

Bio Cart HEPA UVC 13

Operators' Manual

Bio Cart **HEPA 13** Includes 15 ft Extension Ladder



Bio Cart HEPA UVC 13, 120 Volt P/N FG0182 Rev A & B

MM0199 Bio Cart 13 Owner's Manual May 28, 2015

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Unpacking

DO NOT ACCEPT A PALLET THAT SHOWS VISIBLE DAMAGE. Report damage to driver, Delivery Company and contact Air-Care.

Remove Packing and straps from exterior of Bio Cart and Pallet.

Carefully lift the Bio Cart from Pallet with appropriate Fork Lift and place on smooth, level surface. Be sure Brakes are set on wheels before leaving the Bio Cart unattended.

Inspect the interior of the Bio Cart for any signs of damage and report it to Air Care and your Freight Company immediately. This includes the Box of Accessories behind the ladder for Bio Cart HEPA UVC.

Testing the Bio Cart upon Arrival

The Bio Cart only has a few mechanical and electronic parts to test. If any of these tests fail, contact Air-Care Immediately. 800-322-9919, 702-454-5515 or info@air-care.com. The Bio Cart HEPA UVC may require the Ladder to be removed to perform some of the tests.

- 1. Test the Brakes on all 4 wheels to be sure they will secure the cart in working position. The Total lock with set the brake on the wheel and also lock the swivel.
- 2. Turn off all switches in the Bio Cart before connecting to AC Power.
 - a. 2 switches on the UVC Lamps power boxes are below the Pre-filter.
 - b. The "IN USE" light Switch on the Control Panel.
 - c. The "Interior Light" Switch on the Control Panel.
 - d. Turn the Air Scrubber Motor "Speed Control" to OFF (fully CCW) on the Control Panel.
- 3. The Retractable Power cord is on the end of the cart opposite the Door.
 - a. Inspect the GFI Power Plug for Damage
 - b. Pull the power cord out several Feet, give it some slack, and it should lock in place.
 - c. Pull the cord tight again, and allow it to be pulled in and rolled up into the cart.
 - d. Pull it out again, and plug it into a grounded wall receptacle. If the Indicator light does not come on, press the "RESET" button and observe the green indicator light is lit. If it does not light, use another wall outlet.



4. Go inside the Bio Cart to test the electrical system.

a. There is a RED power indicator light on the Control Panel, it should be ON whenever the power cord is in a live, properly grounded outlet.

Air Scrubber

Power and Speed

- b. If the RED indicator is NOT ON, be sure the GFI is plugged into a live outlet and the GFI Green indicator is on.
- c. When the RED Power Indicator is on, turn on the "IN USE" light switch and verify that the IN USE light, on the outside of the door, is lit.
- d. Next, turn on the Interior Light Switch and verify that both white LED strips are on. Both these switches can remain on at all times, if desired.

Lift UP & **DOWN Switch** INTERIOR **IN USE Light** Lights

Power

Indicator

e. Turn the "Speed Control" switch Clockwise until it clicks and set it "HI". The Air Scrubber Fan should run. If it does not, leave the switch on until you test the UVC interlock switch in step 5. When the UVC lamps are ON, the Blower should run, but when the HEPA replacement Door on the outside is open, the UVC lamps and the Blower will not turn on.



- f. The last control to be tested on the panel is the Power Lift. The Bio Cart has a maximum height of over 13 feet, so you may not be able to fully raise it at this time.
 - i. Press the UP (TOP) of the Rocker switch on the control panel, and the GREEN light will light. The top of the Bio Cart will begin to rise with the yellow and black bellows. RELEASE the switch and it will stop. When raising it to the ceiling, release the button just as the foam touches the ceiling to prevent any damage to the ceiling or the cart.
 - ii. Press the DOWN (Bottom) of the rocker switch and the RED light will light and the top will lower back to the transporting position.

