



TECHNICAL MANUAL

OPERATION AND MAINTENANCE INSTRUCTIONS

DUSTMASTER™

VACUUM SANDING SYSTEMS

660-DM-1000 670-DM-1535-0 670-DM-1535-4 DM-100

DM-104 DM-300 DM-304 682-A100 Cyclone Separator



This manual is intended as a complete operator's manual for owners and users of the Clayton DustMaster™ Vacuum Systems. Although this manual details maintenance and operation of Clayton pneumatic tools in conjunction with the vacuum, these tools are sold separately or as part of a kit. Purchasers of the DustMaster™ vacuum systems may choose to purchase pneumatic tools, hoses, or accessories from Clayton Associates, Inc.

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Introduction

Clayton Vacuums have been engineered specifically for use in environments where hazardous dust and debris is present. All operators of this equipment should read this manual thoroughly and understand proper use and maintenance of the system. The procedures herein provide a method for performing dust and debris collection while minimizing the particulate contamination of hazardous dust into the air, ground, and water. Failure to follow proper operational procedures and Safe Filter Change™ instructions can result in personal exposure, damage to equipment, or personal injury.

➡ Warnings and Cautions

When operating electric and pneumatic appliances, or while working nearby one, safety precautions should be exercised to avoid personal injury and property damage. The following safety precautions should be followed by and communicated to all personnel working with or around Clayton DustMaster™ Vacuums:

Never exceed compressed air line pressure of 120 PSI. For best results on all Clayton pneumatic vacuums, maintain an operating pressure of 90 PSI.

Before using this cleaning equipment, check to ensure that all filters are in place. Follow Safe-Filter-Change™ procedures to open filter compartment after initial use.

Never raise cover to filter compartment without the vacuum in operation. The constant suction will prevent recontamination of the work area and personal exposure to hazardous dust.

This vacuum collection system is intended to collect dry or damp, not wet matter. Free flowing liquids may damage the ULPA filter, and will void the warranty.

Always store equipment in dry area.

All vacuums must be grounded during operation. Use a conductive air supply hose or attach a grounding wire to pneumatic vacuums. Always connect electric vacuums to a properly grounded outlet. Failure to use a properly grounded outlet could result in electrocution, injury, or death.

Never operate an electrical vacuum if the cord appears broken or damaged.

Always use conductive vacuum hoses or vacuum hoses with a static conductive wire and assure that hoses and vacuum are bonded before use.

Use caution when connecting and disconnecting compressed air lines. When static air pressure is suddenly released, it can cause the airline to whip.

Never attempt to lift the vacuum system without assistance.

If the vacuum is used with a Clayton Tool Caddy (Model CTK-1 Part No 650-201), always ensure that the CTK-1 is positioned properly atop the vacuum before moving the system. If the CTK-1 is not properly seated on the vacuum, it can topple and cause personal injury or property damage.

➞ Preparation for Use

System is shipped complete on a pallet. Remove packaging material from around system, and remove any straps or ties holding the system to the pallet.

If the vacuum is shipped with the optional Clayton CTK-1 (650-201): Lift the CTK-1 up from the vacuum base, and set it down on the floor.

CAUTION: DO NOT ATTEMPT TO LIFT THE CTK-1 OR THE VACUUM WITHOUT ASSISTANCE. Two persons are required for lifting.

Lift the vacuum system off the pallet. Casters are already mounted, and filter bags are in place and ready for use.

The electric vacuum is designed to operate on the attached 50' electrical cord. Do not connect the vacuum to an extension cord – the added resistance will cause the vacuum to run hot, and performance will be dramatically decreased.

The pneumatic vacuum is designed to operate on a ¾" compressed airline. This size airline will supply enough compressed air to power the vacuum and up to three pneumatic tools. The vacuum can operate from a ½" airline if no pneumatic tools are connected. Pneumatic vacuums are shipped with a ¾" compressed air filter in a separate box. Thread the compressed air filter into the air inlet on the vacuum. Failure to install filter may cause premature motor failure.

➞ Preparation for Storage

The Clayton DustMaster™ system requires no special preparation for short term storage.

When long term storage is required, Clayton recommends that the operator perform a Safe-Filter-Change™ to remove any dust or residue from the system.

Any pneumatic tools stored with the system should be oiled and operated briefly prior to long-term storage.

➞ Preparation for Shipping

Place the vacuum on a pallet. Support the vacuum on blocks of wood, so that the casters are not against the pallet. Failure to block the vacuum can cause damage to the caster mounting studs. Strap the vacuum down firmly, ensuring that it will not be jarred free in shipping.

Shrink wrap or box the pallet.

Electric Powered Vacuum Operational Procedures

Ensure that the electrical supply is properly grounded. If unsure, consult a licensed electrician. Connect vacuum power cord to outlet.

Insert a vacuum hose into one of the vacuum ports. One end of each hose has a metal sleeve – insert this end into the vacuum port. Connect the end of the airline to one of the three air couplers located between the vacuum ports. This connection can be made by pushing the airline plug directly into the coupler.

Turn the vacuum control switches to the ON positions. The vacuum will start operation.

- **If vacuum is used for sanding or grinding, follow the directions below.**

Connect the 1/2" air supply to the vacuum air intake, beneath the power switches. Never allow air pressure to exceed 120 PSI.

Connect the vacuum exhaust of the tool to the end of the vacuum hose by threading the cuff onto the hose. Connect the air fitting on the tool to the airline coupler of the adapter hose.

Choose the proper size of abrasive for the pneumatic tool. If you are unsure of the proper grit abrasive, check with a supervisor.

CAUTION: Always use a higher-numbered (finer) grit if unsure. Lower numbered (rougher) grits can damage the skin of some aircraft.

Lay the abrasive onto the backup pad, with the abrasive side facing away from the tool. Ensure that the abrasive sheet covers the backup pad completely, and that the abrasive is oriented properly. Press the tool against a flat surface with the abrasive down, to affix the abrasive to the backup pad.

