



# OPERATOR'S MANUAL

Metal Working



## DOWN DRAFT TABLE - METAL MODEL: DDTM-4840-HD

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## THANK YOU & WARRANTY

Thank you for your purchase of a machine from Baileigh Industrial. 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 a 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 30 days from date of receipt. The foregoing warranty is Seller's sole obligation, and the original end-user's exclusive remedy, with regard to any defective Goods. This limited warranty does not apply to: (a) die sets, tooling, and saw blades; (b) periodic or routine maintenance and setup, (c) repair or replacement of the Goods due to normal wear and tear, (d) defects or damage to the Goods resulting from misuse, abuse, neglect, or accidents, (f) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

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

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



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

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

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



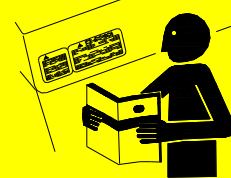
**Note:** *This symbol refers to useful information throughout the manual.*



## 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. **DANGER** identifies a hazard or unsafe practice that will result in severe **Injury or Death.**

Safety signs with signal word **DANGER** or **WARNING** are typically near specific hazards.

General precautions are listed on **CAUTION** safety signs. **CAUTION** also calls attention to safety messages in this manual.



**DANGER**



**WARNING**



**CAUTION**



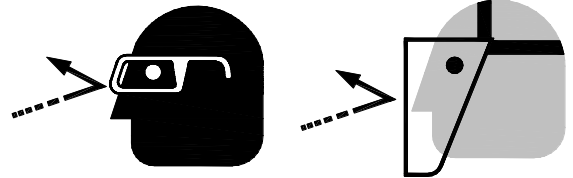


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



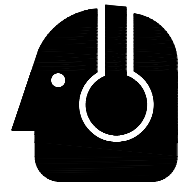
### **PROTECT EYES**

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



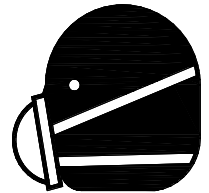
### **PROTECT AGAINST NOISE**

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.



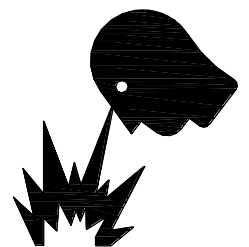
### **DUST HAZARD**

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.



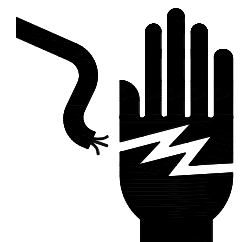
### **DUST PARTICLES AND IGNITION SOURCES**

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



### **HIGH VOLTAGE**

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





Wear Eye Protection



Read Manual



Wear Ear Protection



Wear Respiratory Protection

## **SAFETY PRECAUTIONS**



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

Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't 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 woodworking 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. **Keep work area clean.** Cluttered areas invite injuries.
5. **Overloading machine.** By overloading the machine you may cause injury from flying parts. **DO NOT** exceed the specified machine capacities.
6. **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.
7. **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.
8. **Use eye and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings.
9. **Do not overreach.** Maintain proper footing and balance at all times. **DO NOT** reach over or across a running machine.
10. **Stay alert.** Watch what you are doing and use common sense. **DO NOT** operate any tool or machine when you are tired.
11. **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.
12. **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.
13. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
14. **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.
15. **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.
16. Turn off power before checking, cleaning, or replacing any parts.
17. Be sure all equipment is properly installed and grounded according to national, state, and local codes.
18. Inspect power and control cables periodically. Replace if damaged or bare wires are exposed. **Bare wiring can kill!**



19. **DO NOT** bypass or defeat any safety interlock systems.
20. Keep visitors a safe distance from the work area.
21. **Check** for damaged parts before using machinery. Check for binding or misaligned parts, broken parts, loose bolts, or any other conditions which may impair the machines operation. Repair or replace any damaged parts before operation.
22. **Do not remove** any warning signs.
23. **DO NOT** insert fingers or foreign objects into the dust intake ports. Keep hair, loose clothing, fingers, and all body parts away from openings and moving parts of the dust collector.
24. **DO NOT** use the dust collector without a filter bag and dust collection bag in place and properly secured.
25. **DO NOT** operate the dust collector with unused dust intake ports uncapped. **ALWAYS** cover exposed dust intake ports.
26. **PERIODICALLY INSPECT** dust and filter bags for any cuts, rips or tears. **NEVER** operate the dust collector with a damaged bag or vacuum hose.
27. The dust collector is designed for home use or light commercial duty 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.*



