cast Iron	
Flange Washer		Sheet Metal	
Base			
Foot Print (W x D)		9.5" x 8.06" (242 x 205mm)	10" x 9.64" (255 x 245mm)
Mounting Hole Dimensions		.433" (11mm)	



Distance Between Mounting Holes	8.47" (215.1mm)	8.75" (222mm)
Weights		
Net Weight	38 Lbs. (17.16 Kg)	72 Lbs. (33 Kg)
Shipping Weight	44 Lbs. (20.11 Kg)	80 Lbs. (37 Kg)
Dimensions		
Overall Dimensions (L x W x H)	23.35" x 8.66" x 9.52" (593 x 220 x 242mm)	30" x 9.68" x 11.89" (762 x 246 x 302mm)
Shipping Dimensions (L x W x H)	26.77" x 10.24" x 12.99" (680 x 260 x 330mm)	33.85" x 12.60" x 15.35" (860 x 320 x 390mm)

1 Subject to local and national electrical codes.

2 The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

## **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.





## Contents

Item	Qty.
Buffing Machine	1
Buffing Wheels	2
Flanges	8
Spacer Kit (contains 3 spacers)	1
Arbor Nuts (1 left-hand, 1 right-hand)	2
Work Lamp, Flexible 3W LED	1

## TRANSPORTING AND LIFTING

### **Follow these guidelines when lifting:**

- Use proper lifting techniques when moving the grinder from location to location.
- Make sure the machine is balanced, level, and securely tied or strapped to the transport vehicle or device so that all the supporting feet are taking the weight of the machine and no rocking is taking place.
- While transporting, avoid rough or jerky motion, and maintain a safe clearance zone around the transport area.

## 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, worktables, 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.



- If long lengths of material are to be fed into the machine, make sure that they will not extend into any aisles.
- **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.
- **FLOOR:** This machine 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.
- **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.
- **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.

### Mounting the Buffer

When mount the Baileigh machine on a workbench be aware of the following:

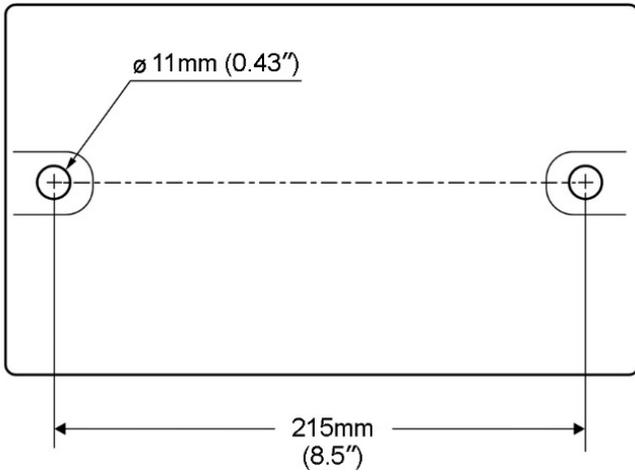
- To prevent the machine from moving during operation, it should be securely mounted to a work bench or stand. Fasteners for mounting are not included with the buffer.
- Overall weight of the machine and the weight of material being processed.
- Make sure the workbench is properly reinforced to support the total weight.
- The strongest mounting option is where the holes are drilled all the way through the workbench and the machine is secured with bolts, washers, and nuts.
- When mounting on a stand such as the BTS-33 Baileigh Industrial Universal Bench Tool Stand (sold separately), be sure to position the grinder on the mounting table to create balance. Anchor the stand to the floor to prevent tipping.
- Use the dimensions to layout and drill the mounting holes.
- Align mounting holes on buffer with the holes in bench or pedestal. Insert M10 (or 3/8") bolts through the holes and secure with washers and nuts.



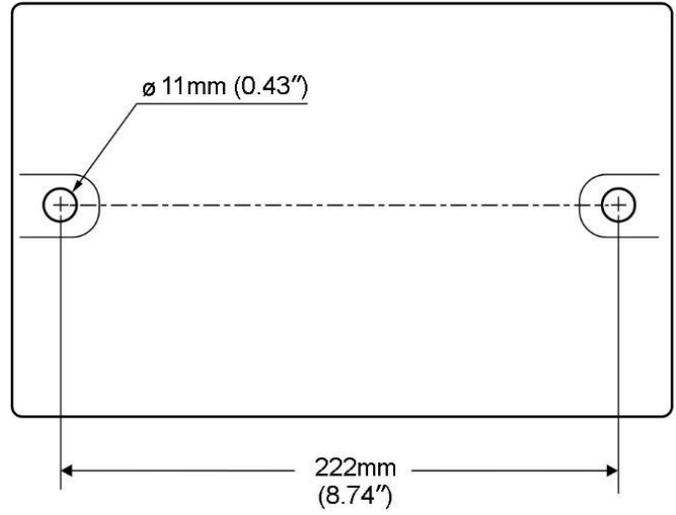
**Important:** *The buffer's base plate contains ventilation holes for heat dissipation. These holes should not be obstructed. It is recommended the rubber pads be left on, as they allow air circulation as well as vibration dampening. If the rubber pads are removed for mounting to a table, allow an opening in the table below the grinder for air circulation.*



