



# OPERATOR'S MANUAL

**Metal Working**



## **BELT GRINDER MODEL: BG-679**

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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, lightning, 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 [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**

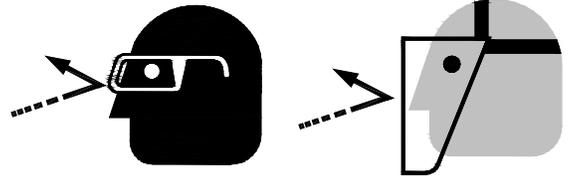


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



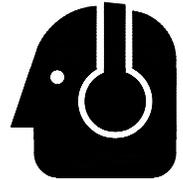
**PROTECT EYES**

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



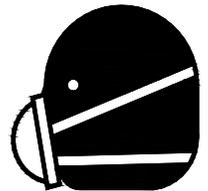
**PROTECT AGAINST NOISE**

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



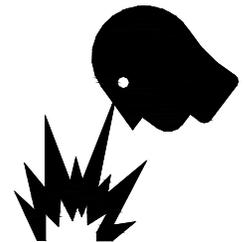
**DUST HAZARD**

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.



**DUST PARTICLES AND IGNITION SOURCES**

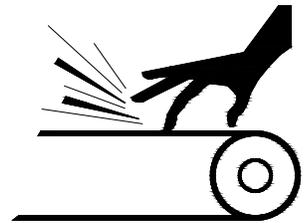
**DO NOT** operate this machine in areas where explosion risks are high. Such areas include locations near pilot lights, open flames, or other ignition sources.





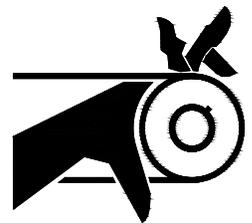
### MOVING BELT ABRASIONS

**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.



### HIGH VOLTAGE

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



### EMERGENCY STOP BUTTON

In the event of incorrect operation or dangerous conditions, the machine can be stopped immediately by pressing the **E-STOP** button. Twist the emergency stop button clockwise (cw) to reset. Note: Resetting the E-Stop will not 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!**

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. **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.
17. **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.
18. **Turn off** power before checking, cleaning, or replacing any parts.
19. Be sure **all** equipment is properly installed and grounded according to national, state, and local codes.
20. Keep **all** cords dry, free from grease and oil, and protected from sparks and hot metal.
21. 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.
22. **DO NOT** bypass or defeat any safety interlock systems.
23. Keep visitors a safe distance from the work area.
24. **Reduce the risk of unintentional starting.** Make sure switch is in “**OFF**” position before plugging in power cord.



25. **Never leave machine running unattended. TURN POWER OFF.** Don't leave machine until it comes to a complete stop.
26. **Minimum Stock Dimensions. DO NOT** sand material thinner than 1/16" (1.5mm), narrower than 1/8" (3mm), or shorter than 8" (203mm).
27. **Changing Sanding Belt. DO NOT** operate the sander if the belt is damaged or badly worn. Replace at once.
28. **Inspect Piece Part.** Always inspect piece part for imperfections that could become projectiles causing personal injury.
29. **Do not** operate the equipment, or allow others to operate the equipment without proper training in these and other rotating machinery safety requirements.
30. **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 material at a time.
31. **Warning:** The dust generated by certain materials can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use a dust collection system whenever possible.
32. **Use spark and debris arresting apparatus.** Such apparatus should be connected to the machine so as to contain dust and debris that is generated, and to suppress sparks thereby limiting human inhalation risk, and the risk of fire or explosion.
33. **Protect persons from work pieces, particulates, etc.** that could be forcibly ejected from the machine. A buffing wheel or grinding belt can "grab" a work piece while the work piece is being buffed, polished, ground, or otherwise conditioned, resulting in forcible ejection toward the operator or those in the vicinity of the machine. The use of leather aprons, gloves, and eye shields are examples of protective gear that may be effective. In general do not grind, buff, or otherwise engage the traveling belt, wheel, or disc surface with the work piece pointing into the direction from which the belt, wheel, or disc is traveling. However, if you choose to do so be aware the work piece may lodge in the traveling belt, wheel, or disc and be forcibly and dangerously ejected.

 **WARNING:** Certain alloys such as titanium may create conditions where grinding debris can accumulate in a tight gap creating a potential fire hazard. When in doubt consult with your safety officer. Failure to observe this warning may result in the work piece or other item being caught in this gap, and/or being forcibly ejected. Failure to heed this warning may cause serious bodily harm to the operator and/or bystanders. **NEVER USE THIS EQUIPMENT IF YOU ARE NOT PROPERLY TRAINED IN ITS OPERATION and/or SAFE USE! IF IN DOUBT STOP and ASK FOR GUIDANCE!**



34. **Do not** operate this machine if the gap (nip point) between a moving belt, wheel or disc and the work support surface exceeds 1/8" (3mm).
35. **Do not** operate this machine if the gap between the moving abrasive belt, disc or wheel and the adjacent face of the work rest (or table) will permit passage of the work piece through the gap (nip point).
36. **Never** position the work rest table at an acute angle between the top of the work rest table and the moving belt or wheel. Doing so will create "nip point" that can cause serious injury should an operator body part become entangled (pulled into) the nip point created by this acute angle.
37. **Correct equipment or safety problems immediately.** Do not operate the equipment when it requires maintenance, or correction.
38. **Install and use high quality abrasive belts, wheels, discs, media, etc.,** as appropriate to your machine. Understand and follow the operating requirements provided by the manufacturer of these materials.