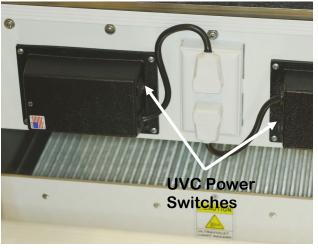
 Release the button when the bellows are fully down.



- 5. Locate the 2 UVC/UVGI switches on the Black UVC power Boxes mounted near the center of the Air Scrubber, below the tool box and Pre-filter.
 - a. You can remove the Extension Ladder by loosening the top clamps and sliding them toward the center of the Cart, then lift the ladder slightly to slide the feet of the ladder forward a few inches and out of the bottom retainer. Be sure to have the Side retainer strap in place as you carefully remove the ladder from the cart. When reinstalling the Ladder, verify that the feet are in the floor retainers and secure the upper clamps
 - b. Next, remove the Pre-Filter in the Air scrubber section and note the location of the Circuit Breaker Button on the side of the Retractable Power Cord on the Right side of the Air Scrubber.



- c. If the UVGI bulbs are not on, Turn on both UVC/UVGI switches on the black power units above the clear plastic shield. If they are still not on, check that the Door for the HEPA Filter is shut on the outside of the cart.
- d. Unshielded UVC light can cause eye damage, so there is an interlock switch on the external HEPA door that will turn them off when changing the HEPA filter, even if the operator forgets to



turn them off. Go to the outside of the cart and open the HEPA access door at the bottom of the rear panel by turning the latches and lowering it to be sure the UVC lights and the Air Scrubber Fan turn off as it is opened.

The operational test is complete. THE UVC switches should be left in the ON position

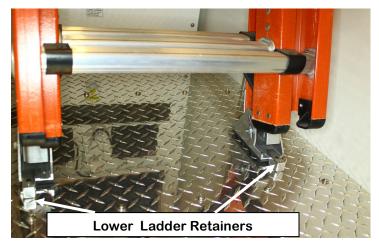
and the Pre-Filter must be re-installed.

The ladder can be returned to its service position and fixed in position with the upper clamps and its feet slid into the retainers in the floor.











For maneuvering the Bio Cart through lower doors, you may need to reposition the ladder base near the door after loosening the upper clamps. Retighten the upper clamps to secure the ladder in position. NEVER CLIMB THE LADDER IN THIS POSITION. The Feet MUST BE IN THE FLOOR RETAINERS WHEN USING THE LADDER.



Safety Information

Air-Care Bio Carts are designed to minimize hazards from dust and debris released from the Ceiling area when work is performed there. The Bio Cart has electrical power and components around which common sense and normal safety procedures must be followed to minimize exposure to any possible dangers.

The Electrical Plug is fitted with a GFI (Ground Fault Interrupter) to shut down power if there is a defective device with improper ground plugged in to the Bio Cart power. Do NOT replace this plug with a normal, non-GFI plug. Do NOT remove the ground pin on the GFI plug. Always plug the power cord into a grounded electrical outlet.

When the Bio Cart is located in the work area, set the Wheel Brakes before stepping inside the Cart to prevent movement that May cause the technician to lose their balance.

The Ladder MUST be fully seated into the bottom Brackets, and the upper support is secured to the ladder with the Clamps provided on the support prior to the technician stepping on to the Ladder. When moving the Ladder, it must be secured with the strap and snap lock attached to one side. This will hold the 3 sections of ladder in a stable configuration while being moved. To move the Bio Cart through doorways, the base of the ladder must be moved toward the door, but do NOT use the ladder in this position.

The Bio Cart HEPA UVC 13 is equipped with 2 UVC/UVGI lamps above the HEPA. To prevent eye damage the Bio Card has a clear window filter that does not allow UVC light to escape, just the safe, "blue" component of the lamps, which is visible. When changing the HEPA filter, an interlock turns off the UVC/UVGI lamps and the Air Scrubber fan motor. DO NOT BY PASS this interlock and if the window is not in place, turn off the UVC/UVGI lamps with the switch on each box above that

Observe all electrical safety procedures when using lights, Power Tools or other electrical devices in the Bio Cart. 120 Volts AC is present in all of the outlets. All power wires are enclosed in protective, insulated tracks or coiled cords. If any wire or covering appears to be damaged, it must be repaired immediately.

