

LAGUNA

XFLUX5 MANUAL 5HP Dust Collector



Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.



Thank you for investing in a Laguna Tools XFLUX5 HEPA (High Efficiency Particulate Air filter) dust collector. This dust collector is one of a family of unique machines proudly offered by Laguna Tools. Every Laguna machine is engineered for years of dependable service. Please feel free to contact Laguna Tools if you have a question or suggestion. We appreciate working with you and your choice of a Laguna Tools machine for your shop.

Regards,
Torben Helshoj
President & Founder Laguna Tools

Dealer Machinery Warranty

New woodworking machines sold by Laguna Tools carry a two-year warranty effective from the date of dealer invoice to consumer. Machines sold through dealers must be registered with Laguna Tools within 30 days of purchase to be covered by this warranty. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts and materials. We will repair or replace, without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part be returned to Laguna Tools with the complaint. An RMA (return merchandise authorization) must be requested, from Laguna Tools, and included with any and all parts or machines returned to Laguna Tools for warranty consideration. Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

This manual applies to the XFLUX5 dust collector. Enter the model number and serial number below for quick reference when ordering accessories, supplies or parts.

Model: _____

Serial: _____

Laguna Tools

800-234-1976

www.lagunatools.com



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Warranty Registration

Register your machine at <https://lagunatools.com/policies/warranty/>

To prevent voiding this warranty, all products sold must be registered within thirty (30) days of receiving the product. Registering the product will enable the original purchaser to receive notifications about important product changes, receive customer service, and be able to file a warranty claim against defective workmanship, parts, or materials.

SAFETY

READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions may result in electric shock, fire and/or serious personal injury or property damage! Electronic copies of this manual are available at www.lagunatools.com.

SAFETY GUIDELINES - DEFINITIONS

This manual contains information that is important for you to know and understand. This information relates to protecting YOUR SAFETY and PREVENTING EQUIPMENT PROBLEMS. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these sections.



Indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.



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



Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.



(Used without the safety alert symbol) indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.

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Woodworking (and similar materials) 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 machine. 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, featherboards, goggles, dust masks and hearing protection can reduce the potential for injury. Even the best guard will not make up for poor judgement, carelessness or inattention. **Always use common sense** and exercise caution in the workshop. If a procedure feels dangerous, do not try it. Figure out an alternative procedure that is safer. **REMEMBER:** Your personal safety is your responsibility.

IMPORTANT SAFETY INSTRUCTIONS

WARNING

This machine was designed for certain applications only. We strongly recommend that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, **DO NOT** use the machine until you have first contacted the manufacturer to determine if it can or should be performed on the product.

If you have any questions relative to its application **DO NOT** use the product until you have contacted the manufacturer and we have advised you.

When using an electrical appliance/machine, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE/MACHINE)

WARNING

To reduce the risk of fire, electric shock, or injury:

1. Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
2. Do not use outdoors or on wet surfaces
3. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
4. Use only as described in this manual. Use only manufacturer's recommended attachments.
5. Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.



6. Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
7. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
8. Do not handle plug or appliance with wet hands.
9. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
10. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
11. Turn off all controls before unplugging.
12. Use extra care when cleaning on stairs.
13. Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
14. Connect to a properly grounded outlet only. See Grounding Instructions.

SAVE THESE INSTRUCTIONS

1. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all warnings may cause serious injury.
2. Replace the warning labels if they become obscured or removed.
3. This 1.5HP Portable Cyclone Dust Collector is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of this type of dust collector, do not use until proper training and knowledge have been obtained.
4. Do not use this machine for other than its intended use. If used for other purposes, **LAGUNA TOOLS INC.**, disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
5. Always wear approved safety glasses/face shields while using this machine.
6. Before operating this dust collector, remove tie, rings, watches, and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
7. Wear ear protectors (plugs or muffs) during extended periods of operation.
8. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: (next page)
 - Lead from lead-based paint.
 - Crystalline silica from bricks, cement, and other masonry products.
 - Arsenic and chromium from chemically treated lumber.



Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.

9. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
10. Make certain the switch is in the **OFF** position before connecting the machine to the power source.
11. Make certain the machine is properly grounded.
12. Make all machine adjustments or maintenance with the machine unplugged from the power source.
13. Form a habit of checking to see that all extra equipment such as adjusting keys, wrenches, scrap, stock, and cleaning rags are removed away from the machine before turning on.
14. Always keep safety guards in place when the machine is in use. If removed for maintenance purposes, use extreme caution, and replace the guards immediately when maintenance is complete.
15. Make sure the dust collector is on a flat even surface and the wheels locked in place before use.
16. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
18. Keep the floor around the machine clean and free of scrap material, oil, and grease.
19. Keep visitors a safe distance from the work area. **Keep children away.**
20. Make your workshop child proof with padlocks, master switches or by removing starter keys.

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21. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
22. Always maintain a balanced stance so that you do not fall or lean against the dust collector. Do not overreach or use excessive force to perform any machine operation.
23. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
24. Use recommended accessories; improper accessories may be hazardous.
25. Maintain machinery with care. Follow instructions for lubricating and changing accessories.
26. Turn off the machine before cleaning. Use a brush or compressed air to remove dust or debris — do not use your hands.
27. Do not stand on the machine. Serious injury could occur if the machine tips over.
28. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
29. Never operate or run the machine without closing the drum up against the lid. Failure to do so will result in the machine amperage increasing and may trip your circuit.

Familiarize yourself with the following safety notices used in this manual:

SAFETY GUIDELINES - DEFINITIONS

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GENERAL SAFETY RULES



FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

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FOR YOUR OWN SAFETY, READ AND UNDERSTAND THE INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE. Learn the unit's application and limitations as well as the specific hazards peculiar to it.

KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.

DON'T USE IN DANGEROUS ENVIRONMENT. Don't use this unit in damp or wet locations or expose it to rain. Keep work area well-lighted.

KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.

DISCONNECT UNIT before servicing.

CHECK DAMAGED PARTS. Before further use of the unit, properly repair or replace any part that is damaged.



FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

ADDITIONAL SAFETY FOR DUST COLLECTORS

Intended use. This dust collector is only intended for collecting wood dust and chips from woodworking machines. Do not use this dust collector to collect metal, dirt, pebbles, drywall, asbestos, lead paint, silica, liquids, aerosols, or any flammable, combustible, or hazardous materials.

Hazardous dust. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each work piece material, and always wear a NIOSH-approved respirator to reduce your risk.

Dust allergies. Dust from certain woods may cause an allergic reaction in people and animals.

Make sure you know what type of wood dust you will be exposed to in case there is a possibility of an allergic reaction.

Wear respirator. Fine dust that is too small to be caught in the filter will be blown into the ambient air during operation. Always wear a NIOSH-approved respirator during operation and for a short time after to reduce your risk of permanent respiratory damage.

Emptying dust. When emptying dust from the collection container, wear a respirator and safety glasses. Empty dust away from ignition sources and into an approved container.

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Disconnecting power supply. Turn the switch off, disconnect the dust collector from the power supply, and allow the impeller to come to a complete stop before leaving the machine unattended or doing any service, cleaning, maintenance, or adjustments.

Suspended dust particles and ignition sources. Do not operate the dust collector in areas where explosion risks are high. Areas of high risk include, but are not limited to, areas near pilot lights, open flames, or other ignition sources.

Fire suppression. Only operate the dust collector in locations that contain a fire suppression system or have a fire extinguisher nearby.

Impeller hazards. Do not place your hands or tools near the open inlet during operation for any reason. The powerful suction could easily cause accidental contact with the impeller, which will cause serious personal injury or damage to the machine. Always keep small animals and children away from open dust collection inlets.

Avoiding sparks. Do not allow steel or rocks to strike the impeller—this may produce sparks.

Sparks can smolder in wood dust for a long time before a fire is detected. If you accidentally cut

Into wood containing tramp metal (nails, staples, spikes, etc.), immediately turn **off** the dust collector, disconnect it from power, and wait for the impeller to stop—then empty the collection container into an approved airtight metal container.

Operating location. To reduce respiratory exposure to fine dust, locate permanently installed dust collectors away from the working area, or in another room that is equipped with a smoke detector. Do not operate the dust collector in rainy or wet locations—exposure to water may create a shock hazard or decrease the life of the machine.

Static electricity. Plastic dust lines generate high amounts of static electricity as dust chips pass through them. Although rare, sparks caused by static electricity can cause explosions or fire. To reduce this risk, make sure all dust lines are thoroughly grounded by using a grounding wire.