### Mounting Dimensions



IB-8



IB-10

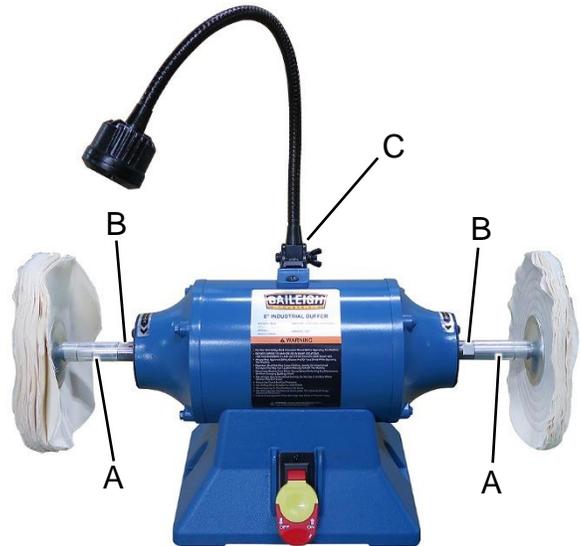


## ASSEMBLY AND SET UP

**⚠ 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. Do not operate this machine without all guards and shields in place and in working order. Failure to comply may cause serious injury.

### Buffing Wheels

1. Disconnect buffer from power source.
2. Install spacers (A) onto each end of arbor as needed for the width of the wheels used.
3. Check the flanges to make sure they are clean and flat. Wheel flanges that are not flat will cause the wheel to wobble.
4. Install inner flange, buffing wheel, and outer flange.
5. Install the right-hand thread nut (silver colored) on right end of arbor; turn clockwise to tighten.
6. Install the left-hand thread nut (brass colored) on left end of arbor, turn counterclockwise to tighten.
7. Do not overtighten the nuts. Place a wrench on the flats (B) of the spindle to keep the spindle stationary while tightening or loosening the nuts.



**Note:** On the IB-8, the **brass colored** nut has left-hand threads; the **silver colored** nut has right-hand threads.

### Work Lamp

- The work lamp is a separate independent accessory which is mounted to the mounting bracket on the back of the motor case using the screws included with the lamp.
- Route the power cord to an outlet.
- Use the wingnut and screw to allow for pivoting the lamp forward and aft tightening the wingnut when is the desired position.
- Use the flexible column to direct the lamp light toward the work site as desired. **DO NOT** allow the lamp to contact the buffing wheel or the workpiece.



## 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 115V/230V pre-wired for 115 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			