Place the pneumatic tool on the work surface. Keep the abrasive flat against the work surface, and depress the throttle paddle on the top of the tool. Keep the tool against the work surface at all times while the tool is in motion. Operating a sander while the abrasive is not touching the work surface can cause the abrasive to spin off of the backup pad.

To control the speed of each tool, locate the speed control valve beneath the tool air intake. Turn the valve control clockwise to reduce the speed of the tool, and counter clockwise to increase the speed.

If two or three technicians will be operating the system at once, follow the same procedure above using the two remaining couplers and ports. The air manifold can support up to three airlines. Additional airlines should be hooked directly to the shop air supply.

Air Powered Vacuum Operational Procedures

Below the vacuum control switch is a standard grounding jack, which will accept most aviation grounding plugs. If a grounding plug is available, connect it to the vacuum. If an aviation grounding plug is unavailable, connect a grounding clamp to the vacuum.

CAUTION: Failure to properly ground vacuum can result in static buildup and sparking, which could cause fire or explosion if flammable fumes are present.

Connect the vacuum to an air supply. To operate the vacuum, the air supply must be ½" or larger. To operate the vacuum and pneumatic tools, the air supply must be ¾" or larger. Air pressure should not exceed 120 PSI.

Some models are equipped with an automatic control system, which can be operated in AUTO mode or ON mode. These vacuums do not have an exposed valve. When the system control is switched to ON, the vacuum will operate continuously until switched OFF. In AUTO mode, the vacuum will turn ON when a pneumatic tool is actuated, and will turn off after a brief delay when the pneumatic tool is released.

The time delay for the AUTO system shutoff is user-adjustable. At the bottom of the control panel is the time delay dial. Turning the dial clockwise will increase the time delay, and turning it counter clockwise will decrease the delay. A minimum 4-second delay is recommended to allow all dust in hoses to be cleared.

Insert a vacuum hose into one of the vacuum ports. One end of each hose has a metal sleeve – insert this end into the vacuum port. Connect the end of the airline to one of the three air couplers located between the vacuum ports. This connection can be made by pushing the airline plug directly into the coupler.

Turn the vacuum control switches to the ON or AUTO position. The vacuum will now be operational.

Connect the vacuum exhaust of the tool to the end of the vacuum hose by threading the cuff onto the hose. Connect the air fitting on the tool to the airline coupler of the adapter hose.

Choose the proper size of abrasive for the pneumatic tool. If you are unsure of the proper grit abrasive, check with a supervisor.

CAUTION: Always use a higher-numbered (finer) grit if unsure. Lower numbered (rougher) grits can damage the skin of some aircraft.

Lay the abrasive onto the backup pad, with the abrasive side facing away from the tool. Ensure that the abrasive sheet covers the backup pad completely, and that the abrasive is oriented properly. Press the tool against a flat surface with the abrasive down, to affix the abrasive to the backup pad.

Place the pneumatic tool on the work surface. Keep the abrasive flat against the work surface, and depress the throttle paddle on the top of the tool. Keep the tool against the work surface at all times while the tool is in motion. Operating a sander while the abrasive is not touching the work surface can cause the abrasive to spin off of the backup pad.

To control the speed of each tool, locate the speed control valve beneath the tool air intake. Turn the valve control clockwise to reduce the speed of the tool, and counter clockwise to increase the speed.

If two or three technicians will be operating the system at once, follow the same procedure above using the two remaining couplers and ports. The air manifold can support up to three airlines. Additional airlines should be hooked directly to the shop air supply.

➡ Safe-Filter-Change™

WARNING: It is imperative that the operator perform the following Safe-Filter-Change™ procedures in order to ensure that neither the operator nor the environment are exposed to potentially hazardous dust.

Changing the Cyclone Waste Bag in DM-300 & 304 Vacuums. If you do not have a cyclone separator on your vacuum, skip this section.

☞ Also applies to DM-100 & 104 vacuums retrofitted with a cyclone separator PN 682-A100

Clayton recommends the use of HEXOFF Surface Decontamination Cleaner to wipe down vacuums and tools to remove traces of Hexavalent Chromium and heavy metals. Hexoff is manufactured under license from the Center for Disease Control, and has been proven to remove hexavalent chromium at the microscopic level.

PN 415-SC01Q **Hexoff Surface Decontamination spray (1 QT bottle)**

PN 415-NR045 **Hexoff No Rinse Wipes (45 count canister)**

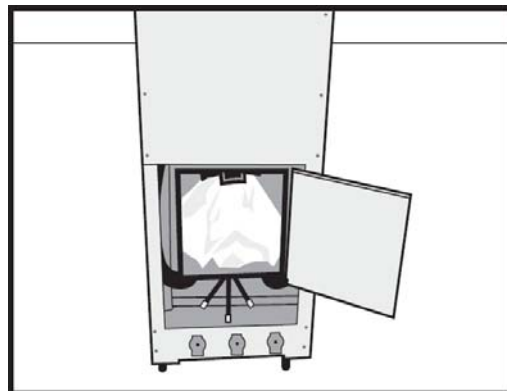
PN 415-NR800 **Hexoff No Rinse Wipes (800 count tub)**

Safe-Filter-Change™ Procedure for the Cyclone Collection Bag.

1.

Connect the shop air supply to the vacuum but **do not start** the vacuum at this time.

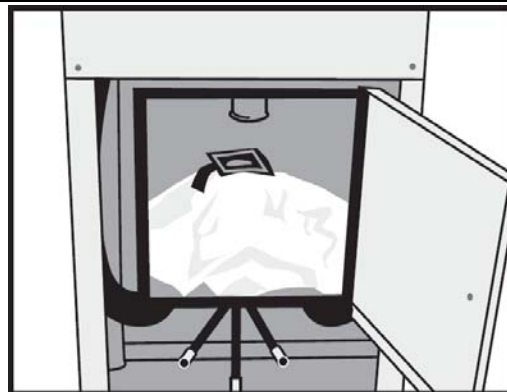
Unlatch the front door to the Cyclone Waste Compartment and open it slowly.



