



# OPERATOR'S MANUAL

**Metal Working**



## METAL DUST COLLECTOR MODEL: MDC-1800

Baileigh Industrial, Inc.  
P.O. Box 531  
Manitowoc, WI 54221-0531  
Phone: 920.684.4990  
Fax: 920.684.3944  
[sales@baileigh.com](mailto:sales@baileigh.com)

REPRODUCTION OF THIS MANUAL IN ANY FORM WITHOUT WRITTEN APPROVAL OF BAILEIGH INDUSTRIAL, INC. IS PROHIBITED. Baileigh Industrial, Inc. does not assume and hereby disclaims any liability for any damage or loss caused by an omission or error in this Operator's Manual, resulting from accident, negligence, or other occurrence.



## Table of Contents

THANK YOU & WARRANTY .....	1
INTRODUCTION.....	3
GENERAL NOTES.....	3
SAFETY INSTRUCTIONS .....	4
SAFETY PRECAUTIONS .....	6
Dear Valued Customer:.....	6
TECHNICAL SPECIFICATIONS .....	8
TECHNICAL SUPPORT .....	8
UNPACKING AND CHECKING CONTENTS.....	9
Cleaning .....	9
Hardware Package .....	11
TRANSPORTING AND LIFTING .....	12
INSTALLATION.....	12
ASSEMBLY AND SET UP .....	14
General Ducting Systems Guidelines .....	16
ELECTRICAL .....	17
OPERATION .....	19
LUBRICATION AND MAINTENANCE .....	20
EXPLODED PARTS DIAGRAM.....	21
Parts List .....	22



## 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, (e) defects or damage to the Goods resulting from improper or unauthorized alterations, modifications, or changes; and (f) any Goods that has not been installed and/or maintained in accordance with the instruction manual or technical guidelines provided by Seller.

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

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



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

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

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



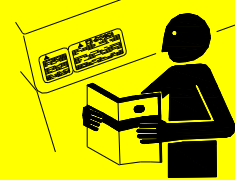
**Note:** *This symbol refers to useful information throughout the manual.*



## 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.





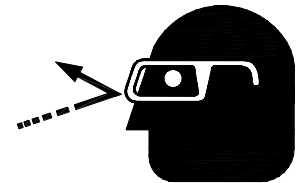


**SAVE THESE INSTRUCTIONS.**  
**Refer to them often and use them to instruct others.**



**PROTECT EYES**

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



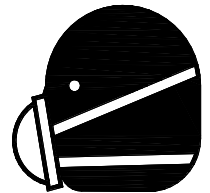
**PROTECT AGAINST NOISE**

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.



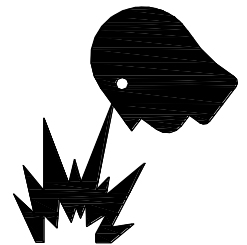
**DUST HAZARD**

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.



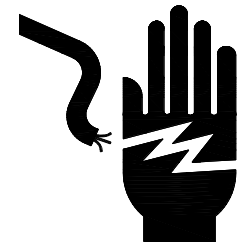
**DUST PARTICLES AND IGNITION SOURCES**

**DO NOT** operate 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.**



**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.





## **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 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 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 and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings.
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 visitors** a safe distance from the work area.
16. **Keep children away.** Children must never be allowed in the work area. **DO NOT** let them handle machines, tools, or extension cords.
17. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep them out of reach of children.
18. **DO NOT operate machine if under the influence of alcohol or drugs.** Read warning labels on prescriptions. If there is any doubt, **DO NOT** operate the machine.
19. **Be Sure** all equipment is properly installed and grounded according to national, state, and local codes. If machine is equipped with a three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the third prong.
20. **Inspect power and control cables periodically.** Replace if damaged or bare wires are exposed. Bare wiring can kill!
21. **Maintain machine in top condition.** Keep clean for best and safest performance. Follow instructions for lubricating and changing accessories.
22. **Reduce the risk of unintentional starting.** Make sure switch is in "OFF" position before plugging in power cord.
23. **Never leave machine running unattended.** TURN POWER OFF. Don't leave machine until it comes to a complete stop.



