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**To learn more about our products and services visit
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pulsebac[®]

552, 552H & 576

OPERATORS SERVICE MANUAL



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Congratulations, you have purchased the latest innovation in commercial vacuum and dust recovery equipment. This manual will help you to get the most from your purchase.

Pulse-Bac® 500 MK.2 Series Vacuums are shipped free from defects; however you should make an initial inspection to ensure that no damage has occurred during shipping and familiarize yourself with the operation and proper use of your new Pulse-Bac®.

Safety is paramount when operating any machinery. Safety is a combination of common sense and staying alert when operating industrial equipment. Read this operator's manual and understand it. The following safety rules should be observed when operating the vacuum.

SAFETY SIGNAL WORDS USED IN THIS MANUAL AND THEIR MEANING ARE AS FOLLOWS:

DANGER: Means if the safety information is not followed, it is likely that the operator or by-standers risk of being seriously injured or killed is very high.

WARNING: Means if the safety information is not followed, the operator or bystanders could be seriously injured or killed.

CAUTION: Means if the safety information is not followed the operator, or by-stander may be injured or the vacuum machine may be damaged

WARNING: PREVENTING ELECTRICAL SHOCK

To reduce the risk of fire, electrical shock, or injury, read and understand the owners manual and all labels on the Pulse-Bac® before operating. Use the Pulse-Bac® only as described in this manual.

Your Pulse-Bac® is designed to vacuum dry material only.
Never use the machine to vacuum liquids of any kind.

CAUTION: REDUCING STATIC SHOCK

Static Shocks are common and occur in dry areas or when the relative humidity of the air is low. Be aware of low humidity conditions and if static shocks are persistent, use a static reduction vacuum hose to reduce static shock.

Pulse-Bac Vacuums recommends anyone using a Pulse-Bac® for collecting wood dust to always use a static reduction hose. Keep in mind wood particles create static electricity even when the humidity is normal.

UNPACKING & CHECKING CARTON CONTENTS

- Remove the vacuum and all the contents of the shipping carton or cartons.
- Check each item against the packing list.
- Contact your delivery company if any items are damaged or missing. If you require additional assistance contact Pulse-Bac Vacuums customer services at 866.954.9700.

CAUTION: PROPER EXTENSION CORD USE.

It is very important to use the proper extension cord with power tools, the performance and life of the equipment depend on it. Using an improper extension cord can cause the equipment to malfunction and become damaged. It can also cause harm to the operator. Listed below are the recommended extension cords for different lengths for use with your Pulse-Bac®. Do not use any other size of extension cord with your Pulse-Bac® but the sizes listed below.

Extension Cord Length	Wire Gauge (AWG)
0—50 Ft.	12 Gauge

INTRODUCTION TO THE 500 SERIES

Every Pulse-Bac® dust extractor vacuum and dust recovery system is designed for applications that require different levels of lift (suction) and CFM (flow rate). The 500 MK.2 series is designed to be used with hand held power tools or for general clean up and features our patented Pulse-Bac® Automatic Pulse-Clean Technology. This technology prevents the filters from clogging and losing suction during operation.

Pulse-Bac 500 MK.2 series dust vacuums are designed to be used with hand-held power tools to capture, collect and control dust or for every day clean up of dry, non-combustible materials. The 552H is HEPA Certified and can be used to capture dust from lead Paint, Concrete, Drywall, Stone, Masonry, Wood, Fine powders, Asbestos, Fiberglass, Plastics, Metals and any other dry non-combustible material.



Patents and Awards

- US Patent # 7082640B2, other patents pending.
- World of Concrete Most Innovative Product (2005, 2006, 2007, 2008 & 2009)
- Rental Equipment Register's Innovative Product of the Year, 2004.