The Top of the Bio Cart is lifted and lowered with a Powered actuator. As with all mechanical devices, use caution when operating it and keep all materials clear of the moving parts of the actuator.

If you have any questions regarding the safe and reliable operation of the Bio Cart HEPA UVC 13, contact Air-Care, 800-322-9919 or info@air-care.com.



CAUTION

ULTRAVIOLET LIGHT HAZARD

Use with UV shield

or wear eye and face protection.

window.

Introduction to Portable Containment Carts

During Construction, maintenance or when inspections are performed in an area that may contain dust, dirt or biological contaminates, there is always the possibility for those contaminates to be released into the room and picked up by the air currents and spread to additional areas.

When Major remodeling or repairs are performed it has been standard practice to install a long term, but temporary containment area with spring poles and plastic film using HEPA air scrubbers to filter out the contaminates and exhaust clean air out of the contained area and provide a NEGATIVE PRESSURE in the work area to prevent particulates from escaping from any tiny holes or seams in the structure.

Installing this type of containment actually creates dust hazard during the installation and removal so the area immediately around it must be evacuated of sensitive individuals during that time.

If the work to be done is a simple re-lamping or running a new IT cable, the time to evacuate, build and remove a temporary containment room is much greater than the time to do the actual work. For a more efficient way to provide HEPA containment with Negative Pressure for normal work, without evacuation, the Portable Containment Cart was developed. It is rolled into place, plugged in to start the HEPA Air Scrubber, which will immediately start filtering out dust and exhausting clean air while the top is raised up to seal off the area of the ceiling where the work is to be done in a very short period of time. The area is protected while the work is performed, the ceiling tiles or light diffusers replaced. The Top of the cart is lowered just enough to clear the ceiling while it is transported to the next work area. If the next work area is in another room or on a different floor, the top can be fully retracted to move the cart through doors or into an elevator to reach that area.

The Bio Cart has added some features to make this process even more efficient. The Top is raised and lowered with one finger on the Power Lift switch. The HEPA chamber for the Bio Cart HEPA 13 has UVGI lights to neutralized captured biological contaminates, the clean air is exhausted out the bottom in a diffused pattern to prevent disturbing paperwork on tables and desks in the area, and the Ladder, which is included, lowers inside the cart so it can be moved as a unit without making a second trip to move a step ladder that may be too tall to remain inside the Bio Carts while moved.

Operation of the Air Care Bio Cart HEPA UVC 13

Air Care Bio Carts are the simplest Portable Containment carts to operate, and they also have more features than other carts. Most of the features can be set to operate in Normal situations and remain in that configuration unless special settings are required for a particular jobsite.

- The Bio Cart is first moved to the area to be contained, located under a ceiling tile or light fixture so that all 4 sides of the Bio Cart are outside that area.
- The wheel brakes should be set.



Bio Cart under Light to be serviced



Bio Cart Raised to 9 ft Ceiling



Bio Cart fully extended 13 ft 2 inches

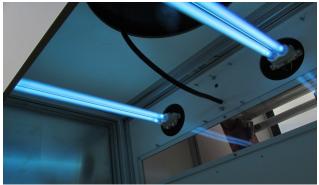
- Pull out enough Power Cord to reach a nearby Plug. DO NOT CROSS a busy hallway with the power cord. If that cannot be avoided, be sure the cord lays flat and use appropriate measures to eliminate it as a trip hazard. Always us a Grounded outlet.
- Step inside the door, close it and press the UP button on the Control Panel located near the door on the left wall. When the Foam seal touches the ceiling, release the button. If the top is raised too far, the ceiling may be damaged.
- The Air Scrubber Motor can be on and in the HIGH speed range. The power switch is built into the speed control is on the Control Panel. Turn it Clockwise to turn it ON. It Starts in High, for lower speeds turn the knob more clockwise.