## TECHNICAL SPECIFICATIONS

Belt Size (L x W)	78.75" x 6" (2000 x 152mm)
Contact Wheel	9.84" x 6" (250 x 152mm)
Drive / Alignment Wheel	9.84" x 6" (250 x 152mm)
Belt Speed	3937ftm (1200mpm)
Power Requirements	220V / 3ph / 60hz
Belt Motor	4hp (3kw) 220V / 3ph / 60hz / 10A
Blower Motor	.75hp (.55kw) 220V / 3ph / 60hz / 2.5A
Shipping Weight	286lbs. (130kg)
Shipping Dimensions	46" x 26" x 26" (1168 x 660 x 660mm)

\* Consult the machine identification plate for specific power supply information.

## 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: [Baileigh-Service@jpwindustries.com](mailto:Baileigh-Service@jpwindustries.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.





Item	Name	Qty.	Item	Name	Qty.
1	Grinder	1	4	Hardware Hex Bolt (pivot) Flat Washer Nylon Insert Locknut	1 2 1
2	Welded Stand	1	5	Dust Bag with Clamp	1
3	Exhaust Blower with Motor	1	6	Spark Trap	1

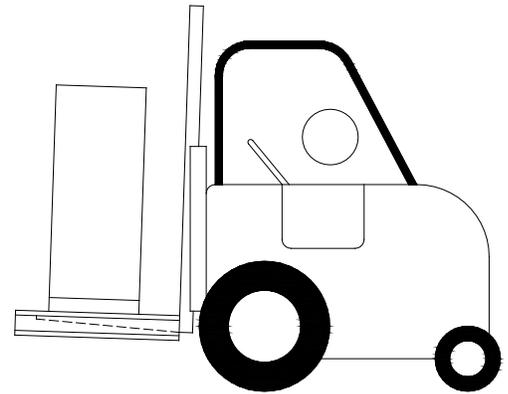


## **TRANSPORTING AND LIFTING**

**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 fork lift 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.



## **INSTALLATION**

### **IMPORTANT:**

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

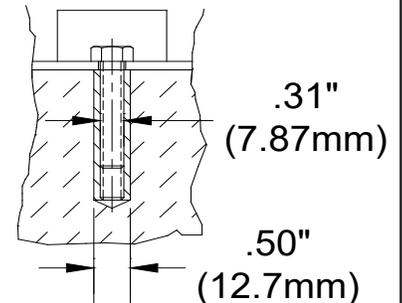
- Overall weight of the machine.
- Weight of material being processed.
- Sizes of material to be processed through the machine.
- Space needed for auxiliary stands, work tables, or other machinery.
- Clearance from walls and other obstacles.
- Maintain an adequate working area around the machine for 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.
- 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.
- **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.

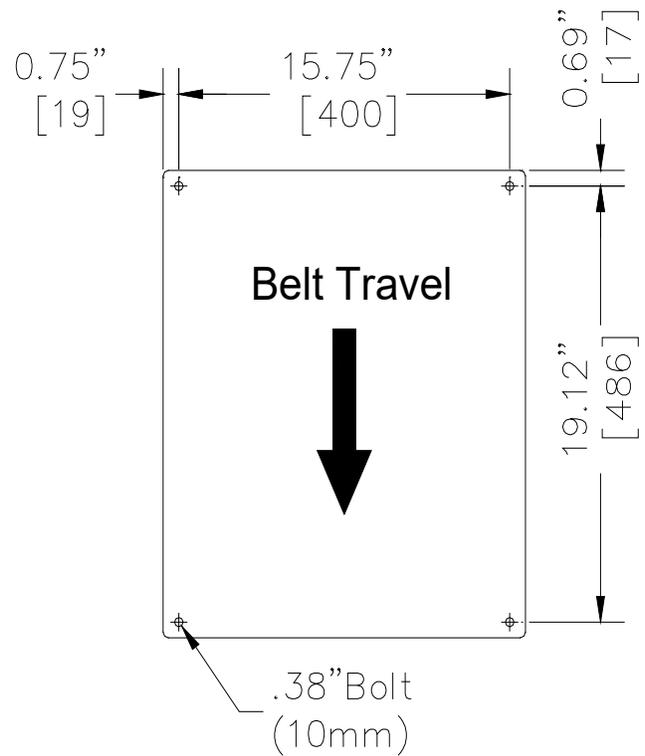
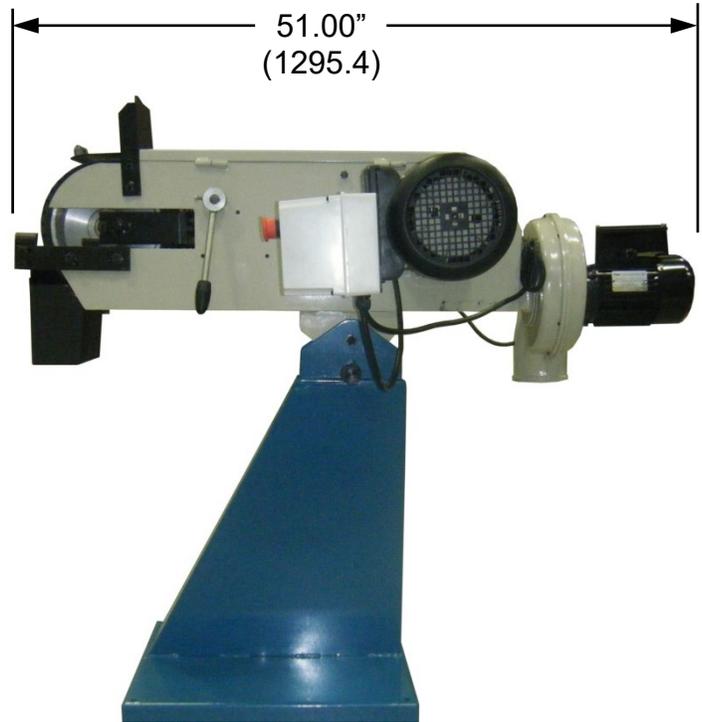
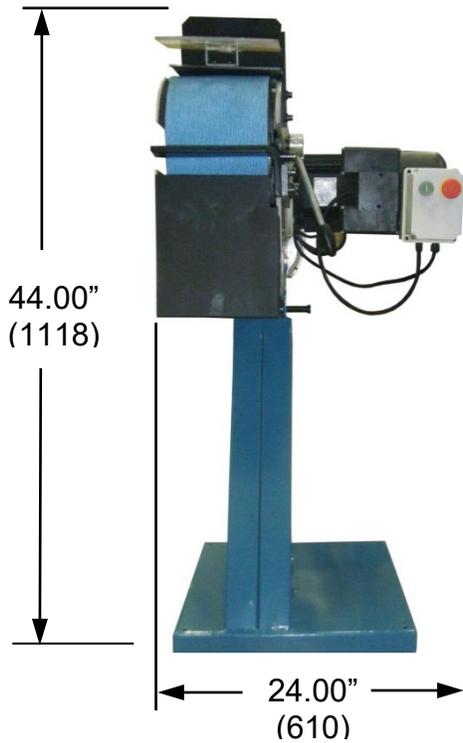
### Anchoring the Machine