Specifications

MODEL	552	552H	576
CFM	150	150	176
Lift	87"	87"	97"
Collection	8 Gallon Steel Tank	8 Gallon Steel Tank	8 Gallon Steel Tank
Weight	30 lbs.	30 lbs.	31 lbs.
Inlet	1.5" (Locking)	1.5" (Locking)	1.5" (Locking)
Amperage	12.5@110V / 6.6@220V	12.5@110V / 6.6@220V	12.2@110V
Voltage	110V/220V*	110V/220V*	110V

OPERATION

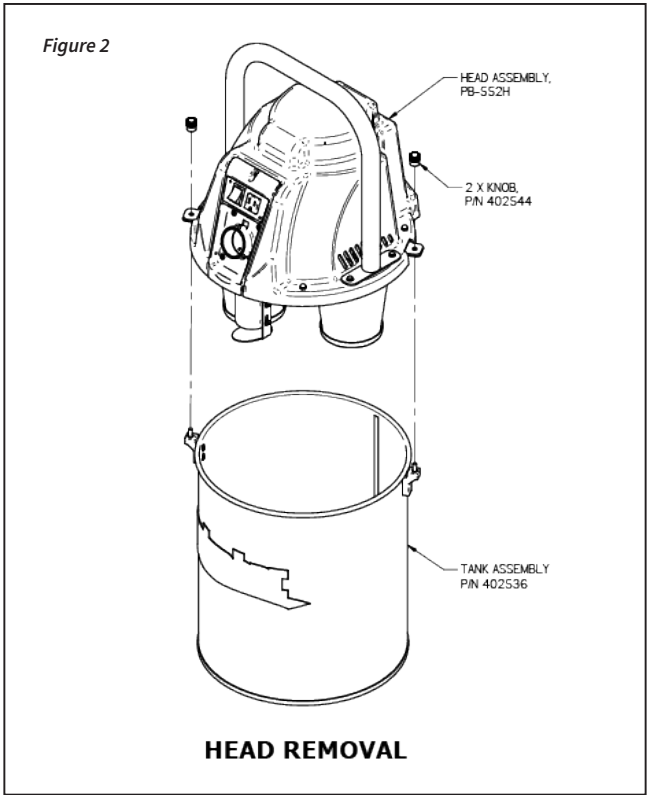
The 500 MK.2 Series comes fully assembled and ready to operate, all you have to do is plug it in and turn the power switch on. 500 MK.2 series dust vacuums operate on a 110V AC 50/60 Hz. Listed below are some safety tips while using Pulse-Bac® vacuum equipment.

CAUTION: SAFETY TIPS FOR PROPER USAGE

- **Never operate in a wet environment.**
- **Never operate with an ungrounded power source.**
- **Never operate with an improper or ungrounded electrical extension cord.**
- **Never operate unattended.**
- **Never vacuum hot ashes or combustible materials.**
- **Never operate in conjunction with any ungrounded equipment.**
- **Always use a proper 120 volt 20 amp electrically protected outlet to operate.**
- **To reduce risk of electrical shock, do not expose to rain and always store indoors.**
- **Never operate the Pulse-Bac® dust vacuum in the presence of explosive vapors.**
- **Always unplug the Pulse-Bac® when not in use and before servicing.**
- **Turn your Pulse-Bac® off before unplugging from the power source.**
- **Never operate the Pulse-Bac® from a generator that is not grounded.**

EMPTYING TANK

- Remove the 2 knobs holding the Head Assembly on the Tank. (Refer Figure 2: Empty Tank)
- Remove the Head Assembly using the handle on the Head Assembly and place it on a flat surface where it is safe from falling.
- Place the Head Assembly on the tank so that the two alignment pins mounted on the tank align with the mounting holes on the Base Plate of the head assembly.
- Secure the head assembly with the two knobs.



WARNING

To reduce the risk of injury from accidental starting, turn the vacuum off and unplug the power cord before emptying the collection tank.

To reduce the risk of back injury or falls, do not lift a collection tank heavy with dust and debris. Scoop enough contents out to make the collection tank light enough for one person to lift comfortably.



Our Automatic Tool Start feature will start the vacuum for you when you start your tool. Plug your tool into the Automatic Tool Start and switch the power button to auto. When your tool activates, the vacuum will turn on automatically. When the tool turns off, the vacuum will run for 3 seconds to clear the hose before it shuts off.