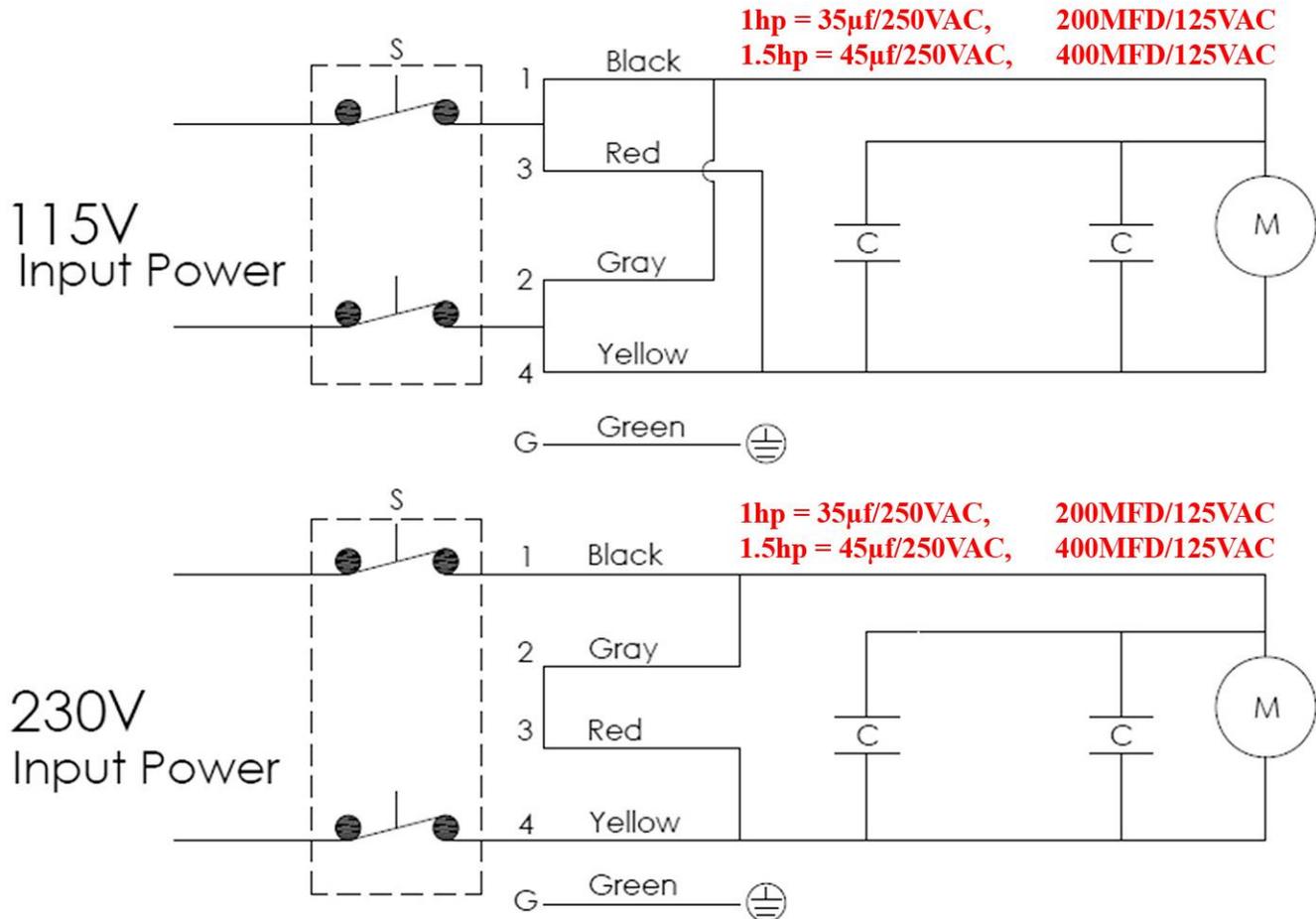
An undersized cord decreases line voltage, causing loss of power and overheating. All cords should use a ground wire and plug pin. Replace any damaged cords immediately.

### **Power cord connection:**

1. Turn the power 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 in a way that does NOT create a trip hazard.
3. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
4. When the machine is clear of any obstruction. The power switch may be turn ON to test the operation.
5. Turn the switch OFF when the machine is not in operation.



## Electrical Diagram



## Voltage Change

This buffer is prewired for 115 volt input power, but can be converted to 230 volt input.

1. Turn the buffer over and remove base plate.
1. Using the wiring diagram, change the lead connections (Black, Red, Gray, and Yellow) to match the pattern and terminal connections (1, 2, 3, and 4). DO NOT change the Green (ground) connection.
2. Install base plate.
3. Remove existing plug from power cable and attach a UL/CSA listed plug designed for 230V power; or "hardwire" the machine directly to a panel. If hardwiring, make sure a disconnect is provided for the operator.



## OPERATION

**⚠ CAUTION:** Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges. Use appropriate respiratory protection as directed by the buffing compound manufacturer. When handling large heavy materials make sure they are properly supported.

**ROTATING EQUIPMENT CAN BE DANGEROUS TO OPERATORS AND THOSE WHO MAY BE IN ITS IMMEDIATE OPERATING VICINITY. IT IS THE ABSOLUTE AND DIRECT RESPONSIBILITY OF THE OPERATOR(S) OF THIS EQUIPMENT TO UNDERSTAND AND OBEY THE OPERATING SAFETY REQUIREMENTS.**

Buffing wheels vary according to material and structure, and range from aggressive wheels that even out high spots and remove surface defects (“cutting”), to finer wheels that bring out the brilliant luster of the metal surface (“coloring”). The buffing wheel surface may be straight or biased (cut at an angle).

The IB-8 (only) is provided with two buffing wheels: full spiral-sewn wheel for general polishing of metals, and a looser or half spiral-sewn wheel for final polishing and coloring of metals.

