KONTROL KUBE® COMPLETE

Mobile Containment. Simplified.

VARIABLE SPEED • 250 - 500 CFM • HEPA FILTERED **NEGATIVE AIR MACHINE** 

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# **Owners Manual Kontrol Kube Complete Negative Air Machine**

115v Model



Fiberlock Technologies, Inc. 150 Dascomb Rd Andover MA, 01810

800-342-3755 www.kontrolkube.com

# Owners Manual Kontrol Kube Complete Negative Air Machine

## **READ AND SAVE THESE INSTRUCTIONS**







## FIRE AND ELECTRIC SHOCK HAZARD

Unit must be electrically grounded.
•Insert 3-prong plug on power cord

- directly into matching grounded receptacle.
- •Do not use with an adapter Keep wiring and motor dry.
- •Do not operate in standing water
- •If electrical components become wet, allow them to dry completely before using.

Read and understand manual before use.

## **Use and Operation**

#### Introduction

The Negative Air Machine is a portable filtration system that draws air in from the surrounding environment and passes it through an advanced filtration system. The unit removes airborne particles like dust, mold spores, pollen, pet dander and miscellaneous debris.

#### **Attention:**

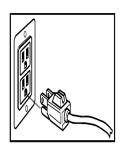
The purpose of this instruction manual is to provide basic usage instructions and machine data. Because some situations can present unique circumstances please contact a trained professional for information regarding health and safety regulations and compliance.

When fitted with the 1st stage pre-filter, the 2nd stage DOP filter and the HEPA filter the Negative Air Machine passes laboratory DOP testing conducted per ANSI standards, achieving an efficiency rating of 99.97% against oily aerosol particles down to 0.3 microns.

**Notice:** Because transport may cause damage to units or filters, job site testing should be conducted to confirm an individuals unit's compliance with DOP testing standards for HEPA efficiency appropriate to specific job settings. DOP testing may be required after filter changes.

# **Getting to Know Your New Kontrol Kube Complete Negative Air Machine**

**Location of key features** 



Use a 115V, 3-prong grounded connection



Do not use with an adapter

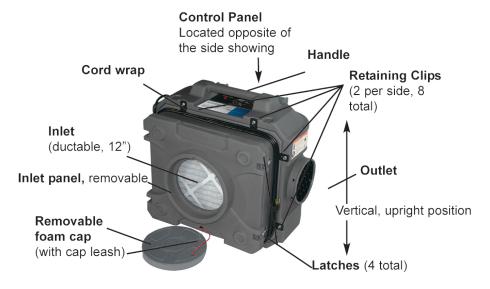


FIGURE 1

# **A** WARNING

#### **CONTAMINATION HAZARD**

Wear NIOSH-approved protective gear when changing filters.

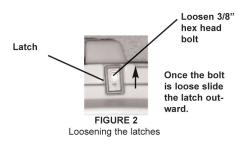


Change filters after every remediation job.

Change HEPA filter when the filter indicator light comes on.

Dispose of used filters according to your local regulations.

Read and understand manual before use.



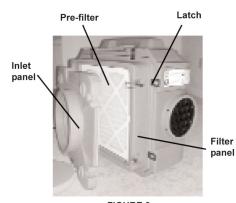


FIGURE 3 Pre-filter

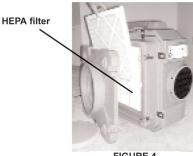


FIGURE 4
HEPA filter

#### **Operating Instructions**

#### Setup

- 1. Unwrap the cord wrap completely
- 2. Place the Negative Air Machine upright (vertical with handle at the top)
- 3. Plug in to a standard 115 volt outlet. Each Negative Air Machine needs 3 amps to operate.
- 4. To switch the unit on, locate the control panel and turn the variable speed switch clockwise to start the unit (see "Control Panel" below). Then select either a maximum (500 CFM) or down to a minimum (250 CFM) airflow rate. To maintain the optimal CFM, consult the IICRC S520 standards, 10.3.1. See this manual's "Resources" section (pg. 4) for how to get an S520 standards guide.
- 5. The Complete Negative Air Machine is ideal for use with Kontrol Kube Containment Units. For more information, see "Specialized Features" on (pg. 4).