24. **Warning:** The dust generated by certain material can be injurious to your health. Always operate machinery in well-ventilated areas and provide for proper dust removal. Watch for fire and keep a fire extinguisher close by.

## **TECHNICAL SPECIFICATIONS**

Motor	3 HP (2.23kw)
Power	220V, 1Ph, 60Hz, 18A
Motor Speed	3450 RPM
Suction Capacity	1846 CFM
Noise (minimum)	85 dB
Impeller Size	12" (305mm)
Static Pressure	11.4" H <sub>2</sub> O (302mm H <sub>2</sub> O)
Inlet Size	3@ 8" x 4" (203 x 102mm)
Switch	ON / OFF Switch
Filter Type	Dual Pleated Stainless Steel, Washable, MERV 4
Filter Size	19.25" x 9.5" x 2" (489 x 241 x 51mm)
Overall Dimensions of Unit	61.2" x 21.6" x 74.8" (1550 x 550 x 1900mm)
N.W.	217 lbs (98 KGS)
G.W.	261 lbs (118 KGS)

## **TECHNICAL SUPPORT**

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

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



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



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



## UNPACKING AND CHECKING CONTENTS

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



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

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

## Cleaning



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



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

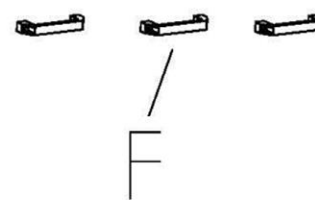
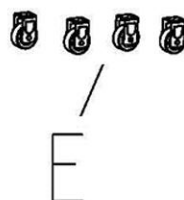
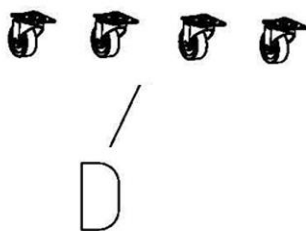
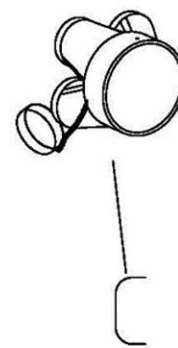
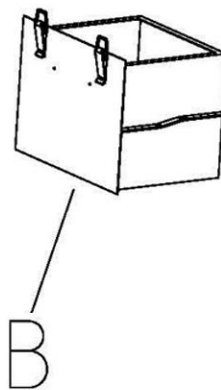
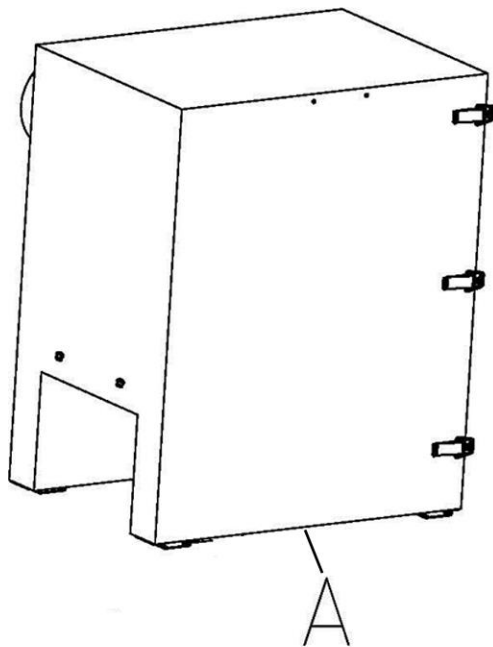
Your machine may be shipped with a rustproof waxy coating and/or grease on the exposed unpainted metal surfaces. Fully and completely remove this protective coating using a degreaser or solvent cleaner. Moving items will need to be moved along their travel path to allow for cleaning the entire surface.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

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



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





Item	Description	Item	Description
A	Main Collector Cabinet	D	Main Cabinet Casters
B	Debris Drawer	E	Debris Drawer Casters
C	Hose Coupler 8"x4"x3" (203 x 102 x 76mm)	F	Handle