A compound (not provided) should be selected for the specific wheel and work to be done. Generally, for spiral-sewn cloth wheels, a brown (Tripoli), compound will be used for basic cutting and polishing, followed by a white compound for coloring. Red (Jeweller’s Rouge) compound is often used for further enhancement to gain a mirror-like surface.

**Change Wheel.** To prevent cross contamination and unintended results, change buffing wheels when changing compounds.

Consult experienced metalworkers and internet resources for specific recommendations on buffing wheels and their application. The best recommendation is to practice, take notes, experiment, and seek out advice through technical colleges, individual mentoring with an experienced operator, and through online forums and trade magazines.



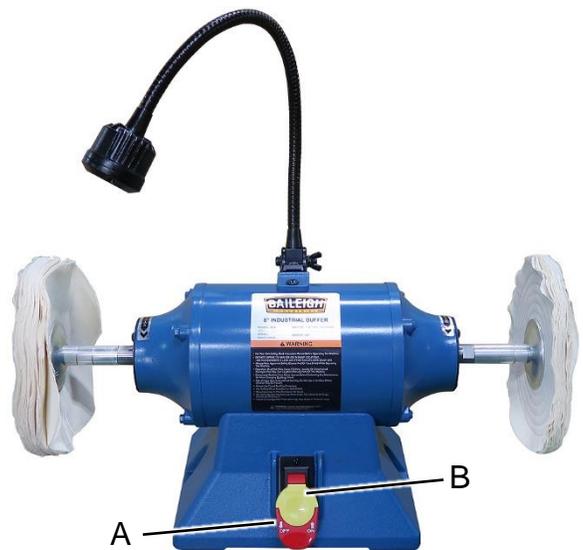
## Operating Controls

**⚠ CAUTION:** Always verify that the unused buffing wheel is free and clear of any materials or object which could come into contact with the wheel while the operator is working on the other wheel. This can cause an ejection of material which may cause injury.



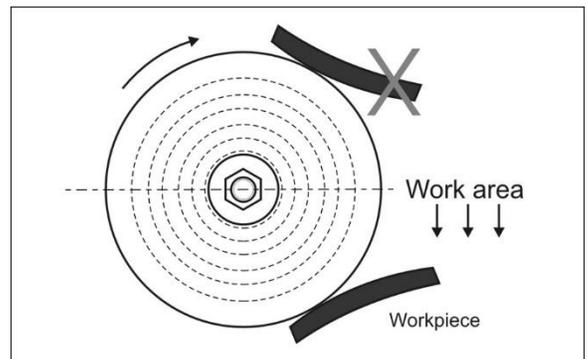
**Note:** After extended operation, the buffer housing may be warm to the touch. This is not abnormal.

1. Insert the yellow safety key onto the paddle switch lever.
2. Lift upward on the paddle switch (A) to start the sander. Allow the belt and disc to come to full speed before sanding material.
3. Push down on the switch to stop the sander.
4. The safety key (B) can be removed to prevent unauthorized use of the grinder. The safety key must be inserted to restart the grinder.



## General Buffing Procedure

1. Turn the buffer On and allow to come to full rpm.
2. Apply compound to lower part of spinning wheel (not the workpiece). Do not apply excessive compound; press compound stick lightly against wheel for only a few seconds. Reapply later as needed.
3. Grip workpiece firmly and press it against underside of wheel; that is, the area of wheel that is rotating away from the workpiece.



**⚠ CAUTION:** Press workpiece to the lower half of buffing wheel ONLY. Using the upper half of wheel may cause the workpiece to catch and could resulting in possible injury.



4. Once contact is established, move the workpiece under the buffing wheel evenly and with uniformity. The intent will be to contact all of the desired surface the same amount of time and with the same amount of contact force and the same amount of compound. This will provide an even and consistent finish.
5. When changing to a finer compound, change the direction of the buff if possible to provide the best finish.



## 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.

- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- On a weekly basis clean the machine and the area around it.
- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.
- Motor bearings are permanently lubricated and sealed at the factory and require no additional attention.
- Periodically clean accumulated dust or debris away from areas such as the on/off switch. Do not allow dust and debris to build up beneath the machine.
- Periodically wipe the shafts clean with a soft rag, and wipe on a light application of SAE 20, or basic machine tool oil, to inhibit rust.

### Buffer Maintenance

- Periodically use a wheel rake (not provided) to clean and shape the buffing wheels.