2.

Wearing impermeable gloves gently slide the waste bag down from the fill tube.

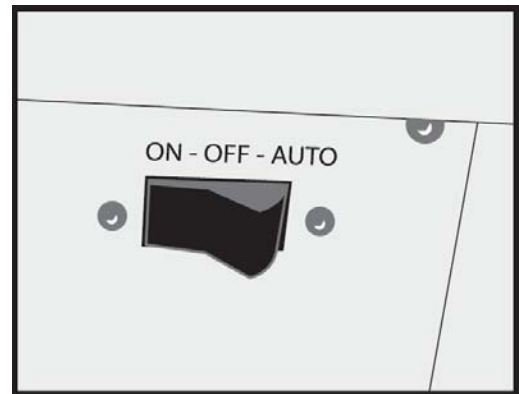
Lower it just enough to prevent it from being sucked into the tube when the vacuum is turned on.



3.
With the door still open, turn the vacuum on.

Open the air supply valve and, if equipped with the automatic on/off feature, move the operating switch to ON.

This will cause the vacuum to operate, and will create a downdraft into the open compartment.



4.
Using a DustMaster™ disposal bag (600-114DM or other suitable sturdy plastic bag) hold the open bag in front and below the open compartment.

Grasp the waste bag and insert it into the disposal bag. Seal and discard bag. If the vacuum was used to collect hazardous dust or debris, be sure to follow all requirements governing disposal of hazardous materials.

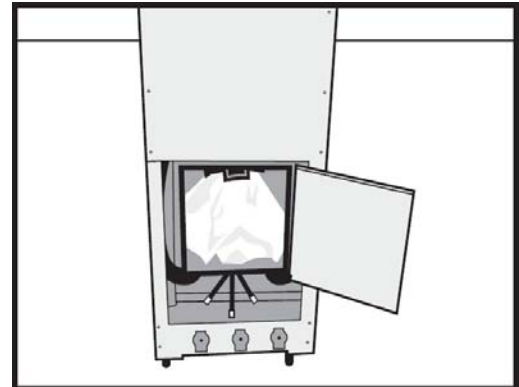


5.
Turn the vacuum off.

Place a new cyclone bag PN 926-050 on the fill tube.

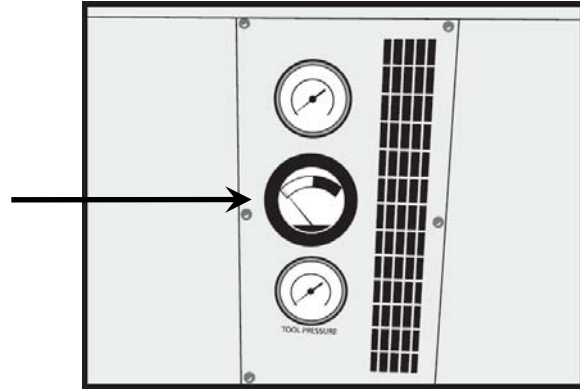
Close and secure the door.

After fifteen (15) changes of the cyclone waste bag it's time to inspect the main filter bag in the vacuum using the procedure for the main filter bag that follows.



Safe-Filter-Change™ Procedure for the Main Filter Bag.

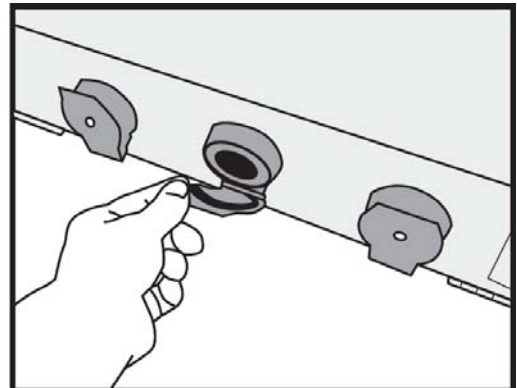
The minihelic gauge on the side of the vacuum measures the condition of the Prefilter and the ULPA filter only - it does not measure the main filter bag.



☞ The main filter bag should be changed when it is approximately half (1/2) to three quarters (3/4) full. If the bag becomes too full, it will be difficult to remove the bag from the compartment. On models equipped with a cyclone separator, this interior filter bag should be checked after the cyclone bag has been changed fifteen (15) times.

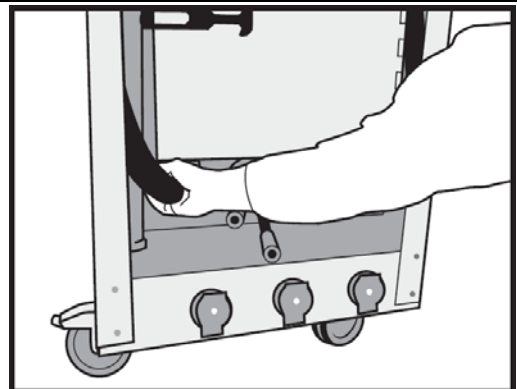
☞ DM-300 & 304 vacuums have a cyclone separator section that must be disconnected in order to access the vacuum filter compartment

1.
Turn the vacuum on.
Briefly flip open each of the 3 inlet ports to clear any dust that might have settled in the ports.

