

ROTOVAC

Model: E-2120 Model: E-2170H Model: E-2500H Model: E-3500



Rotovac Corporation
17905 Bothell Everett Highway
Mill Creek, WA 98012
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Portable Heavy Duty Extractor
Owner's Manual

When the machine is delivered

Check the carton and machine carefully for signs of rough handling. If the unit is damaged, notify the carrier immediately and request an inspection. Be sure to keep the carton, packing inserts, packing list and carrier's receipt until the inspector has verified your claim.

General precautions

Make sure the machine is plugged into an electrical outlet with the same voltage as shown on the unit. When plugging in a two cable machine, each should be into a **separate circuit**, when this is accomplished a "Green Light" will turn on in the dash panel. Push switch on dash panel above green bulb, if two circuits are accomplished the bulb will light up. No light, keep looking for two circuits.

Warning

This extractor was designed for use on carpet, floor and upholstery applications as per instructions and recommendations written in this manual. Any deviation from its proper use or purpose and the consequential damage that may occur is the sole responsibility of end user.

Do not use volatile substances such as gasoline, kerosene, or any petroleum based solvent in the machine or anywhere near the cleaning area. The use and presence of such materials could cause an explosion and fire.

Do not expose machine to extreme temperatures.

Do not attempt repair of machine, contact ROTOVAC.

Do not use unauthorized replacement parts.

This extractor was tested before shipping in most case some water or anti freeze might remain in the plumbing system, we suggested flushing it out before using it. Make sure to use anti freeze for storage if you are located in extreme cold weather.

This extractor is being shipping with protective plastic wrap over the casters and wheels. Please remove the plastic wrap before use. Using without removing the protective plastic wrap may cause a jam or even lock up the wheels or casters. (see below)



remove protective plastic wrap



remove protective plastic wrap

ELECTRIC INSTANT WATER HEATER (in line heater)

Before turning on heater power, make sure to connect solution hose and desired tool. Fill solution tank with water and turn your machine pump on. Make certain to bleed air out of system before use. To check that all air is out of heater open trigger valve and spray till clear. Turn heater switch on and wait approximately 3-4 minutes to heat up. The in line heater has a pre-set thermostat for 210 degrees F.

Keep tank clean and do not use any flammable products.

Water level should always be over the level switch by at least two inches.

TROUBLE-SHOOTING

Problem	Possible Cause	How to Repair
Heat doesn't come on	1. Air in the heater	1. Bleed
	2. Check reset-able thermostat on heater (see below image)	2. Re-set thermostat
	3. Check thermostat-it's either ON or OFF (see below image)	3. Re-set thermostat
	4. Heating element is burned out.	4. Contact ROTOVAC