Regular cleaning. Regularly check/empty the collection bags or drum to avoid the buildup of fine dust that can increase the risk of fire. Make sure to regularly clean the surrounding area where the machine is operated—excessive dust buildup on overhead lights, heaters, electrical panels, or other heat sources will increase the risk of fire.

SAVE THESE INSTRUCTIONS.

Refer to them often and use them to instruct others.

CAUTION

Consult with your duct supplier/technician for all ducting questions!

WIRING DIAGRAMS/POWER CONNECTIONS

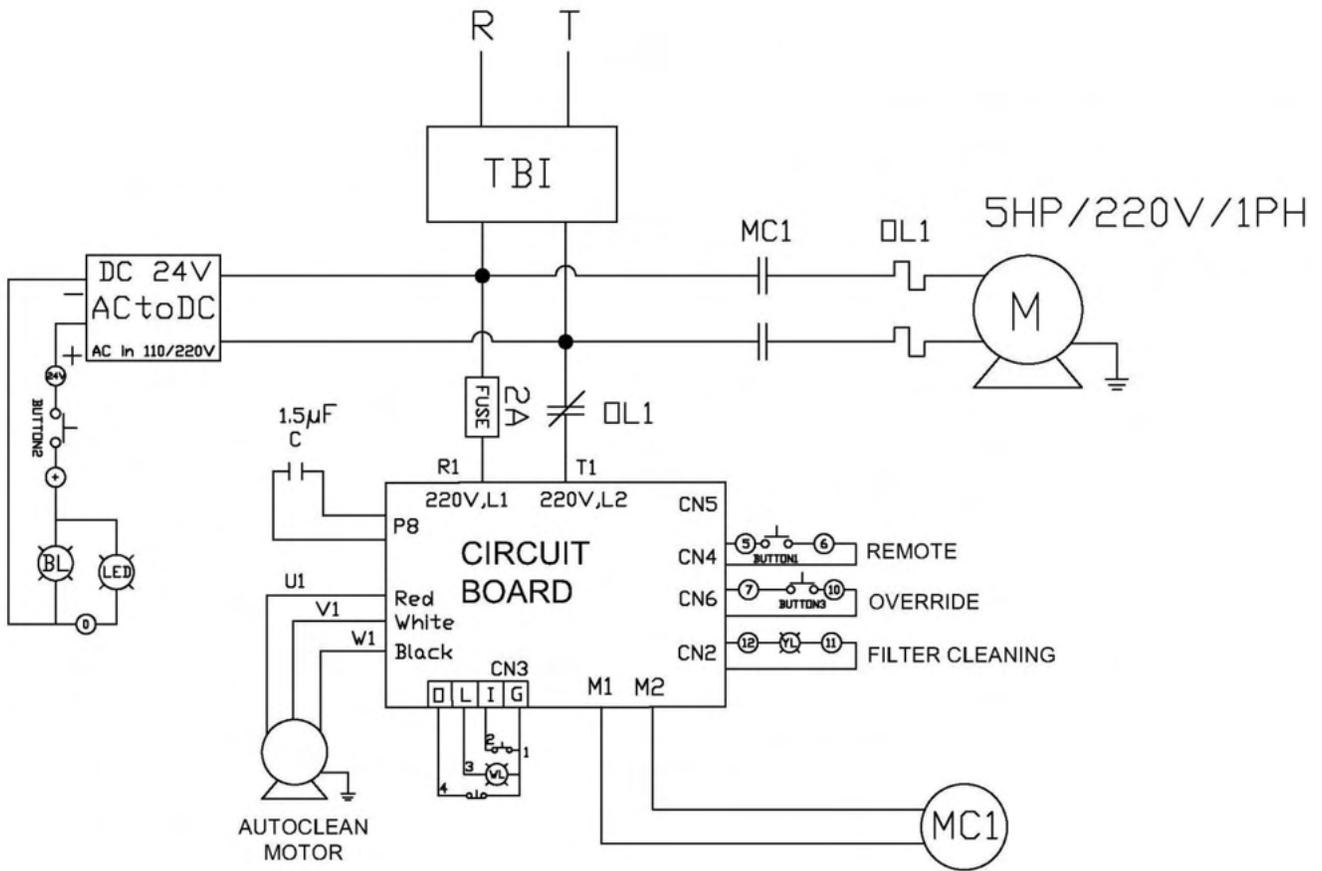


FIGURE 1. WIRING DIAGRAM

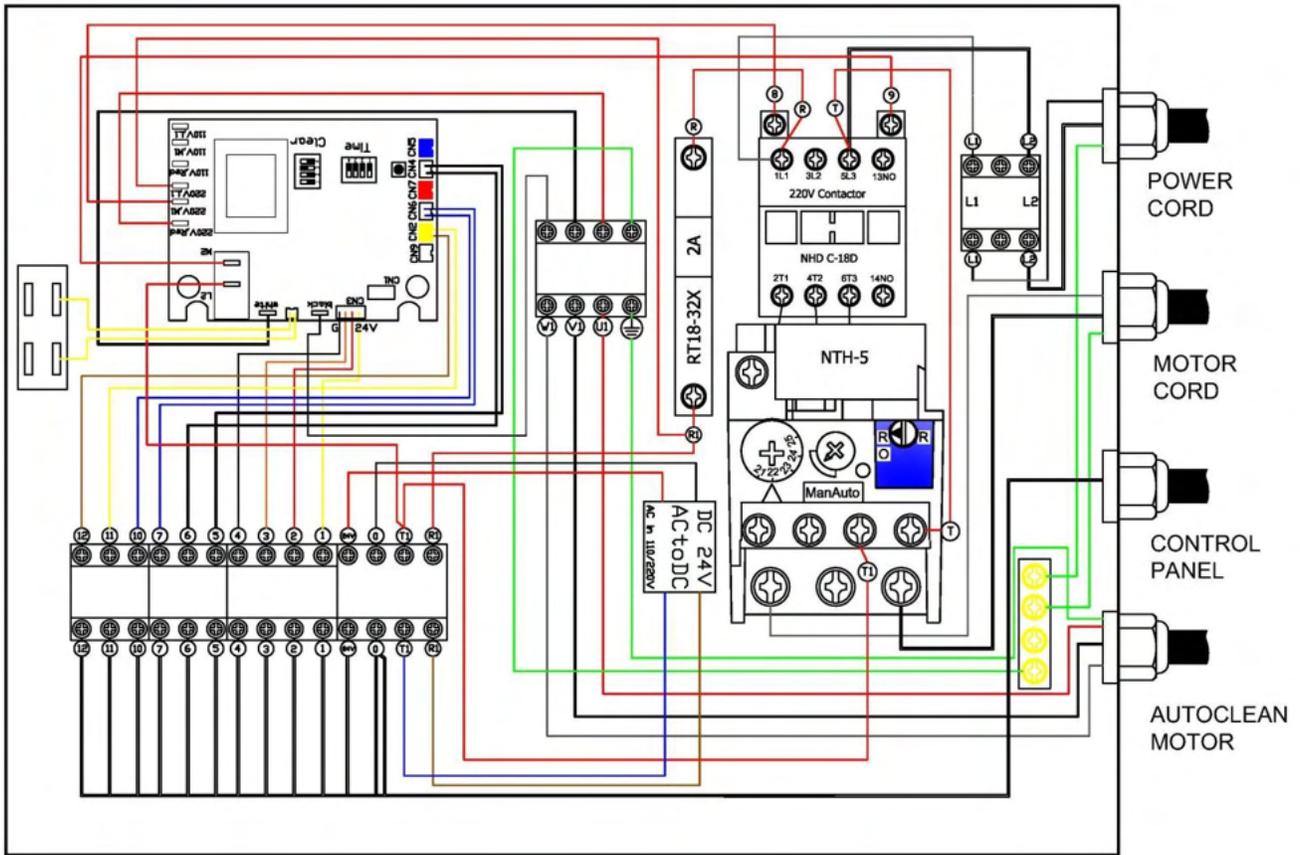


Figure 2: CONTROL BOX

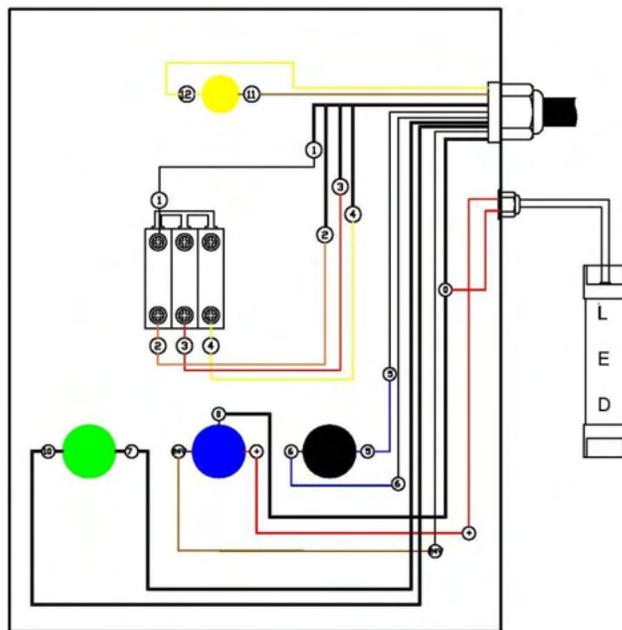


Figure 3: CONTROL PANEL



DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.