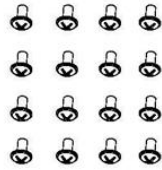
## Hardware Package



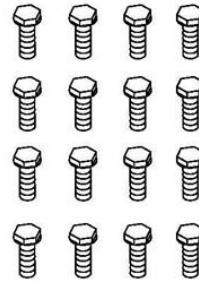
A



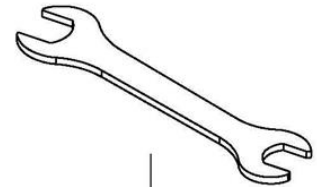
B



C



D



E

Item	Description	Specification	Qty.	Part List No.
A	Phillips Head Sheet Metal Screw	3/16" x 3/8"	1	NO.34
B	Flat Head Screw	1/4" x 1/2"	6	NO.19
C	Phillips Head Screw	M5 x 10	16	NO.29
D	Flange Bolt	5/16" x 1/2"	16	NO.24
E	Open End Wrench	10/12mm	1	NO.35



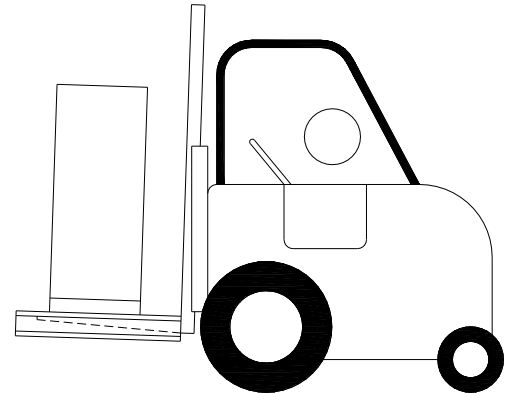
## **TRANSPORTING AND LIFTING**



**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:

- 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 tool distributes a large amount of weight over a small area. Make certain that the floor is capable of supporting the weight of the machine, work stock, and the operator. The floor should also be a level surface. If the unit wobbles or rocks once in place, be sure to eliminate by using shims.
- **WORKING CLEARANCES:** Take into consideration the size of the material to be processed. Make sure that you allow enough space for you to operate the machine freely.
- **POWER SUPPLY PLACEMENT:** The power supply should be located close enough to the machine so that the power cord is not in an area where it would cause a tripping hazard. Be sure to observe all electrical codes if installing new circuits and/or outlets.

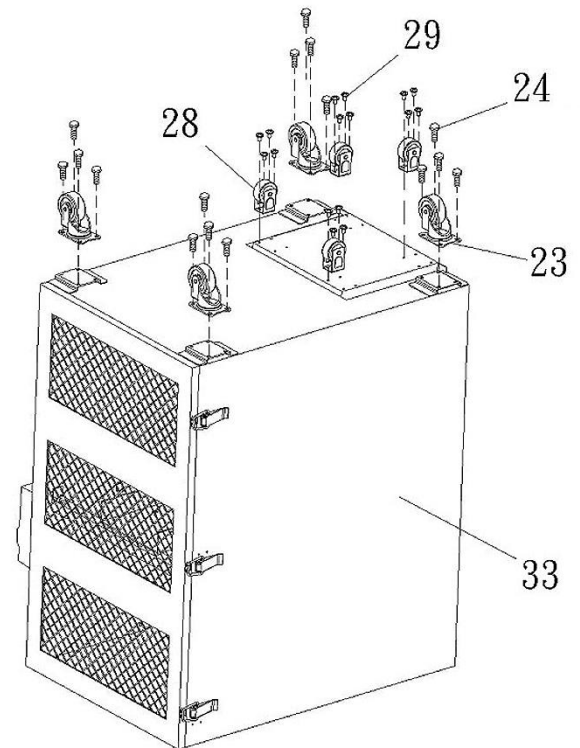


## ASSEMBLY AND SET UP



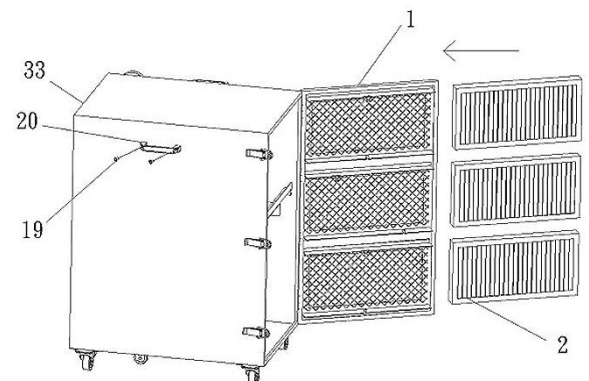
**WARNING:** For your own safety, **DO NOT** connect the machine to the power source until the machine is completely assembled and you read and understand the entire instruction manual.