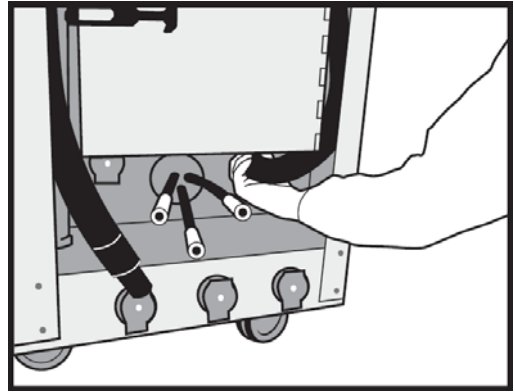


2.
With the vacuum still running, grasp the metal sleeve at the end of the hose and remove it from the vacuum port.

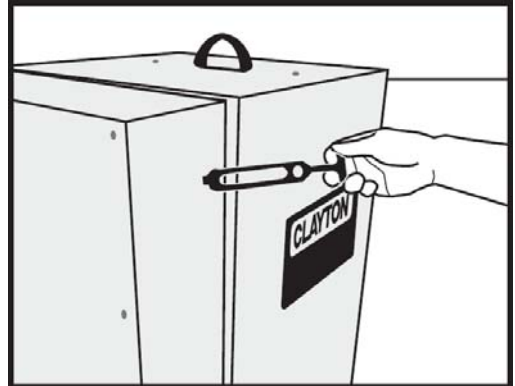
A gentle twisting action will help loosen the sleeve.



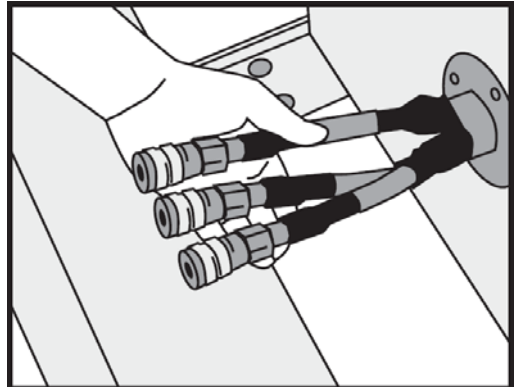
3.
Repeat for the second hose. It is now safe to turn the vacuum off.



4.
Release the straps holding the cyclone section to the hose/tool cabinet.

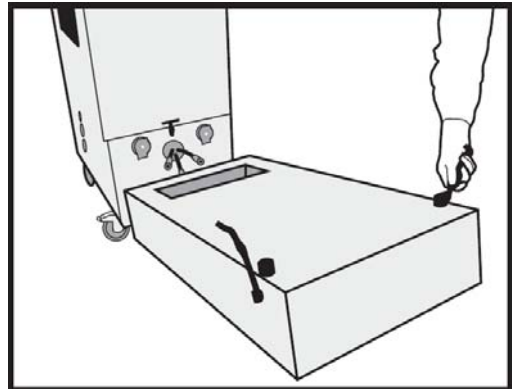


5.
While moving the separator section, use one hand to guide the three (3) compressed air hoses so that they do not hang up on the separator cabinet while moving it.



6.
Allow the cyclone section to move away from the hose/tool cabinet until the top lies on the floor.

From this point onward, follow the instructions for all DM-Series Vacuums.



Bag Filter Change (All Vacuums):

1.
With an assistant, lift the cabinet off of the vacuum, and set it on the floor.

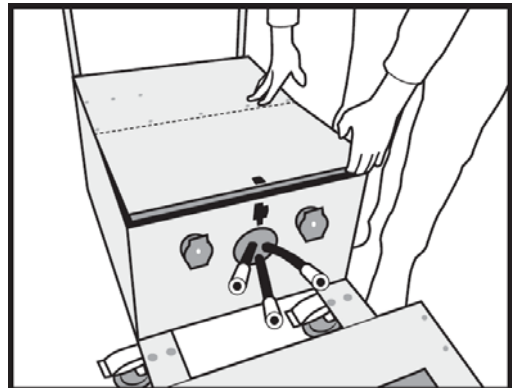
Lift safely using your legs not your back when removing the cabinet.



2.
Use your thumb to release the safety clip on the latch and then lift the handle to release the latch.

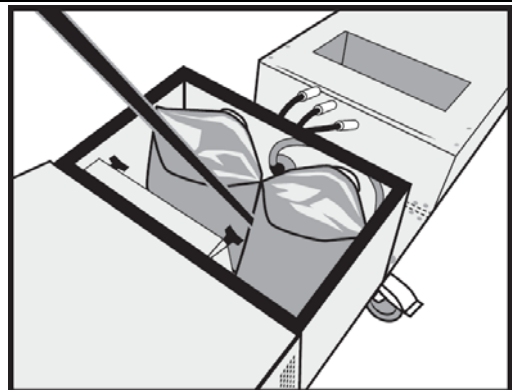


3.
Unlatch the vacuum cover and open the lid 1"-2".
Turn on the vacuum and then open the lid completely.



4.
Push gently on the filter bag with a stick or tool to check the quantity of dust in the bag.

If the bag is $\frac{1}{4}$ to $\frac{1}{2}$ full, perform the filter change.
Do not wait for the bag to be full - a full filter bag can be heavy and unwieldy.



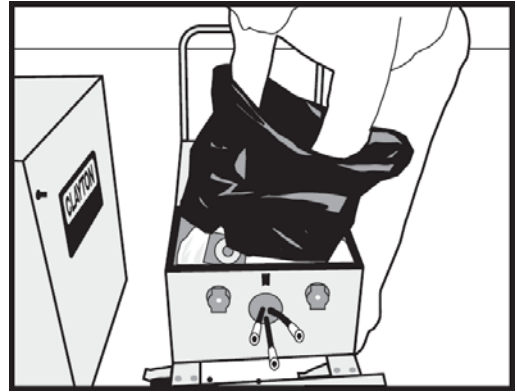
5.
Turn a DustMaster™ disposal bag (600-114DM) inside out around your arms like a large mitten.

Reach into the vacuum and grasp the DustMaster™ Filter Bag.