## **TECHNICAL SPECIFICATIONS**

Air Volume	1350CFM @ Base																		
Inlet Size	Table Surface: Grated Table Top																		
Electrical	230V / 60Hz / 3Ph																		
Motor	2.0hp (1.5kw) TEFC High Efficiency Motor w/ aluminum impeller																		
Table Load Capacity – Maximum	1543lbs (700kgs) Evenly distributed over 80% - 100% of table surface.																		
Table Load Capacity – Concentrated Contact	<table> <tr> <th>Surface Contact</th><th>Weight</th></tr> <tr> <td>10%</td><td>192lbs (87kgs)</td></tr> <tr> <td>20%</td><td>384lbs (174kgs)</td></tr> <tr> <td>30%</td><td>575lbs (261kgs)</td></tr> <tr> <td>40%</td><td>767lbs (348kgs)</td></tr> <tr> <td>50%</td><td>959lbs (435kgs)</td></tr> <tr> <td>60%</td><td>1151lbs (522kgs)</td></tr> <tr> <td>70%</td><td>1343lbs (609kgs)</td></tr> <tr> <td>80%</td><td>1543lbs (700kgs)</td></tr> </table>	Surface Contact	Weight	10%	192lbs (87kgs)	20%	384lbs (174kgs)	30%	575lbs (261kgs)	40%	767lbs (348kgs)	50%	959lbs (435kgs)	60%	1151lbs (522kgs)	70%	1343lbs (609kgs)	80%	1543lbs (700kgs)
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Filter Media																			
Aluminum Filter	11.3" x 23.8" x 0.86" (285 x 630 x 22mm)																		
Cartridge Filter (2)	Ø11.25" x 13"L (Ø285 x 330mm L) filtering area: 5m <sup>2</sup> x 2 = 10m <sup>2</sup> (107.6ft <sup>2</sup> )																		
HEPA Filter	18" x 20" x 5.9" (457 x 508 x 150mm) Filter Area: 134ft <sup>2</sup> (12.5m <sup>2</sup> ) Efficiency: 99.99% of 0.3-micron particle																		
Air Supply	60 – 90psi (4.1 – 6.2bar) 90psi (6.2bar) Maximum																		
Machine Size (L x W x H)	58.8" x 39.3" x 73.6" (1493 x 998 x 1869mm)																		
N.W. (Machine)	776lbs (352.0kgs)																		
G.W. (Machine)	1019lbs (462.0kgs)																		



## UNPACKING AND CHECKING CONTENTS

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



**WARNING: SUFFOCATION HAZARD!** Immediately discard any plastic bags and packing materials to eliminate choking and suffocation hazards to children and animals.

If any parts are missing, **DO NOT** place the machine into service until the missing parts are obtained and installed correctly.

## Cleaning



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



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

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

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



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





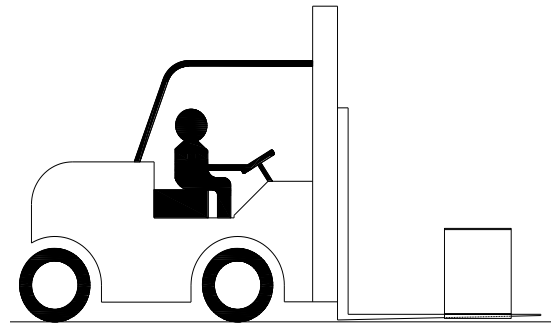
## **TRANSPORTING AND LIFTING**



**IMPORTANT:** *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:

- This unit is specifically designed for the filtration of smoke generated during ordinary welding process work.
- Overall weight of the machine.
- Space needed for clear air flow and service access.
- 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.