# The Control Panel Variable speed control Auxiliary Outlet w/GFCI

#### Variable Speed Control

Note that the MAX setting is located immediately left of the OFF button, and the MIN setting requires an almost 360 degree clockwise turn.

#### **Change Light**

The change light illuminates when you need to change the HEPA filter.

#### The Auxiliary Outlet

You can "daisy chain" or interconnect up to 3 Negative Air Machines to customize your air filtration needs. The unit can conduct a maximum of 12 amps when it is turned off, and 9 amps when it is turned on. That means you can plug other equipment into the unit, but the amperage is limited.

#### Red Circuit Breaker Switch

The primary purpose of the circuit breaker is to protect the machine. It turns the unit off when more than 12 amps run through the on-unit circuit.

#### **Ground Fault Circuit Interrupter (GFCI)**

The GFCI helps protect the user should it detect a sudden "ground fault," the GFCI will interrupt the electric current. The GFCI will also trip when a short circuit or an overload occurs.

When the GFCI "trips," unplug the unit, and look for potential hazards standing water, frayed cords, etc. anything that would cause a surge of electrical current. Relocate the unit and plug it into a different outlet. Then push the "reset" button, and check to see if it's operating; if so, continue use, if not call a Technical Specialist at 800-342-3755

#### The Filters

#### About the filters

The Negative Air Machine utilizes a 3-stage filtration system designed with the most advanced HEPA filtration technology available. The first stage utilizes a pre-filter (Figure 3), the second stage DOP pre-filter and the third a HEPA filter (Figure 4). The pre-filter captures larger particles, the DOP filter ensures first-pass filtration and the HEPA filter captures 99.97% of smaller particles down to 0.3 microns.

For environments with a high volume of aerosolized particles, you can use 2 prefilters to extend the life of the HEPA filter. See "Maintenance" for how often to replace filters. Changing filters

- 1. With a 3/8" wrench, loosen the 8 latches holding the inlet panel in place. See Figure 2.
- 2. Slide the latches outward, away from the center of the inlet panel.
- 3. Remove the inlet panel.
- 4. Remove used filters and replace.

See "Maintenance" for how often to replace filters and specific DOP information.

# **A** WARNING

#### TIPPING HAZARD

When stacking units, beware of tipping.

Do not stack more than 2 units on top of each other.

Falling equipment could cause bodily harm.

Read and understand manual before use.



FIGURE 5
With Kontrol Kube Containment Unit



FIGURE 6 Units daisy chained



FIGURE 7 Stacking 2 Units

#### How to get replacement filters

Call your nearest distributor or Fiberlock at 800-342-3755.



BREATHING HAZARD

When using the Negative Air Machine in a containment area, turn off all sources of power to open combustion appliances such as fireplaces, boilers, furnaces, water heaters and HVAC systems to avoid the risk of backdrafting deadly carbon monoxide fumes.

If the Filter Change Light illuminates during the remediation process, immediately change the HEPA filter. See "Changing Filters" and "Maintenance" for more information.

To create a negative air environment:

You can install the Negative Air Machine outside a containment area to draw air out of an affected area. (see "Specialized Features," Removable intake panel for remediation professionals).

#### **Specialized Features**

#### To use with Kontrol Kube Complete Enclosure

Attach included 5' length of flex duct to the intake port of the negative air machine. After flex duct is securely fastened to the Complete Negative Air Machine, extend the flex duct and pull it through the receiving portal on the Kontrol Kube Enclosure. Once in place the variable speed control can be adjusted to establish the necessary level of negative pressure within the Kontrol Kube Enclosure (see Figuire 5).

#### Daisy-chain capability

The Kontrol Kube Complete Negative Air Machine is designed for optimal versatility. You can interconnect up to three units to create a maximum of 500, 1000, or 1500 CFM using the auxiliary outlet on the unit's control panel. You can also daisy chain the units in a stacked position (see "multi-positional" in this section).