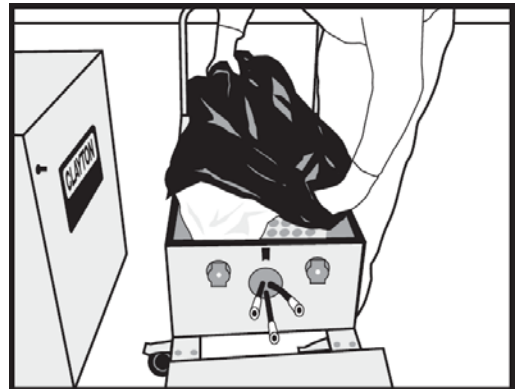
Keep the bag over the open lid at all times.

Be sure to keep the open mouth of the filter bag in the air stream created by the vacuum.

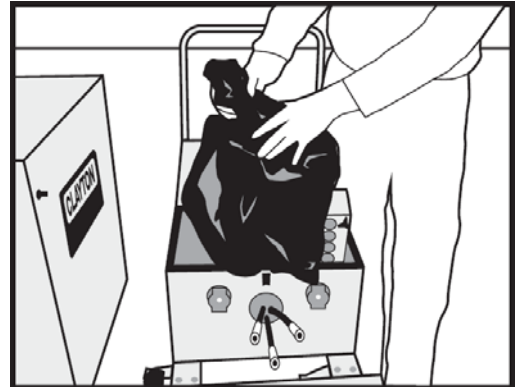
Any dust or debris dislodged from the filter will be drawn into the vacuum and will be captured by the Prefilter.



6.
Turn the disposal bag inside out around the DustMaster™ filter bag.



7.
Tape or tie the end of the disposal bag shut.

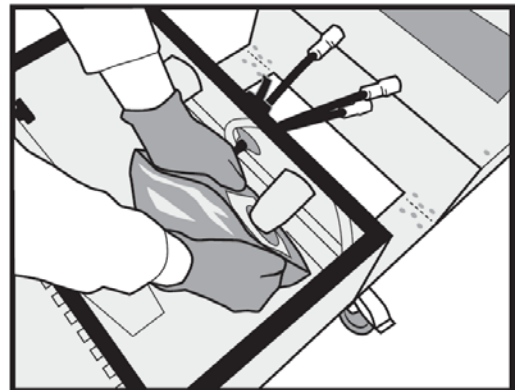


8.
Place a new filter over the intake port, and dispose of the used bag in accordance with all regulations.
Use ONLY Clayton DustMaster™ Filter Bags.

Reorder part number 600-313A.

Close the vacuum cover.

Turn the vacuum off.

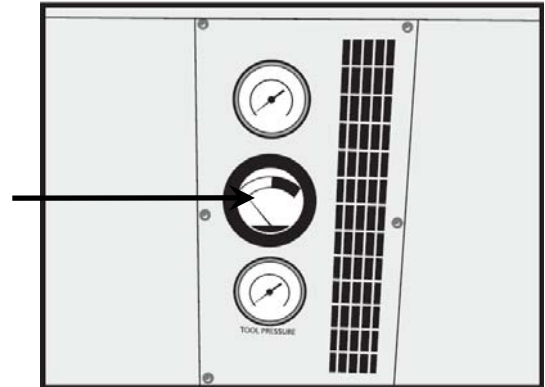


Safe-Filter-Change™ Procedure To Change The Prefilter (All Vacuums):

🔊 The minihelic gauge should be read with the vacuum running and one or more hoses connected.

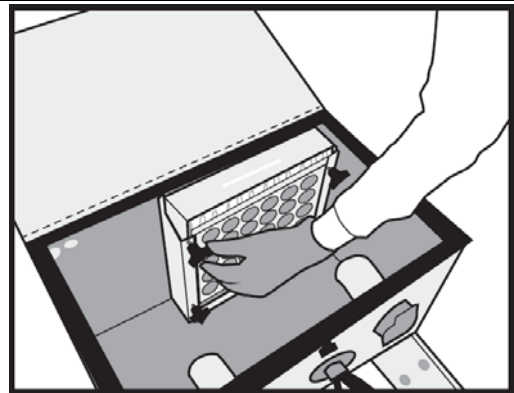
1.

If the minihelic gauge reads 5 or higher, follow the steps listed above to open the filter compartment to change the Prefilter.



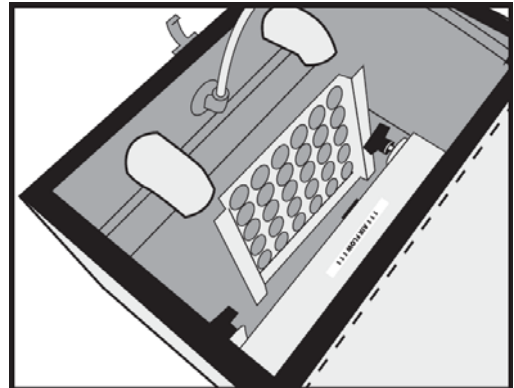
2.

Loosen the knobs holding the Prefilter screen and carefully lift it out of the Prefilter frame.



3.

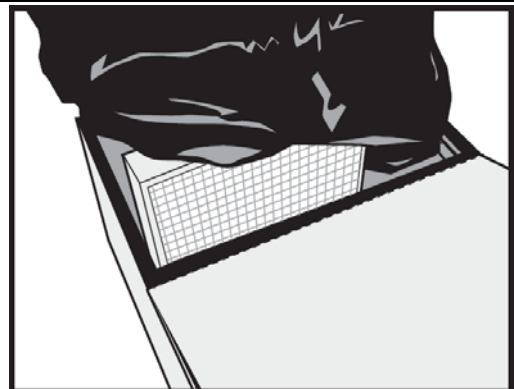
Leave the screen inside the compartment while you change the Prefilter.



4.