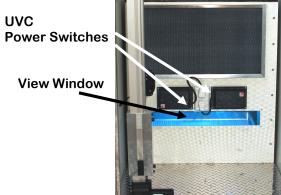
• The Manometer on the back wall will indicate when there is negative pressure in the cart by moving the red fluid line to the Right of "0". The "+" tube will be connected to the fitting for the EXTERIOR of the Bio Cart and the "-" tube will be attached to the Internal fitting.

The Manometer must be level and Zeroed for accurate readings. FIRST adjust the Manometer to be level. Pull the Velcro at the bottom away from the wall slightly so it can be nudged and rotated slightly and then

pressed back in place. Note that a very small movement will change the level a lot. The knob at the lower left can now be used to Zero the red fluid in the tube.

 The UVC/UVGI lamps should light with a blue glow through the narrow view window near the floor area. If they are not on, the switches are located on the UVC power units near the power receptacle that is above the sight window.





Inside View of UVC/UVGI lamps above HEPA Filter

- For Lower ceilings, the 6 foot height of the fully collapsed extension ladder may be tall enough for access. If a more height is needed, unbuckle the ladder retainer on one side and raise the top section of the ladder so it is just 1 step short of the ceiling.
- The Interior Lights can be left on, but if they are not, you can turn them on now. A head mounted work light and a 120 volt halogen work light are included to illuminate the working area above the ceiling. There is a Power Strip with Sockets at the top of the cart, just above the Control Panel, and a 2 socket box near the tool



box shelf.

- Before opening the ceiling, put on your PPE (safety glasses, Dust mask, disposable clothing, etc).
- Climb the ladder and move the ceiling tile out of the way and store it to the side of the opening. For re-lamping light fixtures, you will not normally need to remove any ceiling tiles.
- If power tools are required, plug them in to the AC sockets above the Control Panel.



- KEEP THE AIR SCRUBBER RUNNING DURING THE ENTIRE PROJECT AND EVEN WHEN YOU EXIT THE Bio CART. This will maintain Negative Pressure in the Bio Cart and prevent any airborne particles from escaping into the area around the cart.
- Once the job is complete, leave the air scrubber on while the ladder is lowered and secured with its strap and the bellows is lowered all the way down.
- Remove any protective clothing that may be contaminated with debris and store in a plastic bag inside the cart.
- Step outside the Bio Cart and close the door securely. It can be locked now.
- If required, install the Top Cover of the Bio Cart and secure with the Velcro straps before it is moved to the next work area. <u>This Top is NOT durable enough for</u> <u>transporting the Bio Carts in an open trailer or truck at highway speeds!</u>
- Unplug the 40 ft retractable cord and let it wind back up into the cart.
- Unlock the Wheel Brakes and carefully move the cart to the next work area.

Maintenance

Cleaning

The single most important maintenance activity for the Bio Cart HEPAs is keeping them clean. Since the Bio Cart will be used in a variety of environments, the degree of cleaning will vary with each environment.

The Cleaning protocol for each area that the Bio Cart will be used must be understood prior to transporting it to those areas. In Operating Room environments, the cart must be totally wiped down with the proper sanitizer inside and out and all wheel surfaces. In other areas, lesser measures are required. Consult with the staff in the planned work areas for detailed Infection Control procedures. Contact Air-Care if you have questions about how to meet specific requirements.

Generally, cleaning the inside of the cart after each use is recommended. With the Air Scrubber running, the air in the Bio Cart is HEPA filtered. It is recommended that the air scrubber is left running while vacuuming debris off the floor, shelf, ladder and other surfaces.

Wiping down the pleats in the bellows with a damp cloth, inside and out, between all pleated surfaces is recommended. A suitable biocide can also be used.