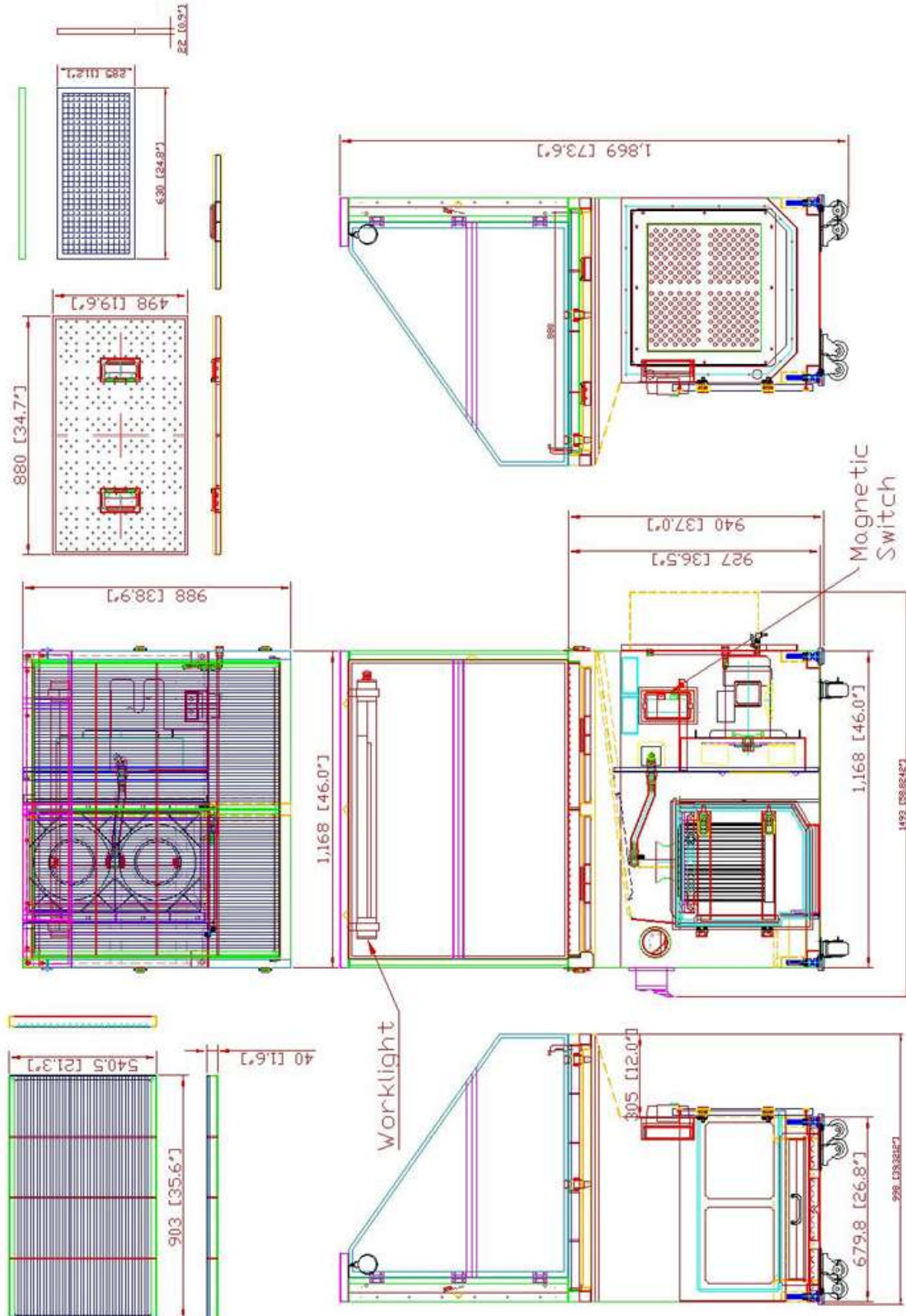


- **WORKING CLEARANCES:** Take into consideration space around this machine to provide the air flow needed to allow for proper filtration. This unit will work best if it is located away from corners, and heating/cooling vents.
- It is important to maintain free area around the machine, which is required for the working place.
- **LEVELING:** The machine should be sited on a level, concrete floor. Provisions for securing it should be in position prior to placing the machine.
- **FLOOR:** This tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **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.





## DIMENSIONS





## GETTING TO KNOW YOUR MACHINE





A	Work Lamp
B	Work Surface
C	Work Lamp Light Switch and Outlet Box
D	Vacuum Pressure Gauge
E	Leveling / Brake Pads
F	Filter Compartment Access Door
G	Air Pressure Pulse Clean Button
H	On / Off Switch Box
I	Air Reservoir Drain Valve / Port
J	HEPA Filter
K	Air Reservoir Inlet



## FILTER ASSEMBLY AND INSTALLATION



**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.



**IMPORTANT:** Always verify that the direction of “Air Flow Arrow” on the filter matches the actual direction of air flow of the system. Failure to match the air flow will damage the filters and possibly the systems motor.