MOTOR SPECIFICATIONS

Your machine is wired for 220 volts, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS



THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

- 1. This appliance must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

The installer, such as a qualified electrician, cut (or bend over) and insulate the grounding conductor from a field wiring supply cable.

In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal. Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Full Load amperage Draw

Amp draw at 220V (prewired)..... 18.5 Amps

Power Supply Circuit Requirements

The power source circuit for your machine must be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

Circuit Size (220V)..... 30 Amp min.

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! DANGER

IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.

220 VOLT Single-Phase Operation

The motor supplied with your machine is a 220 volt motor. Power cord and plug is *not* included. The recommended maximum cord length is 20' of 10 AWG wire. Extension cords are not recommended.

FUNCTIONS



HEPA Canister Filter detection – will illuminate when filter cleans (automatic cleaning/override).

ON/OFF Switch – turns collector **ON** or **OFF**.

Override – Press for (3) seconds to activate override cleaning while the cyclone is ON. You can also activate this function by pressing the CLEAN button on the remote control for (3) seconds.

Receiver SET button – Used to program receiver.

ON/OFF Illuminate drum – controls the LED light on the drum lid to illuminate inside the drum for visuals of the dust level.



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- ← ON button
- ← OFF button
- ← CLEAN button
- ← *Remote set button

*Used to match up a new remote control with the remote switch

Figure 5: Remote Control

PROGRAMMING THE REMOTE CONTROL

1. Confirm the machine is switched ON before programming the remote control.
2. Press the black SET button on the bottom of the remote control until two beeps are heard.
3. Press the Remote SET button on the Remote Control while simultaneously pressing the black Receiver SET button until three beeps are heard, completing the set up.



Figure 6: Receiver Set Button

UNPACKING

The Collector comes packed in a single box on pallet. Before attempting to assemble this machine, follow these directions for unpacking:

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1. Carefully remove the box.
2. Carefully take out the machine components from the box and set aside.
3. Using the diagram below, confirm all parts are present and in good condition.



Figure 7: Inventory

DESCRIPTION

- | | |
|------------------------|-----------------------|
| A. Motor & Fan Housing | G. Drum top rim |
| B. Front door | H. Drum panel (base) |
| C. Intake adapter | I. Drum insert |
| D. Leg support (4) | J. Casters (for drum) |
| E. Drum panel (front) | K. Plastic bag |
| F. Drum panel (back) | L. Hardware box |

Report any missing or damaged parts to your dealer or distributor. Prior to tool assembly and use, read this manual thoroughly to familiarize yourself with proper assembly, maintenance and safety procedures.

ASSEMBLY

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WARNING

This step requires two adults. This Explosion-proof Vacuum Dust Collector is heavy, be careful when lifting and handling it! Failure to comply may cause serious injury and/or damage to the machine and/or property!

To assemble dust cyclone, follow these steps:

For your own safety, do not connect the machine to the power source until the machine is completely assembled. Please also make sure that you read and understand the entire instruction manual.

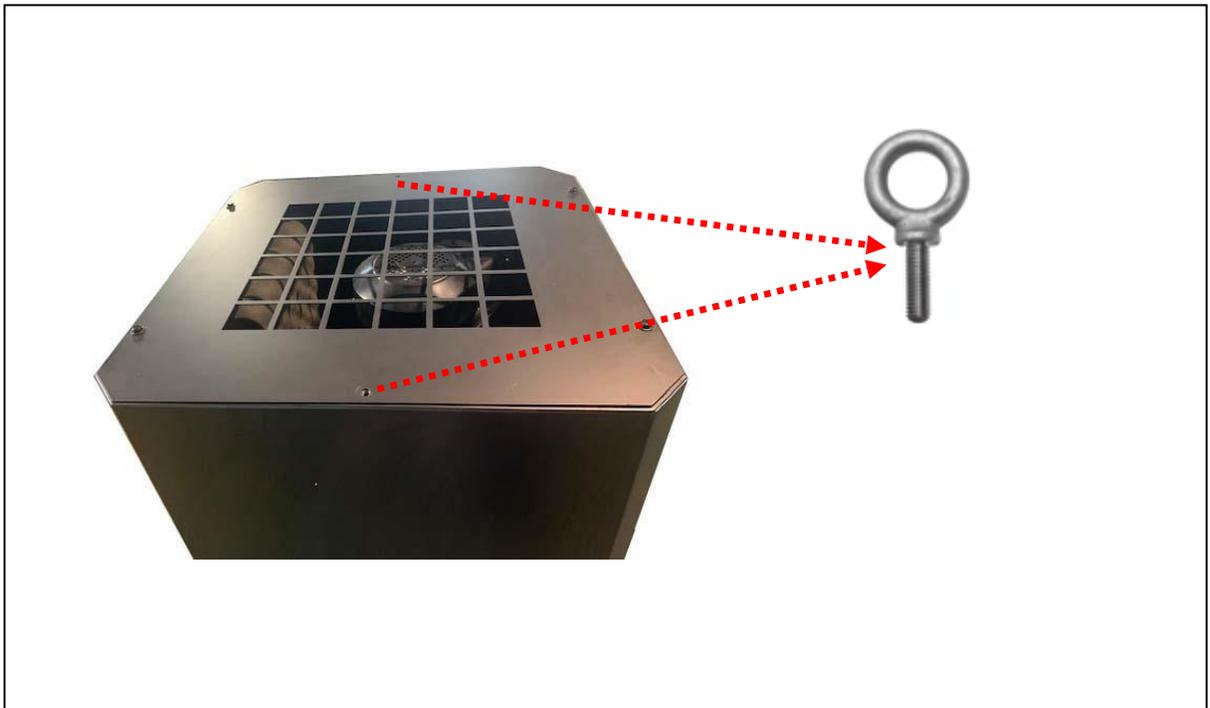
ASSEMBLY TIME ESTIMATE, 3 hour to 4 hours.

1. Carefully remove the cardboard box, there are loose items inside so make sure you pay attention while removing the box. Cut the straps holding the loose items. Set loose items aside for the next steps.



2. Insert (2) eyebolts into the holes indicated below. Use a forklift to lift the unit by attaching a chain with hooks to the two eyebolts. Slowly lift the unit to a height where you will be able to assemble the lower upright supports.

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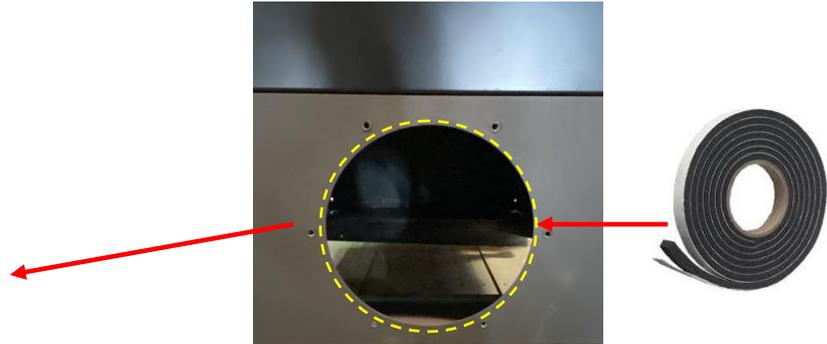
3. Secure the leg stands to the machine using (16) 5/16 x 3/4" hex bolts and (16) 5/16" flat washers.



4. Apply foam tape on the inner edge of the intake opening using 3 x 6mm foam tape. Make sure the foam tape is within the bolt holes (circled below).