1. Carefully place the main collector cabinet (NO.33) upside down on cardboard and install the main cabinet casters (NO.23) onto the corners of the main cabinet and secure each caster using 4 Phillips head screws (NO.24).
2. Install the debris casters (NO.28) onto the four corners of the debris draw and secure each caster using 4 Phillips head screws (NO.29).
3. Carefully place the cabinet onto the casters.



(Fig.1)

4. Install the handle (NO.20) on the main cabinet (NO.33) using the flat head screw (NO.19).
5. Install the Filters (NO.2) into front cover and secure in place using the retaining plate buckle (NO.39).

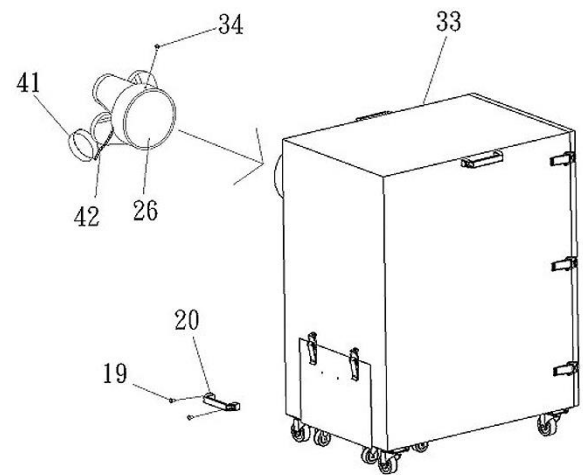


(Fig.2)



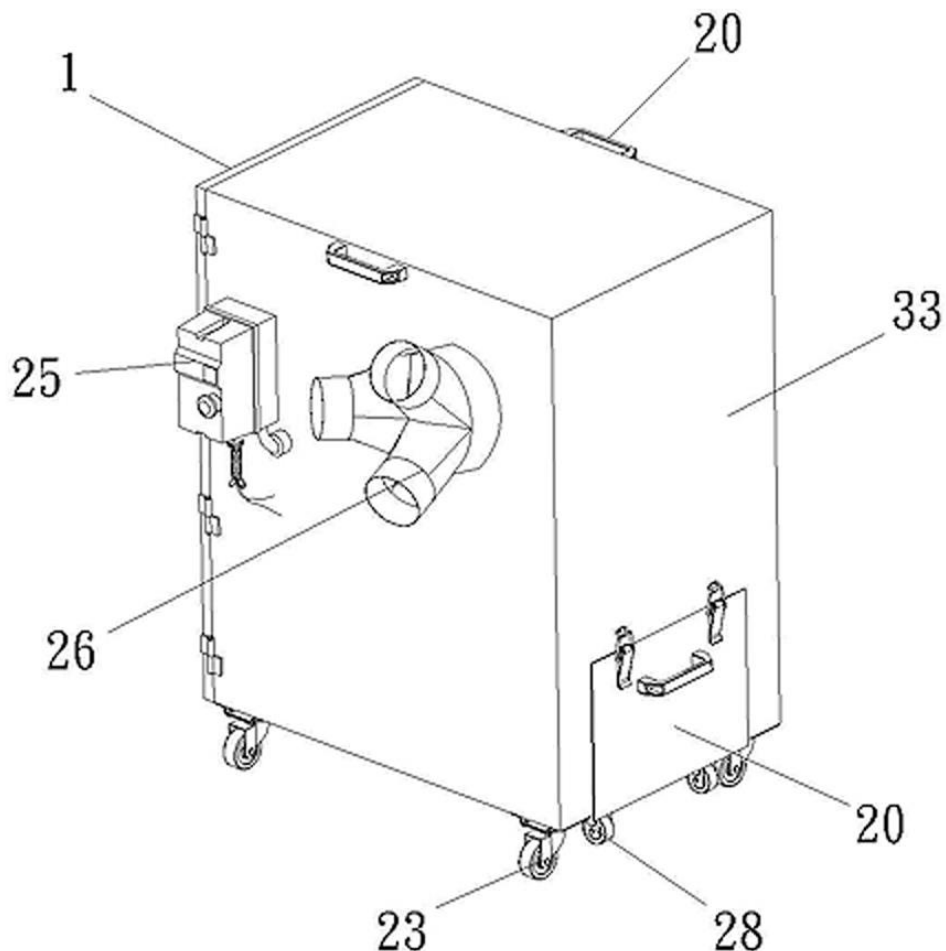
6. Assemble the hose coupler (NO.26) onto the collector cabinet (NO.33) and secure using a Phillips Head Sheet Metal Screw (NO.34).