CAUTION: when electric power is on protect yourself from electric shock & heat

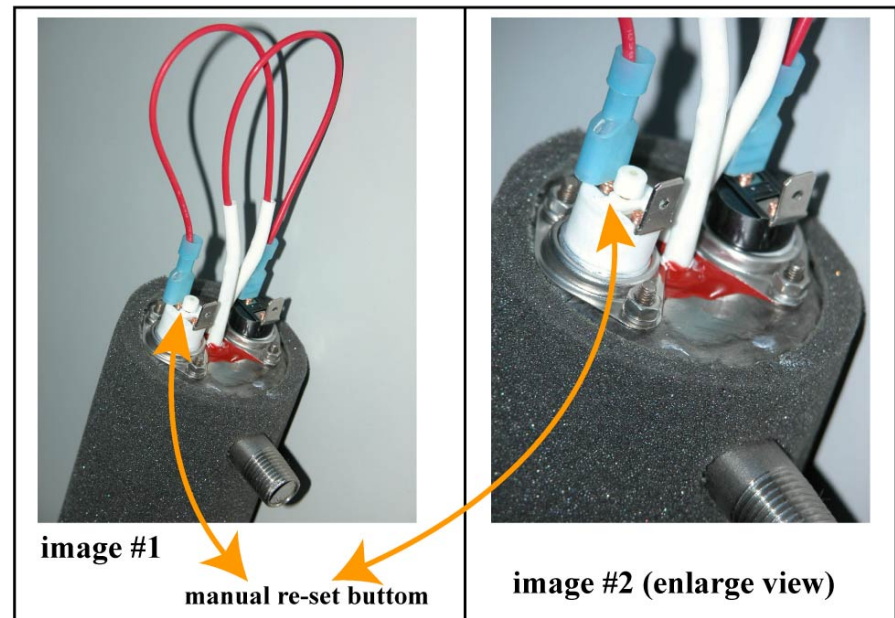


image #1

manual re-set button

image #2 (enlarge view)

Vacuum System		
Problem	Possible Cause	How to Repair
Vacuum motor on, little or no vacuum or suction to head (wand/upholstery tool)	1. Lid is not closed 2. Drain hose not connected 3. Hose or wand clogged 4. Accumulated dirt on the ball float cage and filter 5. Worn out lid gasket 6. Lint and dirt build-up on wand 7. Damaged vacuum hose 8. Loose or no vacuum hose connection inside the machine 9. Lint accumulation in vacuum fans	1. Close the lid 2. Connected hose 3. Clean hoses and wand 4. Clean or replace the filter 5. Replace the gasket 6. Clean the wand 7. Replace 8. Contact ROTOVAC 9. Contact ROTOVAC
Vacuum motors run intermittently		Contact ROTOVAC
ETC.....		
Problem	Possible Cause	How to Repair
No water from the jet	1. Machine not plugged in (or circuit breaker off) 2. Switch is not turned on (bad switch?) 3. Empty solution tank 4. The hose is not connected properly	1. Plug in working outlet 2. Turn the switch on. Contact ROTOVAC for new switch 3. Fill the solution tank with water 4. Connect hose properly
Water or foam coming out from exhaust	1. Over foaming of water in recovery tank 2. Elbow fitting in recovery tank pointing wrong direction (i.e. pointed toward the ball-float cage) 3. No ball-float cage 4. Too much water in the recovery tank	1. Put defoamer in the recovery tank or <u>put it in the end of vacuum hose with vac. motor running</u> 2. Point elbow away from ball-float cage 3. Install ball-float cage w/filter 4. Drain the recovery tank

DO NOT ATTEMPT REPAIR ON THE MACHINES, CONTACT ROTOVAC.

Disconnect Power Cords from the outlet before doing any maintenance work

Caution 1

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OWNER'S WARRANTY INFORMATION

Date of Purchase:

Serial Number:

Model Number:

Purchased From[Dealer name]:

Address:

City, State, Zip:

Telephone:

Keep for your own records

All equipment and accessories are thoroughly inspected and tested before leaving the factory. They are warranted to be free of defects from workmanship and material for one year from date of original purchase.

(Proof of purchase is required)

LABOR = 90 days from initial purchases

PARTS = 1 year, excluding normal wear item's

Should any trouble develop during this period, return the item, freight prepaid, to the factory with the factory issued RETURN AUTHORIZATION NUMBER (RAN) or authorization ROTOVAC service center. If inspection shows the trouble to be caused by defective workmanship or material, the factory will repair (or at our option, replace) without charge, those items. If it is determined to be a warrantable repair the freight back will be pre paid by the factory. No credit will be allowed for items returned as defective without the above mentioned (RAN) number and the determination that it is defective.

Proof of purchase is necessary establishing the date of original sale.

That should be the Registration & Receipt of "WARRANTY REGISTRATION PAGE". It is extremely important to register your purchase by sending the page back within 10 days of purchase.

This warranty is in lieu of all other warranties expressed or implied and no person is authorized to give any other warranty, assume obligation or liability on the factory's behalf.

This warranty does not apply when:

- Repairs have been made or attempted by others
- Repairs are required because of normal or natural wear and tear
- Items have been abused, misused or improperly maintained
- Modifications or alterations have been made to the equipment

LIMITATION OF REMEDY:

In no event shall seller be liable for any incidental, consequential or special damages of any kind or nature whatsoever. Including but not limited to lost profits arising from or in anyway connected with this agreement or items sold hereunder, whether alleged to arise from breach of contract, express or implied warranty, or in tort, including without limitation, negligence, failure to warn or strict liability.