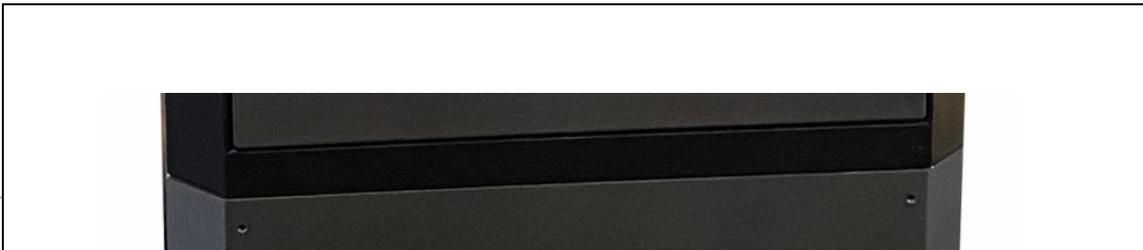
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5. Attach the intake adapter to the machine using (6) 1/4"x 5/8" hex bolts and (6) 1/4" flat washers.



6. Secure the latch base plate to the front side of the machine using (2) 3/16"x 3/8" round head bolts.





7. Secure the (4) casters to the drum base using (4) 5/16" x 3/4" hex bolts, (8) 5/16" flat washers and (4) 5/16" hex nuts for each caster.



8. Assemble the front and back drum panel using (10) 3/16" x 1/2" sheet metal bolts.



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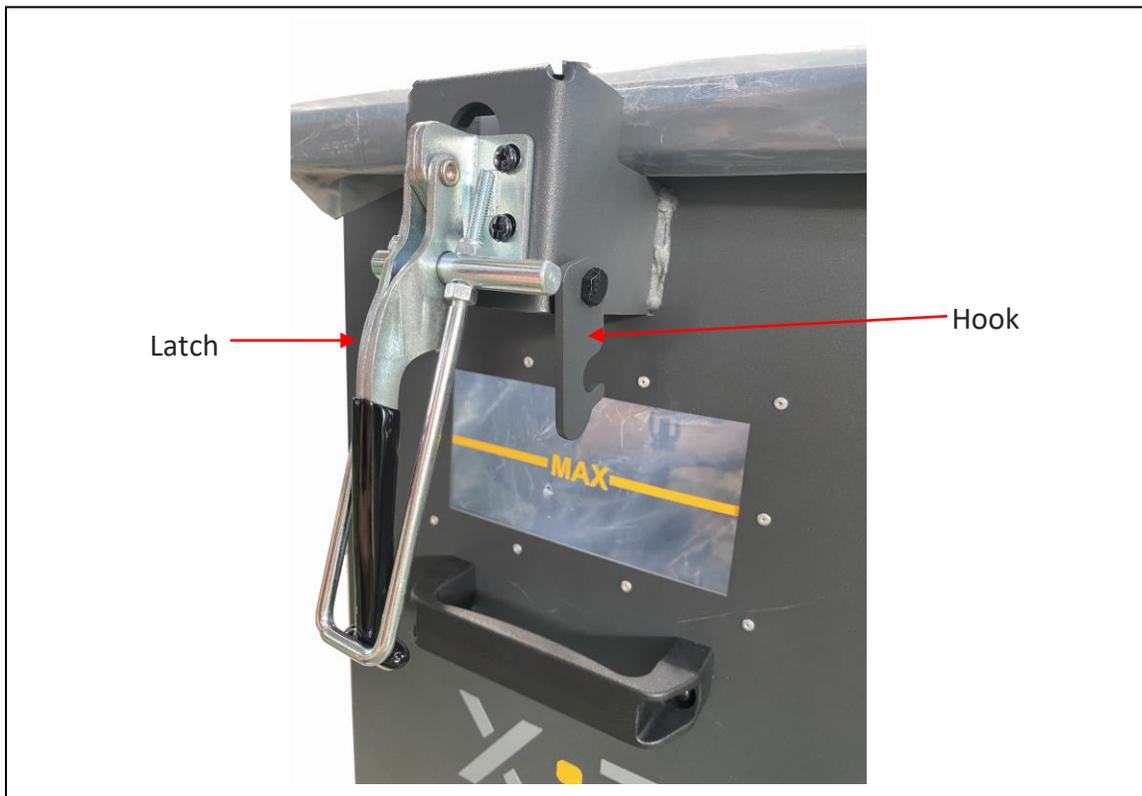
9. Place the assembled front/back panel on its side and attach the drum base (with casters) using (18) 3/16" x 1/2" Philips hd bolts, (18) 3/16" flat washers and (18) 3/16" hex nuts.



10. Place the drum upright and attach the top rim using (20) 3/16" x 1/2" Philips hd bolts, (20) 3/16" flat washers and (20) 3/16" hex nuts.



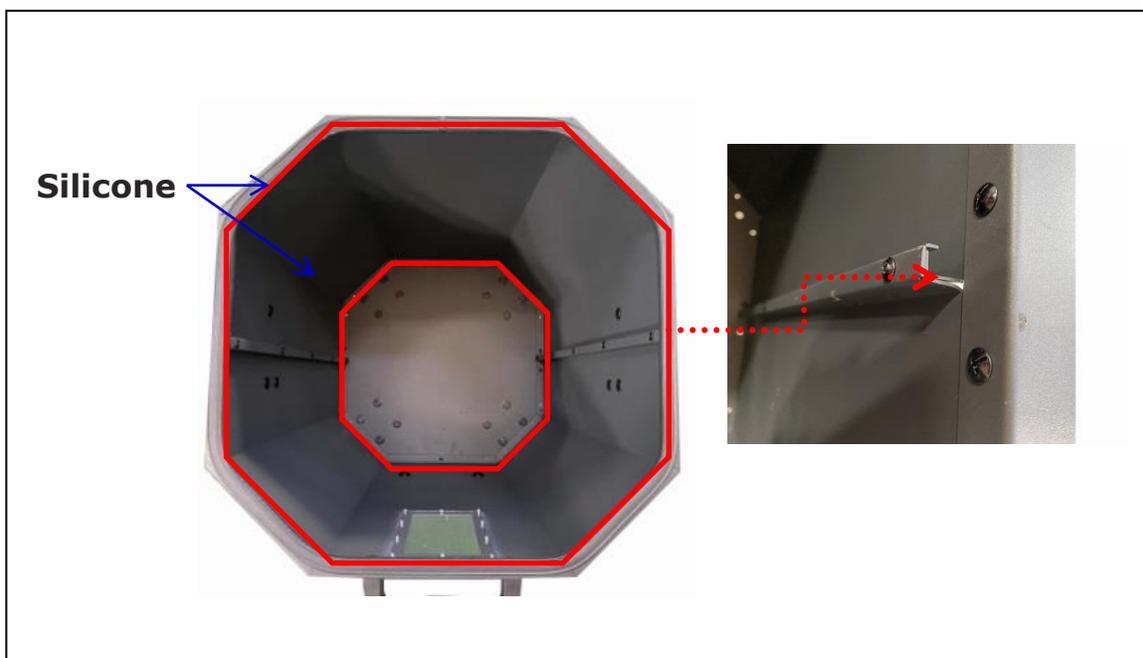
11. Assemble the latch to the drum using (6) 3/16" x 3/8" round head bolts. Secure the hook to the base using (1) 1/4" x 5/8" hex bolt and (1) 1/4" hex lock nut.



12. Assemble the black plastic handle to the front drum panel (below the window) using (2) 5/16" x 3/4" Philips hd bolts, (2) 5/16" flat washers and (2) 5/16" cap nuts.

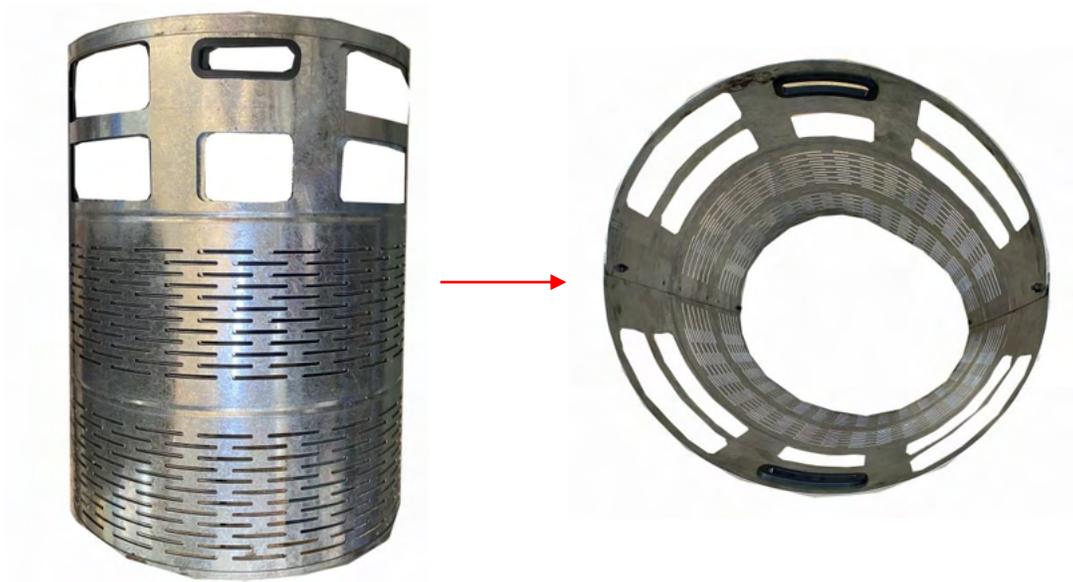


13. After completing the drum assembly, apply silicone (not included) to the inside of the drum, including the base, to seal and prevent air leakage. Do not skip this step.



hex nuts.