- Once positioned, anchor the machine to the floor, as shown in the diagram. Use bolts and expansion plugs or sunken tie rods that connect through and are sized for the holes in the base of the stand.
- This machine requires a solid floor such as concrete at a minimum of 4" (102mm) thick. 6" (153mm) minimum is preferred.



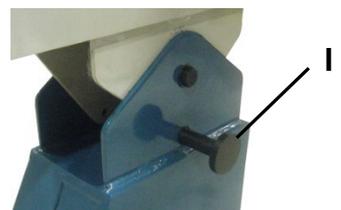
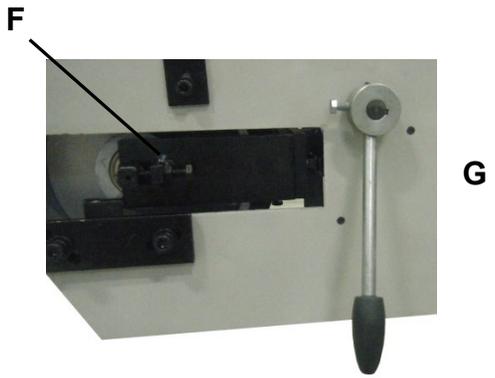
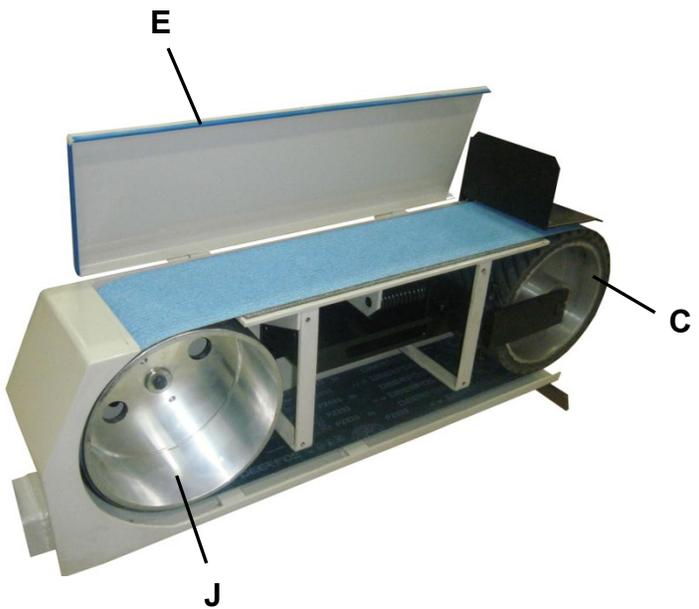
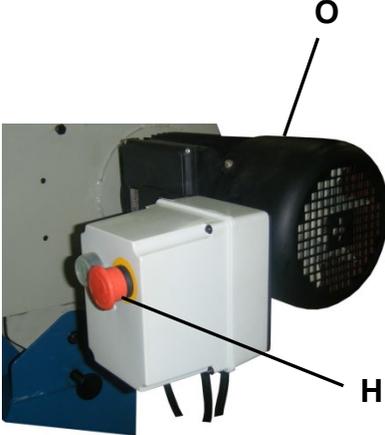
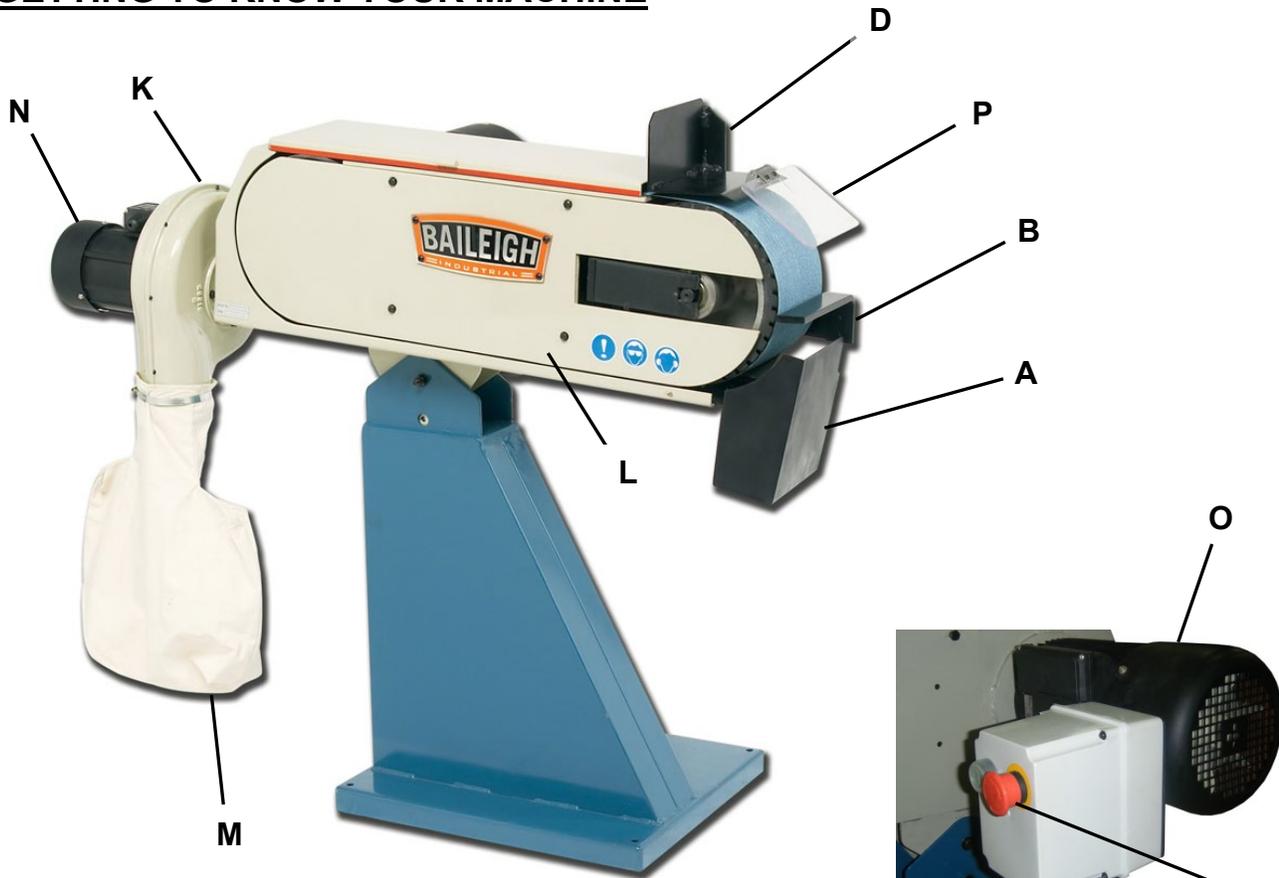