ENTIRE AGREEMENT / GOVERNING LAW:

This agreement and warranty shall be governed in all respects by the law of the State of Washington. No actions arising out of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action occurs. All mediation or litigation will take place in the County of Snohomish Mill Creek, WA.

Electrical System		
Problem	Possible Cause	How to Repair
No electrical power	1. Check the outlet & the plug 2. Damaged cord 3. Circuit breaker off or fuse blown	1. Plug in properly 2. Contact ROTOVAC 3. Flip circuit breaker on or replace fuse. Unplug other equipment using the same circuit. Make sure cords plugged into proper amp circuits.
Switch is turned on, power is intermittent to all motors	1. Faulty electrical cable 2. Defective switch 3. Loose terminal or corroded connector	1.to 3: Contact ROTOVAC
Electric shock	1. Equipment not grounded	Contact ROTOVAC
Pump System		
Problem	Possible Cause	How to Repair
Pump motor stopped	1. Pressure build - up 2. Thermal overload (overheated) 3. Damaged motor or rectifier 4. Pump switch defective 5. Loose wire connection 6. Pump pressure switch defective 7. Faulty motor	1. Release pressure by opening up (press) the lever on the wand 2. Turn off the pump and heater switch and wait 20 -30 minutes for the pump to cool down. 3. to 7: Contact ROTOVAC
Loss of pump pressure with wand valve open and/or uneven or weak spray from the jet tips	1. Clogged or dirty spray- tip 2. Accumulated dirt in solution line 3. Dirty or clogged filters 4. Pump check valve worn or dirty 5. Malfunction in the wand valve 6. Hose quick connect bad or clogged with lint.	1. Clean jets and screens 2. Clean 3. Clean 4. to 6: Contact ROTOVAC

WAITING FOR
IMAGES HERE



WARRANTY REGISTRATION

PLEASE PRINT OR TYPE

PURCHASED FROM:

ADDRESS:

DATE PURCHASED:

PURCHASER'S NAME:

ADDRESS:

TEL:()

MODEL NO:

SERIAL NO:

CUSTOMER RECORDS

**AUTHORIZED ROTOVAC CENTER
WARRANTY REGISTRATION**

PLEASE PRINT OR TYPE

DEALER:

ADDRESS:

DATE SOLD:

PURCHASER'S NAME:

ADDRESS:

TEL:()

MODEL NO:

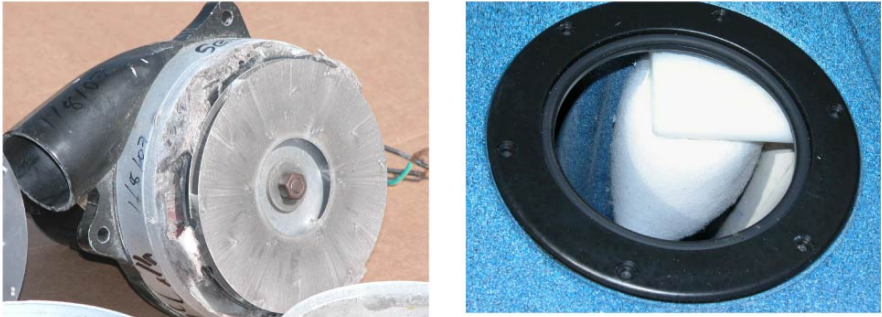
SERIAL NO:

Signature:

Print Name:

**PLEASE SIGN AND MAIL TO ROTOVAC WITHIN 10 DAYS
FROM THE SALE DATE FOR VALID WARRANTY**

ROTOVAC



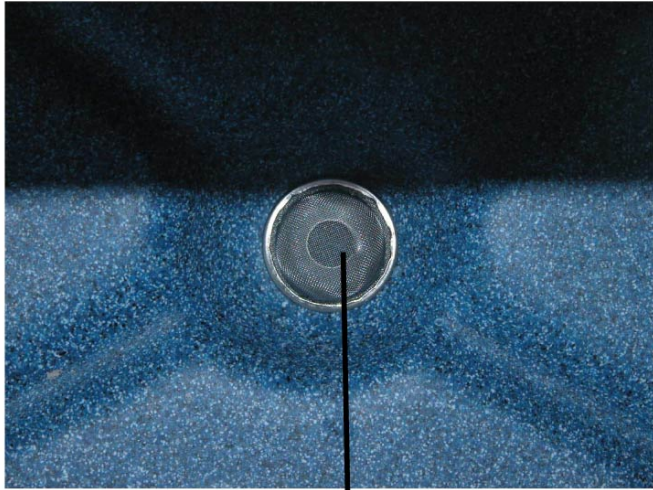
serious damage to vacuum motor cause by *not using* vacuum filter bag in the recovery tank

example of vacuum filter bag in the recovery tank
make sure vacuum motor filter install in recovery tank all time to protect from damaging motor

Vacuum Motor Filter

ROTOVAC

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make sure pump filter install in solution tank all time to protect from damaging pump

Pump Filter

Read the manual carefully and completely before attempting to operate the unit. Make sure the unit is plugged into an electrical outlet with the same voltage as shown on the unit.

1. When plugging in a **two cable** machine; in (2)-**two distinct circuits must be used.**
A green light turns on the dash panel after pushing switch, when this is accomplished.
If no Green Light-don't turn it on. Look for two distinct circuits.
2. Always thoroughly vacuum the surface to be cleaned. Using an upright vacuum cleaner or the extractors dry vacuum with optional dry attachment.
3. Pre Vacuum the area to be cleaned with a dry vacuum cleaner or upright vacuum.
4. Recommended method of getting chemical to the floor is to **pre spray the cleaning area with recommended cleaning solution.**
This will give it dwell time to do it's job and result is a much cleaner floor.
5. We do not recommend putting chemical in machine tank. Fill solution tank with clean water (use cool water for wool).
6. Make sure drain valve is closed and recovery tank lid are closed before turning on vacuum and pump switches. (If left open, there will be no suction)
7. Make sure drain hose is connected and recovery tank lid are closed before turning on vacuum and pump switches. (if left open, there will be no suction)
This apply to only extractor has optional auto dump system.
8. **In case foam is detected in recovery tank and hose, use defoamer to prevent from damaging the vacuum motors.**
9. Continue cleaning until the clean water tank is empty and/or recovery tank is full (or until cleaning job is done). Turn off all the switches and disconnect power cord from power plug, then empty the recovery tank into bucket or other proper drain area.
10. To remove remaining water from clean water tank, disconnect the vacuum hose from wand and insert the vacuum hose into clean water tank. Vacuum out all the excess water. Drain and thoroughly clean the recovery tank.
At this point the tank can be rinsed while dumping.
11. The vacuum filter (wet filter) and ball float cage have to be rinsed and cleaned thoroughly when it's still wet. Wrap power cords around handle for storage. Do not use solution or recovery tanks for storage, machine can be damaged.

Consult your sales representative for more information on cleaning methods.

Read All Instructions Before Using This Extractor

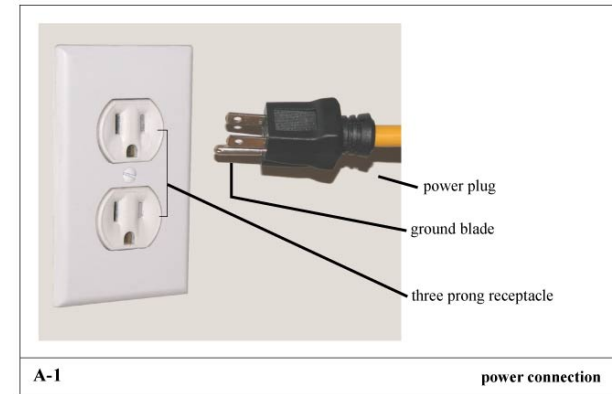
When using an electrical appliance, basic precautions should always be followed.