7. Install the handle (NO.20) on the debris drawer (NO.30) using the flat head screw (NO.19).



(Fig.3)

Fully assembled.





### **General Ducting Systems Guidelines**

- This is a metal dust collector. Per the National Fire Protection Agency (NFPA) a dust collector may only be used to collect a single material as designed. Using a dust collector for multiple materials such as metal and wood is prohibited due to the possibility of a fire and/or explosion.
- Never use PVC pipe for duct work. The National Fire Protection Agency (NFPA) has determined that dust traveling through PVC pipe can build up a static electric charge creating the possibility of a fire and/or explosion.
- Design and build the ducting system using smooth wall steel metal pipe with a minimum of 3" (76mm) diameter (4" [100mm] recommended). Avoid and limit the amount of flexible hose in the ducting system. The pressure drop (resistance) through flex hose is generally 2-3 times higher than smooth wall sheet metal pipe.
- If/when connecting a dust collector to more than one machine, install dampers at each machine so the dust collector is only pulling from one machine at a time.
- Keep the dusting runs as short and as straight as possible and minimize/avoid using 90° and 45° elbows as much as possible. 90° elbow for example, have the same pressure drop (resistance) as 10ft (3m) of straight pipe. Plan for a 2 CFM reduction in air flow for each 12" (305mm) of straight pipe and 20 CFM reduction for each 90° elbow.
- Connect the dust collector suction hose to the connector port built into the dust source machine. If there is no port on the source machine, place the suction hose and nozzle as close as safely possible to the source of the dust material.
- Plan and route the ducting system so that it will NOT become entangled in the dust source machine in any way.
- Plan and route the dusting system to the dust source machine in a way that does NOT create a trip hazard.
- It is recommended to consider static electricity in the ducting system design and employ methods of preventing and controlling static electricity.



## **ELECTRICAL**



**CAUTION:** HAVE ELECTRICAL UTILITIES CONNECTED TO MACHINE BY A CERTIFIED ELECTRICIAN!

Check if the available power supply is the same as listed on the machine nameplate.



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

### **Power Specifications**

Your tool is wired for 220 volt, 60Hz alternating current. Before connecting the tool to the power source, make sure the machine is cut off from power source.

### **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.

### **Extension Cord Safety**

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

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

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

### **Power cord connection:**

1. Verify that the power switch is in 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.





## **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.



**IMPORTANT:** *This metal debris use only, and prohibited from other purpose.*

1. Position the collector where it is to be located and following codes and regulations connect the power supply.
2. Connect the hose to the dust source machine.
3. If connected to other machines, close the dampers to the machine which are not in use.
4. Verify that the collection chamber is empty and the filters are clean.
5. Wear proper safety equipment such as safety glasses, respirator, hearing protection, and any other gear that the specific operation may require. Be aware of and protect clothing and hair from entanglement.
6. Turn the switch to ON. Listen for proper and smooth operation. Turn the collector off immediately if the sound is not smooth and even. Sounds such as squealing, hissing, rattling, rumbling, or vibrating in nature indicate a potential problem and should be checked and corrected before continuing. Sounds that imply restricted air flow may mean the debris tray, and filters need to be cleaned. Other noises may mean loose or faulty components that need to be tightened, repaired or replaced. In either situation, the corrective action must be taken before continuing operation.
7. When the operation is complete, turn OFF the switch.
8. Clean up any dust or similar work debris and empty the debris tray and clean the filters as needed. The debris tray should not be more than 1/3 full. The filters should be cleaned before each use and again whenever there is visible material plugging/blocking the filter.