The Wall surfaces should also be wiped down regularly.

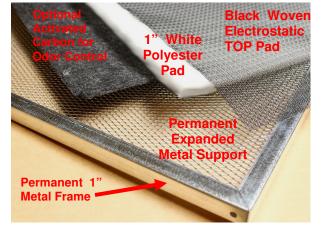
Cleaning and replacing the Pre-Filters.

There are 2 layers for the Standard prefilter in the Bio Cart Air Scrubber unit and an optional 3rd layer of Odor Adsorbing Carbon impregnated polyester pad.

- 1. The bottom layer in the filter frame is 1", non-woven, White Polyester.
- 2. The Top layer is black, woven, Electrostatic Polypropylene. These are disposable

and should both be replaced when soiled.

Odor Adsorbing Carbon Pad can be placed behind the standard 2 layers.
 This Pad cannot be washed, it must be replaced when dirty or the activated carbon has become fully loaded.. There is LESS air flow when the Carbon Pad is in place, so unless there is a need to remove odors, it does not need to be installed.



UVC/UVGI Lamps Replacement.

The UVC/UVGI lamps have a useful life of 10,000 hours. This is just over 12 months of 24/7 illumination. In the Bio Cart, they will not be on continuously, but turning them OFF and ON can sometimes reduce their useful life. Use the observation window in the Bottom of the Air Scrubber section to verify that the bulbs are both operating.

To replace the UVC/UVGI Bulbs, unplug both Power cords for the UVC/UVGI power boxes, just above the Bulb Viewing window. Remove the 4- screws on the power unit to be re-lamped, and carefully remove the box and the bulb. Press the Red Release button on the bulb socket and dispose of the bulb in the proper manner for other Fluorescent bulbs with mercury. It is best to replace both bulbs at the same time.



Do NOT touch the glass on the new bulb with your hands, oil from your fingers will cause local heating and early failure of the bulb. Use rubber gloves or other means to hold the new bulb, press it into the socket and be sure it is secure.





Install the power box into the Air Scrubber section using the 4 screws removed earlier. The far end of the bulb must rest on a support bracket on the wall of the Bio Cart HEPA UVC 13. Verify that the end of the bulb is on that bracket when reinstalling it When both units are installed, plug them in to the electrical outlet.

HEPA Filter Replacement

DO NOT replace the HEPA while on a work site.
Unplug the Bio Cart and open the HEPA door by turning the 2 latches on the Door. Slide the old HEPA out and dispose in the proper manner. It is best to place it in a plastic bag and seal it with Tape before removing it from the area. Some contaminants require the HEPA be Doubled Bagged in 6 mil



plastic bags and labeled – check your local regulations for disposing of contaminated materials.

Routine Inspection of Electrical Wiring and Interlock

Observe the wires that are visible such as the Power Lift wires and the "IN USE" light wired and if the insulation appears compromised, have it repaired or replaced immediately. The Interlock switch on the HEPA Filter Door must turn off the UVC lights and the Air Scrubber Fan when the door is opened. Contact Air Care if there are any questions on how to replace or adjust it.

Routine Inspection of the Ladder and its supports

Inspect the ladder itself for any missing or loose rivets or other parts. Look for cracks in the side rails and the steps. If these are present, replace the ladder.

The Ladder Supports in the Bio Cart must be in good working order with no missing or damaged parts. Check the pictures of the ladder supports if there is any question how it should look when in good operating condition.

Routine Inspection of the Wheels

The 4 caster wheels must not be broken or loose. Be sure the Locking mechanism works on all of them.

Handles, Door Lock, Hinges, Windows and Cart Frame.

Test the Door Handle for secure latching when closed and verify that the lock works from both inside and outside. The hinges must not be damaged or missing parts.

Check the windows and frame for loose or missing screws and replace immediately. If the windows become so scratched that the operator cannot see through them clearly, call Air-Care and order replacement panels.