## OVERALL DIMENSIONS





# GETTING TO KNOW YOUR MACHINE





Item	Description	Qty.
A	Spark Trap	1
B	Front Work Support	1
C	Contact Wheel	1
D	Top Work Support	1
E	Belt Guard	1
F	Tracking Adjuster	1
G	Belt Tension Release Lever	1
H	Stop / Emergency Stop Button	1
I	Spring Loaded Angle Adjustment Pin	1
J	Steering Roller	1
K	Dust Collection	1
L	Side Cover	1
M	Dust Collection Bag with Clamp	1
N	Dust Collection Motor	1
O	Belt Drive Motor	1
P	Eye Shield	1

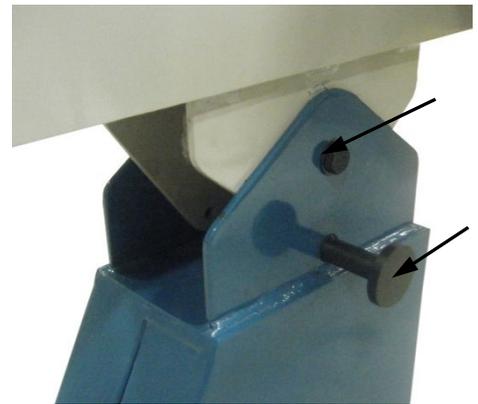


## ASSEMBLY AND SET UP

**⚠ 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.

### Mounting Grinder Body to the Stand

1. Carefully pick up the grinder body using a suitable lifting device (capable of lifting 500 lbs. (227 kg.)
2. Pull back on the spring loaded adjustment pin and place the grinder body into the pivot bracket.
3. Release the pin into the center adjustment hole.
4. When the pivot holes in the stand line up with the holes in the grinder, push the bolt with flat washer through and secure on the opposite side with a flat washer and a hex nut. Do not overtighten, as the grinder will need to pivot on the stand. The grinder is shown in place with the pivot bolt secured and the adjustment pin in place.



### Mounting the Exhaust to the Grinder Flange

5. Attach the exhaust duct to the flange with (4) 6mm x 16mm long hex bolts and lockwashers.



**Important:** Bolts longer than 16mm will strike the rotating blade inside the duct.

6. Tighten the bolts securely.





### Attaching the Bag

1. Slip the bag over the duct housing as shown and secure with the clamp.
2. Tighten securely.



### Mounting the Spark Trap

1. Slide the spark trap onto the front of the grinder and secure with the flat washer and hex bolt.



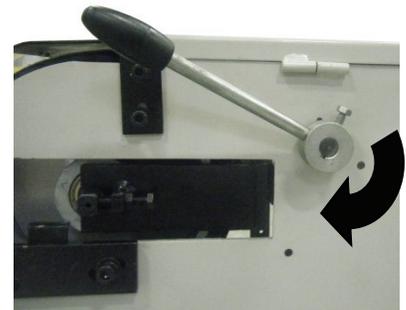
**Note:** Make sure the spark trap does not interfere with the opening of the hinged side access door as indicated by the arrow.