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

### Changing Wheels

- When replacing a buffing wheel, obtain wheels with a safe rated speed at least as high as the maximum RPM of the buffing machine.
- The spacers on the shaft allow for different configurations and widths of buffing wheel.

 **WARNING:** The use of any other accessory is not recommended and may result in serious injury.



### **Wheel Balancing**

With the buffer unplugged from the power source, and arbor nuts snugged down, rotate wheels by hand and observe their motion.

A buffing wheel has proper balance when:

- The wheel's outside face spins true and round; that is, its circumference rotates concentric to the arbor.
- There is no side-to-side wobble.

### **Adjusting Concentricity**

- If the outside face is not rotating concentric to arbor, try shifting the wheel closer to arbor centerline before tightening the nut.
- A wheel rake (not provided) may also be used to shape the buffing wheel for better concentric rotation.

### **Correcting Side-to-Side Wobble**

- These Buffers have large, machined flanges, making wobble unlikely if a good quality buffing wheel is used.

Should a wheel exhibit need for adjustment:

1. Loosen nut and rotate the outer flange a little. Snug the nut and spin the wheel by hand to check.
2. If wobble still exists, continue repeating step 1, rotating outer flange incrementally in the same direction. Make sure to keep the wheel in the same position each time.
3. If complete rotation of outer flange has proved ineffective, remove nut, outer flange, and wheel (keep wheel in same orientation by placing a pencil mark on it somewhere for reference). Then rotate inner flange about 90° and repeat the above steps for the outer flange.
4. Continue this combination of flange movements until the wobble is eliminated.
5. If required, a shim made of paper or card stock may be placed between flange and wheel side.



**Note:** *Slight wobble may still exist at spin-up and spin-down but will not affect normal speed operation.*



## TROUBLESHOOTING

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

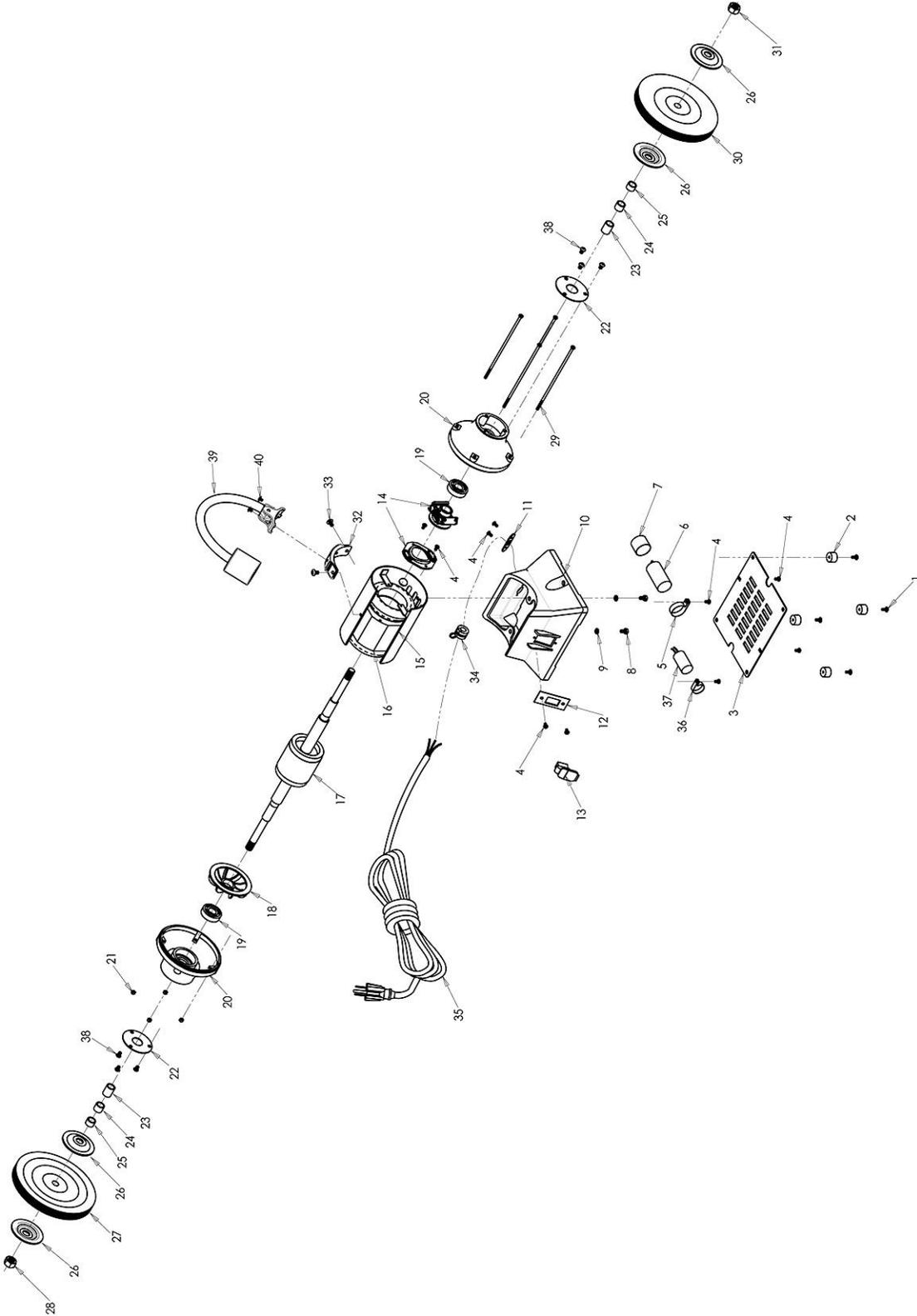
Fault	Possible Cause	Remedy
Motor will not start.	Not connected to power source.	Verify that plug is properly inserted into receptacle.
	Motor cord cut or abraded.	Replace with new cord.
	Wheels cannot rotate because of obstruction.	Unplug and turn wheel by hand to ensure free movement. Restart.
	Plug on cord is faulty.	Replace with new plug.
	Low line voltage.	Check power line for proper voltage.
	Fuse blown or circuit breaker open.	Re-set fuses/breaker.
	Faulty switch.	Replace switch.
	Start capacitor faulty.	Replace start capacitor.
Motor will not start; fuses blow or circuit breaker trips.	Motor fault.	Replace the motor.
	Too many electrical machines running on same circuit.	Turn off other machines and try again.
	Incorrect fuse.	Use time-delay fuse or go to circuit with higher rated fuse or breaker.
	Wheels cannot rotate because of obstruction.	Unplug and turn wheel by hand to ensure free movement. Clear any obstructions and restart.
	Undersized extension cord.	Use correct size extension cord.
	Short circuit in line cord or plug.	Inspect cord or plug for damaged insulation and shorted wires.
Motor fails to develop full power.	Short circuit in motor or loose connections.	Inspect all connections on motor for loose or shorted terminals or worn insulation.
	Low line voltage.	Check power line for proper voltage.