CAUTION:

It is important to consider the current draw (amp rating) of the tool you are using with the ATS system. Tools should not exceed 15 amps. Depending on the wall circuit it is possible that the combined draw of the vacuum and tool could trip the circuit breaker. If the breaker trips look to see if any there are any other devices on the circuit. If not discontinue using the ATS and find another outlet for the tool.

SERVICING YOUR PULSE-BAC

With regular use the Pulse-Bac® vacuum may require repair of critical components from time to time. This section of your manual will provide information for a qualified technician to make repairs to the machine when required. Most repairs to the machine can be made at your facility if the technician making the repairs is trained in electrical and mechanical theory. If you are not qualified to repair the vacuum contact Pulse-Bac Vacuums Service Department or have the unit returned to Pulse-Bac Vacuums™ or one of Pulse-Bac Vacuums's authorized service centers for repair. If you or someone you know is qualified to service the unit and need assistance, contact the Pulse-Bac Vacuums Service Department and a qualified technician will assist you to complete the repair.

Pulse-Bac Vacuums recommends that any repairs made to the valve system in the Pulse-Bac® be made by Pulse-Bac Vacuums or a technician who is qualified to repair electro-mechanical equipment. If you or someone you have retained plans to make repairs on your Pulse-Bac®, you will need the following tools and test equipment:

- Volt / Ohm Meter (digital or analog)
- Phillips Screw Driver # 4 & # 3,
- Needle Nose Pliers,
- 5/16" Nut Driver,
- 3/8" End Wrench
- 1/8" X 2" Slot Screw Driver.

FILTER INSTALLATION & REPLACEMENT

The 552 comes with two Individually tested HEPA Certified filters installed. The 552H has an additional HEPA IEST RP CC007.3 filter installed. To replace twist on filters and ensure proper filter installation in the unit follow instructions below.

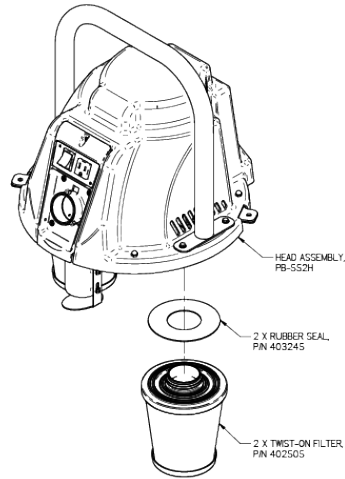
Step 1. If not already installed, install the rubber seal (P/N #403245) onto the top of the Twist-on filter as shown in Figure 3 : Then twist the filter into the receiver under the head assembly counter clock wise until tight.

Step 2. Check to ensure that the filter receiver is clean and void of any dust or foreign material before screwing your filter into place.

Step 3. Insert the filter into the filter receiver and twist in a clockwise direction until the filter just touches the base, then turn the filter one quarter turn to tightly secure it.

Once the filters have been installed, the vacuum is ready to be put into service. (The 552H's third HEPA Filter is located inside the vacuum unit. See next page.)

Figure 3



FILTER REPLACEMENT

CAUTION:

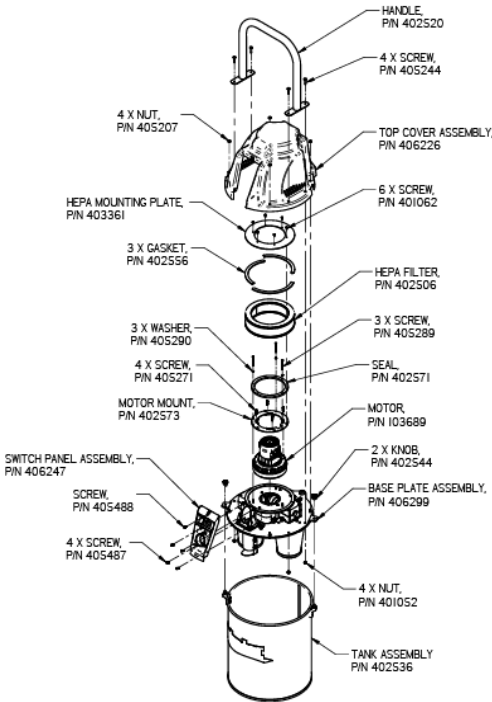
Once you have installed the filters on the Pulse-Bac®, the filters should never be removed unless they are to be replaced. Removing the filters after initial installation can cause various problems if not reinstalled properly. Since your new Pulse-Bac® cleans its filters automatically, you should never have a reason to remove the filters other than for replacement. It is recommended that filters be changed every 6-8 months when used daily.