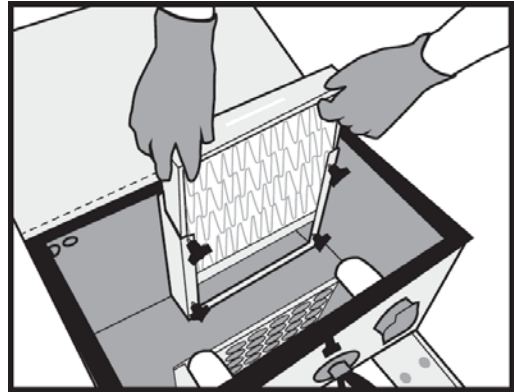
Turn a DustMaster™ disposal bag inside out and use it like a mitten to grasp and remove the Prefilter.

The Prefilter can be removed by pulling it gently upwards and out of the Prefilter frame.



5.
Replace the Prefilter by inserting a new filter into the Prefilter frame.

Note the direction arrows on the filter.

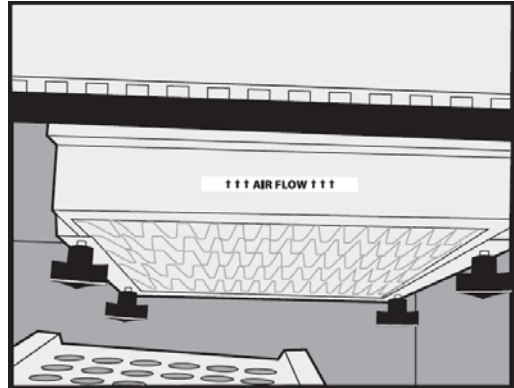


6.
Install the filter with the arrows pointing toward the ULPA filter.

Use ONLY Clayton DustMaster™ Prefilters - Part Number 600-115.

Shut the lid and latch it securely.

Turn the vacuum control to the OFF position to shut down the vacuum.



🔊 The minihelic gauge should be read with the vacuum running and one or more hoses connected. Change the ULPA filter if the gauge still indicates 5 or higher with a new Prefilter installed. Contact Clayton for technical support before attempting to change this filter.

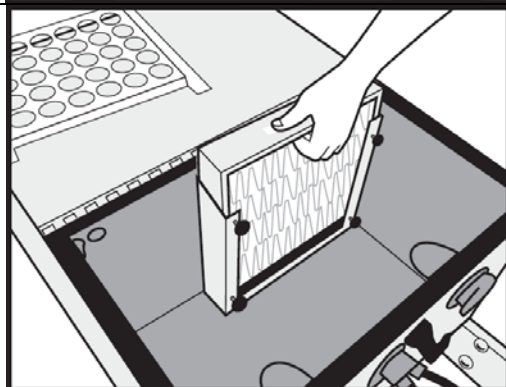
ULPA Filter Change

The ULPA filter change is performed with the vacuum turned OFF. Wear proper PPE, including protective clothing, gloves, safety glasses, and respirator. Check with a supervisor to determine the appropriate level of protection required based on the type of dust collected in the vacuum. If available, we recommend changing the ULPA filter in a controlled environment, such as a sanding booth or downdraft room.

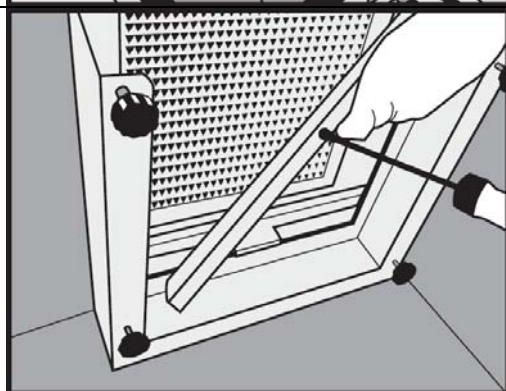
1.
Loosen the knobs holding the prefilter screen and carefully lift it out of the prefilter frame.



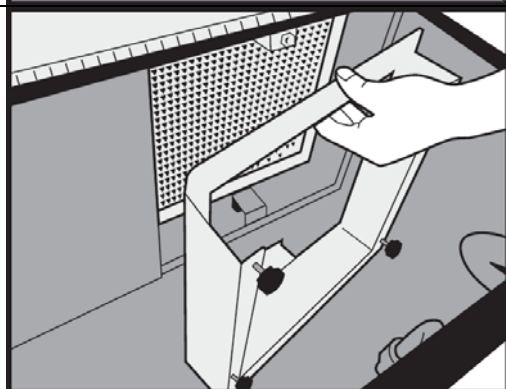
2.
Remove the prefilter by sliding it straight up.



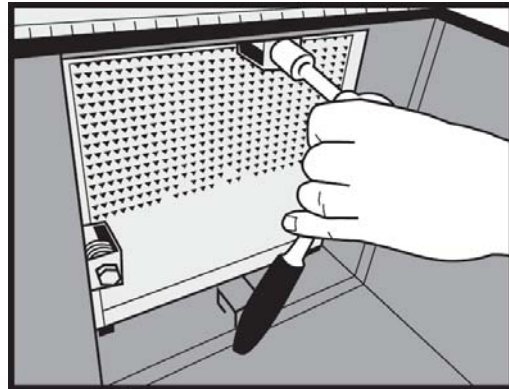
3.
The prefilter holder is held in place by two metal straps. Use a 5/32" Allen key to loosen the set screws visible at the center of each strap.



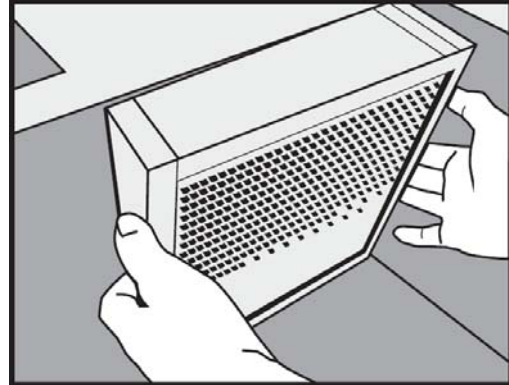
4.
Once loose, the straps and the prefilter holder can be removed by hand.