Pre Filter 30-35% SECC  
SIZE : 595 \* 595 \* 45mm



### Cartridge and Aluminum Filter

1. Press the button to unlock the front maintenance door.



2. Loosen the retaining knob and slide the filter retaining bar over, (right as shown in picture), to release the retention handles.





3. Rotate the retention handles downward to release the filter cartridge.

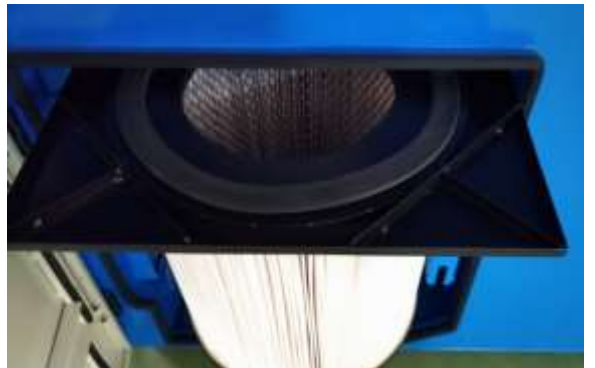


4. Pull the entire filter cartridge assembly out as a unit and clean or replace as needed.

The filter cartridge is reusable; however, it will need to be replaced when worn, damaged, or when it becomes so clogged that cleaning is no longer effective.



**IMPORTANT:** DO NOT wash the filter(s). Washing will cause irreversible damage to the filters. If the filter gets wet, they will need to be replaced.



5. Use compressed air and a brush to clean the filter.
6. Inspect the gasket at the top of the filter and replace the filter if damaged.





7. Remove and clean the bottom debris tray.



- 8. Disconnect the down draft table from the power supply.
- 9. Replace the Aluminum filter by lifting slightly on the filter and pulling outward on the bottom and then lowering the filter out of the frame.
- 10. Install a cleaned or new filter in reverse order.

This aluminum filter is washable and reusable, however it will need to be replaced when worn, damaged, or when it becomes so clogged that washing is no longer effective.







11. Install the first filter cartridge into the housing and slide it fully into the cabinet.
12. Install the second filter cartridge until it is in place next to the first cartridge. Do not allow the support flange from each cartridge to overlap.
13. Secure in place using the retention handles.
14. Inspect the door seal, and replace if damaged.
15. Close and latch the maintenance door.



#### **HEPA Filter**

1. Remove and retain the 12 knob screws (6 shown) securing the filter case and filter to the housing.

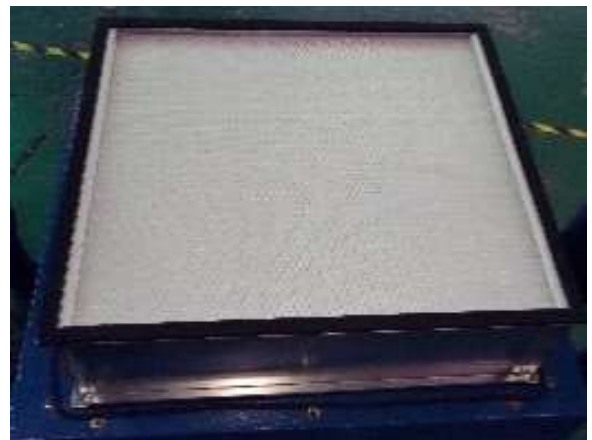




2. Remove the filter case and filter from the housing.
3. Clean the motor compartment and motor as needed to provide full air flow around the motor.



4. Remove the HEPA filter from the case and replace with a new HEPA filter.
5. Install the HEPA filter into the case and install the case and filter assembly onto the housing.
6. Secure the filter case and filter assembly to the housing using the (12) knobs screws.



### **Air Supply**

Attached compressed air to the unit for cleaning purposes



**IMPORTANT:** Do not exceed 90 PSI pressure.

1. A 1/4" PT port is available for the connection of the down draft table to a compressed air supply. The air supply should be between 60 and 90 PSI.
2. Place a pressure regulator inline ahead of the connection to control the air pressure.
3. Use the ball valve near the bottom of the cabinet to drain any accumulated water from the air reservoir on a monthly basis.