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15. Place the plastic bag inside the drum.



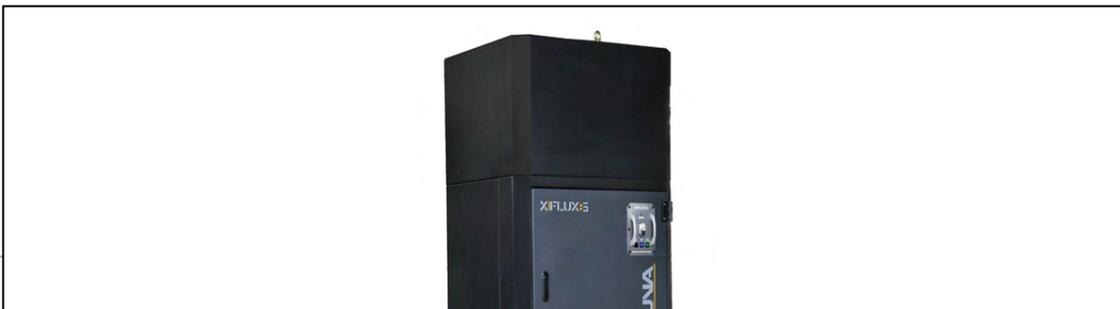
16. Place the drum insert inside the plastic bag (within the drum).



17. Push the drum into the lower chamber along the rails. **Seat the drum to the very end to prevent air leakage or excessive motor load.**



18. All the assembly steps have been completed.





OPERATION

1. Make sure at least one blast gate is open, if connected to a dust collection system with blast gates.

CAUTION

Never operate dust collector with all blast gates closed!

2. Confirm the electrical supply is correct and connected to machine.
3. Make sure no one is working on or doing maintenance to dust collector.
4. To start, press the ON button on either the ON/OFF switch or remote control.
5. To stop, press the OFF button on either the ON/OFF switch or remote control.

MAINTENANCE

CLEANING THE HEPA CANISTER FILTER

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To ensure proper operation of this Dust Cyclone, the canister filter must have adequate air flow. This means the filter must be regularly maintained by carefully blowing the filter clean using compressed air and an air gun to release built-up particulates trapped between the filter pleats.

For heavy duty users, it is recommended to use compressed air on a regular basis to maintain maximum filtration efficiency and longer life span of the filter.

Auto cleaning motor

The machine is equipped with an auto cleaning system that will clean the canister filter every three minutes for 10 seconds one way and another 10 seconds the other way. The cleaning will stop when you shut the machine off. While the canister is cleaning the LED light will illuminate showing that it is in the process of cleaning.

Using Compressed Air



DISCONNECT MACHINE FROM POWER!

For heavy duty usage, use compressed air on a weekly basis to maintain maximum filtration efficiency and longer life span of the filter.

REMOVING THE CANISTER FILTER

1. Remove the maintenance panel on the canister cover plate (on top of the dust chute) where the gear motor is located.

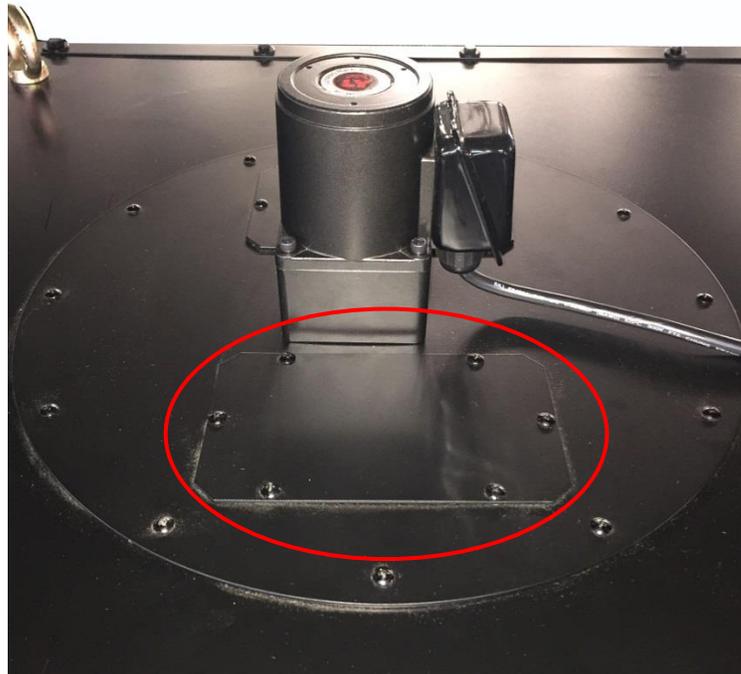


Figure 8: Maintenance Panel

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2. Remove the bolt from the rotation shaft as shown below. Set the shaft and bolt aside for reassembly.

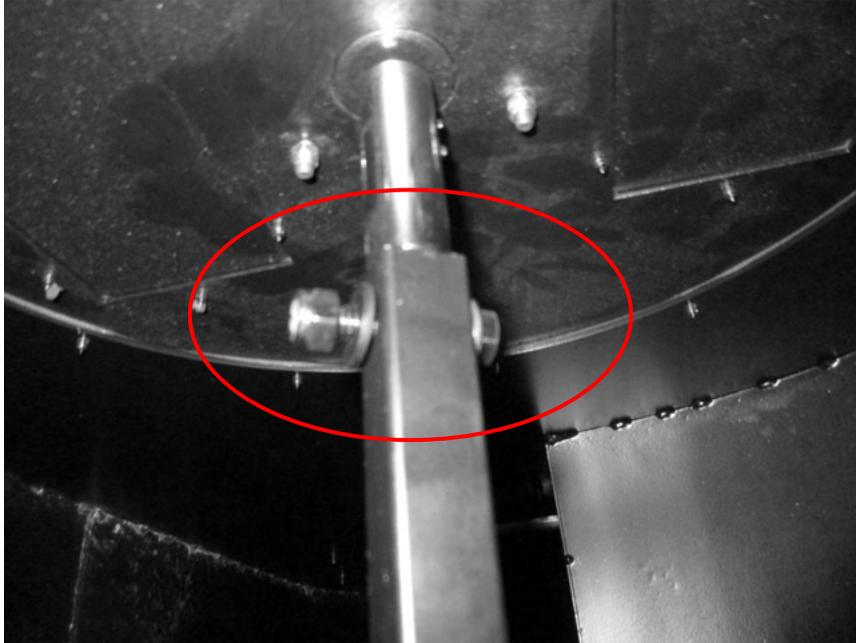


Figure 9: Rotation Shaft connecting bolt

3. Remove the adjustable clamp from the canister filter (located at the bottom, Fig. 10) to remove the canister filter from the housing.

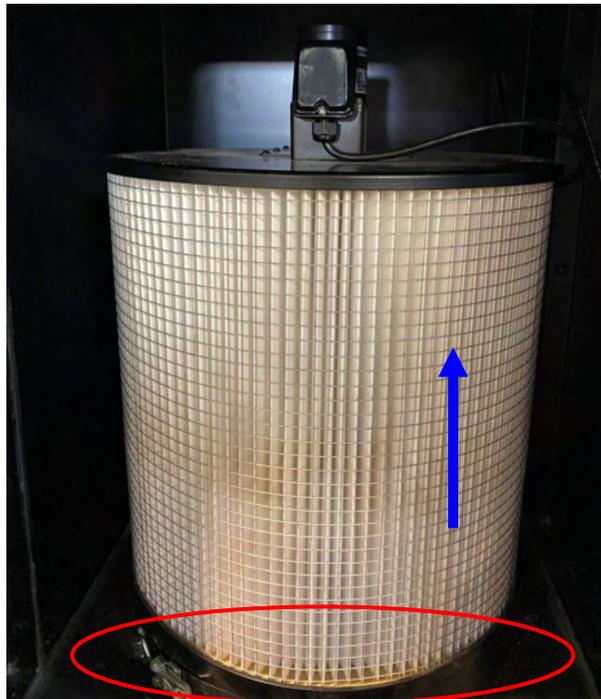


Figure 10: Adjustable Clamp

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4. With the canister filter removed use a compressed air gun to thoroughly clean between the pleats, both inside and outside.