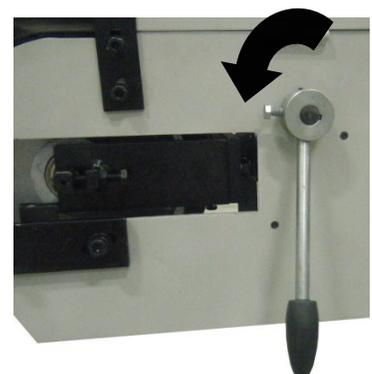
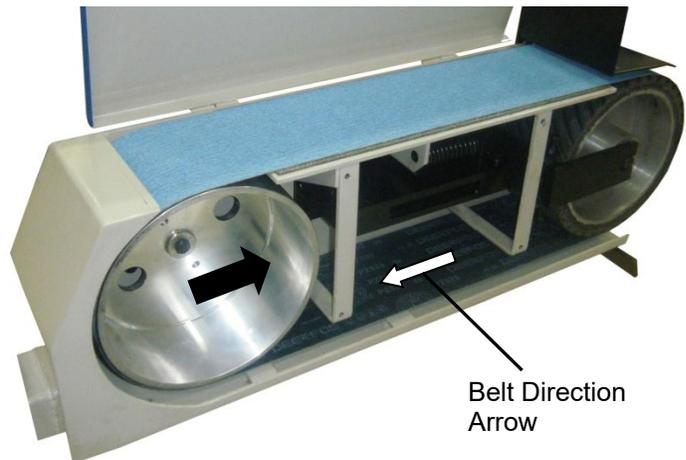
## Belt Removal and Installation

1. MAKE SURE there is no power to the machine during removal and installation of the belt.
2. Remove the spark trap from the front of the machine.
3. Remove the side cover by taking out the four hex bolts.
4. Rotate the belt tension release lever 90° clockwise (cw). This action brings the spring loaded steering roller closer to the contact wheel allowing you to place the belt around the wheels.



**Note:** The direction arrows on the belt must match the belt travel direction.

5. Remove the old belt and center the new belt on the wheels and then turn the belt tension lever clockwise (cw) to tighten the belt.
6. Close and secure the side cover.
7. Replace the spark trap to the front of the machine and secure. (Make sure the spark trap does not interfere with the opening of the side cover.)





## ELECTRICAL

**⚠ WARNING:** Baileigh Industrial Holdings LLC is not responsible for any damage caused by wiring up to an alternative 3-phase power source other than direct 3-phase. If you are using an alternate power source, consult a certified electrician or contact Baileigh Industrial Holdings LLC prior to energizing the machine.

**⚠ 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.

**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 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 main power switch may be turn ON to test the operation. Turn the switch OFF when the machine is not in operation.

**Check for correct rotation of the motor**

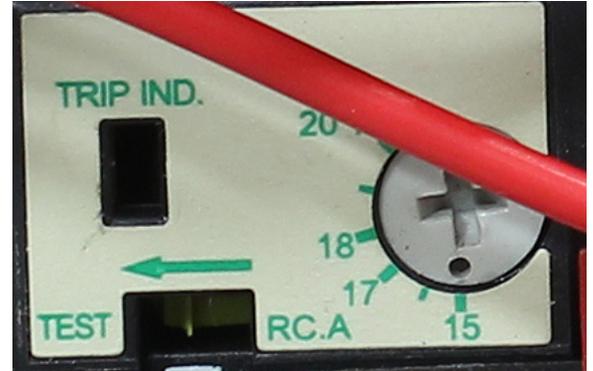
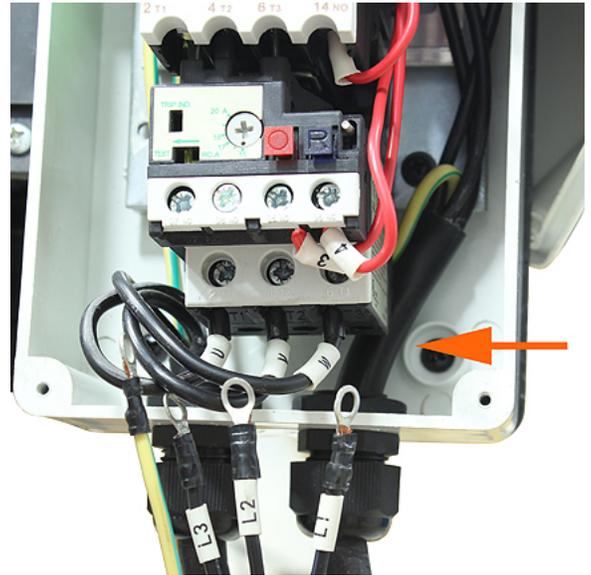
5. With power connected and the main disconnect turned ON, push the start button to start the belt motor. The belt should rotate toward and down across the contact wheel and material rest.
6. If not, disconnect power to the machine, and switch the L1 and L3 wires. DO NOT move the ground wire.