**Note:** *It is the operator's responsibility to clean and maintain the dust/debris collection chambers and filters. Full is full! The amount of time it takes to fill the debris tray/chamber and filters is a variable based upon your specific usage.*



## **LUBRICATION AND MAINTENANCE**



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

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

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

### **Daily Maintenance**

- Do a general cleaning by removing dust and metal chips from the machine.
- Empty dust collection drawer.
- Inspect and clean filters located on the machine door. 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 internal chambers and motor. Accumulated debris on the fan blades will reduce performance. Dust and debris accumulation on the motor will cause the motor to overheat and fail.



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





## Parts List

Item	Description	Specification	Qty.
1	Front Cover		1
2	Filter, Stainless Steel	MERV 4	3
3	Hex Cap Screw	5/16" x 1	4
4	Flat Washer	5/16" x 23 x 2	8
5	Motor	3HP/220V/60HZ/1PH	1
6	Key	7 x 7 x 25mm	1
7	Motor Packing		1
8	Motor Cord		1
9	Strain Relief	PG-20	3
10	Phillips Head Screw	M6 x 12	1
11	Housing		1
12	Phillips Head Screw	1/4" x 1/2"	5
13	Hex Nut	5/16"	4
14	Hex Cap Screw	3/8" x 1/2"	1
15	Impeller	12"	1
16	Washer		1
17	Cap Screw	M6 x 20	1
18	Padlock		5
19	Flat Head Screw	1/4" x 1/2"	6
20	Handle		3
21	Hinge		4
22	Motor Plate Bar		1
23	Main Cabinet Casters	2-1/2"	4
24	Flange Bolt	5/16" x 1/2"	16
25	Magnetic Switch	MP-09	1
26	Hose Coupler	8" x 4" x 3	1
27	Power Cord		1
28	Debris Drawer Casters	2"	4
29	Phillips Head Screw	M5 x 10	16
30	Debris Drawer		1
31	Canister Housing Cover		1
32	Phillips Head Screw	3/16" x 3/8"	12
33	Main Collector Cabinet		1



Item	Description	Specification	Qty.
34	Phillips Head Sheet Metal Screw	3/16" x 3/8"	1
35	Open End Wrench	10 x 12mm	1
36	Phillips Head Screw	3/16" x 3/4"	2
37	Flange Bolt	M6 x 12	3
38	Retaining Plate Mount		6
39	Retaining Plate Buckle		6
40	Rivet	3-1	12
41	Cap		2
42	Chain		2
43	Rivet	4-2	20



## NOTES





## NOTES



**BAILEIGH INDUSTRIAL, INC. 1625 DUFEEK DRIVE MANITOWOC, WI 54220**

**PHONE: 920. 684. 4990 FAX: 920. 684. 3944**

**[www.baileigh.com](http://www.baileigh.com)**

**BAILEIGH INDUSTRIAL, INC. 1455 S. CAMPUS AVENUE ONTARIO, CA 91761**

**PHONE: 920. 684. 4990 FAX: 920. 684. 3944**

**BAILEIGH INDUSTRIAL LTD. UNIT D SWIFT POINT**

**SWIFT VALLEY INDUSTRIAL ESTATE, RUGBY**

**WEST MIDLANDS, CV21 1QH UNITED KINGDOM**

**PHONE: +44 (0)24 7661 9267 FAX: +44 (0)24 7661 9276**

**[WWW.BAILEIGH.CO.UK](http://WWW.BAILEIGH.CO.UK)**

**BAILEIGH INDUSTRIAL GMBH HOFENER STRASSE 64**

**70736 FELLBACH**

**DEUTCHSLAND**

**[WWW.BAILEIGHINDUSTRIAL.DE](http://WWW.BAILEIGHINDUSTRIAL.DE)**

**BAILEIGH INDUSTRIAL PTY. LTD.**

**P.O Box 1573, 126 MELROSE DRIVE TULLAMARINE,**

**VIC 3043 AUSTRALIA**

**PHONE: 011 61 383 743 888**

**[WWW.BAILEIGH.COM.AU](http://WWW.BAILEIGH.COM.AU)**