15 GALLON

HEPA FILTERED VACUUM

WET/DRY

EXPRESS AIR FORCE 15

INSTRUCTION MANUAL



All products that have rated efficiencies of 99.97% @ 0.3 microns and/or 99.99% @ 0.3 microns, have H.E.P.A. filters that have been individually tested to meet these minimum efficiencies.

Although all the filters have been pre-tested, the possibility of leaks or filter failure due to handling, transportation, punctures, loaded filters, moisture, wear and tear, etc., does exist.

Therefore, when using this equipment in highly sensitive areas or where any release of particles above and beyond the minimum efficiencies would be detrimental and harmful to humans, plants or property; it is strongly recommended that the units be individually tested prior to their use.

This is to assure that they are maintaining the efficiency levels, which they were designed to filter out.

FAILURE TO DO SO COULD RESULT IN SERIOUS HARM TO HUMAN LIFE, PLANT LIFE AND/OR PROPERTY.

"READ AND SAVE THESE INSTRUCTIONS"

RISK OF FIRE, ELECTRIC SHOCK, OR PERSONAL INJURY

IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS

BEFORE USING (THIS APPLIANCE)

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 airflow.
- 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."
- 15. "Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes."
- 16. "Do not use without dust bag and/or filters in place."
- 17. Do not wrap the cord around the dome. Wrapping the cord around the dome will restrict the motor from exhausting properly and will result in overheating and damaging the motor
- 18. This vacuum cleaner should never be used in explosion-hazardous areas or to pick up combustible or flammable liquids such as gasoline, etc.
- 19. This vacuum should never be operated without the proper filters installed in the manner described in the following pages of this manual.
- 20. This machine should never be serviced by anyone other than an authorized technician.
- 21. This vacuum is for commercial use only.
- 22. Use only original replacement parts and attachments.

OPERATING INSTRUCTIONS

INSPECTION

Thoroughly inspect your machine for any shipping damage. Your machine has already been thoroughly tested at the manufacturing plant prior to shipping.

ELECTRICAL SPECIFICATION

This machine is designed to operate on a 15 amp. 115V., 60 hz., AC circuit. A deviance of this could cause serious damage to the unit.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician. **Sketch A Fig. 20**

This appliance is for use on a nominal 120-V circuit and has a grounding attachment plug that looks like the plug illustrated in sketch A in Figure 20. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.





Grounding Pin

MAINTENANCE

Lubrication of this motor is not required as it is equipped with sealed bearings.

Always keep the air cooling intake screen free, not allowing any restriction of airflow. Airflow restriction will over heat and damage the motor.

To prolong the life of the HEPA filter, empty, clean, and replace bags and filters regularly as described in the following sections.

STORAGE

Before storing your vacuum disconnect from electrical outlet.

The tank should be emptied and cleaned.

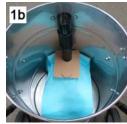
The cord should be coiled and stored so as not to create a tripping hazard.

The vacuum should be stored indoors.

TANK AND FILTER PREPARATION

1. Layout the paper collection bag (#520032) and fold back the side closest to the opening. (See Photo 1a) Place the paper collection bag (#520032) into the bottom of the tank. Pull the cardboard/rubber collar over the down tube, pulling it just above the rib on the down tube. Then gently pull apart the accordion-like pleats so that the bag is open. (See Photo 1b)





2. Open the filter protector bag (#520034) and push it down into the tank. Take the elastic bag and pull it over the top of the tank. The elastic band should rest on the outside of the tank below the rim. (See Photo 2)



3. Make sure the impaction prefilter (#520316P) is in proper placement over the HEPA filter, make sure that it covers the entire surface area of the HEPA filter. (See Photo 3)



4. Take the non-clinging dacron bag (#520210) and pull the elastic band up over the HEPA filter, and let the elastic band rest securely on the motor port of the lid assembly, above the HEPA filter flange. (See Photo 4)



 Place the lid assembly (with the HEPA filter securely bolted in place) onto the tank and snap the latches into place. (See procedure for changing the HEPA filter section of this manual) (See Photo 5)



6. Vacuum is ready for use. Plug in vacuum. On/Off switch is located on the motor dome.

FILTER MAINTENANCE AND REPLACEMENT INSTRUCTIONS

Warning: When a loss of vacuum power is detected, the vacuum should be turned off immediately. Continued use of the machine could result in severe damage to the motor and/or HEPA filter. This loss of vacuum power could be caused by one of the following:

- A. The paper collection bag may be full and needs to be replaced.
- B. The tank may be full and needs to be emptied.
- C. The wand, hose, or down tube may be clogged and needs to be cleared.
- D. The impaction prefilter may be clogged and needs to be replaced. (Never try to clean the impaction prefilter, it should be discarded.) See section on changing the impaction prefilter.
- E. The Dacron bag may be clogged and needs to be cleaned or replaced.
- F. The HEPA filter may be clogged and needs to be replaced.