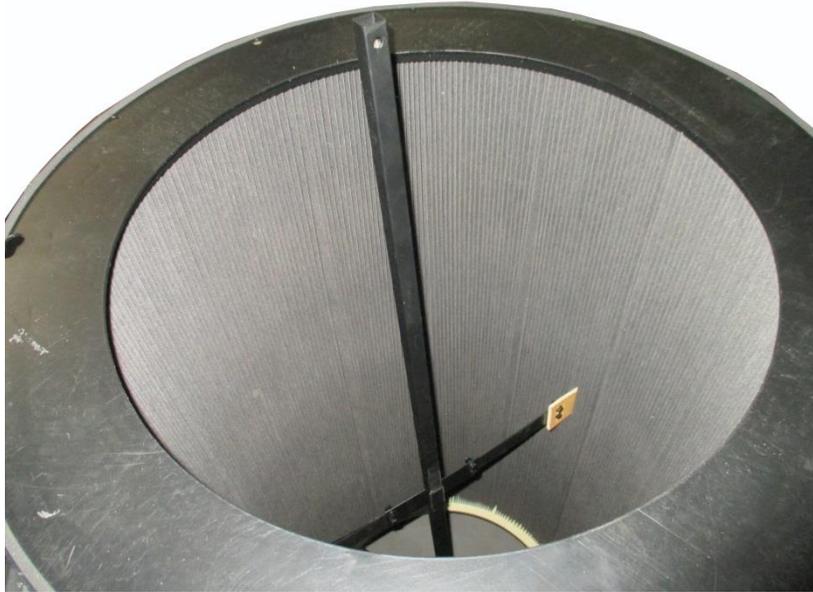


Figure 11: Cleaning filter pleats

RE-ASSEMBLING THE CANISTER FILTER AFTER CLEANING

1. With the aid of another person, carefully re-insert the canister filter, repeating steps above in reverse.

EMPTYING OR REPLACING THE FILTER BAG

Periodically check the filter bag, if it is more than one third full, it is recommended that you empty it.

NOTE: If the filter bag gets too full, the weight may force it to pull away from the band clamp, exposing the user to potentially harmful particulates.

1. Release the spring-loaded band clamp at the bottom of the filter and remove the filter bag.
2. Empty or replace the filter bag and re-attach using the spring-loaded band clamp.

EMPTYING THE DRUM

Periodically inspect the contents of the drum and empty as needed. To inspect the contents of the drum:

1. Lift the black handle on the latch on the drum lid to lower the drum.



Figure 12: Latch

2. Roll drum away from the machine, inspect and empty as needed.

CAUTION

If the drum (and bag) are not emptied before becoming too full, machine performance will be dramatically reduced as the pleated filter will become clogged prematurely, not allowing proper air flow!

ROUTINE INSPECTION

It is a good idea to routinely inspect any quality woodworking tool in order to keep it in optimum condition. This includes inspecting all hardware for tightness, ensuring the filter is clean, and cleaning debris and grime from any surfaces and moving parts.

CIRCUIT BOARD REPLACEMENT

⚠ WARNING

READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage.

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1. Remove the Cover Plate by removing the circled bolts to access the circuit board.



Figure 13: Access Plate

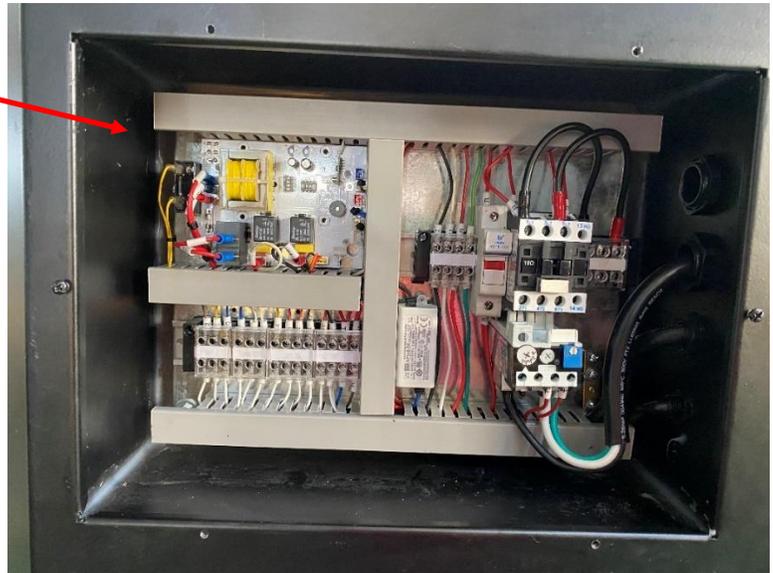


Figure 14: Circuit housing

2. The Circuit Board is located inside on the top, left corner inside housing.

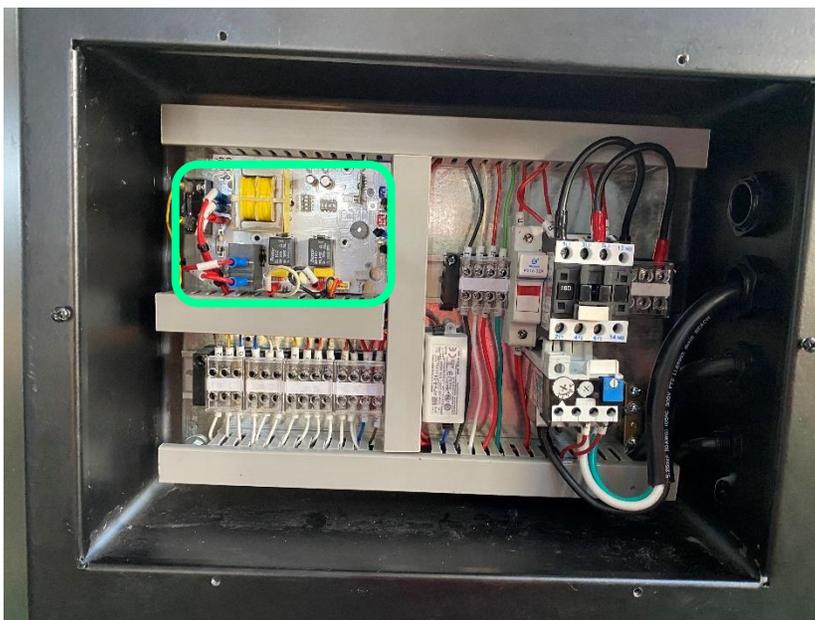


Figure 15: Circuit Board circled, top left

3. Remove the three plastic bolts securing the circuit board to the base panel.

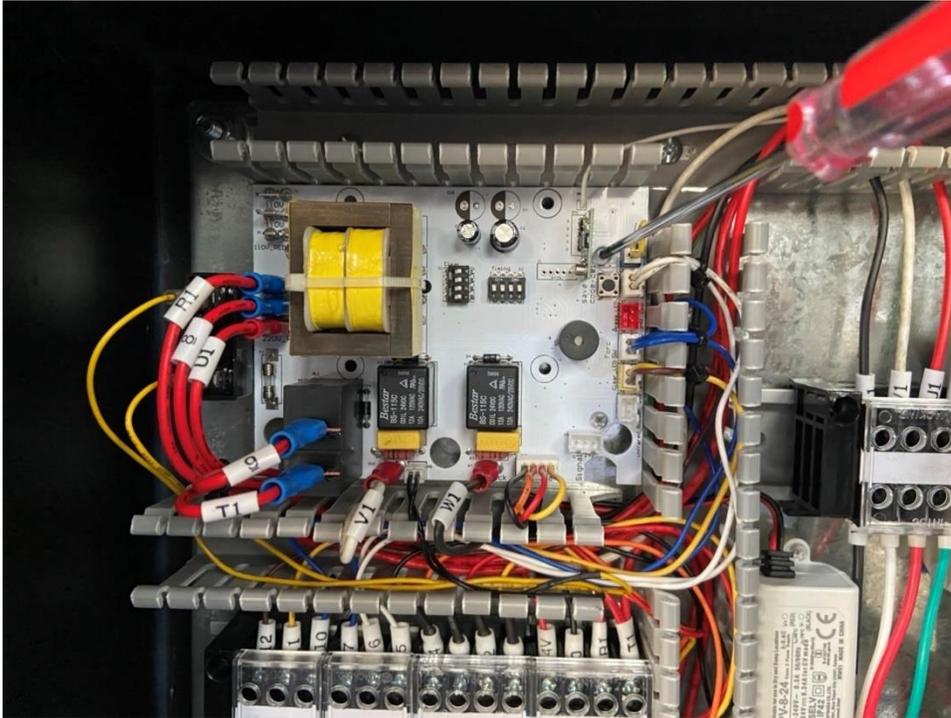


Figure 16: Circuit Board wiring locations

4. Disconnect all the electrical wires from the circuit board. Taking a photo of the circuit board with all connections before disconnecting/removing, to use as reference when attaching the new circuit board, can be helpful. Refer to wiring diagram to ensure all connections are in the correct location.