Parts List

Description Bio Cart HEPA 13 Parts	Rev A P/N	Rev B P/N
Complete Bio Cart, 120 Volt version	FG0182	FG0182
Operator Manual	MM0199	MM0199
UVC/UVGI Replacement Bulbs	ACC0155	ACC0155
UVC/UVGI Replacement Power Unit with 90° plug	SABIO0128	SABIO0128
HEPA air Filter, 99.97% at 0.3 microns (SABio0049)	F0046	F0046
Pre-Filter Pad sets (5 each Polyester and Polypropylene)	SABio0156	SABi0156
Pre Filter, Disposable Carbon Pa, 11.75" x 22.5"	SABio0120	SABio0120
Wheels, 4" Swivel with Total Lock	COM0547	COM0547
Power Lift Unit, Bottom (60" or 45")	Sabio0039	Bio0051 Rev B
Power Lift Unit, Top (40" or 45")	SABio0040	Bio0052 Rev B
Window Panel for fixed window	SABio0016	SABio0016
Window, Hinged pass through with knob & Lock	SABio0023	Sabio0023
Interior Light (2 required)	Bio0030	Bio0030
Power Strip, 6 outlets	Bio0031	Bio0031
Tool Box, 3 drawer	COM0550	COM0550
Document Holder, unbreakable Polycarbonate	Bio0011	bio0011
Retractable Power Cord, 14 ga, x 40 feet	Sabio0116	Sabio0116
Power Supply for Lift (Specify 2 x 30 volt or 1 x 12 VDC)	Included with lift	COM0155
Control Panel Assembly Bio Cart 13	Sabio0047	Sabio0047
Bellows assembly, 32 x 27.5 x 3" pleats	Bio0007	Bio0007
Door Lock assembly	Bio0008	Bio0008
Door Hinges, Black	Bio0006	Bio0006
HEPA door plate	Sabio0014	Sabio0121
HEPA door Interlock Switch	Bio0006	Bio0006
Side, end and door Panels (Melamine)	Call	Call
Gasket Material, 3/4" wide x 1/4" thick,	COM0030	COM0030
Air Scrubber Motor	DLTC0004	DLTC0004
Air Scrubber Speed Control	COM0552	COM0552
Power Lift Control Switch	Bio0042	Bio0042
Replacement wiring, connectors and terminal strips	Call	Call
Ladder, 3 section, Fiberglass 15' extension Ladder	Bio0001	Bio0001
First Air Kit	Bio0034	Bio0034
Work Light, 120 Volt Halogen	Bio0036	Bio0036
Work Light, 5- LED headband with Magnetic holder	Bio0035	Bio0035
Disposable Clothing (FG0002	FG0002
Shoe Covers	COM0067	COM0067
AAA Batteries for 5- LED light	Bio0037	Bio0037
Safety Glasses	SHOP0049	SHOP0049
N95 Dust Mask	SHOP0071	SHOP0071
Top Foam Seal, 2" x 2" x 64" for sides	Bio0028	Bio0028
Top Foam Seal, 2" x 2" x 32" for ends	Bio0029	Bio0029
"IN USE" Light	SABio0048	SABio0048
Cable pulling pass through Bio0009	SABio0108	SABio0108
Coiled Extension cord for Lift Motor (Top One)	Bio0021	Bio0021
Coiled extension for "IN USE" Light	Bio0021	Bio0021
Control Panel DECAL (No Cut Outs)	Bio0043	Bio0043
Top Dust Cover (Coroplast with Velcro straps	SABio0123	SABio0123

Specs: Bio Cart Model Comparison

The Bio Cart comes in two models that meets the requirements of any service professional. The fully equipped Bio Cart 13 reaches ceiling heights of 13 feet and comes with a number of features that can make the job easier or take less time than other competing models provide. If you're in the market for a more affordable option the Bio Cart 10 doesn't have as many bells and whistles as the Bio Cart 13 and reaches heights of 10 feet for more standard ceilings.