WARNING - To reduce the risk of fire, electric shock or injury:

1. Do not leave appliance plugged in. Unplug from outlet when not in use and before servicing.
2. **WARNING: ELECTRIC SHOCK COULD OCCUR IF USED 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 parts.
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, follow warranty instructions and contact an approved service center.
6. Do not pull or carry by cord, do not use cord as a handle, do not close a door on cord, or do not 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 air flow.
10. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
11. Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
12. Do not use without filters in place.
13. Turn off all controls before unplugging.
14. Use extra care when cleaning on stairs.
15. Always wear safety equipment and appropriate clothing when operating extractor to protect from hot water.
16. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
17. Connect to a properly grounded outlet only.
18. Do not attempt to service the unit while appliance is plugged in.



1. Connect vacuum hose to vacuum intake connection on the machine and the wand, solution hose to the solution connection (solution out let and to quick connector on wand).
2. To protect the grounding plug; this plug is to be used only with proper grounding type (three prong) receptacle. Do not break off or pull out the grounding blade. (see A-1, P.8)



PREVENTATIVE MAINTENANCE

1. **Thoroughly clean all equipment and accessories after each use.**
 - a) **Rinse solution and vacuum tank with clean water.**
 - b) **Flush entire solution system with clean water. This includes all solution hoses and wand(s). Do not allow liquid with cleaning chemicals to remain in the equipment.**
 - c) Clean all filters.
2. Occasionally, lubricate all quick connects.(every 3 months)
3. Do not use the same pail to fill the solution tank that is used to empty the waste tank.
This would result in putting dirt and debris into the solution lines that can block filters, orifices, and generally degrade solution line systems.
4. Keep equipment out of extreme temperatures. (i.e. Freezing temperatures will make water expand, and will damage pump, fittings, valves, etc.)
5. **Turn off the machine when not in use. Especially, walking away from the machine and not using it for a while may build up pressure in the machine or heater. This can cause excessive pressure that is not good for the machine.**
6. Check for loose or frayed wires.

HOW TO EMPTY YOUR SOLUTION TANK

READ instructions carefully!

- Step 1:** to remove remaining water from solution tank; disconnect vacuum hose and solution hose from tool, such as Wand or Hand tool, or any other tool. (see below images)
- Step 2:** bring disconnected vacuum hose and insert it into solution tank. (see below images) Caution with components inside the solution tank.
- Step 3:** turn vacuum motor switches on and vacuum out all the excess water from solution tank. (see below images)



HOW TO DRAIN MANUALLY FROM DRAIN HOSE

FOR EXTRACTORS WITH DRAIN HOSE

- Step 1:** pull out upper drain hose from extractor. (see image #1a and #1b)
- Step 2:** bring the hose into a bucket or other container or suitable dump area. (see image #1b) **NOTE:** Do not use the same pail to fill the solution that is used to empty the waste tank. This would result in putting dirt and debris into the solution line systems.
- Step 3:** make sure to put drain hose back to drain connector after you have just drained.

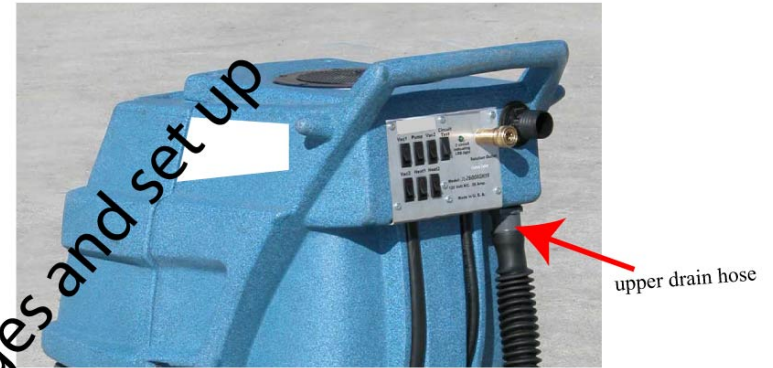


IMAGE #1a



IMAGE #1b