If you need assistance or require additional information when installing the filters, you can contact Pulse-Bac Vacuums Customer Services Department at 866.954.9700 we will put you in contact with a technician that can help you accomplish the installation and answer any questions you may have.

HEPA FILTER REPLACEMENT

552H Model

Figure 4



The HEPA filter located under the hood is a Industrial rated IEST RP CC007.3 filter. certified to capture dust particles .3 micron in size at a 99.99% efficiency rating. The twist on filters are a HEPA filter, capable of capturing dust particles .3 micron in size at a 85% or better efficiency rating and a 100% efficiency rating at 2 micron and above.

Chart of average material micron sizes:

Lead Dust	2.0 Micron	Asbestos	.7 - 30 Micron
Copier Toner	.5-15 Micron	Saw Dust	30 - 600 Micron
Drywall	10 Micron	Cement Dust	3.0 - 100 Micron
Mold	3.0 - 12 Micron	Fiberglass	1.0-1000 Micron

HEPA Filter Removal:

Step 1. Turn the switch to off position and unplug the power cord.

Step 2. Remove the 4 x nuts, #10-32 acorn, holding the top cover. Remove the 4 screws (405487) holding the Switch Panel to remove the Top Cover

Step 3. Disconnect the motor wires and Switch Wires from the pc board.

Step 4. Remove the 6 screws, #6-32-0.375".

Step 5. Remove the HEPA mounting plate to remove the HEPA filter.

Install New HEPA Filter:

Step 6. Place the new HEPA filter on the plenum Covering the plenum so that the outer diameter of the filter is aligned with the outer diameter of the gasket.

Step 7. Place the HEPA mounting plate on the HEPA filter such that the six mounting holes of the mounting plate are aligned with the six threaded inserts on the motor mounting plate.A

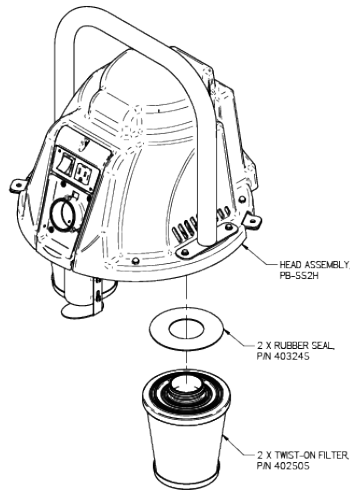
Step 8. Fasten HEPA mounting plate to the motor mounting plate using 6 screws, #6-32-0.375".

Step 9. Connect one motor wire to 'line' and the other to 'neutral' pins on the pc board such that they are securely held in place.

Step 10. Install the top cover by aligning 4 holes on the top cover with the 4 x studs, #10-32, on the baseplate and fasten it in place with 4 x nuts, #10-32, acorn (refer to figure 4).

MOTOR REPLACEMENT

Figure 5



FILTER REPLACEMENT

Motor Removal:

For 552H Models, follow steps 1-5 of HEPA Filter Replacement (pg. 8) before completing the following steps.

For 552 Models, follow steps 1-3 of HEPA Filter Replacement (pg. 8) before completing the following steps.

Step 1. Disconnect the motor from the Printed Circuit Board.

Step 2. Remove the four # 10-19 screws securing the motor.

Step 3. Remove the 3 x # 10-32-2.5" screws securing the motor.

New Motor Installation:

Step 4. Place the new motor on the plenum cover so that the center of the motor is aligned with the center of the plenum cover.

Step 5. Place the motor mounting plate on motor so that the 3 mounting holes are aligned with the threaded standoffs

Step 6. Secure the motor mounting plate to the motor using the 4 screws.