### Exhaust Motor Electrical Connection

1. Verify that the main sanding belt motor is properly connected and rotating the correct direction.
2. **DISCONNECT THE MACHINE FROM THE POWER SUPPLY!**
3. Remove the cover from the electrical box.
4. Carefully drill a hole into the lower right side of the electrical box. The hole will be of the size to fit a cord strain relief fitting to grip the power cord (supplied by customer).
5. Insert a cord strain relief fitting into the open hole to grip the power cord (supplied by customer).
6. Insert the power cord from the blower motor through the strain relief and into the electrical box.
7. Connect the three power wires terminals **L1 to W**, **L2 to V**, & **L3 to U**.
8. Connect the ground wire (typically green) to the **E** terminal.
9. Adjust the Thermal Overload setting up to the 17A position.
10. Install the cover onto the electrical box. Be sure to check that NO wires are pinched between the cover and the box during assembly.
11. Test the motor for correct rotation. Turn on the grinder and verify that the blower motor is inflating the collection bag.
12. If the blower is rotating the wrong direction.  
**DISCONNECT THE MACHINE FROM THE POWER SUPPLY!**
13. Change the wire connections to **L1 to U**, **L2 to V**, & **L3 to W**.
14. Do not change the ground wire.
15. Install the cover onto the electrical box. Be sure to check that NO wires are pinched between the cover and the box during assembly.
16. Test the motor for correct rotation. Turn on the grinder and verify that the blower motor is inflating the collection bag.





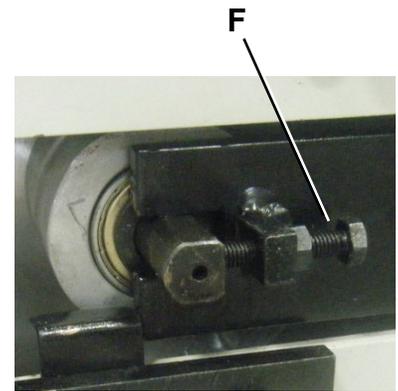
## **MACHINE ADJUSTMENTS**

### **Belt Tracking**

After the initial machine startup or after changing a belt, you will need to check the tracking of the belt on the contact wheel.

Back off the jam nut and turn the hex bolt (F) out, counterclockwise (ccw). This tracks the belt "right" while facing the spark trap end of the machine. Turn the hex bolt in, clockwise (cw) to track the belt to the "left"

1. Make sure the side cover is on and secure.
2. Open the top belt guard to observe the tracking of the belt.
3. After clearing the area of any tools, piece parts, etc., start the drive motor.
4. Adjust the tracking of the belt with the tracking adjuster hex bolt (F) as explained above. Retighten the jam nut when finished.



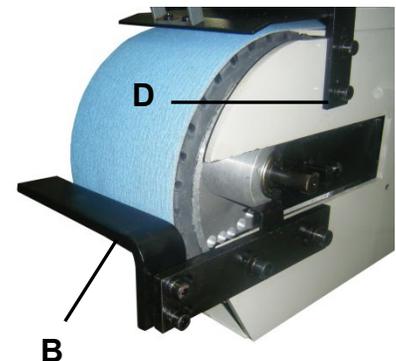
### **Height and Angle Adjustment**

1. Pull back spring loaded knob "I" to allow the grinder head to be rotated to a higher or lower position.
2. Release the knob into one of the three holes after making the adjustment.



### **Top and Front Work Supports**

1. By loosening the side bolt, the front work support "B" can be moved closer to or away from the belt as needed.
2. Top work support "D" can be adjusted up or down when doing surface grinding.





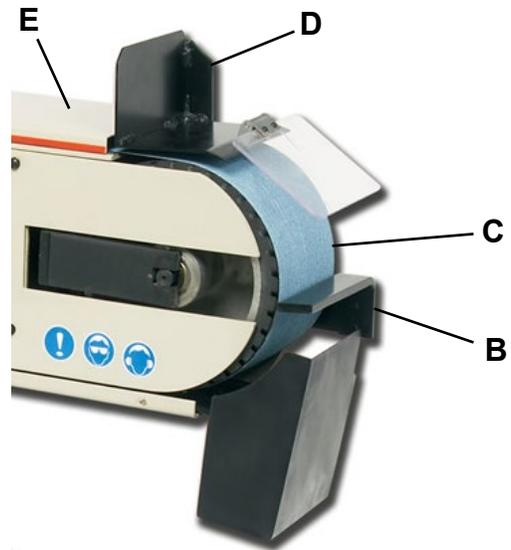
## OPERATION

**⚠ 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 materials make sure they are properly supported.

**⚠ CAUTION:** Do not allow hands or fingers to make contact with a moving grinding belt!

### Contact Grinding

1. Before grinding, make sure the exhaust fan with the collection bag attached, is running and that the spark trap is in place.
2. When grinding against the contact wheel "C", make sure that the top belt guard "E" is closed.
3. Press the ON button to start and run the belt motor and belt.
4. The operator faces the contact wheel and securely holds the piece part to be ground.
5. KEEP HANDS AWAY from the point of grinding as heat will be generated during the grinding process.
6. Use the front work support "B" to steady the work piece whenever possible.
7. The piece part is then pressed against the belt and turned and ground as needed.



### Surface Grinding

1. Before grinding, make sure the exhaust fan with the collection bag attached, is running and that the spark trap is in place.
2. Open the top belt guard "E" to expose the top surface of the belt.
3. Press the ON button to start and run the belt motor and belt.
4. With the belt turning, hold the piece part firmly against the top work support "D" while grinding.



**Note:** Belt life can be prolonged if the grinding starts with a light pressure.



## 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.



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

### Daily Maintenance

- Check daily for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.
- Do a general cleaning by removing dust and debris from on or around the machine.
- Empty and clean out the spark trap. (as often as needed)
- Remove and empty the exhaust bag.
- Inspect the abrasive belt for wear and replace if needed.
- Check that the side belt guard, top belt guard, eye shield, and emergency stop button are in good working order.