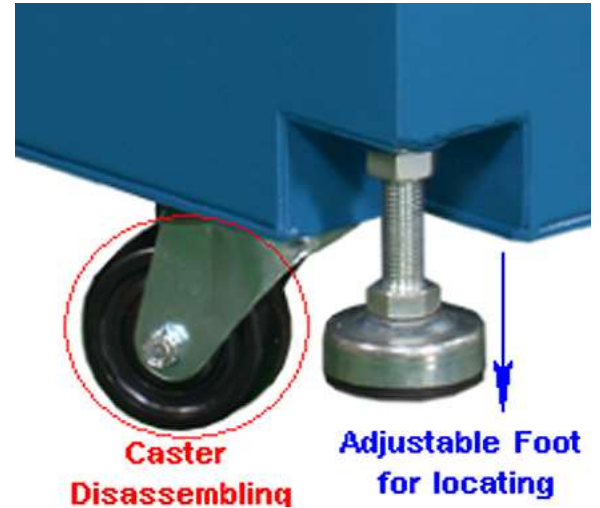




### Height / Brake Pad Adjustment

This table has both casters and leveling pads.

- The leveling pads may be used for leveling the table or as a brake pad using just enough pressure on the floor to prevent movement.
- If needed to lower the table, remove the casters and set the table on the pads at the lowest positions to level the table.





## **ELECTRICAL**



**WARNING:** Baileigh Industrial 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 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 tool is wired for 220 volts, 60Hz alternating current. Before connecting the tool to the power source, make sure the machine is cut off from power source.

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 a amperage rating slightly higher than the full load current of machine.
- A separate electrical circuit should be used for your tools. 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 tool.
- 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 tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.



**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 a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Repair or replace damaged or worn cord immediately.

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. Position the down draft table in a safe location clear of any entanglement with other machines.
2. Verify that the blower outlet is directed in a safe direction and will not cause a problem with suction of unintended material into the machine. Also verify that the discharge air does not blow in a direction that will cause unwanted blowing of debris.
3. Unwrap the power cord and route the cord away from the machine toward the power supply.
  - a. Route the power cord so that it will NOT become entangled in the machine in any way.
  - b. Route the cord to the power supply is a way that does NOT create a trip hazard.
4. Connect the power cord to the power supply and check that the power cord has not been damaged during installation.
5. When the machine is clear of any obstruction. The main power switch may be turn ON to test the operation. Turn the switch OFF when the machine is not in operation.
6. Connect the separate plug from the light switch / outlet box to a 110V power source.





## OPERATION

**⚠ CAUTION:** Always wear proper eye protection with side shields, safety footwear, and leather gloves to protect from burrs and sharp edges.

The Welding Down draft table is designed for the filtration of smoke generated during ordinary welding process work.

When installed and operated correctly, the machine will effectively collect and screen the smoke yielding a significant improvement in air quality within the working environment.

- Press the Green On button to start and run the down draft table.
- Press the Red Off button to stop the down draft table.



### Filter Clog Indicator – Pressure Gauge

When the machine is in operation, the pressure gauge indicator should be between 2" ~ 4". This is normal.

If a decrease in vacuum is noted during operation and/or pressure exceeds 6"; this means that the filters are dirty and need to be cleaned or replaced.

- Power down the machine, remove the metal filter, clean with water and then re-install.

If vacuum continues to be too weak for proper fume extraction, after cleaning the metal filter, a new filter will be required.



**Note:** The pressure is measured in Inches of Water.







### **Pulse Cleaning**

The manual air pulse jet button is used for filter cleaning during operation and between removal cleaning and replacement.

For maximum effectiveness should be used as follows:

1. Power the down draft table off.
2. Press and release the air pulse button one to two times.
3. This type of cleaning should be daily or as any decrease in vacuum is observed.
4. If the operating vacuum is weak after manual pulse cleaning and the measurement of pressure still exceeds 6" WIC on the pressure gauge, remove the metal filter, clean and re-install.
5. If vacuum remains weak after cleaning the filter, it will be necessary to replace the filter(s).



### **Work Lamp Light Switch and Outlet Box**

Located on the left side of the table is the light switch and outlet box.

- Connect the separate power lead from the light switch and outlet box to a 110V power supply.
- Lifting the paddle switch supplies power to the work lamp and to the two 110V outlets in the box.
- Pressing the paddle inward removes power from the work lamp and the outlets. This removes power from any tool which may be plugged into these outlets.