* Denotes An Exclusive To Air-Care Bio Carts)

Bio Cart 13		Bio Cart 10
73" L x 32" W x 77" H (inches)	Size Collapsed:	73" L x 32" W x 77" H (inches)
73" L x 32" W x 158" H (inches)	Size Fully Extended:	73" L x 32" W x 120" H (inches)
445 lbs with ladder and tool box & Filters	Weight:	400 lbs
Extruded aluminum frame with walls with Melamine skin with easy to clean white thermal bonded surface. Aluminum, power lift mechanism.	* Construction:	Extruded aluminum frame with walls with Duramine skin with easy to clean white thermal bonded surface. Aluminum, power lift mechanism.
One hinged, lockable, as a tool pass through from the outside and one fixed window.	Windows:	One hinged, Lockable, as a tool pass through from the outside.
Cable feed though with 4 rollers and a heavy bristle air seal.	Cable Pass Through:	Cable feed though with 4 rollers and a heavy bristle air seal.
2- stage power lift with foam seal at top, for ceilings from 7 ft to 13 ft 2 inches high.	* Top Lifting Mechanism:	2- stage power lift with foam seal at top, for ceilings from 7 ft to 13 ft 2 inches high.
Fire retardant black and yellow vinyl that is 3 inches high when collapsed and 90 inches extended.	* Bellows:	Fire retardant black and yellow vinyl that is 3 inches high when collapsed and 60 inches extended.
Aluminum frame with a white thermal bonded skin that is 27 inches W 66, inches H, locking from inside or outside.	Door:	Aluminum frame with a white thermal bonded skin that is 27 inches W 66, inches H, locking from inside or outside.
4 inches dia x 2 inches wide non-marking rated at 900 Lb (for 4) with total lock for wheel brake and swivel.	* Wheels:	4 inches dia x 2 inches wide non-marking rated at 900 Lb (for 4). 2 with total lock for wheel brake and swivel.
880 CFM @ 300 Watt – 62 Db at max speed with variable speed control capable of reaching p to 6 air changes per minute.	* Air Scrubber Fan:	880 CFM @ 300 Watt – 62 Db.
Removable Frame with Disposable Pad. Carbon odor adsorber pad. HEPA 99.97%	* Filtration:	Removable Frame with Disposable Pad. Carbon odor adsorber pad. HEPA

Bio Cart 13		Bio Cart 10	
@0.3 micron .		99.97% @0.3 micron .	
Externally visible LED "IN USE" light with switch.	Caution Sign:	Externally visible LED "IN USE" light.	
Document holder on door.	Document Protection:	Document holder on door.	
2 LED light strips provide indirect lighting.	Lighting:	1 LED light strips provide indirect lighting.	
Power outlet strip at top of cart and dual outlets for recharging tools on tool box shelf	Power Outlets:	Power outlet strip at top of cart	
Built in with a 40 foot long retractable power cord with GFI plug and roll up guide mechanism and circuit breaker.	* Power Cord:	Built in with a 40 foot long retractable power cord with GFI plug and roll up guide mechanism and circuit breaker.	
Control panel with lift up-down switch and air scrubber fan speed control plus interior light switch and "IN USE" light switch.	* Controls:	Control panel with lift up-down switch and air scrubber fan switch	
(5) N95 dust masks, (5) sets of disposal clothing including shoe covers, first aid kit, (2) pairs of safety glasses.	* Personal Protective Equipment:	Optional	
2 UVGI germicidal lamps in HEPA chamber.	UVC/UVGI Lighting	Not Included	
15 ft. fiberglass 3 section extension ladder (6 ft closed) that Meets OSHA requirements for electrical safety and Class A rated for 300 lbs.	* Ladder:	Not Included. Will accommodate user provided, 6 ft or 8 ft Step Ladder.	
HEPA door switch for fan and UVC/UVGI.	* Interlock:	Not Included	
3 drawer locking steel tool box.	* Tool Box:	Not Included	
150 Watt halogen work light. 5 LED portable head band light with magnetic holder and batteries.	* Accessories:	Not Included	

Compliance Information

Bio Cart HEPA-UVC 13 complies with all relevant health and safety guidelines for portable, negative air, dust containment carts used in healthcare facilities such as ICRA 1 through 4, and others listed below.