FOR ASSISTANCE
SERVICE DEPARTMENT
866.954.9700
M-F 8AM-5PM

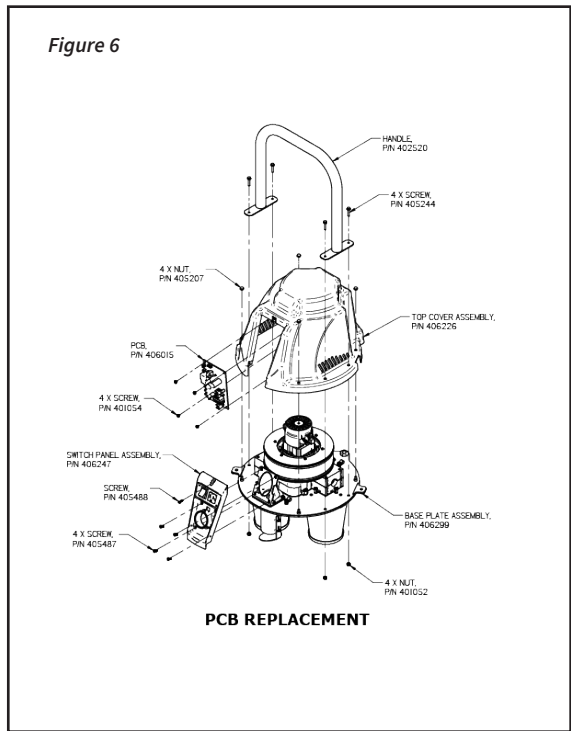
PRINTED CIRCUIT BOARD REPLACEMENT

Step 1. Disconnect the Pulse-Bac® from the electrical power source.

Step 2. Remove the top cover assembly by removing the 4 1/4"-20 Cap Nuts and the 4 screws (405487) holding to Switch Panel to remove the Top Cover.

Step 3. Remove the 4 screws (401054) holding the PCB on the PCB Mounting Plate.

Step 4. Install the new PCB by aligning the four mounting holes with the mounting bosses on the electrical panel and secure the PCB with four screws.



TROUBLESHOOTING

- Unit will not start: Check the power source at the electrical outlet. Check cord cap for proper connection. Check to see the switch is in the ON position and light is on.
- Unit's Lift & CFM are low: Check to see if vacuum head is properly aligned on the tank and the seal is in good condition. Check to see if filters have become saturated with debris. Check to see if Pulse Bac® filter cleaning system is operating correctly. Check inlet and hose for obstructions.
- Dust coming out of head: Check to see if filters are Installed properly and seals are in good condition. Check filters for tears or cuts. Check to see if filters are saturated.
- Motor is not working: Check power to unit. Check power switch, Check motor.

LIMITED WARRANTY

Pursuant to the specific terms and conditions set forth herein, Pulse-Bac Vacuum Systems, LLC. ("Pulse-Bac Vacuums") warrants all products manufactured by Pulse-Bac Vacuums™ for a period of one (1) year from any defects in materials and workmanship arising under normal usage and care. Components manufacturers offer separate warranty periods. The aforesaid warranty shall extend only to the original purchaser of the product and all Pulse-Bac Vacuums Distributors based on the original date of purchase, but under no circumstances shall the warranty extend past thirteen (13) months from Pulse-Bac Vacuums original shipment date, regardless of to whom the shipment was sent or when the purchaser purchased the product. The original date of purchase will be the date indicated on a bill of sale or receipt.

The purchaser's remedies under the aforesaid warranty and Pulse-Bac Vacuums total obligation under the aforesaid warranty is limited to repair or replacement of any and all parts or components covered under this limited warranty at the sole discretion of Pulse-Bac Vacuums. The product or products must be returned to Pulse-Bac Vacuums place of business, along with a copy of the bill of sale or receipt indicating the original date of purchase, and all freight costs associated with the return of the product or products to Pulse-Bac Vacuums for repair or replacement and subsequent freight costs associated with the return of the product or products to the purchaser will be the sole responsibility of the purchaser. In the event that the original date of purchase cannot be determined by a bill of sale or receipt, then the original shipment date according to the records of Pulse-Bac Vacuums shall be used as the original date of purchase. This limited warranty is not transferable or assignable. This limited warranty shall not apply if the product or products have been abused, misused, altered or damaged by purchaser or a third party. IN NO EVENT WILL Pulse-Bac Vacuums BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER DAMAGES OR FOR ANY CONTINGENT LIABILITY ARISING OUT OF THE FAILURE OF OR USE OF ANY PULSE-BAC VACUUMS PRODUCT, INCLUDING BUT NOT LIMITED TO LOST PROFITS AND/OR LOSS OF INCOME, WHETHER OR NOT PULSE-BAC VACUUMS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE, AND REGARDLESS OF WHETHER ANY REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE.