## **MAINTENANCE**



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

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

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

### **Daily Maintenance**

- Do a general cleaning by removing dust and chips from the machine.
- Empty debris collection drawer.
- Inspect and clean filters located on the machine base. Replace as needed. This will vary based upon amount of use and type of work material.
- Check and tighten any loose mounting bolts.
- Inspect the power plug and cord.
- Keep area around machine clear of debris.
- Check for any unsafe conditions and fix immediately.
- Check that all nuts and bolts are properly tightened.



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

### **Monthly Maintenance**

- Inspect and clean the impeller and motor. Accumulated debris on the impeller blades will reduce performance. Dust and debris accumulation on the motor will cause the motor to overheat and fail.



**Note:** The motor and impeller cleaning may be altered based upon actual usage. Whether increasing or decreasing the service frequency, the motor and impeller must be kept clean to provide the best performance and service life.



### **Dust Drawer Cleaning**

1. Disconnect power to the machine.
2. Turn the latch knob 90° clockwise and pull on the handle to remove the dust drawer for cleaning.
3. When the draw is clean, install the drawer into the cabinet and secure in place by turning the latch knob 90° counter-clockwise.



### **Filter Identification & Installation**

The Pleated Fire Resistant Cartridge Filter is located inside of the cabinet and can be cleaned by push-button pulse-jet cleaning of the cartridge filter from an onboard air tank.

This table uses 2 cartridge filters which measure Ø11.2" x 13" (Ø285 x 330mm) each, for a total filtering area of 107.6 ft<sup>2</sup> (10m<sup>2</sup>).





The HEPA Filter is located on the right end of the main body and filters the noxious fumes to provide a better working environment.

The HEPA Filter is 18" x 20" x 5.9" (457 x 508 x 150mm) and rated at 99.99% efficiency of 0.3-micron particle.



**IMPORTANT:** Always verify that the direction of "Air Flow Arrow" on the filter matches the actual direction of air flow of the system. Failure to match the air flow will damage the filters and possibly the systems motor.

Pre Filter 30-35% SECC  
SIZE : 595 \* 595 \* 45mm

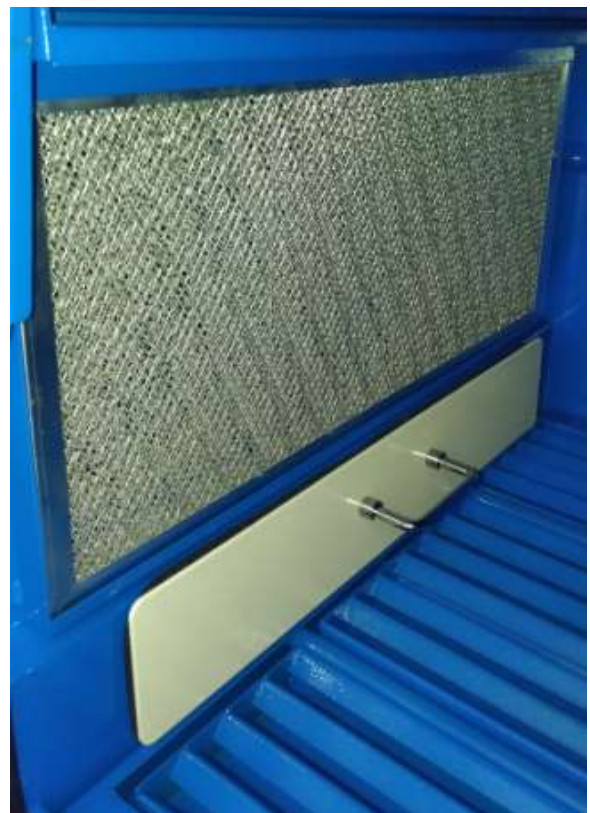


This down draft table uses one Aluminum filter screen to catch and screen sparks and steel chips.

This is a single screen that measures 11.2" x 24.8" x .86" (285 x 630 x 22 mm).

This aluminum filter is washable and reusable, however it will need to be replaced when worn, damaged, or when it becomes so clogged that washing is no longer effective.