To prolong the life of the HEPA filter and motor, the paper collection bag should be changed when it is 1/2 full. The filter protector and impaction prefilter should be changed at least every other time that the collection bag is changed

PROCEDURES FOR REMOVING CONTAMINATED FILTERS

Caution:

When removing contaminated filters or using this machine, you should always wear gloves, clothing and a respirator approved for the particular contaminant that you are working with.

FILTER REMOVAL PROCEDURES

- 1. Turn off and unplug machine
- 2. Slowly and carefully lift one side of the lid assembly from the tank. Holding the lid with one hand, reach under the lid and gently tap all around the dacron filter bag, allowing any loose dust particles to drop into the tank.
- 3. Carefully lift the lid assembly off the tank and slide the Dacron bag off the lid assembly. With a damp rag, wipe underside of the lid assembly. Set aside and dispose of rag properly. (Never set the lid assembly down on the HEPA filter).
- 4. Remove the impaction prefilter. (by sliding it off the end of the HEPA filter). Dispose of contaminated filters properly.
- 5. Carefully pull the paper filter protector bag over the rim of the tank and remove it from the tank. Dispose of contaminated filters properly.

Caution: Be careful not to create any airborne dust by snapping the elastic bag

- 6. Take the collar of the paper collection bag and carefully slide it down and off the down tube and remove the collection bag from the tank. Dispose of properly.
- 7. Take a damp rag and wipe down the inside of the tank. Dispose of contaminated rag properly.
- 8. All hazardous waste must be disposed of properly. Never put contaminated debris in a regular trash container. All debris must be placed in a properly labeled bag or container, and should be removed by a licensed waste hauler. Check with Federal, State, and Local officials for proper handling and disposal of the waste you are handling.

CONSULT PROPER AUTHORITIES FOR REGULATIONS REGARDING DISPOSAL OF FILTERS AND DEBRIS

PROCEDURE FOR CHANGING THE HEPA FILTER

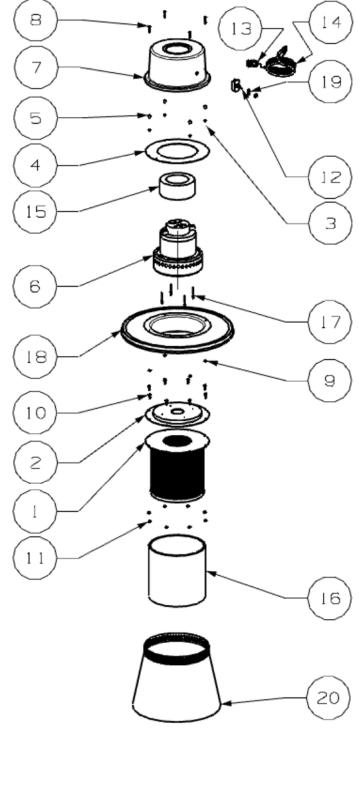
- 1. The precautionary steps described in this manual should be used when changing the HEPA filter.
- 2. NOTE: You must follow Local and or Federal guidelines when working with contaminated filters.
- 3. Remove the eight (8) bolts holding the HEPA filter to the filter mounting plate, using a Phillips screwdriver and a 11/32" wrench.
- 4. Carefully remove the HEPA filter from the filter mounting plate, being careful not to create any airborne dust.
- 5. This filter cannot be cleaned, and should be disposed of in an appropriate manner.
- 6. Re-install the new HEPA filter securely tightening the eight screws, nuts, lock washers, and flat washers.
- 7. Replace the impaction filter, on the HEPA filter.



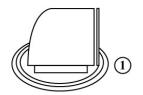
15 GALLON LID ASSEMLBY

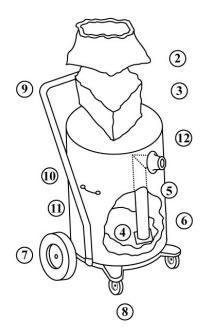


PC NO	PART NO	PART NAME	QTY
1	520307	HEPA FILTER	1
2	520367	FILTER MOUNTING PLATE	1
3	520215	SMALL SPACER	4
4	520304	MOTOR HOLD DOWN	1
5	520214	LARGE SPACER	4
NOT SHOWN	520029	UPPER MOTOR GASKET	1
6	520365	MOTOR	1
7	520001	DOME	1
NOT SHOWN	520029	LOWER MOTOR GASKET	1
8	861761	8-32 X 1 SCREW	4
9	861537	8-32 NYLON LOCKNUT	4
10	862092	10-32 X 5/8 HEX HEAD FLANGE BOLT	8
11	861770	10-32 NYLON LOCKNUT	8
12	520015	SWITCH	1
13	520013	ELECTRICAL CORD STRAIN RELIEF	1
14	520010	ELECTRICAL CORD	1
15	520016	FOAM RING	1
16	520316	IMPACTION FILTER	1
17	861422	RIVET	4
18	520008	LID	1
NOT SHOWN	520018	LID GASKET	1
19	860170	SWITCH ON/OFF LABEL	1
NOT SHOWN	520014	LID EDGING GASKET	1
20	520210	DACRON BAG	1
	520362	MOTOR & LID ASSY COMPLETE	