Because the occupants of healthcare facilities are often more susceptible contaminates introduced into the air by routine maintenance work to and above the ceilings, the Center for Disease Control (CDC) has created strict guidelines for how this work must be performed while minimizing the risks to sensitive individuals in its guidelines for Infection Control in Healthcare Facilities (ICRA).

Activities such as testing fire and smoke sensors, adding or rerouting wires and fiber optic lines for IT equipment, cleaning air system components, changing electrical wiring, all must include consideration for controlling the amount of dust and infectious particles that might be disturbed and introduced into the air.

The Bio Cart HEPA UVC13 is a portable containment cart that extend to any ceiling 13 ft 2 in high, with a ladder that remains inside to reach the work area. The Bio Cart provides negative pressure and air exchange rates to comply with CDC guidelines to contain dust and infectious particles. Bio Cart HEPA 13 adds UVGI irradiation in the HEPA Filter compartment to neutralize infectious particles captured by the 99.97% HEPA filter. The clean air is then exhausted out the bottom as a diffused flow so it cannot disturb documents on desks. The Bio Cart complies with the CDC's ICRA 1-4 Guidelines, and also meets fire control guides for using flame retardant materials and able to quickly be relocated from fire evacuation routes.

Built to Compliances, Standards, and Recommendations

ASHRAE 52.2:2007

ICRA Class 1-4 Compliant

OSHA 1910.1000 Air Contaminants: Nuisance Dust

OSHA IMIS

• 9135, 9130

OSHA/ACGIH Respirable Dust Compliant

CDC/HICPAC Guidelines for Environmental Infection Control in Health-Care Facilities

- 3.b, 3.b, 3.d.iii, 3.d.iv
- Part IV Appendix B. Air,

VI.C.1. Environmental controls

• VI.C.1.a, V.I.C.2, V.I.E.



LIMITED WARRANTY Bio CART HEPA UVC 13

Air-Care warrants this product to be free from defects in materials and workmanship to the original purchaser for a period of Five (5) years from the date of purchase. Components listed below are excluded from this Five year period and are covered for periods described below:

Blower Motor1 YearSpeed Controller1 YearBellows1 YearUV Light Assemblies1 YearCord Reel90 Days

Lift Motor & Assembly 1 year (Progressive) or 90 days (Firgelli)

Ladder, Wheels, & Filters No Warranty

Warranty covers both parts and labor (labor is to be performed at Air-Care's facility located at 3868 E. Post Road; Las Vegas, Nevada).

Warranty is extended to the original purchaser and is **not** transferrable.

This warranty does not extend to any damage to a product caused by or attributable to freight damage, abuse, misuse, improper or abnormal usage. Warranty is also void if the product has been modified or altered in any way.

The purchaser is responsible for the cost of shipping the equipment to Air-Care's facility for evaluation. If found to be defective and covered by the terms of this warranty, Air-Care will pay FedEx ground shipping charges on the repaired or replaced item back to the purchaser's location. Any additional expedited service charges for quicker shipping shall be born by the purchaser. If the product or component is not found to be a warranty issue, the purchaser will be responsible for return shipping charges.

Air-Care is not responsible or liable for indirect, special, or consequential damages arising out of or in connection with the use or performance of the product; damages with respect to any economic loss, loss of property, loss of revenues or profits, loss of use, or other incidental or consequential damages of whatsoever nature.

The warranty extended hereunder is in lieu of any and all other warranties, and any implied warranties of any type.

This warranty gives you specific rights. These rights and others vary from state to state.

Division of D.P.L. Enterprises Inc.

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