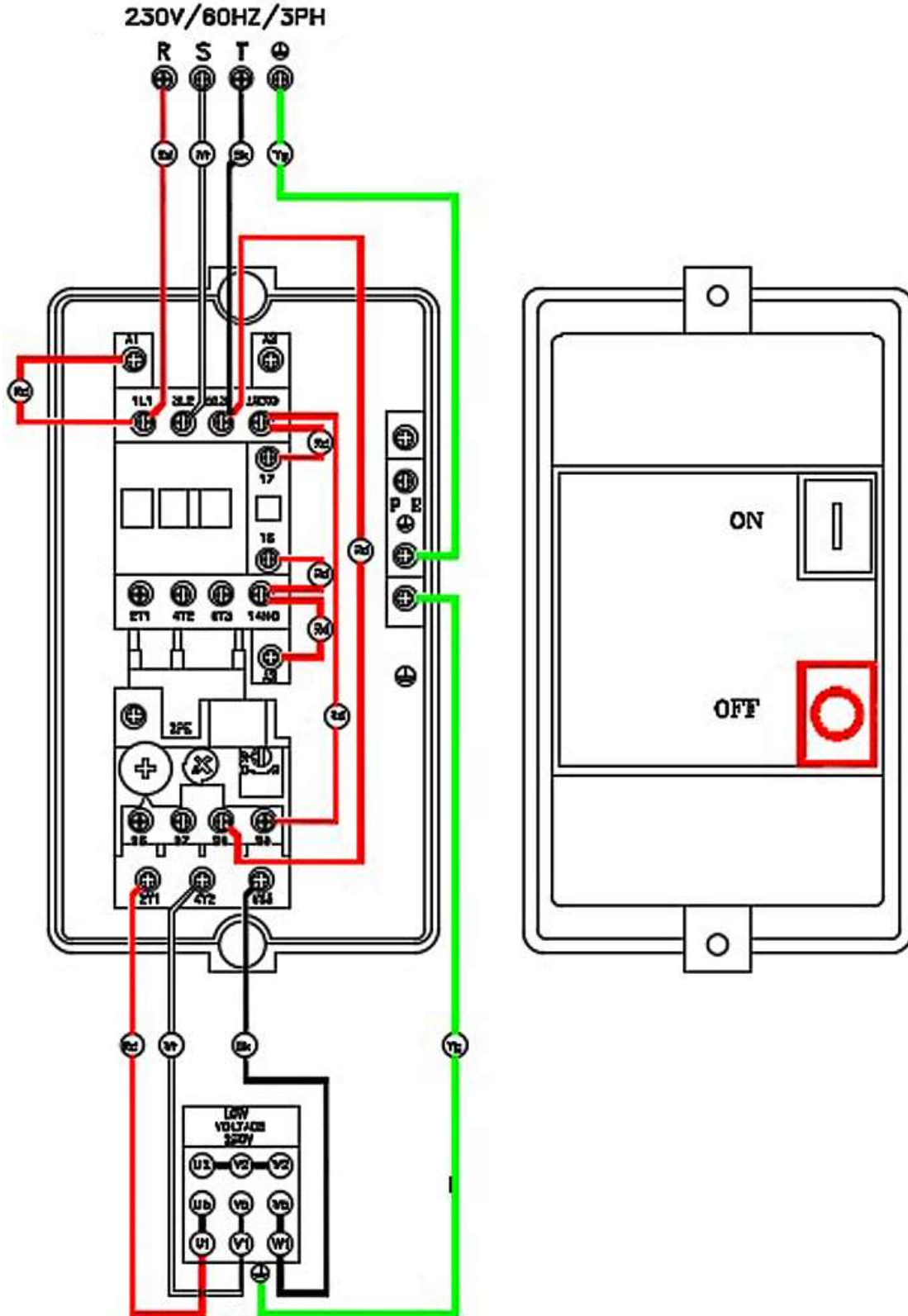
4. Disconnect the down draft table from the power supply.
5. Replace the Aluminum filter by lifting slightly on the filter and pulling outward on the bottom and then lowering the filter out of the frame.
6. Install a cleaned or new filter in reverse order.