### Weekly Maintenance

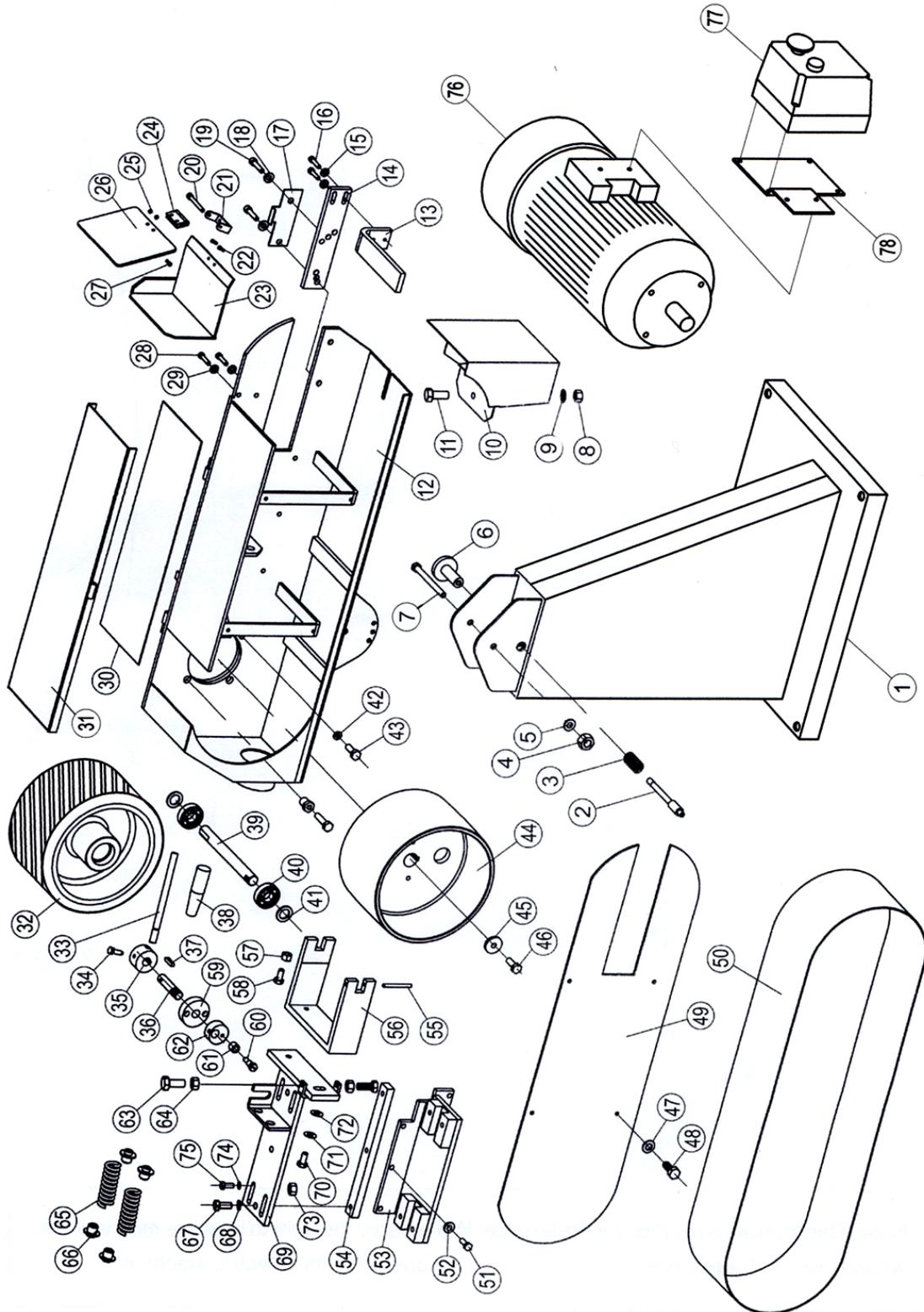
- On a weekly basis clean the machine and the area around it.
- Lubricate threaded components and sliding devices.
- Apply rust inhibitive lubricant to all non-painted surfaces.
- Clean and inspect the sliding surface underneath the top side of the belt.
- If available, use compressed air to remove fine metallic filings from the wheels.
- Inspect the edges of the rubber contact wheel. Replace the wheel if the edges become rounded.
- Check that the bolts mounting the machine to the floor are secure.



**Note:** Baileigh Industrial offers an assortment of belts for your machine to suit your application. Please phone Baileigh Industrial at (920.684.4990) or fax to (920.684.3944)