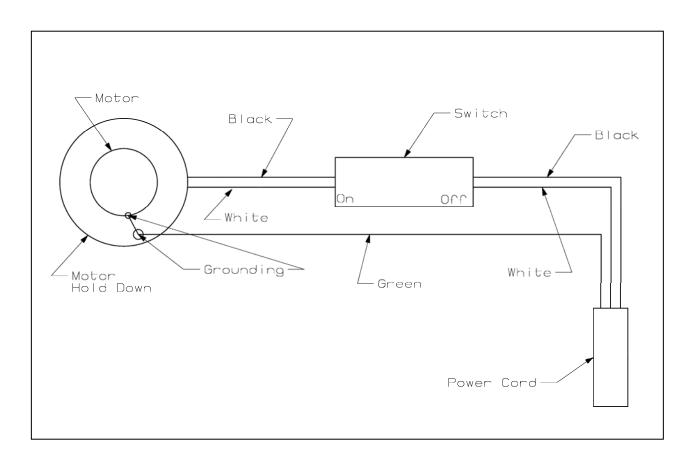
15 GALLON TANK ASSEMBLY





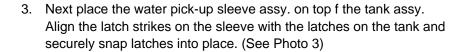
PC NO	PART NO	PART NAME	QTY
1	861157	LID ASSEMBLY	1
2	520210	DACRON FILTER BAG	1
3	520034	PAPER FILTER PROTECTOR	1
4	520032	COLLECTION BAG	1
5	520321	DOWN TUBE ASSEMBLY	1
6	520203	15 GAL SS TANK	1
7	520227	REAR WHEEL	2
8	520228	FRONT CASTER	2
9	520229	HANDLE	1
10	520222	TANK SIDE HANDLE	2
11	520320	TANK HANDLE CLAMP	2
NOT SHOWN	540001	LID LATCH	2
NOT SHOWN	520328	15 GAL SS TANK COMPLETE	1

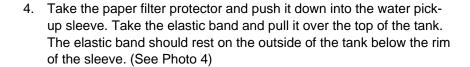
#15 GALLON WIRING DIAGRAM

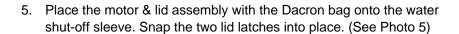


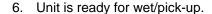
OPTIONAL WET PICK-UP CONVERSION - #860913

- 1. Remove all paper filters from the vacuum tank assembly and remove the lower portion of the down tube. (See Photo 1)
- Place the water shut-off float assembly onto the tank. Make sure the rubber gasket on the float plate is seated on the top rim of the tank (See Photo 2)









WARNING:

For safe and proper water pick-up, the conversion assy. must be assembled exactly as shown.

IMPORTANT:

When converting for wet pick-up, the upper clamp on the down tube coupler (located in the tank assy.) must be loosened and bottom half of the tube removed; this will prevent water from splashing up on the HEPA filter. (See Photo 1)











WARRANTY

HEPA Vacuums are warranted for 2 years from the date delivered to the original end user and may not be assigned or transferred.

Parts, which become defective due to faulty workmanship or materials during normal use in this period will be repaired or exchanged at no charge if returned and approved by an authorized service center. All replaced or repaired parts shall only be warranted for the remainder of the original two year warranty period.

After the expiration of the two year warranty. All warranties on this unit including fitness for a proposed usage or purpose will become void.

The end user shall be responsible for freight charges incurred to deliver warranted product to an approved service center. Manufacturer shall be responsible for freight charges incurred in returning unit to customer, but not to exceed the original freight charges to customer.

It shall be wholly Manufacturer's decision to repair, replace or refund the purchase price of any such defective goods.

This warranty does not apply to normal wear and tear, neglect, misuse, abuse or incorrect installation. If any other replacement parts, filters or attachments are used other than original parts, this warranty will become void.

Manufacturer disclaims responsibility for loss of production, profits, goodwill or any other costs that may indirectly occur due to the failure of this product.

H.E.P.A. FILTER STANDARDS AND CERTIFICATION

H.E.P.A. filtered vacuums are built in accordance with ANSI Z9.2 standards.

All H.E.P.A. filters are manufactured and individually tested using the MIL-STD 282 D.O.P. test, or the IEST-RP-CC-001.3 test method.

Each filter is tested and certified to have a minimum efficiency of 99.97% @ 0.3 micron particles. All filters are then individually labeled and registered by the manufacturer.

All H.E.P.A. filters used in equipment meet, and in most cases, exceed the minimum standard of 99.97% efficiency @ 0.3 micron particles, and comply with OSHA and EPA standards for cleaning the air of toxic and nuisance dust such as mold, lead and asbestos.