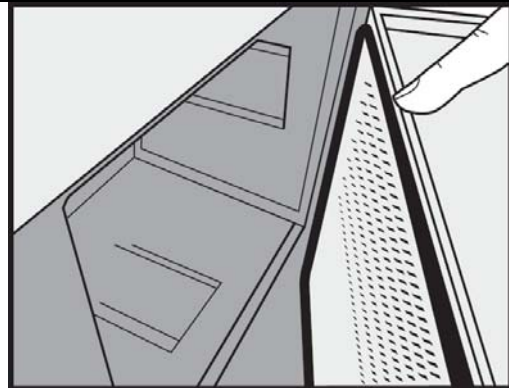
5.
Use a 9/16" socket to loosen and remove the four filter brackets.



6.
Grasp the ULPA filter by the metal frame and pull it from the enclosure. Discard the filter in accordance with HAZMAT regulations.



7.
Insert a new ULPA filter into the filter compartment with the gasket side facing into the vacuum.



Secure the filter in place using the filter brackets, and reinstall the prefilter holder using the metal straps you removed previously. Reinstall the prefilter, and ensure that there is a filter bag on each inlet tube before closing the filter compartment.

Be sure to discard filters and contaminated PPE in accordance with appropriate HAZMAT regulations.

Clayton recommends the use of HEXOFF Surface Decontamination Cleaner to wipe down vacuums and tools to remove traces of Hexavalent Chromium and heavy metals. Hexoff is manufactured under license from the Center for Disease Control, and has been proven to remove hexavalent chromium at the microscopic level.

PN 415-SC01Q	Hexoff Surface Decontamination spray (1 QT bottle)
PN 415-NR045	Hexoff No Rinse Wipes (45 count canister)
PN 415-NR800	Hexoff No Rinse Wipes (800 count tub)

Filters

926-050

Cyclone Clear Collection Bag 10 pack



610-313A

Cyclone Collection Bag Cloth 10 pack



600-313A

Filter Bag 5 pack



600-115

Pre Filter 3 pack



600-116

HEPA / ULPA Filter 1 pack

600-114DM

Waste Disposal Bag 25 pack



➞ Vacuum Maintenance

Always check the air pressure of the vacuum and the pneumatic tool system using the gauges on the side of the unit. Never allow the air pressures to exceed recommended specifications.

Always connect hoses before operating the system. Keep at least one inlet open or one hose connected at all times while vacuum is running to prevent stress on the vacuum motors.

Check the Cyclone collection bags regularly during operation, and before every use. Follow Safe-Filter-Change procedures outlined above to check filter bag levels. If filters are not changed at the recommended levels, a decrease in system performance will be realized.

Keep the unit away from moisture or harsh environments whenever possible. Store unit in a dry location. Never use the Clayton Vacuum for wet vacuuming. The Clayton System is designed to extract dry dust, and is not equipped for fluid extraction. Vacuuming wet material can ruin the filter system, and void the warranty. No field adjustment or calibration is required on vacuum system air pressure gages.

➞ Tool Maintenance

Always check the condition of a pneumatic tool before use. Ensure that the backup pad is in good condition. Replace the backup pad at the first sign of wear. An old or damaged backup pad can break apart at high speeds, causing personal injury or property damage.

Oil the tools regularly. Before each use, place a drop of pneumatic tool oil directly into the air intake of each tool. Always disconnect the pneumatic tool from the air supply when the tool is not in use. Change abrasives whenever a decrease in sanding performance is noticed. Failure to change abrasives regularly can cause more rapid degradation of backup pads.

To remove the backup pad from circular random orbital sanders, choose the proper wrench from the CTK-1 tool tray. Insert the wrench into the sander between the pad and the shroud. Push the wrench to the center of the sander, until you feel it lock onto the shaft. Once the wrench is holding the shaft in place, turn the pad counterclockwise by hand until it spins freely off. Reverse these directions to install a new pad.

To remove the backup pad from the rectangular orbital sanders, simply peel the backup pad from the tool. The backup pad is affixed with an adhesive backing. Be sure to remove any old adhesive from the sander. Peel the backing paper from a new pad, line it up to the tool, and press firmly. Note that the 3" x 4" pads have a tapered front edge. Be sure to position this rounded edge to the front of the sander.

Use only Clayton DustMaster Supreme backup pads, and only use the proper size for the sander. Each tool is calibrated for a specific size pad. Using an under- or over-sized pad will most likely result in heavy vibration, and a shortened lifespan for the tool and the backup pad. Excess vibration can cause personal injury.

➞ Hose Maintenance

Never use the Clayton Air/Vacuum hoses for suctioning liquids.

Always visually examine the air lines and disconnect plugs before using the Clayton Air/Vacuum Hoses. If a leak is detected, discontinue use immediately and discard the hose.