#### Multi-Positional

You can stack and operate up to two Negative Air Machines vertically. The handle of one unit fits into bottom of another unit (see Figure 7). You can also stack them horizontally for space-saving storage, or operate a unit with its outlet facing upward.

#### Resources

- S520: The Standard and Reference Guide for Professional Mold Remediation, call the IICRC at 360-693-5675
- Institute of Inspection, Cleaing and Restoration Certification (IICRC), 360-693-5675
- NIOSH help line 800-35-NIOSH, for respirator and respirator filter information.

#### Maintenance

#### **Maintenance Intervals**



**ELECTRIC SHOCK HAZARD** 

Unplug the Negative Air Machine before performing maintenance.

#### **Before Each Use**



Always wear an appropriate NIOSH-approved respirator and personal protective equipment when removing or replacing filters, or when cleaning the Kontrol Kube Complete Negative Air Machine.

- <u>Inspect the electrical cord for damage.</u> Look for fraying, cuts, etc. Do not use the unit if you find any. Call Fiberlock for the nearest Service Center.
- <u>Check your GFCI protection.</u> Plug the unit in and turn it on, depress the red GFCI "Test" button. If it's operating properly the "Reset" button should pop up. (Note: you'll need to depress the "reset" button again for operation.)

When fitted with the 1st stage pre-filter, the 2nd stage DOP filter and the HEPA filter the Negative Air Machine passes laboratory DOP testing conducted per ANSI standards, achieving an efficiency rating of 99.97% against oily aerosol particles down to 0.3 microns.

**Notice:** Because transport may cause damage to units or filters, job site testing should be conducted to confirm an individuals unit's compliance with DOP testing standards for HEPA efficiency appropriate to specific job settings. DOP testing may be required after filter changes.

#### When using the Kontrol Kube Complete Negative Air Machine for Mobile Containment:

- <u>Inspect pre-filter before each use.</u> Look for accumulated dust and dirt that could restrict airflow through the filter into the unit. If any is visible, replace the pre-filter.
- Insure DOP 2nd Stage Filter is installed properly.
- Replace the HEPA filter when the Change Indicator Light comes on.

(Note: To be assured of true HEPA filtration, change the HEPA filter after every water damage job, or when the indicator light comes on; whichever occurs first.)

#### When using the Kontrol Kube Complete Negative Air Machine for water damage restoration:

- <u>Inspect pre-filter before each use.</u> Look for accumulated dust and dirt that could restrict airflow through the filter into the unit. If any is visible, replace the pre-filter.
- Replace the HEPA filter when the Change Indicator Light comes on.

(Note:To be assured of true HEPA filtration, change the HEPA filter after every water damage job, or when the indicator light comes on; whichever occurs first.)

#### When using the Kontrol Kube Complete Negative Air Machine for remediation:

#### After every job

- Replace both the filters to prevent cross-contamination.
- Clean the unit thoroughly (vacuum and damp wipe per IICRC S520, 10.11) after each job before removing it from the containment area to avoid cross-contamination. Pay particular attention to the area around the air intake. Let the unit dry before installing clean filters.

#### **Troubleshooting**

For any problems not listed below, call your local distributor or contact our Service Department toll free at 800-342-3755.

Problem	Cause	Solution
Unit does not operate	<ul><li>No power to machine</li><li>Switch not turned on</li><li>No power to outlet</li><li>GFCI Tripped</li></ul>	<ul> <li>Plug in the unit; check power at outlet</li> <li>Turn on the switch</li> <li>Reset circuit breaker/GFCI</li> <li>Reset circuit breaker/GFCI</li> </ul>
Change light illuminated	Primary filter is full     Air intake restricted	<ul> <li>Replace the filters; refer to Maintenance section</li> <li>Eliminate bends/kinks in ducting, or remove ducting</li> </ul>
Blower wheel not turning	Obstructed blower     Loosen blower wheel set screw	Remove obstruction     Tighten set screw