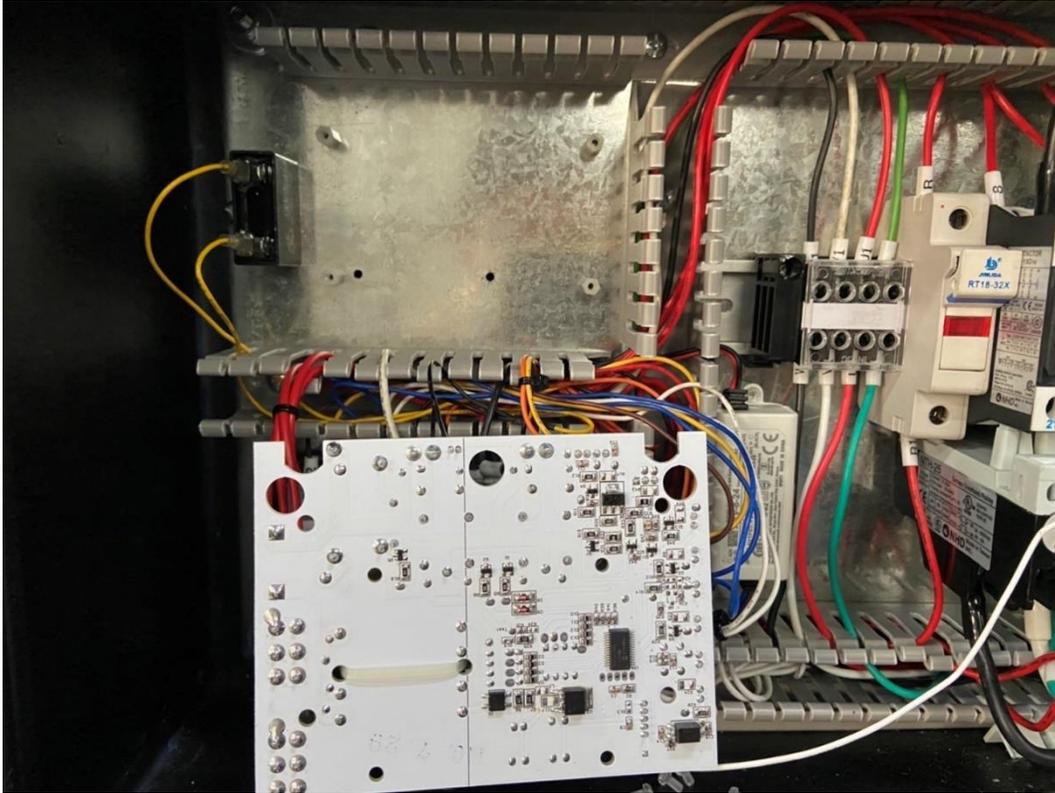


Figure 17: Circuit Board removal

5. Install and secure new circuit board.
6. Attach all wires to new circuit board and confirm locations with pictures and wiring diagrams.
7. Reattach access panel.
8. Inspect and test machine before putting back in service.



TROUBLESHOOTING GUIDE

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	Power supply switched OFF or is faulty.	Ensure power supply is ON and has the correct voltage.
	Wall fuse/circuit breaker is blown/tripped.	Ensure adequate circuit size; install inlet restrictor, replace weak breaker.
	Faulty remote control.	Replace batteries; ensure unobstructed line-of-sight and signal range.
	Remote receiver is faulty.	Inspect receiver circuit board; replace if faulty.
	Incorrectly wired motor connection.	Rewire or call certified service technician or electrician.
	On-board circuit breaker is tripped.	Allow motor to cool, improve ventilation, press reset button.
	Wiring is open/has high resistance.	Check for broken wires or poor connections, repair as necessary.
	Faulty power switch.	Replace switch.
Excessive vibration or noise during operation.	Motor is at fault.	Test/repair/replace.
	Loose component.	Inspect and tighten all bolts/nuts.
	Loose or broken motor mount.	Tighten or replace as needed.
	Motor fan hitting fan cover.	Check fan and cover; replace as needed.
	Bad motor bearings.	Rotate shaft manually, check for grinding or loose shaft, replace bearings if needed.

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<p>Loud, repetitive noise, or excessive vibration coming from cyclone</p>	<p>Machine is on uneven surface.</p> <p>Damaged/Unbalanced impeller.</p> <p>Loose fasteners.</p> <p>Impeller is loose.</p> <p>Motor fan hitting fan cover.</p>	<p>Stabilize on a flat surface.</p> <p>Inspect impeller for dents, bends, loose fins. Replace if needed.</p> <p>Check and re-tighten all fasteners.</p> <p>Replace the motor and impeller.</p> <p>Check fan and cover; replace as needed.</p>
<p>Dust cyclone does not adequately collect dust or chips; poor performance.</p>	<p>Canister end cap is full.</p> <p>Filter is dirty.</p> <p>Restricted duct line.</p> <p>Suction route is too long or has too many sharp bends.</p> <p>Wet lumber is clogging ducts.</p> <p>Leaks in the duct work or too many open ports.</p> <p>Inadequate velocity in the main suction line.</p> <p>Wrong size ducting/ports used.</p>	<p>Empty canister end cap.</p> <p>Clean filter.</p> <p>Clean inlet splitter.</p> <p>Move machine closer to the point of suction, and rerun ducts to eliminate sharp bends.</p> <p>Use lumber with less than 20% moisture content.</p> <p>Repair all duct leaks and close any ports not being used.</p> <p>Increase velocity by opening 1 or 2 more blast gates to different branch lines.</p> <p>Re-size and re-install ducts and fittings.</p>
<p>Sawdust being blown into the air from the dust cyclone</p>	<p>Band clamp or end cap is not secure.</p> <p>Loose or damaged seals.</p>	<p>Re-install ensuring a tight fit.</p> <p>Replace seals and gaskets.</p>

PARTS LIST

No	Part Number	Part Name	Description	QTY
1	PDCXF52201-1	DUST CHUTE		1
1D	PDCXF52201-1D	RUBBER GASKET	1.9M	1
2	PDCXF52201-2	8" INTAKE COVER PLATE		1
2A	PDCXF52201-2A	HEX BOLT	1/4"x5/8"	6
2B	PDCXF52201-2B	FLAT WASHER	1/4"x19x2mm	6
3	PDCXF52201-3	8" INTAKE ADAPTER		1
3A	PDCXF52201-3A	HEX BOLT	1/4"x5/8"	6
3B	PDCXF52201-3B	FLAT WASHER	1/4"x19x2mm	6
4	PDCXF52201-4	LEG STAND		4
4A	PDCXF52201-4A	HEX BOLT	5/16"x3/4"	16
4B	PDCXF52201-4B	FLAT WASHER	5/16x18x2mm	16
5	PDCXF52201-5	FILTER HOUSING	FRONT	1
5A	PDCXF52201-5A	HEX BOLT	5/16"x3/4"	10
5B	PDCXF52201-5B	FLAT WASHER	5/16x18x2mm	20
5C	PDCXF52201-5C	HEX NUT	5/16"	10
5D	PDCXF52201-5D	RUBBER GASKET	2.4M	1
6	PDCXF52201-6	FILTER HOUSING	REAR	1
6A	PDCXF52201-6A	HEX BOLT	5/16"x3/4"	32
6B	PDCXF52201-6B	FLAT WASHER	5/16"x18x2mm	32
7	PDCXF52201-7	DEFLAGRATION VENT GUARD		1
7A	PDCXF52201-7A	PHILIP HD BOLT	3/8"x3/8"	10
7B	PDCXF52201-7B	FLAT WASHER	3/8"x23x2mm	10
8	PDCXF52201-8	DEFLAGRATION VENT GASKET		1
8A	PDCXF52201-8A	PHILIP HD BOLT	1/4"x5/8"	6
8C	PDCXF52201-8C	FLANGE NUT	1/4"	6
8D	PDCXF52201-8D	LOCK WASHER	1/4"	6
9	PDCXF52201-9	DEFLAGRATION VENT		1
9A	PDCXF52201-9A	SHEET METAL BOLT	5/16"x2-1/2"	2
11	PDCXF52201-11	MOTOR HOUSING		1
11A	PDCXF52201-11A	HEX BOLT	5/16"x3/4"	4
11B	PDCXF52201-11B	FLAT WASHER	5/16"x18x2	4
12	PDCXF52201-12	STRAIN RELIEF	PG-21	1
13	PDCXF52201-13	ELECTRICAL PLATE		1
13C	PDCXF52201-13C	HEX NUT	1/4"	4