Fault	Possible Cause	Remedy
	Run capacitor faulty.	Replace capacitor.
	Faulty motor.	Replace the motor.
Motor overheats.	Motor overloaded.	Reduce pressure against wheel. Make sure wheel is appropriate for the job.
Motor stalls, resulting in blown fuses or tripped circuit.	Motor overloaded.	Reduce load on motor; do not press so hard.
	Capacitor failure.	Replace the capacitor.
	Short circuit in motor or loose connections.	Inspect connections on motor for loose or shorted terminals or worn insulation.
	Low voltage.	Correct the low voltage conditions.
	Incorrect fuses or circuit breaker in power line.	Install correct fuse or breaker.
Motor slows.	Motor overloaded.	Reduce load to motor; do not press so hard.
	Low line voltage.	Check power line for proper voltage.
	Loose electrical connections.	Inspect connections.
Frequent fuse or circuit breaker failure.	Motor overload.	Reduce load to motor; do not press so hard.
	Electrical circuit overload; too many machines running on same circuit.	Turn off other machines and try again.
	Incorrect fuse or circuit breaker.	Have electrician upgrade service to outlet.
Excessive vibration.	Wheel(s) out of balance; wobbling or not rotating concentric to arbor.	Rake the wheel or replace it. Adjust wobble by rotating flange as needed.
	Improper mounting.	Secure machine firmly to bench or stand.