THE WARRANTIES CONTAINED IN THIS LIMITED WARRANTY ARE IN LIEU OF ALL OTHER WARRANTIES. EXCEPT AS EXPRESSLY SET FORTH ABOVE, PULSE-BAC VACUUM EXPRESSLY DISCLAIMS AND NEGATES ALL REPRESENTATIONS OR WARRANTIES, WHETHER EXPRESS OR IMPLIED, IN FACT OR IN LAW, RELATING TO THE PRODUCTS (INCLUDING WITHOUT LIMITATION (A) ANY IMPLIED OR EXPRESS WARRANTY OF MERCHANTABILITY, (B) ANY IMPLIED OR EXPRESS WARRANTY OF FITNESS FOR ANY PURPOSE, (C) ANY IMPLIED OR EXPRESS WARRANTY OF CONFORMITY TO MODELS OR SAMPLES OF MATERIALS, (D) ANY IMPLIED OR EXPRESS WARRANTY REGARDING THE CONDITION OF THE PRODUCTS AND (E) ANY IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE

IMPORTANT NOTICE

RETURN POLICY:

Pulse-Bac Vacuums requires a Returned Goods Authorization be issued by customer service before any merchandise may be returned to Pulse-Bac Vacuums for credit or service. Customer Services will issue an RGA for credit on any unused equipment within 30 days of original sale date. Orders returned must be in resalable condition and the original shipping carton, along with any and all accessories included with products, a 15% restocking fee, and return handling fee will be assessed on all returned items for credit. Pulse-Bac Vacuums does not credit shipping and handling charges. Customer is responsible for all freight charges, including return freight back to Pulse-Bac Vacuums. All orders are F.O.B Pulse-Bac Vacuum Systems, LLC. Tulsa OK.

All returns require an RGA and must be done within 30 days of receipt of order for credit. Package and ship returns in a manner to prevent damage, write your return authorization code on the outside of your box, and include a copy of your invoice.

Returned products that exhibit obvious misuse will not be accepted for return and will be sent back to the owner at his or her expense. All products returned are subject to evaluation by Pulse-Bac Vacuums before any credit is issued. All credits are issued in the way there were received and may take up to 4-6 weeks after receipt of delivery.

After 30 days, Pulse-Bac Vacuums will only allow returns under warranty. To obtain an RGA call customer service. E-mails requesting a return authorization will be instructed to call customer service before the 30 day period for return expires. No RGA will be given out via E-mail. Office hours are 9-5 Monday thru Friday central standard time. Any merchandise returned with out a RGA will be quarantined until such time the owner of the goods calls in to make arrangements. IF orders are returned without an RGA and the order sits in our warehouse past the 30 days authorized for returns, the order will be sent back to owner at his or her expense with no credit due.

IN CASE OF DAMAGE

1. Save the container and packing material for inspection.
2. **VISIBLE:** Request carrier to describe damaged identically on both. Carriers and your copies of transportation bill, and acknowledge by legible signature of inspector of agent.
3. **CONCEALED DAMAGE:** If damage is discovered upon unpacking containers received in apparently good order, immediately notify carrier, requesting an inspection. Written request for such inspection must be made within 10 days from date of delivery of goods.
4. **SHORTAGE:** If number of containers in shipment does not correspond with transportation bill, obtain carriers notation of shortage, and signature on transportation bill. When number of containers is correct, but there is indication of pilferage, notify carrier in writing, with complete list of missing merchandise.

Claims for loss or damage must be filed with the carrier by consignee. This must be done within 30 days of date of delivery. We will assist you in every possible manner, but cannot be responsible.

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