#### **Specifications**

Model	6542	Controls	Touchpad
Type	115V	Filters	Pre-Filter Stage 1 (part #6562) DOP Filter Stage 2 (part #6564) HEPA Filter Stage 3, 99.97%, 0.3 microns (part#6561)
Variable CFM	250-500 CFM	Handle	Rotomolded
Height	24.6" (62.5 CM)	Housing	Rotomolded
Width	26.2" (65.5 CM)	Power 115V	3 Amps
Depth	18.2" (46.2 CM)	Cord Length	25' (7.6M)
Use Weight	44 lbs (19.9 KG)	Safety	UL and CSA Listed
Ship Weight	46 lbs (20.9 KG)	Frequency (hertz)	60
		Flex Duct	5' length (1.52 M) (part # 6565)

ORDERING INFORMATION	PART#
Complete Negative Air Machine	6542
HEPA Filter Stage 3 - (8)/Case	6561
Pre-filter Stage 1 - (12)/Case	6562
DOP Filter Stage 2 - (4)/Case	6564
Carbon Filter - (4)/Case	6563
Flex Duct 5' - (5)/Case	6565
10" Duct Clamp	6567
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For more information visit www.kontrolkube.com or call 800-342-3755

# KONTROL KUBE COMPLETE NEGATIVE AIR MACHINE LIMITED WARRANTY

#### **What Does This Warranty Cover?**

This warranty covers the Fiberlock Kontrol Kube Complete Negative Air Machine and is provided to the original purchaser only.

#### **How Long Does This Warranty Last?**

This warranty runs for:

- · Lifetime from the date of purchase on the polyethylene body;
- One (1) year from the date of purchase on parts and labor (EXCEPT this warranty does not cover filters).

#### **What Will Be Done:**

If a defect in materials or workmanship occurs within the warranty period, at our election the defective part will be replaced or repaired.

#### **What This Warranty Does Not Cover:**

This warranty does not cover or apply to defects due directly or indirectly to misuse, abuse, disassembly, alteration, corrosive chemicals, improper voltage, fire, flood, negligence, accident, improperly or incorrectly performed maintenance or repair, or failure to perform necessary or recommended maintenance or repair (See your Owner's Manual) or if the use of this product is not in compliance with the instructions and specifications for its use. This warranty does not cover filters. We limit all implied warranties to:

- · Lifetime from the date of purchase on the polyethylene body;
- One (1) year from the date of purchase on parts and labor;

OTHER THAN THE WARRANTIES PROVIDED HEREIN, THIS WARRANTY MAKES NO EXPRESS OR IMPLIED, ORAL OR WRITTEN WARRANTIES WITH RESPECT TO THIS PRODUCT OR WORKMANSHIP AND ALL WARRANTIES IMPLIED BY LAW INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS WARRANTY. Some state do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. WE SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSON OR PROPERTY OR FOR INCIDENTAL, CONTINGENT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING FROM USE OR OUR PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

#### **How Do I Get Service?**

In order to be eligible for service under this warranty you MUST do the following: (a) write or call for a return material authorization (RMA); and (b) have the serial number or original proof of purchase available. Contact us at:

Fiberlock Technologies, Inc. (800) 342-3755 150 Dascomb Rd. Andover, MA 01810

We will inspect the product without charge and contact you within 72 hours of our receipt of the product to give you the results of our inspection. If our inspection uncovers a defect we will repair or replace the product, at our election. If the product is returned to use on or before ninety (90) days from the date of purchase, we will pay for the cost of shipping it to the repair facility and the cost to return it to you. If the product is returned to us after the expiration of ninety (90) days from the date of purchase, all shipping costs shall be paid by the purchaser.

If it is determined that there is no defect in the product, or that the defect results from causes not within the scope of our warranty, then the product will be repaired or replaced only at your request and at your expense and you must bear all shipping costs.

#### **How Does State Law Apply?**

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.