## IB-8 PARTS DIAGRAM





### IB-8 Parts List

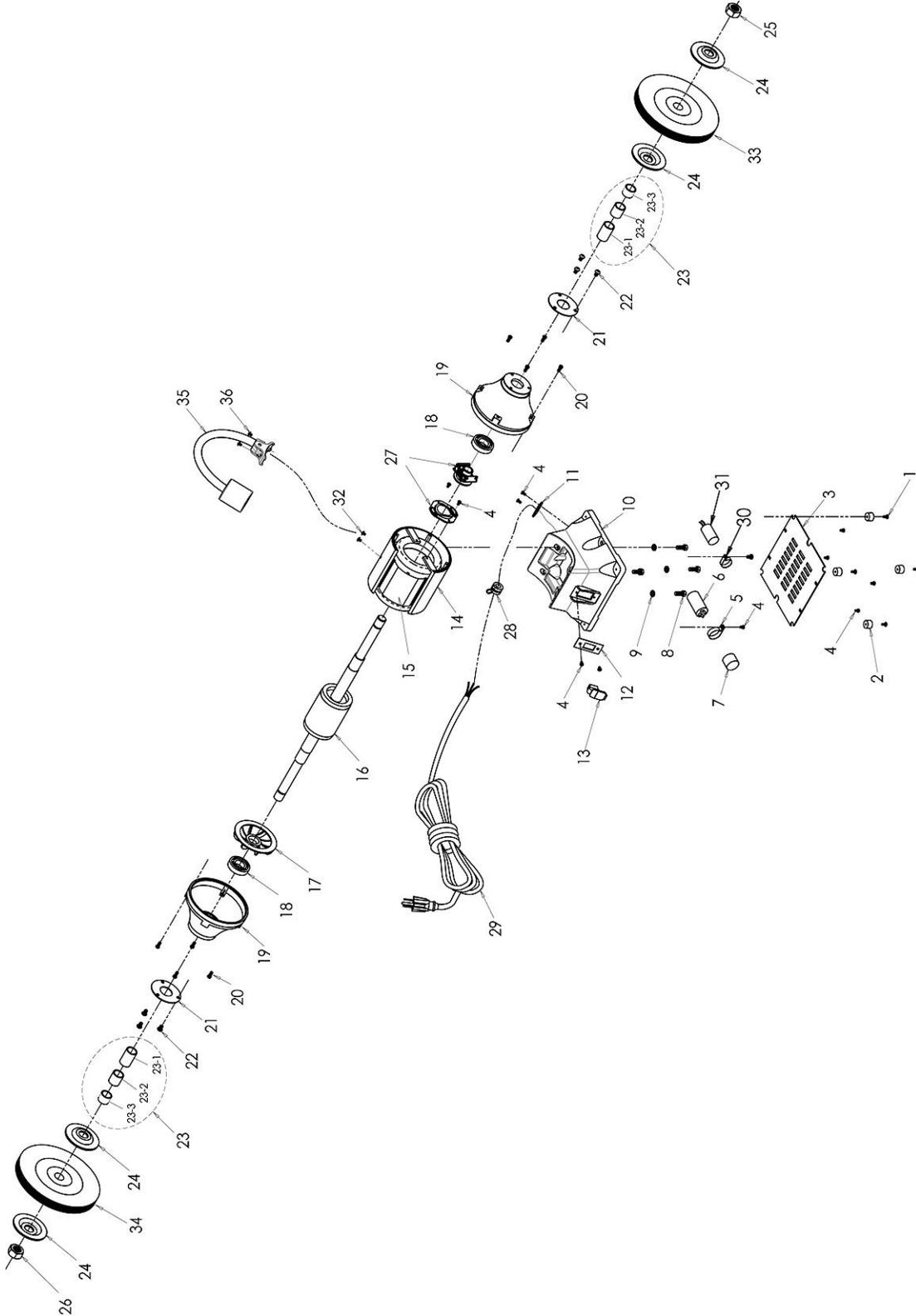
Item	Part No.	Description	Size	Qty.
1	IBG8-01	Truss Head Screw	3/16"-24 x 1/2"	4
2	IBG8-02	Rubber Pad		4
3	IBG8-03	Base Plate		1
4	IBG8-04	Truss Head Screw	3/16"-24 x 3/8"	10
5	IBG8-05	Capacitor Bracket		1
6	IBG8-06	Start Capacitor	200MFD, 125VAC	1
7	IBG8-07	Capacitor Cover		1
8	TS-0050021	Hex Cap Screw	1/4"-20 x 5/8"	2
9	TS-0720071	Lock Washer	1/4"	2
10	IGB8-10	Base		1
11	IBG8-11	Cord Plate		1
12	IBG8-12	Switch Plate		1
13	IBG8-13	Switch with Safety Key		1
	IBG8-13-1	Safety Key		1
14	IBG8-41	Centrifugal Switch Assembly		1
15	IGB8-14	Motor Housing		1
16	IBG8-15	Stator		1
17	IBG8SSB-17	Rotor with Shaft		1
18	IBG8-17	Motor Fan		1
19	BB-6204ZZ	Ball Bearing	6204ZZ	2
20	IGB8-19	End Bell		2
21	TS-1540031	Hex Nut	M5	4
22	IB8-22	End Cap		2
23	IBG8VSB-23	Spacer	L 25mm	2
24	IBG8VSB-24	Spacer	L 16mm	2
25	IBG8VSB-25	Spacer	L 13mm	2
26	IGB8-22	Wheel Flange	2-7/8" OD, 5/8" ID	8
27	IBG8VSB-27	Buffing Wheel (full spiral sewn)	Ø8" x W 1/2" x B 5/8"	1
28	IBG8-24	Hex Nut (LH Thread)	5/8"-11UNC LH	1
29	IBG8-42	Screw	M5 x 0.8 x 205	4
30	IBG8VSB-30	Buffing Wheel (half spiral sewn)	Ø8" x W 1/2" x B 5/8"	1