➡ Troubleshooting Electric DM-100/300

Symptom	Probable Cause	Remedy
Vacuum will not start	Main vacuum switch is in the OFF position. Electricity is not connected.	Push switch up. Confirm that the vacuum electrical cord is plugged into an outlet. Ensure that the outlet is energized.
Vacuum performance is low	Electrical cord is plugged into an extension cord. Filter bag is full or prefilter is clogged. Hose is clogged.	Only operate the vacuum with the 50' cord – DO NOT use extension cords. Replace filter bag and/or prefilter using the Safe-Filter-Change procedure. Check each hose for obstruction, and remove any debris.
Electric vacuum is running hot	Vacuum is not drawing enough air to cool the motors.	Open another vacuum port to allow more air into the system. The vacuum can operate with multiple hoses connected without a loss of performance.
Air tools operating too fast.	Tool throttle is set too high. Compressed air pressure is set too high.	Reduce tool throttle with adjustment knob on tool. Check the pressure on facility compressed air system, and lower if over 110 PSI.
Air tools operating too slowly.	Tool throttle is set too low. Pneumatic tool system pressure is too low. Not enough volume of air available.	Increase tool throttle with adjustment knob on tool. Increase pressure of supply air to system. DO NOT EXCEED TOOL PRESSURE SPECIFICATIONS. Confirm that the compressed air supply line is large enough, and that there are no bottlenecks in the air system piping.
Static electricity is causing sparks or shocking.	System is not properly grounded.	Ensure that shop air lines are grounded. Check to be sure that a ground wire has been connected to the vacuum grounding lug. Ensure that grounded electrical cord is connected to a properly grounded outlet.
Excessive dust is visible at work surface.	Filter bag is full. Fine dust has coated surface of filter bag. ULPA filter needs to be replaced.	Replace filter bag and/or prefilter using the Safe-Filter-Change procedure. Using the Safe-Filter-Change procedure, open the filter compartment. With a blunt tool, gently shake the filter bag to knock particles off the inner wall. Check minihelic reading. With a new DustMaster filter bag and prefilter in place, the minihelic should read below 5.

➔ Troubleshooting Air Powered DM-104/304

Symptom	Probable Cause	Remedy
Vacuum will not start	Compressed air supply not connected.	Ensure that main air supply is connected
Auto system not responding	Sander is not drawing enough air to trigger sensor	Increase tool speed
	Auto system contaminated with dirty compressed air	Contact Clayton for support
Vacuum performance is low	Compressed air supply pressure too low, or supply hose not large enough.	Ensure that compressed air is being delivered at 90-100 PSI through a ¾" compressed air hose.
	Filter bag is full or prefilter is clogged.	Replace filter bag and/or prefilter using the Safe-Filter-Change procedure
	Hose is clogged.	Check each hose for obstruction, and remove any debris
	Vacuum motors contaminated by dirty compressed air	Contact Clayton for support
Air tools operating too fast.	Tool throttle is set too high.	Reduce tool throttle with adjustment knob on tool.
	Compressed air supply is set at too high a pressure.	Reduce compressed air supply by installing a properly sized regulator between the compressed air supply and the vacuum system
Air tools operating too slowly.	Tool throttle is set too low.	Increase tool throttle with adjustment knob on tool.
	Compressed air supply is not adequate in pressure or volume.	Increase supplied compressed air pressure or increase the size of the airline feeding the system. DO NOT EXCEED TOOL PRESSURE SPECIFICATIONS.
	Pneumatic system filter is clogged.	Inspect external air filter.
Static electricity is causing sparks or shocking.	System is not properly grounded.	Ensure that shop air lines are grounded. Check to be sure that a ground wire has been connected to the vacuum grounding lug. Ensure that conductive vacuum hoses are being used
Excessive dust is visible at work surface.	Filter bag is full.	Replace filter bag and/or prefilter using the Safe-Filter-Change procedure.
	Fine dust has coated surface of filter bag.	Using the Safe-Filter-Change procedure, open the filter compartment. With a blunt tool, gently shake the filter bag to knock particles off the inner wall.
	ULPA filter needs to be replaced.	Check minihelic reading. With a new DustMaster filter bag and prefilter in place, the minihelic should read below 5.

Warranty

Clayton Associates, Inc. guarantees its products against defects in materials or workmanship and will either repair or replace all parts that prove defective under normal use for a period of one (1) year with the exception of Clayton Associates, Inc. vacuums, for which the period is two (2) years. The warranty period shall commence from the date of invoice.

This warranty does not cover repairs due to normal wear, accident, neglect, misuse, or use other than as indicated in the instruction booklet.

Within the continental U.S.: During the first 90 days of the warranty period, Clayton will at no charge to the customer, provide parts and labor at the customer's site. From day 91 onward, Clayton will provide parts to the customer's site at no charge and will perform labor at no charge for products returned to its factory at the customer's expense.

Outside the continental U.S.: Clayton will provide parts to the customer's site at no charge or for products returned to its factory at the customer's expense, Clayton will provide parts and perform labor at no charge.

Clayton shall not in any event be liable for any damages, loss of production time or profits, whether based on contract, warranty, negligence, strict liability or otherwise, including without limitation any consequential, incidental or special damages, arising with respect to the equipment or its failure to operate.

Clayton Associates, Inc. makes no other warranty or representation of any kind, except that of title, and all other warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, are hereby expressly disclaimed.

EC DECLARATION OF CONFORMITY



Clayton Associates, Inc. of 1650 Oak Street, Lakewood New Jersey 08701 U.S.A. declare on our own responsibility that the following equipment:

Industrial ULPA Filtered, Pneumatically Powered Vacuum Cleaners and Accessories for Dry Recovery

- Vacuum Model: **DM-104, DM-104CTK, DM-304**
- With serial numbers ranging from **DM0000001** through **DM9999999**

Are designed and manufactured in compliance with the essential requirements and other relevant provisions of the following applicable directives:

- **Machinery Directive 2006/42/EC**

Compliance has been obtained by application of the following standards:

- **EN ISO 12100:2010-11**
- **EN ISO 4414:2010 excluding references to Unintended Pressures section 5.2.2**
- **EN 60335-2-69:2012 specifically Annex AA: Requirements for vacuum cleaners and dust extractors for the collection of hazardous dusts**

The legally authorized entity, established in the EU for compiling the technical file is ExVeritas Limited, Unit 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ, United Kingdom.

File Number: 18FILE0423

Subject to use for the purpose for which it was designed in accordance with relevant standards and with the manufacturer's recommendations. We hereby declare that the equipment specified above conforms to the listed Directives and Standards.

Brad Clayton
President
Clayton Associates, Inc.

Place of Issue: Lakewood, New Jersey, USA August 1, 2019



Clayton products are proudly made in the USA