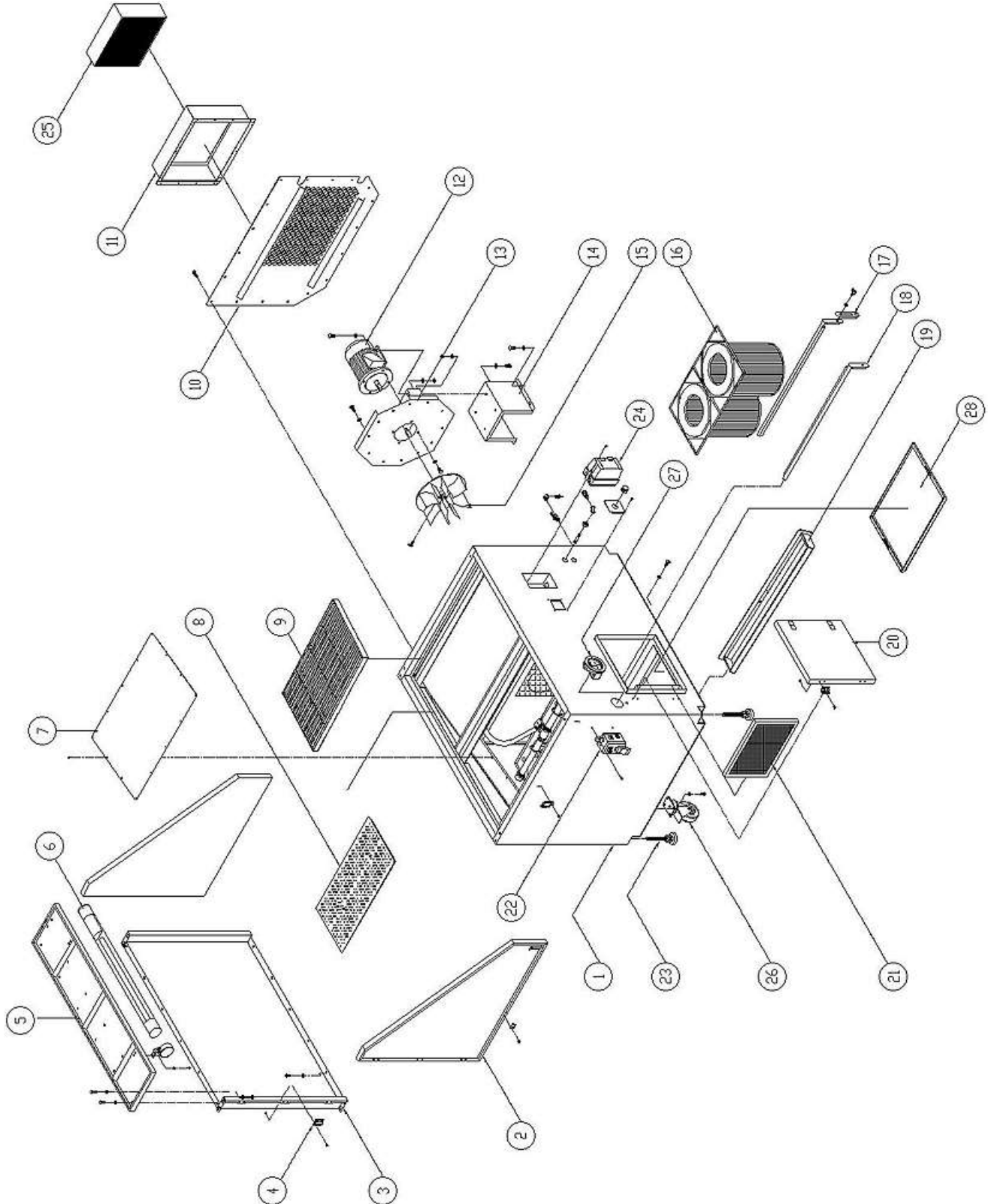


## ELECTRICAL DIAGRAM





## PARTS DIAGRAM







## Parts List

Item	Description	Qty.
1	Main Body	1
2	Side Panel	2
3	Back Panel	1
4	Hinge	8
5	Top Panel for work light	1
6	Work light	1
7	Seal Board	1
8	Desktop Drawer	2
9	Desktop	2
10	Right Side Cover	1
11	Cage for HEPA	1
12	Motor	1
13	Motor Base	1
14	Motor Support Base	1
15	Motor Impeller	1
16	Cartridge Filter	2
17	Filter Handle Fixing Plate	1
18	Filter Handle	2
19	Dust Drawer for Aluminum Filter	1
20	Maintenance Door	1
21	Aluminum Filter	1
22	Work Light Switch	1
23	Adjustable Foot	4
24	Magnetic Switch	1
25	HEPA Filter	1
26	Caster	4
27	Differential Pressure Gauge	1
28	Dust Drawer for Cartridge Filter	1



## NOTES



## NOTES



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