# PARTS DIAGRAM





## Parts List

Item	Part No.	Description	Qty.
1	BG679-1	Stand	1
2	BG679-2	Angle Pin	1
3	BG679-3	Compression Spring	1
4	BG679-4	Hex Nut M10	1
5	BG679-5	Lock Washer M10 x 20	1
6	BG679-6	Handle	1
7	BG679-7	Hex Bolt M10 x 120mm	1
8	BG679-8	Hex Nut M8	1
9	BG679-9	Lock Washer 8mm	1
10	BG679-10	Spark Trap	1
11	BG679-11	Hex Bolt M8 x 16mm	1
12	BG679-12	Body	1
13	BG679-13	Work Support	1
14	BG679-14	Top Work Support Plate	1
15	BG679-15	Lock Washer 8mm	2
16	BG679-16	Socket Capscrew M8 x 20mm	2
17	BG679-17	Limiting Position Plate	1
18	BG679-18	Lock Washer 10mm	2
19	BG679-19	Socket Capscrew M10 x 25mm	2
20	BG679-20	Socket Capscrew M5 x 50mm	1
21	BG679-21	Eye Protector Base	1
22	BG679-22	Machine Screw M4 x 12mm	2
23	BG679-23	Cover Plate	1
24	BG679-24	Eye Protector Binder	1
25	BG679-25	Hex Nut M4	2
26	BG679-Shield	Plastic Eye Protector Shield	1
27	BG679-27	Machine Bolt M4 x 12mm	2
	BG679-20-27	Full Eye Shield Assembly	
28	BG679-28	Socket Capscrew M8 x 16mm	2
29	BG679-29	Lock Washer 8mm	2
30	BG679-30	Graphite Layer 475 x 160 x 1.5	1
31	BG679-31	Belt Guard	1
32	BG679-32	Contact Wheel	1



Item	Part No.	Description	Qty.
33	BG679-33	Belt Tension Release Lever	1
34	BG679-34	Special Hex Bolt M8 x 25mm	1
35	BG679-35	Belt Tension Release Base Collar	1
36	BG679-36	Shaft – Eccentric, Belt Tension	1
37	BG679-37	Key 5 x 20mm	1
38	BG679-38	Handle	1
39	BG679-39	Shaft	1
40	BG679-40	6204RS Bearing 802404	2
41	BG679-41	Stop Ring (M20 x 37 Flat Washer)	2
42	BG679-42	Spacer	2
43	BG679-43	Hex Bolt M8 x 30mm	2
44	BG679-44	Steering Wheel	1
45	BG679-45	Flat Washer	1
46	BG679-46	Hex Bolt M10 x 35mm	1
47	BG679-47	Flat Washer 6mm	4
48	BG679-48	Hex Bolt M6 x 16mm	4
49	BG679-49	Side Cover	1
50	BG679-50	Belt 2000mm x 150mm	1
51	BG679-51	Hex Bolt M8 x 20mm	6
52	BG679-52	Spring Washer 8mm	6
53	BG679-53	Support	1
54	BG679-54	Draw Bar	1
55	BG679-55	Slot Drive Set Screw M6-1.0 x 22 Shaft 6 x 35mm	1
56	BG679-56	Support of Contact Wheel	1
57	BG679-57	Hex Nut M8	1
58	BG679-58	Hex Bolt M8 x 30mm	1
59	BG679-59	Fixing Base	1
60	BG679-60	M8-1.25 x 15 Slot Drive Hex Shoulder Bolt 10 x 12mm Shoulder	1
61	BG679-61	Bushing M10 x 16 x 12	1
62	BG679-62	Eccentric Wheel	1
63	BG679-63	Hex Bolt M8 x 30mm	2
64	BG679-64	Hex Nut M8	2
65	BG679-65	Compression Spring	2
66	BG679-66	Supporting Knot	4



Item	Part No.	Description	Qty.
67	BG679-67	Hex Bolt M10 x 25mm	3
68	BG679-68	Spring Washer 10mm	3
69	BG679-69	Slip Support	1
70	BG679-70	Hex Bolt M10 x 20mm	2
71	BG679-71	Spring Washer 10mm	2
72	BG679-72	Lock Washer 10mm	2
73	BG679-73	Hex Nut M10	4
74	BG679-74	Lock Washer M10	4
75	BG679-75	Hex Bolt M10 x 55mm	4
76	BG679-Three Phase	Motor 4 hp, 220V, 3ph., 60hz	1
77	BG679-77	Switch Box	1
	BG679-77-A	Overload 11.3 – 16 Amp	
	BG679-77-On/Off	On/Off Switch Assembly	
78	BG679-78	Switch Box Bracket	1
	BG679-Collector Motor	Dust Collector Motor	
	BG679-Collector Fan	Dust Collector Fan	
	BG679-Dust Bag	Dust Collection Bag	





## TROUBLESHOOTING

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

FAULT	PROBABLE CAUSE	REMEDY
MOTOR DOES NOT RUN	<ol style="list-style-type: none"> <li>1. Motor incorrectly wired.</li> <li>2. Relays or motor defective.</li> <li>3. Thermal protection of motor defective.</li> <li>4. Fuses blown.</li> <li>5. Emergency stop button depressed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Have checked by qualified electrician.</li> <li>2. Replace faulty component.</li> <li>3. Replace thermal protector.</li> <li>4. Find reason for blown fuses and replace.</li> <li>5. Clear problem and turn E-stop button to reset.</li> </ol>
POOR TRACKING	<ol style="list-style-type: none"> <li>1. Improper belt splice.</li> <li>2. Worn wheel bearings</li> </ol>	<ol style="list-style-type: none"> <li>1. Check belt for irregular seam or shape.</li> <li>2. Check all bearings for overheating or damage. Replace worn or damaged bearings.</li> </ol>
CONTACT WHEEL WEAR	<ol style="list-style-type: none"> <li>1. Grinding in one area on belt.</li> <li>2. Excessive grinding deposits on belt and debris in machine.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use entire work surface of belt whenever possible.</li> <li>2. Periodically clean interior of grinder.</li> </ol>
SHORT BELT LIFE	<ol style="list-style-type: none"> <li>1. Excessive grinding pressure.</li> </ol>	<ol style="list-style-type: none"> <li>1. Allow the belt to do the cutting. Excessive pressure dulls the belt and removes the grit from the belt.</li> </ol>



**NOTES**

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