Item	Part No.	Description	Size	Qty.
31	IBG8-44	Hex Nut (RH Thread)	5/8"-11UNC	1
32	IGB8-63	Lamp Fixed Bracket		1
33	F000297	Phillips Pan Hd Machine Screw	1/4"-20 x 3/8"	2
34	IBG8-47	Strain Relief		1
35	IBG8-46	Power Cord with 15A Plug	16AWG x 3C SJT	1
36	IBG8-48	Capacitor Bracket		1
37	IBG8-49	Running Capacitor	35 $\mu$ F, 250V	1
38	TS-0254021	Socket HD Button Screw	1/4" x 1/2"	6
39	578100	Flexible 3W LED Lamp		1
40	TS-081F031	Mach Screw, Flat HD, Phillips	1/4" x 1/2"	2
	LM-IB8	ID/Warning Label, IB-8 (not shown)		1



# IB-10 PARTS DIAGRAM





### IB-10 Parts List

Item	Part No	Description	Size	Qty.
1	IBG8-01	Truss Head Screw	3/16"-24 x 1/2"	4
2	IBG10-02	Rubber Pad		4
3	IBG10-03	Base Plate		1
4	IBG8-04	Truss Head Screw	3/16"-24 x 3/8"	12
5	IBG10-05	Capacitor Bracket		1
6	IBG10-06	Start Capacitor	400MFD, 125VAC	1
7	IBG10-07	Capacitor Cover		1
8	TS-0060051	Hex Cap Screw	3/8"-16 x 1"	4
9	TS-0720091	Lock Washer	3/8"	4
10	IGB10-10	Base		1
11	IBG8-11	Cord Plate		1
12	IBG10-12	Switch Plate		1
13	IBG8-13	Switch with Safety Key		1
	IBG8-13-1	Safety Key		1
14	IGB10-14	Motor Housing		1
15	IBG10-15	Stator		1
16	IBG10SSB-16	Rotor with Shaft		1
17	IBG10-17	Motor Fan		1
18	BB-6206ZZ	Ball Bearing	6206ZZ	2
19	IGB10-19	End Bell		2
20	IBG8-26	Truss Head Screw	1/4"-20 x 3/4"	8
21	IBG10SSB-21	End Cap		2
22	TS-0255021	Socket HD Button Screw	5/16" x 1/2"	6
23	IBG10SSB-23	Spacer Kit (includes #23-1 thru 23-3)		1
23-1	IBG10SSB-23-1	Spacer	L 2"	2
23-2	IBG10SSB-23-2	Spacer	L 1"	2
23-3	IBG10SSB-23-3	Spacer	L 1/2"	2
24	IGB10-24	Wheel Flange	3-3/4" OD, 1" ID	8
25	IBG10-45	Hex Nut (Right Hand Thread)	1"-8UNC	1
26	IBG10-26	Hex Nut (Left Hand Thread)	1"-8UNC LH	1
27	IBG10-43	Centrifugal Switch Assembly		1
28	IBG10-48	Strain Relief		1
29	IBG10-47	Power Cord		1



Item	Part No	Description	Size	Qty.
30	IBG10-50	Capacitor Bracket		1
31	IBG10-51	Running Capacitor	45mF, 350VAC	1
32	F000297	Phillips Pan HD Machine Screw	1/4"-20 x 3/8"	2
33	IB10-33	Buffing Wheel (half spiral sewn)	Ø10" x W 1" x B 1"	1
34	IB10-34	Buffing Wheel (full spiral sewn)	Ø10" x W 1" x B 1"	1
35	578100	Flexible 3W LED Lamp		1
36	TS-081F031	Mach Screw, Flat HD, Phillips	1/4" x 1/2"	2
	LM-IB10	ID/Warning Label, IB-10 (not shown)		1



NOTES



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