No	Part Number	Part Name	Description	QTY
14	PDCXF52201-14	CONTROL BOX PANEL		1
14A	PDCXF52201-14A	SHEET METAL SCREW	3/16"x1/2"	6
15	PDCXF52201-15	EXHAUST PLATE		1
15A	PDCXF52201-15A	EYEBOLT	3/8"x1"	2
16	PDCXF52201-16	MOTOR	5HP, 220V, 1 PH	1
16A	PDCXF52201-16A	HEX BOLT	3/8"x1-1/4"	4
16B	PDCXF52201-16B	FLAT WASHER	3/8"x2mm	8
16C	PDCXF52201-16C	HEX NUT	3/8"	4
16D	PDCXF52201-16D	LOCK WASHER	3/8"	4
17	PDCXF52201-17	RUBBER GASKET		1
17A	PDCXF52201-17A	HEX BOLT	1/2"x1-3/4"	4
17B	PDCXF52201-17B	FLAT WASHER	1/2"x34x3mm	8
17C	PDCXF52201-17C	HEX NUT	1/2"	4
17D	PDCXF52201-17D	LOCK WASHER	1/2"	4
18	PDCXF52201-18	MOTOR BASE		1
18A	PDCXF52201-18A	HEX BOLT	5/16"x3/4"	10
18B	PDCXF52201-18B	FLAT WASHER	5/16"x18x2mm	10
19	PDCXF52201-19	FAN	14.5"	1
19B	PDCXF52201-19B	FLAT WASHER	3/4"x45x3mm	1
19C	PDCXF52201-19C	FAN BOLT	3/4"	1
20	PDCXF52201-20	GEAR MOTOR		1
20A	PDCXF52201-20A	SUNKEN BOLT	M5x65L	4
20B	PDCXF52201-20B	FLAT WASHER	3/16"x12x1mm	8
20C	PDCXF52201-20C	LOCK NUT	M5	4
21	PDCXF52201-21	FILTER COVER PLATE		1
21A	PDCXF52201-21A	RD HD BOLT	3/16"x3/8"	8
22	PDCXF52201-22	HEPA CANISTER FILTER		1
23	PDCXF52201-23	FRONT ROTATION SHAFT		1
23A	PDCXF52201-23A	SUNKEN BOLT	M4x10mm	2
24	PDCXF52201-24	ROTATION SHAFT		1
24A	PDCXF52201-24A	HEX BOLT	5/16"x1-1/2"	1
24B	PDCXF52201-24B	FLAT WASHER	5/16"x18x2mm	2
24C	PDCXF52201-24C	LOCK NUT	5/16"	1
25	PDCXF52201-25	RUBBER PADDLE		2
26	PDCXF52201-26	CLEANING ARM		4

No	Part Number	Part Name	Description	QTY
26A	PDCXF52201-26A	HEX BOLT	1/4"x5/8"	8
26B	PDCXF52201-26B	FLAT WASHER	1/4"x13x1mm	16
26C	PDCXF52201-26C	LOCK NUT	1/4"	8
27	PDCXF52201-27	SHAFT BASE		1
27A	PDCXF52201-27A	HEX BOLT	1/4"x5/8"	4
27B	PDCXF52201-27B	FLAT WASHER	1/4"x13x1mm	8
27C	PDCXF52201-27C	LOCK NUT	1/4"	4
28	PDCXF52201-28	BAND CLAMP	DIA. 500MM	1
29	PDCXF52201-29	MAINTENANCE DOOR		1
30	PDCXF52201-30	HINGE		2
30A	PDCXF52201-30A	SUNKEN BOLT	M6x10mm	8
31	PDCXF52201-31	DOOR HANDLE		1
32	PDCXF52201-32	CONTROL PANEL		1
32A	PDCXF52201-32A	SHEET METAL SCREW	3/16"x1/2"	6
33	PDCXF52201-33	SWITCH BOX		1
34	PDCXF52201-34	SWITCH COVER PLATE		1
34A	PDCXF52201-34A	PHILIP HD BOLT	M5x12mm	4
34B	PDCXF52201-34B	FLAT WASHER	3/16"x12x1mm	4
34C	PDCXF52201-34C	HEX LOCK NUT	M5	4
35	PDCXF52201-35	STRAIN RELIEF		2
36	PDCXF52201-36	DRUM INSERT		2
36A	PDCXF52201-36A	PHILIP HD BOLT	3/16"x3/8"	12
36C	PDCXF52201-36C	HEX NUT	3/16"	12
37	PDCXF52201-37	PLASTIC BAG	610x1200MM	2
38	PDCXF52201-38	DRUM TOP RIM		1
39	PDCXF52201-39	BACK DRUM PANEL		1
39A	PDCXF52201-39A	PHILIP HD BOLT	3/16"x1/2"	20
39B	PDCXF52201-39B	FLAT WASHER	3/16"x12x1mm	20
39C	PDCXF52201-39C	HEX NUT	3/16"	20
40	PDCXF52201-40	FRONT DRUM PANEL		1
40A	PDCXF52201-40A	SHEET METAL BOLT	3/16"x3/8"	10
41	PDCXF52201-41	DRUM LATCH		1
41A	PDCXF52201-41A	PHILIP HD BOLT	3/16"x3/8"	6
43	PDCXF52201-43	DRUM WINDOW		1

No	Part Number	Part Name	Description	QTY
43A	PDCXF52201-43A	RIVET		10
44	PDCXF52201-44	DRUM HANDLE		1
44A	PDCXF52201-44A	PHILIP HD BOLT	5/16"x3/4"	2
44B	PDCXF52201-44B	FLAT WASHER	5/16"x23x2mm	2
44C	PDCXF52201-44C	CAP NUT	5/16"	2
45	PDCXF52201-45	DRUM LATCH HOOK		1
45A	PDCXF52201-45A	HEX BOLT	1/4"x5/8"	1
45C	PDCXF52201-45C	HEX LOCK NUT	1/4"	1
46	PDCXF52201-46	DRUM PANEL BASE		1
46A	PDCXF52201-46A	PHILIP HD BOLT	3/16"x1/2"	18
46B	PDCXF52201-46B	FLAT WASHER	3/16"x12x1mm	18
46C	PDCXF52201-46C	HEX NUT	3/16"	18
47	PDCXF52201-47	3" DRUM CASTER		4
47A	PDCXF52201-47A	HEX BOLT	5/16"x3/4"	16
47B	PDCXF52201-47B	FLAT WASHER	5/16"x18x2mm	32
47C	PDCXF52201-47C	HEX NUT	5/16"	16
48	PDCXF52201-48	LED WINDOW		1
48A	PDCXF52201-48A	RIVET		2
49	PDCXF52201-49	LED LIGHT		1
50	PDCXF52201-50	LED COVER		1
50A	PDCXF52201-50A	PHILIP HD BOLT	M4x10mm	6
50B	PDCXF52201-50B	FLAT WASHER	3/16"x12x1mm	6
50C	PDCXF52201-50C	HEX NUT	M4	6
51	PDCXF52201-51	SILICONE (not included)		1
*	PDCXF52201-IC3	CIRCUIT BOARD (not shown)		1



SPECIFICATIONS

Motor Specs:	5 HP
Electrical Specs:	220V / 60Hz / 1PH / 3450 RPM
Running AMP	(8" inlet) 18.5 A at 220V
Air Volume:	1823CFM (cubic feet per minute)
Max. static pressure	12 Inches of water
Fan size	14.5"
Inlet:	8"
Switch	High frequency remote control switch
Collection capacity	56 gallon Octagon drum x 1 set
Packing Size: (L x W x H)	36" x 30" x 96" (91.32 x 77 x 243.7 cm)
Machine weight	456 lbs. (207 kgs)
Shipping weight	544 lbs. (247 kgs)

<u>Filter Media</u>	filtering area: 32.3 sq/ft (3m2)
Cartridge Filter	HEPA 19.7" x 19.7" (50 x 50cm) x 1pc ; (0.3-0.4 micron @ 99.7% efficiency)

SUPPLIES

Plastic debris collection bag;

SKU/Part # PDCXF52201-37



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